

# Perceptions of Vape Prevention Strategies Among Public Secondary School Staff: A Qualitative Review

Makhali Ba<sup>1</sup>, Ibrahima Khalil Cisse<sup>2</sup>

<sup>1</sup>Ed.D., Midwestern State University  
makhali0409@hotmail.com

<sup>2</sup>Ph.D., Midwestern State University  
ibrahimacisse@gmail.com

**Abstract:** ***Background:** The vaping crisis among today's youth is continuing to grow [1]. Existing research offers no clear or consistent strategy to tackle this growing problem. Educators and administrators often serve as disciplinarians rather than educators when managing vape usage. This can be attributed to the lack of knowledge, training, and resources provided to public educators regarding vaping, nicotine use, and cessation strategies. **Purpose:** This qualitative study focused on discovering themes associated with public educators' perceptions of vape education strategies based on their experiences as administrators. **Methods:** A semi-structured interview was performed with seven public school administrators and two public school counselors across seven schools within four different school districts in North Texas. Data obtained were reviewed for qualitative thematic analysis utilizing a phenomenological approach. **Results:** Analysis of qualitative data resulted in the identification of three primary themes associated with perceptions of vaping education and prevention: evasive student behavior, enforcement challenges, and the underpreparedness of staff to address the vaping issue. **Conclusions:** The findings of this study underscore the multidimensional nature of the vaping crisis in public secondary schools. Data indicate that punitive strategies alone are inadequate. These results highlight the necessity for a more education-driven approach to address this public health concern.*

**Keywords:** vaping education, school administration, student behavior, qualitative analysis, nicotine prevention

## 1. Introduction

In the United States, the use of electronic cigarettes (e-cigarettes) has become the most common form of nicotine delivery among high school and middle school-aged youth [2]. According to the Centers for Disease Control and Prevention, 1.63 million (5.9%) of students report regular use of e-cigarettes [3]. Among these students, 26.3% report their usage of e-cigarettes as daily vaping. In Texas alone, 13.8% of middle school students and 17.1% of high school students reported e-cigarette use in 2023 [4]. The vaping trends among youth continue to compound the struggles of public-school administrators, educators, and staff when trying to strike a balance between discipline, education, and preventing substance abuse.

This study explored the perceptions of vape use and prevention strategies among public-school administrators in North Texas. Similar to national trends, vaping use was reported as a concern from administration at every level of instruction. Among the current perceptions of vape use, administrators reported behavioral concerns, disciplinary challenges, and inadequate preparation or resources to fully address the vaping crisis on their schools' campuses.

## 2. Literature Survey

### Behavioral Concerns

In today's academic environment, it is difficult to identify with certainty which students are "vapers" or users of electronic cigarettes when compared to non-users. However, a common theme among school personnel is the secretive or elusive behavior that is shared among suspected vape users.

Such behaviors include hiding behind their backpacks or other belongings in class, wearing their shirts or jackets above their face or nose, and making frequent requests to go to the bathroom or leave class. These behaviors have been linked to trying to conceal the vape cloud while in class or on school property where there is known enforcement of an anti-vaping policy [5]. On the contrary, in schools where there is no known anti-vaping policy or poor enforcement, vaping behaviors are bolder and blatantly obvious among students. These behaviors include, but are not limited to, daring classmates to record videos of themselves vaping in class, vaping in groups so that the teacher can't identify the actual user, passing vape pens/pods between students in the open, but making it difficult to track possession [5][1].

Additional behavioral concerns among students who are vape users are increased irritability, agitation, and anxiety. Existing research supports the correlation between prolonged vape usage and increased depression, suicidal tendencies, impulsivity, and anxiety disorders in adolescents [6][7]. Similarly, these behaviors are also associated with nicotine addiction and withdrawal symptoms in adults. However, there is a lack of longitudinal studies associated with mental health and behavioral complications in youth.

