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Research Paper

Impact of Anxiety and Peer Pressure in Using Vapes/E-Cigarettes in Young Adults (18–23)

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ABSTRACT

This research investigates the interplay of anxiety and peer pressure as contributing factors for vaping among Indian young adults in the age group of 18 to 23 years. Two hundred and three participants who had experimented with vaping were recruited through a combination of purposive, convenience, and snowball sampling. They completed a self-report structured questionnaire assessing peer pressure (using the Peer Pressure Questionnaire), anxiety (using the GAD-7 scale), and vaping dependence (using the Penn State electronic cigarette dependence index). The participants' data were analyzed using linear and multiple regression with Jamovi software. It has been found that the two factors (peer pressure and anxiety) both independently, and together, significantly predicted vaping behavior. Increased anxiety and greater vulnerability to peer pressure were associated with greater dependence on and frequency of vaping. Such findings extend our understanding of the psychosocial determinants of youth substance use and demonstrate the urgency of developing culturally appropriate policies that address mental health issues alongside peer relationships. The study contributes to the conversation on vaping by shedding light on an ethnic group that has not been thoroughly studied in this context, enriching the global discourse on the public health concern of youth vaping.

Keywords: *Vaping Behavior, Peer Pressure, Anxiety, Indian Youth*

Vaping, more commonly known as using e-cigarettes, is increasingly popular with young people these days. These devices work by heating up a liquid, which can sometimes contain substances like nicotine and flavoring, into an inhalable mist. E-cigarettes were initially marketed as safe alternatives to traditional smoking, but their modern design and pleasant taste have made them popular among teenagers and young adults (Grana et al., 2014; Breland et al., 2017).

Although e-cigarettes were banned in India in 2019 with the Prohibition of Electronic Cigarettes Act, they can still be found easily on online platforms, through personal networks, and even brought into the country illegally (Ministry of Health and Family Welfare, 2019). The promotion of vaping as a lifestyle choice on social media platforms greatly overshadows health concerns (Jain et al., 2024). Research indicates that higher

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income and education levels expose urban youth to e-cigarette advertising, making them susceptible to its influence (GATS-2; Ministry of Health and Family Welfare, 2017).

Despite scientific studies associating the use of e-cigarettes with respiratory problems, nicotine addiction, and exposure to harmful substances (CDC, 2023 & WHO, 2020), vaping is incorrectly viewed as a healthier alternative to traditional smoking. The perception of vaping as a 'healthier' alternative is misleading, and this damage is especially concerning for adolescents whose brains are still maturing, increasing the likelihood of addiction and cognitive decline (Yuan et al., 2015).

In other regions, surge in early vaping is reported to be progressively followed with the use of combustible tobacco and other illegal substances. This poses a significant threat to public health initiatives aimed at curbing tobacco-related morbidity in India, where the tobacco epidemic is responsible for nearly a million deaths each year (Jha, 2020). Understanding the underlying social and psychological motivators of this trend is imperative given the growing tendency of vaping in regions where it is legally restricted.

Emerging Adulthood: A Period of Psychological Vulnerability

The phase of young adulthood, particularly between 18-25, is characterized by the exploration of personal identity, booming independence, and emotional volatility. During this life stage, individuals often come across academic and professional difficulties, undergo social role changes, and bear the weight of societal expectations, all of which puts additional strain on mental health (Arnett, 2000; Tanner et al., 2011).

While both Arnett and Erikson have seen this stage as confused identity, Arnett describes it as more unstable, while Erikson sees it as a struggle between intimacy vs. isolation. Accordingly, anxiety disorders appear mostly in this age group, aggravated by social media, missing social cues, and pressure from academia or future jobs (Primack et al, 2017; NIMH, 2020).

At this age, the influence of peers can be formidable. Adults in young age tend to lean heavily toward peer validation and often alter their actions to align with group expectations. When a peer group normalizes or encourages drinking, an individual may partake in undesirable risky behaviors to fit in or avoid social ostracization, even if those actions contradict their strongly-held beliefs (Tajfel and Turner, 1986; Borsari and Carey, 2001).

