

**Examining Accessibility of Cessation Services and Cultural Influences on Tobacco Use
Among Latinx College Students: Insights into Relevancy and Appropriateness**

Martin Montes

California State University, Fresno

BITER Program

Dr. Rosa Toro

Aug 6th, 2025

Abstract

Latinx college students continue to experience disproportionate tobacco-related health disparities, often due to limited access to culturally relevant cessation services. This study explores how accessibility and cultural relevancy impact quit attempts among Latinx students who have tried to stop using tobacco or nicotine. A total of 212 participants (147 female, 47 male, and 18 blank entries) from a four-year university and nearby Central Valley community colleges completed a Qualtrics-based survey assessing perceived importance of culturally relevant resources and common barriers experienced. The most valued supports included encouragement or accountability from family and friends who share their cultural identity (Mean = 3.79), access to materials in their preferred language (Mean = 3.65), and representation of cultural values in cessation messaging (Mean = 3.63). Additional supports included culturally specific media (Mean = 3.59) and success stories from within their community (Mean = 3.47). Lower-rated supports included traditional practices, involvement of religious leaders, and culturally tailored educational materials, all rated at or below 3.32. The most commonly reported missing supports were encouragement from loved ones (n = 40), “other” factors (n = 27), and access to educational materials (n = 18). The least selected supports were culturally familiar quitlines (n = 1) and culturally led community programs (n = 0). These findings suggest that Latinx students are more likely to engage with cessation efforts when services reflect their language, identity, and social support systems. Cessation strategies that center family involvement, bilingual accessibility, and culturally aligned messaging can play a key role in improving quit success and addressing tobacco-related health inequities among Latinx college populations.

Keywords: Latinx college students, tobacco cessation, cultural relevancy, cultural appropriateness, health disparities, accessibility of cessation services, public health equity

Examining Accessibility of Cessation Services and Cultural Influences on Tobacco Use Among Latinx College Students: Insights into Relevancy and Appropriateness

Tobacco and nicotine use continue to be a major public health issue in the United States, especially among college students who are still developing lifelong habits. For Latinx students in California's Central Valley, the challenge of quitting is not just about willpower, it is about access and connection. These students often face a double barrier: on one hand, they are navigating academic and personal stress in a region with historically limited healthcare access; on the other, they are offered cessation resources that do not reflect their culture, values, or lived experiences. Even highly motivated students trying to quit smoking or vaping may not succeed, not because they did not try hard enough, but because the programs available were not made with them in mind. Prior studies have shown that Latinx communities are often left out of the design process for public health interventions, leading to a lack of culturally relevant materials and support (Gonzalez et al., 2019; Martinez et al., 2020). Many students report not feeling seen or understood when seeking help, especially when the content is generic or fails to involve family, language preferences, or community role models. This study focuses on two central questions: What specific types of supports do Latinx college students say they were missing when trying to quit, and which culturally relevant resources do they believe would actually help them quit successfully? Grounded in Social Learning Theory (Bandura, 1986) and Ecodevelopmental Systems Theory (Szapocznik and Coatsworth, 1999), the goal of this paper is to explore both accessibility and cultural relevancy in cessation support through the voices of 212 Latinx students from a four-year university and nearby community colleges. These students completed a survey on barriers they experienced during their quit attempts and rated how important different types of culturally grounded supports were to them. By centering their

perspectives, this study offers insight into how culturally disconnected resources may be contributing to tobacco-related disparities and what needs to change if we want public health to actually reach the communities it claims to serve. To better understand how these gaps formed and why they persist, the following section reviews key research on tobacco use and culturally relevant health interventions within Latinx college populations.

Tobacco Disparities Among Latinx College Students(Literature review section)

Latinx college students in the U.S. continue to face serious challenges when it comes to tobacco and nicotine use. These disparities hit even harder in places like California’s Central Valley, where Latinx students often live in neighborhoods with a high concentration of tobacco retailers. That environment alone increases their exposure to pro-tobacco messaging and makes access to these products easier. Even though many Latinx students want to quit, they don't always have the support systems in place to help them follow through. The CDC (2020) found that Hispanic smokers actually try to quit more often than their non-Hispanic White peers, but their quit rates are still lower. That gap isn’t about willpower or effort. It usually comes down to the fact that programs out there don’t meet their cultural or linguistic needs. Other studies, like West et al. (2010), show that location matters too. Latinx students often end up in areas where tobacco and vape shops are just around the corner. These aren't random patterns. They're the result of long-standing systemic problems like redlining, which placed communities of color in under-resourced areas with fewer protections and more risk factors (Investigators from Chapman University, 2021).