### Enforcement Challenges

The disciplinary challenges associated with enforcing anti-vaping policies tend to further complicate the vaping crisis on middle school and high school campuses [5]. These challenges include the students not considering the disciplinary repercussions, such as openly vaping in class or openly on school property. This leads to further vape use as the punishment is not significant enough to deter the behavior. Additionally, some educators believe that the punishments

associated with vape usage disrupt the learning process and often mean these students require additional help or fall behind in comparison to their classmates [5][1][8]. In contrast, existing research also shows that some educators believe the punishments or disciplinary actions are completely ineffective, therefore, they do not feel they should take the time to report students when caught vaping in class or on school property [1]. Consequently, the anti-vaping policy is not enforced, rendering the policy ineffective among staff and students.

Some disciplinary actions include out-of-school suspension, alternative education placement, in-school suspension, community service, and/or a combination of these actions. The suspensions and alternative placements vary from one school to another, making it difficult to find an appropriate balance between education and discipline. In 2023, the Texas legislature made changes to the Texas Education Code that mandated any student caught vaping or in possession of an e-cigarette within 300 feet of school property would be sent to disciplinary alternative education placement (DEAP) as a disciplinary consequence [9]. According to a report from The Dallas Morning News, area schools had anywhere from 20% to 45% of enrolled students in alternative placement (DEAP) due to vaping violations in February 2024 [10].

### Staff Preparedness

A common theme among school staff and administrators is the lack of education, training, or available resources to ensure their preparedness to offer vaping education or cessation assistance. Some districts tend to leave the topic of tobacco and nicotine education to the health teachers and school nurses. Therefore, several members of the school staff have little to no training in regards to vaping or nicotine delivery devices [11][12]. Additionally, nicotine delivery devices are difficult to detect due to the various styles that are available. School staff also reported that they did not feel confident in recognizing vape pens, pods, or cartridges. Therefore, these educators did not feel prepared to report these students as they were unsure that they were violating school policy. Another concern among educational staff is the use of alternative substances in the vape devices, such as THC or other cannabis derivatives [8][5][11][13].

### Purpose Statement

The purpose of this study was to examine the perceptions and experiences of public secondary educators regarding vape or e-cigarette education. Additionally, this study was meant to gain a better understanding of how administrators view the effectiveness, challenges, and implementation of vape/nicotine prevention curricula within their schools. This study was designed to answer the following questions:

- 1) How do public secondary educators perceive their role in delivering vape and e-cigarette education to students?
- 2) What are school administrators' perceptions of the effectiveness and challenges associated with implementing vape/nicotine prevention curricula in secondary schools?

## 3. Methods

### Procedure

Prior to the initiation of this study, IRB approval was obtained. Participants for this study included a convenience sample of public school administrators at the secondary level (6<sup>th</sup> -12<sup>th</sup> grade). Participants, aged 18 and above, were recruited using a solicitation email, outlining the purpose of the study and participation requirements. Communication with participants addressed the voluntary nature of participation, and any information obtained would be de-identified. Inclusion criteria for participation covered all participants currently employed and working within the role of a school administrator. Such roles included: principals, vice principals, associate principals, dean of students, and counselors.

A semi-structured interview guide was developed specifically to address the vaping concerns within the 6<sup>th</sup> – 12<sup>th</sup> grade population within public schools, reviewing current policies/disciplinary actions, and preparedness to teach vaping cessation content. Consent was implied by their voluntary attendance in the interview, resulting in 9 participants.

The method used in this study was qualitative thematic analysis following a phenomenological approach. An interpretive phenomenological approach was deemed appropriate for this study, as the primary aim was to obtain a greater understanding of the vaping concerns within secondary schools based on the perceptions of the school administrators.

