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RESEARCH ARTICLE

FACTORS INFLUENCING VAPING PRACTICES AMONG STUDENT NURSES IN A PRIVATE COLLEGE

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ABSTRACT

Background: Vaping is increasingly prevalent among young adults, including student nurses, despite awareness of its health risks. **Aims:** This study aimed to determine the factors influencing vaping practices among student nurses in a private college. **Study design:** Descriptive-correlational. **Place and Duration of Study:** The study was conducted in a privately owned tertiary institution in Iloilo City during the academic year 2025–2026. **Methodology:** A descriptive-correlational design was used with 317 respondents selected through stratified random sampling. Data were collected using a validated questionnaire and analyzed using descriptive statistics and Spearman's rho. **Results:** Respondents demonstrated a moderate level of vaping practices. No significant relationships were found between vaping practices and family support, peer influence, or attitudes toward vaping ($p > 0.05$). **Conclusion:** Vaping practices among student nurses are not significantly influenced by family support, peer influence, or attitudes toward vaping, suggesting that other factors such as stress or environmental influences may play a role.

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INTRODUCTION

Vaping, or the use of electronic cigarettes, has become a growing public health concern, particularly among young adults and college students. Although it is often marketed as a safer alternative to traditional smoking, vaping is associated with health risks such as nicotine addiction, respiratory problems, and potential cardiovascular effects. Its increasing use among students, including those in health-related programs, is concerning because it reflects a gap between health knowledge and actual behavior. Student nurses, as future healthcare professionals, are expected to model healthy behaviors and promote wellness. However, they are also exposed to academic and clinical stress, peer influence, and social environments that may lead to unhealthy coping mechanisms such as vaping. Previous studies have identified factors such as curiosity, stress, peer pressure, and perceived reduced harm as contributors to vaping behavior among college students. In the Philippines, vaping has become increasingly common among young adults, and awareness of its health risks does not always lead to healthier choices. While several studies have examined vaping among general student populations, limited research has focused specifically on student nurses, particularly in private colleges in Iloilo City. Given these gaps, this study aims to determine the

factors influencing vaping practices among student nurses in a private tertiary institution. The findings of this study may help educators and school administrators develop programs that reduce vaping and promote healthier coping strategies among students.

METHODOLOGY

This study employed a descriptive-correlational research design to examine factors influencing vaping practices among student nurses in a private tertiary institution in Iloilo City during the academic year 2025–2026. A total of 317 respondents were selected using stratified random sampling. Data were gathered through a validated, researcher-developed questionnaire administered via Google Forms, covering demographics, vaping practices, family support, peer influence, and attitudes toward vaping. Reliability testing showed acceptable to excellent internal consistency. Descriptive statistics and Spearman's rho correlation were used for data analysis, with a significance level set at 0.05.

Research Design: This study utilized a descriptive-correlational research design to examine the factors influencing vaping practices among student nurses. The design was appropriate for determining the relationship between

selected variables, namely family support, peer influence, and attitudes toward vaping, and the respondents' vaping behavior without manipulating any variables.

Study Setting: This study was conducted in a privately owned tertiary educational institution in Iloilo City, Philippines, offering a Bachelor of Science in Nursing program. The institution accommodates student nurses from first to fourth year levels, who served as the respondents of the study. Data collection was carried out during the academic year 2025–2026.

Population and Sampling: The respondents of the study consisted of student nurses enrolled in a private tertiary institution in Iloilo City. A stratified random sampling technique was employed to ensure representation from different year levels. A total of 317 respondents were included in the study.

Instrument: The study utilized a structured, researcher-developed questionnaire to collect data on vaping practices and their influencing factors among student nurses. The instrument consisted of five parts. Part I gathered the respondents' demographic profile, including age, sex, and year level. Part II assessed vaping practices in terms of frequency and patterns of use using a 5-point Likert scale ranging from 5 – Always, 4 – Often, 3 – Sometimes, 2 – Rarely, to 1 – Never. Part III measured family support, Part IV assessed peer influence, and Part V examined attitudes toward vaping, all using the same 5-point Likert scale. The questionnaire underwent content validation and reliability testing prior to administration to ensure accuracy and consistency.

Data Gathering Procedure: Permission was secured from school authorities before data collection. Informed consent was obtained from the respondents before administering the structured questionnaires. Data were collected during the academic year 2025–2026, ensuring confidentiality and anonymity. The completed questionnaires were retrieved and prepared for analysis.

Data Analysis Procedure: The data collected were encoded, organized, and analyzed using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics such as frequency, percentage, and mean were used to summarize the respondents' demographic profile, vaping practices, and influencing factors. To determine the relationship between vaping practices and the influencing factors, inferential statistics were employed using Spearman's rho correlation coefficient, since the data were measured using a Likert scale. All statistical tests were conducted at a 0.05 level of significance.