Influence of anxiety and peer pressure on vaping culture

Vaping, especially among the youth, is often done as a way to socially fit in and cope with anxiety. young adults express anxiety or want to fit in socially by vaping (Kong et al, 2015, Schneider and Diehl, 2016). This raises the chances of starting or persisting in vaping when peer groups enforce substance use and anxiety renders coping mechanisms ineffective.

It has previously been documented that people suffering from heightened anxiety are more inclined to be influenced by peer pressure, particularly when vaping is associated with social enhancement or relief from stress (Zvolensky et al., 2014). On the other hand, seeking help for mental health problems remains low due to stigma and poor availability, which increases dependence on substances as coping mechanisms (Gulliver et al., 2010).

The Present Study

There is substantial interest in research globally, but the synergistic impact of anxiety and peer pressure on vaping among young adults in India remains understudied. Most of the literature focuses on Western settings and overlooks the cultural, legal, and social context of India.

This study attempts to address that gap by examining the simultaneous and distinct effects of anxiety and peer pressure on vaping among Indian youth aged 18 to 23. In addressing this aim, the study seeks to contribute to culturally tailored prevention and intervention strategies that address the psychosocial factors underlying vaping.

LITERATURE REVIEW

The Vaping Culture Among Indian Young Adults

Despite the prohibition, vaping persists in the country due to online availability, social media marketing, and peer distribution. Research indicates that e-cigarette usage is common among urban, educated youth (Goel et al., 2023). Mistry et al. (2023) documented that adolescents in Mumbai and Kolkata were much more aware of e-cigarettes than their caregivers, which raises suspicions of marketing intended for youths.

Gaiha et al. (2020) reported that the COVID-19 pandemic had an impact on vaping – some people started using vapes more while others started using them less. Clearly, external factors significantly influence substance use behaviors. Sharan et al. (2020) noted that the majority of e-cigarette users in India were male, urban residents with a pre-existing consumption of nicotine. Many perceived vaping as a "safer" alternative to smoking, with over 71.3% reporting improved tobacco-use patterns post-switch.

Regardless of the restrictions, vaping products continue to be advertised on social media platforms. Arora et al. (2024) suggest that e-cigarettes are often viewed as contemporary tools for coping with stress among the youth in India. Nonetheless, the absence of local data makes it difficult to create efficient policies and health initiatives.

Vaping and Anxiety

There is a strong interplay between mental health and substance abuse. Tawba et al. (2024) indicates that e-cigarette users among dental students in the United Arab Emirates have significantly greater stress, anxiety, and depression than non-users. In the same way, Morris et al. (2021) noted that college students who began using e-cigarettes before switching to conventional cigarettes seemed to have heightened social anxiety and more stress-coping motives.

Nakama et al. (2021) analyzed over 2600 young adults and reported that anxieties, depression, impulsivity, and e-cigarette use exhibited strong positive correlations. Minter et al. (2023) also reported that the presence of severe anxiety and depression was associated with e-cigarette use.

Soto et al. (2025) employed a mixed-methods approach and reported that drug use by peers, even in the absence of direct participation, was associated with heightened anxiety symptoms, thereby providing a more holistic understanding. These findings highlight the influence of personal anxiety, social context, or even external factors on vaping behavior.

Peer Pressure and Vaping Behavior

One of the main motivators for vaping among adolescents is peer pressure. There is evidence provided by Wallace and Roche (2018) indicating that students in college who had friends that vaped were more likely to vape themselves. Stocker and Fredrickson (2022) reported that the intention to vape amongst peers had a greater impact on individual intentions to vape than social roles and gender norms.

Skinner et al. (2024) noticed that the greater the resistance to peer influence (RPI), the lower the likelihood of initiating vaping. Jha and Kraguljac (2021) indicated that the relief of stress and peer influence were the two most popular reasons for vaping among high school students, independent of their self-esteem.