### Instrument and Data Collection

The method of data collection for this study was semi-structured interviews utilizing an interview guide (See Appendix A). The interviews were conducted by two primary researchers, one facilitating the questions and the other taking notes. Participating administrators were assured that their willingness to share information was voluntary prior to the initiation of discussion. The interview was guided by open-ended questions designed to address the school administrators' perceptions of vape prevalence, prevention strategies, and preparedness to provide vape education/support within their campus (See Appendix A). Recordings and notes were taken during the interviews to ensure precise documentation of the administrators' statements. After completion of the interviews, the recordings were transcribed verbatim and carefully reviewed by both researchers to ensure the accuracy of the data. No additional or follow-up data collection procedures were conducted.

### Data Analysis

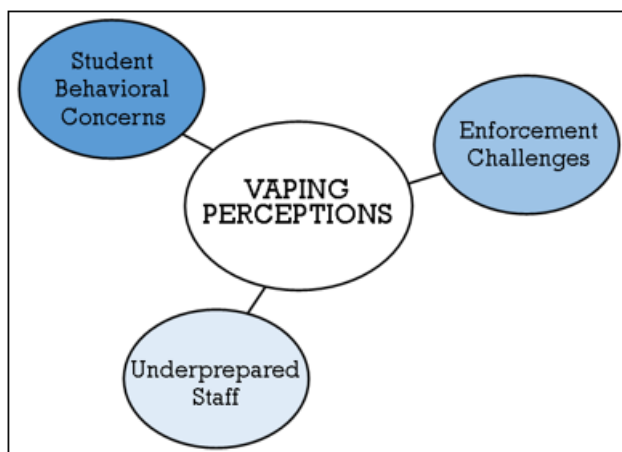
Thematic analysis was carried out using qualitative analysis. Using a conventional content analysis approach, codes were developed based on content, responses, and beliefs. The codes were then grouped into thematic categories to establish major and minor themes based on the interview responses. To provide increased precision, two outside analysts were utilized to review the developed codes and themes. The analysts convened to assess discrepancies, resolving differences by in-depth discussion and negotiated consensus. A comprehensive review was conducted by both researchers

to develop a thematic map and potential connections between categories.

#### 4. Results

A total of 9 public school staff members participated in the interviews for the purpose of this study. Among the participants, 7 individuals held the title of principal or assistant principal, while 2 participants were school counselors. There were 4 principals from the high school level (grades 9-12), 2 principals from the middle school level (grades 6-8), and 1 principal from a combined junior/senior high (grades 6-12). The 2 counselors were from the high school level. The interviews consisted of 5 female administrators and 4 male administrators. All participants were employed by public schools across 5 different school districts in North Texas. Additionally, all participants self-reported as having been involved in addressing vape use on their academic campus.

Data analysis resulted in the identification of three common themes relating to the perceptions and experiences of public secondary educators regarding vape or e-cigarette education: (1) student behavioral concerns, (2) enforcement challenges, and (3) underprepared staff in regards to offering effective education and cessation assistance. The model below (Figure 1) demonstrates the various themes found within the study group.



**Figure 1:** Thematic Map of Vaping Perceptions

##### **Theme 1: Behavioral Concerns among students suspected of vaping**

The theme of behavioral concerns among students who were suspected vape users was reported as a significant issue among school administrators. When trying to address vaping and e-cigarette use on their campus. Administrators expressed their experiences with students leaving campus, trying to hide from or “trick” the vape detectors, passing the vape devices among several students, and increased agitation and irritability among students who admit to vape usage on or off campus.

Participant 1: “...students are getting better at hiding it (vape devices) ... word gets out that we are doing searches and they tend to get rid of or hide their vapes in their cars or somewhere off campus that day.”

Participant 2: “...some students are getting better at hiding it, but we are allowed to search their person and belongings on campus.”

Participant 3: “...they pass them (vape devices) off to each other so that they aren’t caught with them, but sometimes we can still see who was in the hallways with them if a vape detector was triggered...”

Participant 5: “...we don’t have a lot of open use in class, but we struggle to catch it (vape use)... they are always finding new ways to hide them (vape devices).”

Participant 6: “...our vape detectors are not in every bathroom, so we know those are avoided if possible...and there is a trend that flushing the toilet while they exhale the cloud will trick the detectors.”