RESULTS AND DISCUSSION

Demographic Profile of Respondents: Table 1 presents the demographic profile of the respondents in terms of sex and year level. The majority were female (50.3%), followed by male (44.3%), while a small proportion preferred not to disclose their sex (5.4%). This distribution reflects the typical gender composition in nursing programs, where females are generally more represented. In terms of year level, most respondents were third-year students (34.1%), followed by fourth-year (28.7%), second-year (24.9%), and first-year

students (12.3%). This indicates that a larger proportion of participants were in the higher year levels, suggesting greater exposure to academic and clinical experiences. These characteristics may influence vaping behavior in terms of exposure, maturity, and academic-related stress.

Table 1. Demographic Profile (n = 317)

Demographic	n	%
Sex		
Male	140	44.3
Female	159	50.3
Prefer not to say	17	5.4
Year Level		
1st year	39	12.3
2nd year	79	24.9
3rd year	108	34.1
4th year	91	28.7
Total	317	100.0

Level of Family Support: The results indicate that respondents experienced a moderate level of family support ($M = 2.00$). Higher mean scores were observed in perceived guidance and emotional support, such as recognizing that lack of family guidance may lead to unhealthy behaviors ($M = 2.32$) and feeling cared for ($M = 2.20$). However, lower mean scores were noted in communication-related aspects, including discussing personal concerns ($M = 1.86$), family discussions about the dangers of vaping ($M = 1.87$), and discouragement of harmful substance use ($M = 1.76$). These findings suggest that while emotional support is present, limited communication may reduce the effectiveness of family influence in preventing vaping behavior.

Table 2. Mean scores on Level of Family Support (n=317)

Family Support	Mean	Standard Deviation
I feel that lack of family guidance can lead to unhealthy habits like vaping.	2.32	0.63
I feel loved and cared for by my family.	2.20	0.72
I seek advice from my family before making important decisions.	2.07	0.66
My parents or guardians set good examples when I am stressed.	2.02	0.76
My parents or guardians check on my well-being.	2.02	0.76
My family provides emotional support when I am stressed.	1.96	0.76
My family encourages me to live a healthy lifestyle.	1.90	0.67
My family discusses the danger of smoking or vaping.	1.87	0.65
I feel comfortable talking to my family about personal issues.	1.86	0.78
My family may discourage me from using harmful substances like cigarettes and alcohol.	1.76	0.62
Overall Mean	2.00	0.33

Level of Peer Influence Among the Respondents: The findings show a moderate level of peer influence ($M = 2.01$). Higher mean scores were observed in exposure to peers who vape ($M = 2.15$) and the influence of friends' opinions ($M = 2.10$), indicating that peer interactions are present in shaping perceptions. Lower mean scores were found in admiration of peers who vape ($M = 1.84$) and vaping during social interactions ($M = 1.92$ – 1.93), suggesting that vaping is not strongly perceived as a desirable or admired behavior. Overall, peer influence exists at a moderate level; however, it does not necessarily translate into vaping behavior.

Table 3. Level of Peer Influence (n=317)

Peer Influence	Mean	Standard Deviation
Most of my close friends use or have tried vaping.	2.15	0.85
My friends' opinions about vaping affect how I see it.	2.10	0.77
My decision to try or avoid vaping is influenced by what my friends do.	2.12	0.81
I usually spend time with friends who vape.	2.01	0.79
I sometimes feel the need to vape so I can blend in with my friends.	2.01	0.90
My friends and I often talk about vaping or share opinions about it.	2.03	0.87
Some of my friends have invited or encouraged me to vape.	1.98	0.86
When hanging out, vaping is usually part of the activity.	1.92	0.85
I often see people vaping during group hangouts or gatherings.	1.93	0.86
I look up to or admire some friends who vape.	1.84	1.01
Overall Mean	2.01	0.47

Level of Attitude Towards Vaping: Respondents demonstrated a low level of favorable attitude toward vaping (M = 1.84), indicating generally negative perceptions. Some items showed relatively higher mean scores, such as the belief that vaping is less harmful than traditional smoking (M = 2.47), increasing social acceptability (M = 2.08), and its use for stress relief (M = 2.01). These suggest the presence of certain misconceptions. Lower mean scores were observed in awareness-related items, such as promoting vaping risk awareness (M = 1.50), practicing healthy behaviors (M = 1.53), and recognizing nicotine addiction (M = 1.68). Overall, although respondents generally held negative attitudes, some beliefs influenced by perceived reduced harm and social acceptance remain evident.