Davidson and Hamdani (2023) uncovered gender-specific differences: women were more affected by social media, whereas men reported peer and occupational pressure. It is also Wang et al. (2022)'s finding that the presence of close friends who vape greatly increases the chances of a young person trying and subsequently becoming dependent on e-cigarettes.

Combined Influence of Anxiety and Peer Pressure

Although anxiety and peer pressure are both known to heighten the likelihood of using a substance, they are now studied in relation to one another. Westernberg et al. (2016) reported that adolescents suffering from high social anxiety were more susceptible to peer pressure, which subsequently predicted higher levels of substance use. What is interesting is that anxiety, in some situations, was linked to avoidance—until peer pressure took control.

Can and Kucukoglu (2022) confirmed that adolescents scoring high on the scale of social phobia became more susceptible to peer pressure and thus drug usage. Their findings are consistent with the "dual-vulnerability model," where internal emotional distress and external social influence together result in risky behavior.

Psychosocial and Cultural Dimensions Impacting Vaping

A study by Bowersock et al. (2018), indicated that more than half, (51.4%) of College students in the US have used e-cigarettes at least once. This was mainly because of peer pressure and the fact that vaping was viewed as safer. A good number of them were polytobacco users and regarded ENDS (Electronic Nicotine Delivery Systems) as a less harmful form of addiction.

A risk factor analysis conducted by Ferri et al., 2025, showed teen vaping to be influenced by several risk factors such as peer smoking, parental smoking, alcohol consumption, cannabis consumption, and other tobacco use. It highlighted teenager's access to disposable income as well as gender and perception of risk (being male and lower risk perception). It is worth noting that a good proportion of e cigarette smokers were also alcohol and cannabis users, often at the same time.

An increase in current users believing that e-cigarettes aid smoking cessation has also been documented by Kelsh et al. (2023). These nonsmoking vapers often defend vaping as risk-free. Evidence has shown Copeland et al., 2017, that users placed more attention on perceived benefits rather than focusing on the evidence which logically suggested otherwise.

Vulnerability to vaping has been associated with some demographic and psychological traits such as socio-economic status and mental health by Conner and Teah (2021). People from lower SES backgrounds not in college are more likely to vape, especially when combined with stress and impulsivity.

METHODOLOGY

Aim

To examine the impact of anxiety and peer pressure on vaping behavior among young adults in India.

Objectives

1. To assess how anxiety affects vaping behavior.
2. To analyze the role of peer pressure in influencing vaping.
3. To evaluate the combined influence of anxiety and peer pressure on vaping among young adults.

Hypotheses

- **H1**: Higher levels of anxiety significantly contribute to increased vaping behavior.
- **H2**: Peer pressure significantly contributes to increased vaping behavior.
- **H3**: The combined effect of anxiety and peer pressure has a stronger influence than either factor alone.

Variables

- **Independent Variables**:
  - Anxiety (measured using GAD-7)
  - Peer Pressure (measured using Peer Pressure Questionnaire - Revised)
- **Dependent Variable**:
  - Vaping behavior (measured using the Penn State Electronic Cigarette Dependence Index)

Sample

A total of **203 young adults** aged 18–23 from India participated. All had tried vaping at least once, fulfilling the study's inclusion criteria. Data were collected using an online Google Form.

A **non-probability sampling approach** was employed, combining:

- **Purposive sampling**: Participants selected based on vaping experience
- **Convenience sampling**: Initial contacts reached through personal networks
- **Snowball sampling**: Participants invited peers to participate, expanding the reach to the target group

This approach helped efficiently recruit a relevant sample despite the legal and social barriers to openly studying vaping behavior.

Instruments

1. **Generalized Anxiety Disorder Scale – 7 (GAD-7)**: A 7-item self-report tool that measures anxiety symptoms over the past two weeks using a 4-point Likert scale. Scores range from 0 to 21, indicating severity from minimal to severe. The tool has strong internal consistency ($\alpha = .92$) and is widely used in clinical and academic settings (Spitzer et al., 2006).