Participant 7: “The known users seem to be already addicted, with years of use sometimes, they tell us this is how they deal with anxiety.”

Participant 8: “We see the changes in them...like agitation, irritability, and mental struggles... and it is across all demographics of students here.”

##### **Theme 2: Enforcement Challenges and Effectiveness**

Reported as the second most common perspective among school administrators is the difficulties associated with enforcing the anti-vaping policy. The legislative changes in Texas force school administration to utilize disciplinary alternative education placement (DEAP) for any student caught using or in possession of a vape or any component of an electronic nicotine delivery device. However, there were varying perspectives as to how this disciplinary model should be enforced, its effectiveness, and how to balance education with discipline for these students, especially if the students are “repeat offenders”.

Participant 2: “...legislative changes have helped a lot, as well as the vape detectors in the bathrooms that set off a silent alarm...we don’t see as many as we did before.”

Participant 4: “We have a strict policy that amps up after each offense, ranging from 30 to 90 days in DEAP, but we still have 10% of our student body caught for weekly use, and THC a couple times a month...”

Participant 5: “I think the law has helped some, but I think there are more out there than we catch, and DEAP placement helps...but it is not a magic consequence that makes them want to change.”

Participant 7: “...DEAP placement has helped us identify the kids that need help, but it seems that some are already addicted, and to keep sending them back... they get behind in class.”

Participant 8: “Sometimes we have to bring these students (those caught with a vape) back to campus because there isn’t enough room at DEAP for worse offenses...”

Participant 9: “There is not a lot of balance when we send them away with what they really need help with...”

**Theme 3: Administrator/Staff preparedness to offer vaping education or cessation**

As another theme associated with addressing vaping, participants reported that they did not believe they were as prepared as they should be to address vaping cessation within their schools. While many participants reported that they were aware of some sort of vape education occurring, they did not know the extent of what information was shared or how to help those students already addicted to nicotine.

Participant 1: "...there is a counseling program that teaches them about vape use while at DEAP, but it doesn't work well for most students...as a coach, we try to talk to the athletes about their physical performance, but it is not enough!"

Participant 3: "The health classrooms address vaping in their content each year, but that is one unit in one semester...we need more resources. The district is really just playing defense. We do have signs and posters hung in the hallways sharing the health effects of vaping and smoking. The school is not able to address true addiction to vaping...we need parents more involved."

Participant 4: "We have at-risk coordinators that try to follow these students, sometimes we also use peer-to-peer educators with the ones most troubled with vaping...but we could always use more help, resources, and up-to-date education to better help these students."

Participant 5: "We have to get better educated on this to stay ahead of it... it's really bad here, and I don't think we even catch them all. I can't keep up with the vapes that look like USB sticks, highlighters, and pens."

Participant 7: "We have asked for more funding to get speakers and experts here to talk to our staff and the students...we need to be able to better help them, especially those who are desperate to change or quit."

**5. Discussion**

The vaping crisis continues to grow among high school and middle school-aged students in the United States [14]. The findings from this study show that public school administrators in North Texas are experiencing many of the same struggles as the rest of the country. There is a cyclic trend in vape usage associated with legislative changes in Texas that occurred in 2023. However, several educators attribute this trend to the fact that students are simply getting better at hiding the vape devices. When social media accounts show repeat use of vapes on campus or vape use by current students, it seems unlikely that these students would not be caught with such devices while at school. Students are becoming increasingly sophisticated at hiding vapes, using items that resemble everyday school supplies, or employing tactics such as breathing into paper towels or flushing toilets when using their vapes in the school bathroom. However, many educators also acknowledge that there are ways to bypass the vape-detecting technology that was reported as being used on all campuses included in this study. Therefore, some administrators report that they have had a significant drop in vape offenses, while others within the same district report that their vape offenses keep rising.