Table 4. Level of Attitude Towards Vaping (n=317)

Attitude Towards Vaping	Mean	Standard Deviation
I think vaping is less harmful than traditional vaping.	2.47	0.77
I feel that vaping is becoming more common and accepted among college students.	2.08	0.80
I think vaping helps reduce stress or anxiety.	2.01	0.89
I think vaping can lead to health issues over time.	1.85	0.85
I avoid vaping in school or near the campus because these places do not allow it or prohibit it.	1.72	0.74
I know that vaping is an unhealthy habit.	1.73	0.80
I notice people vaping during social gatherings.	1.79	0.77
I think vaping can lead to nicotine addiction.	1.68	0.73
I try to set a good example by practicing healthy behaviors as a nursing student.	1.53	0.63
I believe it's important to raise awareness among students about the risk of vaping.	1.50	0.70
Overall Mean	1.84	0.29

Level of Vaping Practices: The results indicate a moderate level of vaping practices (M = 2.55), suggesting occasional engagement rather than consistent or habitual use. Higher mean scores were observed in vaping in private or accessible

locations, such as at home (M = 3.13) and near campus (M = 3.09). Vaping during stress (M = 3.00) suggests that it may serve as a coping mechanism for some respondents. Lower mean scores were noted in behaviors related to dependence, such as cravings (M = 2.02), failed attempts to quit (M = 2.24), and sharing vape devices (M = 1.75). These findings suggest that vaping behavior among respondents is situational rather than strongly habitual or dependent.

Table 5. Level of Vaping Practices (n=317)

Vaping Practices	Mean	Standard Deviation
I vape at home or in private places.	3.13	0.66
I vape in school or near campus.	3.09	0.72
I vape when I feel stressed.	3.00	0.71
I spend money on buying vape products.	2.78	0.60
I vape when I am with friends.	2.62	0.62
I use vape or e-cigarette.	2.61	0.95
I experience coughing, dizziness, or shortness of breath after vaping.	2.27	0.75
I have tried to stop vaping but failed.	2.24	0.81
I feel cravings when I haven't vaped for a while.	2.02	0.82
I share vape devices with friends.	1.75	0.79
Overall Mean	2.55	0.37

Relationship between the family support, peer influence, attitude towards vaping and vaping practices: The results revealed that family support, peer influence, and attitude toward vaping showed no statistically significant relationship with vaping practices.

- Family support: $r_s = -0.058, p = 0.300$
- Peer influence: $r_s = -0.015, p = 0.794$
- Attitude toward vaping: $r_s = 0.073, p = 0.192$

Since all p-values were greater than 0.05, the null hypotheses were not rejected. These findings indicate that the selected variables do not significantly influence vaping practices among student nurses. This suggests that other factors not examined in this study—such as stress, environmental exposure, or personal coping mechanisms—may play a more important role in shaping vaping behavior.

Table 6. Relationship between the family support, peer influence, attitude towards vaping, and vaping practices

	Vaping Practices
Family support	$r_s = -0.058$ $p = 0.300$
Peer influence	$r_s = -0.015$ $p = 0.794$
Attitude towards vaping	$r_s = 0.073$ $p = 0.192$
*Sig at 0.05	

LIMITATIONS OF THE STUDY

This study was limited to student nurses from a single private college in Iloilo City, restricting generalizability. Data were self-reported, which may introduce bias. Only selected variables were examined, excluding other potential influencing factors. Additionally, the descriptive-correlational design does not establish causality.

CONCLUSION

Student nurses demonstrated a moderate level of vaping practices, which typically occurred in private or easily accessible environments rather than as habitual behavior. The study found no statistically significant relationship between vaping practices and family support, peer influence, or attitudes toward vaping. These findings suggest that vaping behavior may be influenced by other factors not examined in this study, such as psychological stress and environmental exposure. Therefore, strengthening health promotion programs and addressing underlying behavioral factors are essential to reducing vaping practices among student nurses.

RECOMMENDATIONS

The findings revealed that student nurses demonstrated a moderate level of vaping practices. However, several recommendations are proposed to help reduce vaping behavior and promote healthier lifestyles. Student nurses are encouraged to adopt healthier coping mechanisms for stress, such as engaging in wellness activities and seeking peer or professional support.

Nursing educators may utilize the findings to strengthen health education by integrating anti-vaping campaigns, stress management programs, and discussions that correct misconceptions about vaping. School administrators may support the implementation of institutional policies, counseling services, and wellness programs that discourage vaping and promote a healthy campus environment. Lastly, future researchers are encouraged to replicate the study using larger and more diverse samples, explore additional factors such as stress, mental health, and social media influence, and consider longitudinal or qualitative approaches to better understand vaping behavior over time.

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Authors' Contributions: Author A supervised and led the entire study, guided the co-authors, prepared the preliminary pages and appendices, and formulated the statement of the problem, hypothesis, and conducted the statistical analysis with the statistician. Author B developed the background and significance of the study, assisted in searching related literature, and handled the ethical considerations and summary of findings. Author C prepared the abstract, assisted in the preliminary pages, developed the scope and limitations, and contributed to the instrumentation and conclusions. Author D worked on the definition of terms, participated in data gathering and data analysis, interpreted the results, and prepared the recommendations.