2. **Peer Pressure Questionnaire – Revised (PPQ-R)**: Developed by Sunil Saini and Sandeep Singh (2016), this 25-item scale measures susceptibility to peer pressure across multiple dimensions (e.g., conformity, risk-taking, resistance). Items are rated on a 5-point Likert scale. Higher scores indicate greater susceptibility. It has demonstrated strong reliability ($\alpha = .86$).
3. **Penn State Electronic Cigarette Dependence Index (PSECDI)**: A 10-item scale measuring physical and psychological dependence on e-cigarettes. It evaluates use frequency, cravings, difficulty abstaining, and withdrawal symptoms. Scores classify users into four levels of dependence: None (0–3), Low (4–8), Moderate (9–12), and High (13+). It is a validated tool for assessing nicotine dependence among e-cigarette users.

Procedure

An online Google Form survey was created and distributed to eligible participants. It included:

- Demographic details: Age, location, reasons for vaping initiation
- Standardized scales: GAD-7, PPQ-R, and PSECDI

Participants were first shown an informed consent form that explained the study's purpose, ensured anonymity, and clarified voluntary participation. No incentives were provided, but participants were encouraged to share the link to expand the sample.
The form remained open until **203 complete responses** were collected.

Ethical Considerations

The study followed ethical research principles:

- Informed consent was obtained from all participants
- Confidentiality and anonymity were guaranteed
- Participation was voluntary, with the right to withdraw at any time
- No personal identifying data were collected

Data Analysis

Data were analyzed using **Jamovi** statistical software. The process involved:

- **Descriptive Statistics**: Used to summarize demographics and main variables (mean, median, SD)
- **Linear Regression**: To assess the individual influence of anxiety and peer pressure on vaping behavior
- **Multiple Regression**: To evaluate the combined effect of both predictors on vaping

To address non-normality, **z-score transformation** was applied before running regression models. All assumptions of normality, linearity, and outliers were checked using Shapiro-Wilk and Cook's Distance.

RESULTS AND DATA ANALYSIS

Descriptive Statistics

Data from 203 participants were analyzed without any missing values. Key statistics for the three main variables—peer pressure, anxiety, and vaping behavior—are summarized below.

Variable	Mean	Median	SD	Range	Min	Max
Peer Pressure	77.70	78	19.30	89	28	117
Anxiety (GAD-7)	9.96	11	5.53	21	0	21
Vaping Behavior	8.93	10	5.27	19	0	19

Participants showed **moderate levels** of peer pressure and anxiety, with varied patterns of vaping behavior—ranging from no dependence to high dependence.

Regression Analyses

To evaluate the study hypotheses, three regression models were tested using z-score transformed data.

Model 1: Anxiety Predicting Vaping Behavior

(H1: Anxiety significantly predicts vaping behavior)

• **R = .472**	• R^2 = .223	• **F(1**	• **201) = 57.6**	• p < .001
• **β = .472**	• t = 7.59	• p < .001	•	•

Interpretation:

Anxiety explained **22.3% of the variance** in vaping behavior. This supports H1—higher anxiety levels were significantly associated with increased vaping. The result aligns with the Self-Medication Hypothesis, suggesting anxiety may drive nicotine use for emotional relief.

Model 2: Peer Pressure Predicting Vaping Behavior

(H2: Peer pressure significantly predicts vaping behavior)

• **R = .443**	• R^2 = .196	• **F(1**	• **201) = 49.0**	• p < .001
• **β = .443**	• t = 7.00	• p < .001	•	•

Interpretation:

Peer pressure accounted for **19.6% of the variance** in vaping behavior, confirming H2. These findings reflect the influence of social norms and peer modeling in shaping youth behavior.