Additionally, the ability to enforce disciplinary actions against vaping has been mandated by the state of Texas. This limits the flexibility of discipline across schools and districts. The only variance noted in this study was that the time spent at DEAP was determined by each school administrator based on the requirements and recommendations of the associated legislation. Typically, each offense escalated the time spent in DEAP and THC-related offenses also led to longer durations. While trends may show a slight decline in the number of students "getting caught", the balance between education and discipline has yet to be determined. All administrators believed that the students were required to keep up-to-date on their coursework while in DEAP. Many believed that the students were at a greater risk of falling behind and struggling to be successful academically. In addition to the disciplinary consequences associated with school, it is also important to consider the legal implications of vaping and possession of cannabis derivatives among adolescent-aged students. In Texas, cannabis is not legalized for recreational use at any age, and Tobacco 21 prohibits the sale or possession of nicotine products to individuals under the age of 21 [15].

While disciplinary systems are in place and show some effect, the responses highlight a strong need to shift toward more comprehensive, education and support-oriented strategies. Schools recognize that punitive actions alone are insufficient for addressing the root issues, such as addiction, peer influence, and lack of awareness or support. Among the administrators who participated in this study, several seemed to delegate vaping and nicotine education to the health classes or counselors associated with the DEAP center. In addition, many reported having physical posters and signage around their school as a primary method of vape education outside the classroom. Studies indicate that students are more likely to trust information presented by their educators, largely because of the established relational dynamics between them. [5]. Therefore, it is imperative that all educators have knowledge and training related to vape education, including topics such as vape identification, student behaviors related to adolescent vaping, mental health concerns, and signs of nicotine addiction to better address the vaping crisis within their school. Cessation programs such as INDEPTH<sup>®</sup>, created by the American Lung Association, were designed to assist educators in providing vaping education to teens that focuses on nonpunitive measures. By empowering school staff with the necessary tools and knowledge to recognize, educate, and support students, schools can move beyond reactive discipline and toward proactive prevention and intervention.

**6. Limitations**

This study does present possible limitations. One limitation is centered on the participants within the study. The study utilized public school administrators only in North Texas, therefore, results cannot be generalized to all public schools.

**7. Future Scope**

Recommendations for further research regarding this study should focus on utilizing a more varied group of participants. Ideally, future studies could incorporate administrators, staff, and students from varying public schools across the United

States. This would allow a more generalized and comprehensive representation of all public schools. A potential recommendation for future studies could include alternative methods for data collection. This could allow for differing themes to emerge within the study or provide consistency with the themes identified in this study. Another aspect that could be explored is the perceptions of students who are not vape users and their views on the stricter policies that have been implemented in an attempt to circumvent vape use in schools.

## 8. Conclusion

The findings of this study illuminate the complex and multifaceted nature of the vaping crisis within public secondary schools. Through the voices of administrators and counselors, it becomes clear that student behavioral concealment, the inconsistent impact of disciplinary enforcement, and a widespread lack of staff preparedness contribute significantly to the challenges schools face in addressing this issue. While recent legislative changes in Texas have introduced stricter disciplinary measures, the data suggest that punitive approaches alone are insufficient. Rather, a shift toward comprehensive, education-focused strategies is essential. Educators expressed a need for greater training, more consistent resources, and collaborative efforts involving parents, students, and cessation specialists to effectively combat nicotine addiction among youth.