Author E developed the conceptual framework, assisted in gathering related studies, and contributed to the population and sampling, as well as interpretation of results and major findings. Author F also contributed to the framework, assisted in the review of related literature, and worked on the research design, study setting, and descriptive analysis. Author G assisted in data organization, supported literature review, and helped in editing and finalizing the manuscript. Lastly, Author H served as the study's adviser. All authors reviewed and approved the final manuscript.

Consent: All authors declare that informed consent was obtained from the respondents prior to data collection. A copy of the signed consent forms is available for review by the Editorial Office/Chief Editor/Editorial Board members of this journal.

Ethical Approval: All authors hereby declare that the study was submitted to the Iloilo Doctors' Institutional Research Ethics Committee (IDIREC) before data collection and was granted ethical clearance.

Disclaimer (Artificial Intelligence): All authors hereby declare that no generative AI technologies were used during the writing or editing of this manuscript.

REFERENCES

- Ahmad, S., Rahim, N., & Kamal, A. (2021). E-cigarette use and influencing factors among university students in Malaysia. *Journal of Public Health Research*, 10(2), 122–129.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Ajzen, I. (2022). Understanding planned behavior and decision-making processes. *Journal of Behavioral Studies*, 17(2), 114–128.
- Bautista, M. E., & Cabral, L. R. (2022). Social media influence and vaping behavior among Filipino college students. *Philippine Journal of Health Education*, 18(1), 45–57.
- Bernardo, A. (2023). Peer influence and behavioral choices among Filipino adolescents. *Philippine Journal of Psychology*, 55(1), 45–59.
- Dela Cruz, R. G., Reyes, A. S., & Serrano, K. M. (2023). Determinants of vaping among health science students in Metro Manila. *Philippine Journal of Health Sciences*, 12(3), 33–42.
- Department of Health. (2023). Philippine report on tobacco and e-cigarette use among youth. DOH Health Promotion Bureau.
- Fishbein, M., & Ajzen, I. (2021). Predicting and changing behavior: The reasoned action approach. Psychology Press.
- Glanz, K., Rimer, B. K., & Viswanath, K. (2008). Health behavior and health education: Theory, research, and practice (4th ed.). Jossey-Bass.
- Goniewicz, M. L., Knysak, J., Gawron, M., Kosmider, L., Sobczak, A., Kurek, J., & Benowitz, N. L. (2020). Levels of selected carcinogens and toxicants in vapor from electronic cigarettes. *Tobacco Control*, 29(6), 678–684.
- King, B. A., Jones, C. M., & Tynan, M. A. (2022). Vaping behaviors among college health science students in the

- United States. *Journal of American College Health*, 70(8), 2379–2388.
- Lechner, W. V., Janssen, T., Kahler, C. W., Audrain-McGovern, J., & Leventhal, A. M. (2019). Peer influence and use of e-cigarettes among college students. *Journal of Behavioral Medicine*, 42(5), 1062–1072.
- Lim, C. C., Leung, J., & Chan, G. (2021). Perceived risk and motivations for e-cigarette use among Australian university students. *BMC Public Health*, 21(1), 1123.
- Lyzwinski, L. N., Naslund, J. A., Miller, C. J., & Eisenberg, M. J. (2022). Global youth vaping and respiratory health: Epidemiology, interventions, and policies. *npj Primary Care Respiratory Medicine*, 32, 14.
- Palmes, M., Trajera, S., & Vasquez, R. (2022). Awareness and vaping practices among nursing students in selected Philippine colleges.
- Panya, S., Thavorncharoensap, M., & Sangthong, R. (2022). Determinants of e-cigarette use among nursing students in Thailand. *Asian Journal of Nursing Education*, 14(4), 210–219.
- Rahman, R., Hidayat, A., & Nur, F. (2023). Academic stress and e-cigarette use among Indonesian university students. *Indonesian Nursing Journal*, 11(2), 55–66.
- Santos, J. L., Lao, M. A., & Gomez, E. R. (2022). Awareness and prevalence of vaping among nursing students in a private university in Cebu. *Philippine Nursing Research Review*, 8(2), 89–98.
- Soule, E. K., Lee, J., & Cobb, C. O. (2022). Perceptions of e-cigarette harm and use among college students. *Addictive Behaviors Reports*, 16, 100440.
- Trumbo, C. W., & Harper, R. (2021). Use and perceptions of electronic cigarettes among college students. *Journal of American College Health*, 69(5), 533–540.
- World Health Organization. (2023). *Electronic nicotine delivery systems: Global report*. WHO Press.