Model 3: Combined Impact of Anxiety and Peer Pressure

(H3: Combined model explains more variance than individual predictors)

• **R = .511**	• R^2 = .261	• Adjusted R^2 = .253
• **F(2**	• **200) = 35.3**	• p < .001
• **β (Peer Pressure) = .246**	• t = 3.21	• p = .002
• **β (Anxiety) = .322**	• t = 4.19	• p < .001

Interpretation:

The combined model explained **26.1% of the variance** in vaping behavior, confirming H3. Both anxiety and peer pressure remained significant predictors, with anxiety having a slightly stronger effect.

Model	Predictors	R^2	Increment Over Previous
Model 3	Anxiety + Peer Pressure	0.261	—
Model 1	Anxiety only	0.223	+0.038
Model 2	Peer Pressure only	0.196	+0.065

Summary of Findings

- **Anxiety alone** explained 22.3% of the variation in vaping.
- **Peer pressure alone** explained 19.6%.
- **Combined**, they explained 26.1%, showing a stronger joint impact.

DISCUSSION

The analysis was particularly focused on the internal psychological distress and external social influence of vaping, supporting all three hypotheses (H1, H2, H3) and stating that both factors deeply motivate the behavior of vaping among young adults.

This research sought to assess the impact of anxiety and peer pressure on the vaping behavior of young adults in India and looked into both types of effects; independent and combined. The results after using standardized tools and regression analysis indicate that both anxiety and peer pressure are important predictors of the aforementioned behavior. Furthermore, when both elements are present together, they provide a greater explanatory power than when one of the elements is present alone. This demonstrates a synergistic interaction effect.

Anxiety as a Predictor of Vaping

The evidence gathered supports the claim of anxiety being a significant predictor of vaping behavior and encourages vaping in its higher forms. Participants with higher levels of anxiety reported increased frequency and dependency towards vaping. This aligns with the self-medication hypothesis which states that individuals use substances like nicotine to manage psychological distress. In tune of this study, vaping seems to serve as a dysfunctional coping mechanism for anxiety. Considering the sample of young adults experiencing escalating stages of identity, inter-personal relationships, and academic or career oriented goals, heightened anxiety is reasonable to expect. Vaping, with the perceived soothing effects alongside, may provide relief in the short run.

The regression analysis showed that anxiety alone explained 22.3% of the variance in vaping behavior, which demonstrates its importance. These results are particularly concerning because of the age of the participants, who are especially susceptible to anxiety and using substances often as a means to cope with emotions.

Peer Pressure and Social Influence

Peer pressure was also noted as one of the strongest predictors, explaining 19.6% of the variance in vaping behavior. Participants who perceived themselves as more likely to be influenced by peers were more likely to vape, supporting the notion that the need for social acceptance and alignment with peers is a strong driver of behavior in young adults.

The effect of peers could be direct as offering vapes or indirect by making vaping socially acceptable in some contexts. For some individuals, having access to a vape or being offered one could be viewed as an opportunity to join a social group or boost their popularity. Due to the strong emphasis on social identity in India's collectivist culture, peer influences often

take precedence over individual considerations and can dominate personal health behavior choices.

These findings support social learning theory, which posits that people replicate actions they see in their sociocultural context, particularly those actions performed by people whom they idolize or from whom they seek validation. Thus, efforts aimed at preventing vaping must tackle not only personal choices but also the larger collective factors that support vaping as a normalized, socially accepted, or sought-after behavior.

The Combined Effects of Anxiety and Peer Pressure

The most significant vaping behavior insight from this study is that anxiety and peer pressure working in concert accounted for 26.1% of the variance — more than either factor alone. This finding supports the third hypothesis and highlights the additive effect of social and psychological vulnerabilities. Anxious individuals tend to vape as a relief mechanism, especially when surrounded by peer networks that encourage vaping.