## References

- [1] Wagoner, K. G., King, J. L., Alexander, A., Tripp, H. L., & Sutfin, E. L. (2021). Adolescent use and perceptions of juul and other pod-style e-cigarettes: A qualitative study to inform prevention. *International Journal of Environmental Research and Public Health*, *18*(9), 4843. <https://doi.org/10.3390/ijerph18094843>
- [2] American Lung Association (2025) E-Cigarettes & Vaping. Retrieved April 29, 2025, from <https://www.lung.org/quit-smoking/e-cigarettes-vaping>
- [3] Centers for Disease Control and Prevention (2024). E-cigarette Use Among Youth. Retrieved April 29, 2025, from <https://www.cdc.gov/tobacco/e-cigarettes/youth.html>
- [4] Texas Department of State Health Services (2025). 2025 Electronic Cigarette (E-Cigarette) Report. Retrieved from <https://www.dshs.texas.gov/sites/default/files/legislative/2025-Reports/2025-Electronic-Cigarette-E-Cigarette-Report.pdf>
- [5] Cole, A. G., Lienemann, B. A., Sun, J., Chang, J., & Zhu, S. H. (2024). California school staff reports of seeing students vaping at school and disciplinary actions. *The Journal of School Nursing : The Official Publication of the National Association of School Nurses*, *40*(6), 618–629. <https://doi.org/10.1177/10598405221127694>
- [6] Khan AM, Ahmed S, Sarfraz Z, Farahmand P. (2023). Vaping and mental health conditions in children: An umbrella review. *Substance Abuse: Research and Treatment*. 2023;17. doi:10.1177/11782218231167322
- [7] Becker, T. D., & Rice, T. R. (2022). Youth vaping: a review and update on global epidemiology, physical and behavioral health risks, and clinical considerations. *European Journal of Pediatrics*, *181*(2), 453–462. <https://doi.org/10.1007/s00431-021-04220-x>
- [8] Tanz, L. J., Heck, C., Herzig, C. T. A., Ranney, L. M., Herndon, S., Martin, J., Hast, M., McGowan, E., Baler, G., Shamout, M., King, B. A., Tynan, M. A., & Kansagra, S. M. (2023). Assessment of school staff knowledge and perceptions of student e-cigarette use and resource needs, and e-cigarettes confiscated at 12 North Carolina high schools - 2019. *North Carolina Medical Journal*, *84*(6), 10.18043/001c.83954. <https://doi.org/10.18043/001c.83954>
- [9] Texas Education Code. <https://statutes.capitol.texas.gov/Docs/ED/htm/ED.37.htm#37.006>
- [10] Richman, T. (2024). New vaping law lands hundreds of North Texas students in alternative school. *The Dallas Morning News*. Retrieved from <https://www.dallasnews.com/news/education/2024/04/15/new-vaping-law-lands-hundreds-of-north-texas-students-in-alternative-school/>
- [11] Smith, L. M., Boehm, L., Strang, L. V., DeMarre, C., & Marcyjanik, D. (2024). Targeted education for school staff on electronic nicotine delivery systems: A nurse led intervention. *The Journal of School Nursing : The Official Publication of the National Association of School Nurses*, *40*(2), 223–230. <https://doi.org/10.1177/105984052111043127>
- [12] Kawalkar, U., Joshi, S., Patekar, A., Kogade, P., Rajurkar, S., & Telrandhe, S. (2023). Teacher's perspectives about tobacco consumption and its prevention among students from Western Maharashtra, India: A qualitative study. *Cureus*, *15*(9), e45924. <https://doi.org/10.7759/cureus.45924>
- [13] Lee, R., Herzig, S. E., Ramirez, C. M., Soto, D., & Unger, J. B. (2025). Peer e-cigarette and cannabis use and adolescent anxiety: findings from a mixed-methods study. *Substance Use & Misuse*, *60*(5), 648–658. <https://doi.org/10.1080/10826084.2024.2446738>
- [14] Jones K., & Salzman G.A. (2020). The vaping epidemic in adolescents. *Mo Med*, *117*(1):56-58. [https://www.researchgate.net/publication/339883775\\_The\\_Vaping\\_Epidemic\\_in\\_Adolescents](https://www.researchgate.net/publication/339883775_The_Vaping_Epidemic_in_Adolescents)
- [15] Texas Department of State Health Services. (2021). *Electronic nicotine delivery systems (e-cigarette) report*. <https://www.dshs.texas.gov/sites/default/files/legislative/2021-Reports/Electronic-Nicotine-Delivery-Systems-%28E-cigarette%29-Report-2021.pdf>