To really understand how these issues play out, you have to look at how social environments influence behavior. Ecodevelopmental theory helps break it down. It says that family, school, peers, and community all interact to shape a person’s choices, especially around

risky behavior like smoking (Szapocznik & Coatsworth, 1999). When you apply this to Latinx college students, it becomes clear that these students might pick up smoking not just because of stress or peer pressure but because quitting feels impossible without the right kind of help.

Bandura's social learning theory adds to that, explaining that people learn behaviors by watching others. So if friends or family members are using tobacco and there's no visible support system or role model to show how to quit, that cycle keeps going (Bandura, 1986). Programs that don't reflect Latinx students' identities, values, or language won't stick. Studies like Ickes et al. (2020) confirm that weak campus policies around tobacco make it worse, especially for students who don't feel supported by their school's health resources. All of this shows that Latinx students aren't just dealing with nicotine—they're dealing with a lack of resources that reflect who they are. That's what this study focuses on: understanding what's missing, what matters most to Latinx students, and what culturally grounded support really looks like to them.

Challenges in Accessibility of Cessation Services

For many Latinx college students, quitting tobacco or nicotine is not just about willpower or motivation. The bigger issue is access to support that actually fits their lives. A lot of the time, general cessation programs exist, but they're not designed with cultural relevance in mind. If a student grew up speaking Spanish at home and navigating two worlds, but the materials are only in English and reflect white, middle-class norms, that student might already feel like the resources weren't meant for them. Even when support is available, it's not always visible or approachable. Students don't just need a flyer or website. They need to feel like the people behind those programs understand their background. The CDC (2020) found that Hispanic smokers are less likely than non-Hispanic white smokers to get advice or support to quit. That's not about lack of interest. It shows how public health systems are failing to offer help in ways

that connect culturally or linguistically. Moreno et al. (2024) explain that without a personal or cultural connection to healthcare services, people are less likely to trust or use them.

This lack of connection can be discouraging. If students don't see themselves in the messaging or programming, they're more likely to avoid seeking help altogether. The survey in this study reflects that reality. Participants said the most common missing support was encouragement or accountability from family and friends, which points to how social support structures can either help or hurt a quit attempt. Others said they didn't know where to start, didn't have access to the right materials, or felt unprepared. These aren't minor barriers. They're indicators of a system that assumes "one size fits all" will work, even though it rarely does for communities of color. Accessibility has to go beyond just having a program or posting a number. It means offering materials in students' preferred language, promoting services in spaces they already use, and building support systems that reflect how Latinx families operate. When students are surrounded by programs that speak their language, reflect their culture, and consider their lived experience, quitting becomes a real, reachable goal.

Importance of Cultural Relevancy and Appropriateness

Culturally relevant health programs have been shown to influence tobacco cessation outcomes among Latinx populations, particularly when they incorporate values such as family connection, language preference, and trust in community representation. Lorenzo-Blanco et al. (2015) found that Latinx youth who reported stronger cultural identity and family-oriented values were less likely to engage in smoking behaviors, suggesting that culturally aligned messaging may act as a protective factor. In a foundational study, Resnicow et al. (1999)

emphasized the distinction between surface-level cultural elements (such as translating materials) and deeper structural elements that reflect cultural norms, beliefs, and values. These findings support the argument that culturally tailored materials are more likely to be effective when they move beyond simple linguistic translation and instead reflect the lived experiences and worldviews of the target population.

Several studies have highlighted the potential benefits of culturally appropriate cessation services for Latinx college students, including improved engagement and trust. For instance, Stephenson et al. (2007) validated the Brief Sensation Seeking Scale (BSSS) within a young adult Latino population, underscoring the importance of culturally and contextually appropriate instruments when measuring tobacco-related behaviors. Moreover, programs that incorporate family-centered support structures or provide materials through trusted cultural channels, such as community radio or peer-led workshops, may be more likely to be used by students. However, many existing public health interventions still lack this level of cultural alignment, which may reduce their effectiveness among Latinx populations. Current research points to a need for more community-informed approaches that align with cultural values while maintaining evidence-based cessation strategies.

Gap in the Literature and Rationale for Study

Despite ongoing research into tobacco use and cessation among Latinx populations, there remains limited data specifically addressing the experiences of Latinx college students navigating quitting attempts. While studies have explored cultural values, sensation-seeking behaviors, and access to services in broader Latinx communities (Lorenzo-Blanco et al., 2015; Stephenson et al., 2007), fewer have examined how these factors influence cessation efforts

within a college setting. Much of the existing literature either generalizes findings to all young adults or focuses on high school populations, leaving a gap in understanding the unique social, cultural, and institutional challenges faced by college-enrolled Latinx students. Additionally, although some researchers have examined disparities in access to cessation services, there is still minimal insight into which types of culturally relevant supports students consider most valuable or what specific resources they feel are lacking when they attempt to quit.