This pattern demonstrates a type II vulnerability model in which internal stressors and external factors combine to promote unhealthy behaviors. An example would be an anxious person who is most likely to escape to distinct bodily sensations when leaning into peer endorsement. The social enhancement of the perceived risk transforms the dynamics of context on use versus non-use. The self-reinforcing cycle can be addictive. For instance, anxiety is reduced when vaping is used, social reinforcement activates the behavior, then withdrawal or social pressures maintain continued use.

This is very true for the period of young adulthood, when emotional regulation and social identity are still evolving. The ever-developing prefrontal cortex, responsible for impulse control and decision-making, contributes to the risk. There is also an increased risk when attempts to treat one domain, like peer education or anxiety treatment, are neglected. Integrated strategies that address social and emotional issues simultaneously are vital, as frameworks that focus only on one are bound to fail.

Contextual Considerations: The Indian Youth Experience

While the study's predictors may cross multiple cultures, special consideration is needed in the Indian context. Regardless of a countrywide ban, e-cigarettes remain easy to access through informal markets, peer groups, and online platforms. Educated urban youths, like those represented in this research, are particularly vulnerable and more likely to perceive vaping as a trendy, sophisticated, or a stress-relief activity.

More so, cultural expectations of family and academic achievement tend to encourage a harsh, anxiety-inducing environment for open conversations regarding mental distress. In these situations, opting to vape may serve as a more subtle way to manage internal turmoil. Also, the social stigma of needing to seek help for mental health issues may render vaping an easier, more socially acceptable coping mechanism, especially when it is normalized among peers.

Cultural understanding is important in developing interventions. Indian public health policies must consider both the availability of vaping products and the psychosocial narratives that enable their vaping. Campaigns aimed at dismantling the glamorization of vaping alongside the provision of mental health support services can help to address the overreliance on substances as coping mechanisms.

Implications for Policy and Practice

The findings underscore the need to take a comprehensive approach to prevention. Educational programs should address not only the physical health effects of vaping, but also the underlying emotional and social drivers associated with its use. Proactive mental health services need to be offered within schools and colleges, focusing on the teaching of healthy coping strategies and emotional literacy.

Social norms campaigns can also be effective—particularly those that document the exploitation inflicted by vaping companies and influencers, and underscore social dependency on nicotine. The participation of young people as peer educators or ambassadors to change group norms could be particularly impactful.

Policymakers need to understand that bans are ineffective on their own. As long as the unaddressed issues of anxiety and peer validation exist, young people will find ways to use and access vaping products. A blend of culturally grounded frameworks is needed.

Constraints and Prospective Pathways

The study reveals important findings, but certain constraints are worth mentioning. Causal determinations are not possible with the cross-sectional design; longitudinal studies are necessary to understand the impact of anxiety and peer relationships on vaping over time. Additionally, social desirability or recall bias may affect self-report measures.

Moreover, the non-probability sampling technique (online-based and urban) may restrict generalizability. Greater diversity in socioeconomic status and regions should be included in future studies. Also, incorporating qualitative data through interviews and focus groups could enhance understanding of the complexities associated with vaping.

To build a more holistic approach, investigating familial factors, academic stress, and exposure to vaping on social media would help. These studies could also deepen understanding of the social and cultural factors influencing vaping and its predictors across different countries or regions.

CONCLUSION

This research examined the impact of anxiety and peer pressure on the vaping habits of young adults in India aged 18 to 23 years. From a sample of 203 respondents, all of whom had previously vaped at least once, the results confirmed that both social and psychological elements are major factors influencing e-cigarette use. Most importantly, the study showed that anxiety and peer pressure had a stronger effect when working together than when considered individually.

The most important conclusion is that anxiety, as an internal emotional strain, leads young adults to look for ways to cope—and vaping is one of the most readily available options. Participants with higher anxiety scores were more likely to be frequent vapers or show signs of dependency. Such observations support existing frameworks that argue substance use, especially with vulnerable populations, is often used as a form of self-soothing for emotional distress, a phenomenon exacerbated in the absence of healthy coping mechanisms.

As external social factors, peer pressure, for instance, had more than an average impact on vaping behavior. To fit in with the peer group or to avoid being ostracized from peers seems to spur young people to take up or maintain vaping. Both direct forms (e.g., being offered a

vape) and indirect forms (e.g., voicing espousal to the norm of vaping among friends) were relevant. This is so especially in India, where one's social self is heavily embedded in a prism of collective identity and social affirmation is critical.

An additional factor that exacerbates vaping, which is the primary focus of this study, is anxiety. Designing an environment that incorporates both aspects would be essential.

From a cultural lens, this is germane to the Indian setting, where mental health care is not developed, is under-resourced and experiencing stigma makes it difficult for one to seek help. Firstly, young adults may as well turn to more socially accepted behavioral markers of coping like vaping, especially when it is uncritically applauded by one's peers. Moreover, despite legal provisions prohibiting access to e-cigarettes, informal circulation via social networks and digital platforms sustains their availability, transforming vaping into a readily accessible means for stress relief and social engagement.

This information can shape policy and practice in distinct ways. Surrounding preventive measures for vaping, laws are not enough; there is a need to educate the public on the psychological and social factors that compel people to vape. Misinformation needs to be targeted on the public's perception; additionally, mental health services offered at colleges and universities must better equip students with constructive coping strategies. Because of the inherent social aspect of vaping, peer-to-peer programs could be effective.

In addressing the rest of this study's gaps, there are also some other insights that can be helpful for future research. The interplay between anxiety, peers, and vaping could be better captured by longitudinal studies. Including participants from diverse geographical and socioeconomic backgrounds would increase generalizability to the population. Vaping motivation can be explored further through qualitative research.

This research portrays the phenomenon of vaping among young adults in India as more than a simple behavior; instead, it exposes the psychological wants and social pressures that exist beneath the surface. It is clear that effective strategies must be multi-dimensional in nature in order to reduce reliance on vaping and promote sustained wellbeing.

THEORETICAL FRAMEWORK

The relationship between anxiety, peer pressure, and vaping behavior among Indian young adults can best be explained through a blend of CBT, SLT, and the Dual Process Model of Addiction.

Cognitive-Behavioral Theory helps to confirm the hypothesis that anxiety increases vaping behavior by detailing how people engage in maladaptive coping strategies such as self-medicating with substances. CBT focused primarily on negative markers, which, alongside poor emotion regulation, control problems, heavily influence behaviors. For example, in the current study, anxious young adults may be more likely to indulge in vaping as a relief to worries or tension, especially when healthier coping strategies are unavailable or stigmatized.

SLT justifies the second hypothesis—that social influences are a significant factor in increased vaping. Observational learning is a key pillar of SCT; behaviors are acquired by watching and mimicking others, especially those who are well-liked and towards whom the observer holds admiration. Young adults are more likely to engage in vaping if they perceive

this behavior as widespread or socially positive within their networks. The theory addresses both active endorsement and passive endorsement through indirect modeling as mechanisms of influence.

The Dual-Process Model of Addiction brings together these two perspectives. It accounts behavior as a consequence of impulsive (automatic) and reflective (deliberate) systems. In highly stressful or emotionally exhausting contexts – such as those brought on by anxiety – impulsive tendencies may take center stage, prompting an influx of relief-seeking behaviors, such as vaping. At the same time, peer norms may also determine more conscious choices, such as opting to vape in order to preserve social bonds or a particular standing. This explanatory framework assists in understanding why those with heightened anxiety and strong peer pressure tend to vape the most.

Taken together, these theories construct a solid rationale for the study's hypotheses. They shed light on vaping as not only an issue of personal v. health choice, but a complex interplay of self-psychology and surrounding sociological realms. This synthesis reinforces the study's main argument that the need to tackle emotional aspects of resilience and peer influence simultaneously in order to maximize effectiveness.The analysis supports all three hypotheses (H1, H2, H3), emphasizing that both internal psychological distress and external social influence significantly drive vaping behavior among young adults.

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Conflict of Interest

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