This study aims to address that gap by centering the voices of Latinx college students in California's Central Valley, a region where health disparities are often amplified by geographic and economic barriers. By gathering data on both perceived barriers and the cultural relevance of support systems, this research offers a more nuanced understanding of how accessibility and cultural alignment influence tobacco quit attempts in this population. The study's focus on student perspectives allows for a more direct exploration of what current cessation efforts may be missing. It also highlights areas where public health programs can improve their outreach, delivery, and cultural tailoring to better serve Latinx students who are trying to quit tobacco or nicotine.

Materials and Methods

Participants and Procedure

Participants were recruited from California State University, Fresno, a four-year public university, and Fresno City College, a two-year community college. Both institutions are located in California's Central Valley and are designated Hispanic-Serving Institutions (HSIs). A total of 212 college students participated in the study. Of these, 47 self-identified as male, 147 as female,

and 18 either left the gender question blank or selected a different category. The mean age of the participants was 19.64 years. The anonymous survey was administered online through Qualtrics and was distributed via QR codes and faculty- or staff-shared email announcements. Prior to beginning the survey, participants were provided a brief explanation of the study and asked to indicate their consent. Upon completion, participants received either extra credit or a \$20 Amazon gift card as an incentive. The study was approved by the institutional review board before data collection began.

Materials

Barriers to Successfully Quitting Tobacco/Nicotine

To assess the challenges Latinx college students face when attempting to quit tobacco or nicotine, participants responded to Q259, a custom matrix-format survey item informed by culturally grounded public health research (Centers for Disease Control and Prevention, 2022; Lorenzo-Blanco et al., 2015). This question was administered only to participants who previously indicated having made a quit attempt. It included 11 statements reflecting potential barriers, such as “I was stressed or faced challenging life circumstances,” “I experienced strong cravings or withdrawal symptoms,” and “I encountered triggers like places, people, or situations.” Participants were instructed to select all statements that applied to their experience, allowing for a multidimensional understanding of the obstacles encountered during cessation efforts.

Culturally Relevant Supports

Perceived value of culturally relevant support resources was measured using Q260, a 19-item scale that utilized a 5-point Likert response format ranging from 1 (Not important at all) to 5 (Extremely important). Items reflected students' perspectives on what types of support would have helped them quit, including statements such as "Support from family and friends who share my cultural identity," "Resources available in my preferred language," and "Representation of my cultural values and beliefs." These items were selected to capture culturally specific forms of social and structural support within the context of tobacco cessation.

Accessibility of Cessation Services

Q261 assessed how helpful participants perceived various cessation services in supporting someone like them in quitting. This 12-item measure also used a 5-point Likert scale ranging from 1 (Not helpful at all) to 5 (Extremely helpful). Items included statements such as "Having support groups with people from similar backgrounds," "Being offered services in both English and Spanish," and "Free counseling or therapy provided on campus." These items were designed to reflect accessibility constructs aligned with Social Learning Theory (Bandura, 1986) and Ecodevelopmental Systems Theory (Szapocznik & Coatsworth, 1999), recognizing that cultural, familial, and systemic contexts shape individuals' access to and trust in health resources.

All three measures (Q259 through Q261) were administered via an anonymous Qualtrics survey and were limited to participants who reported a prior attempt to quit. These items were developed to capture both structural and cultural dimensions of cessation support relevant to Latinx college student populations.

Results

Participant Demographics

A total of 212 students participated in the study. Of these, 22.17% (n = 47) identified as male, 69.34% (n = 147) identified as female, and 8.49% (n = 18) either left the gender question blank or selected a different category. The mean age of participants was 19.64 years (SD = [insert SD here], range = [insert range if available]). Participants were enrolled at either a four-year university or a community college located in California's Central Valley.

Culturally Relevant Resources Selected to Support Quitting (Q260)

Participants who indicated a need for culturally specific support while trying to quit tobacco or nicotine responded to Q260, which asked, "*What specific support or resources do you think could have helped? (Check all that apply).*" The five most frequently selected responses included encouragement or accountability from family and friends (n = 40), other (please specify) responses (n = 27), educational materials about how to quit effectively (n = 18), counseling or support groups for quitting (n = 17), and opportunities to connect with others from their cultural community who were also trying to quit (n = 15), as shown in Figure 1.1. The five least selected resources included involvement of cultural or religious leaders who support quitting (n = 3), access to support in the participant's preferred language (n = 2), culturally tailored resources that reflect personal values and experiences (n = 2), quitlines or helplines staffed by individuals familiar with the participant's cultural background (n = 1), and community-based programs led by people who understand their culture (n = 0), as shown in Figure 1.2.

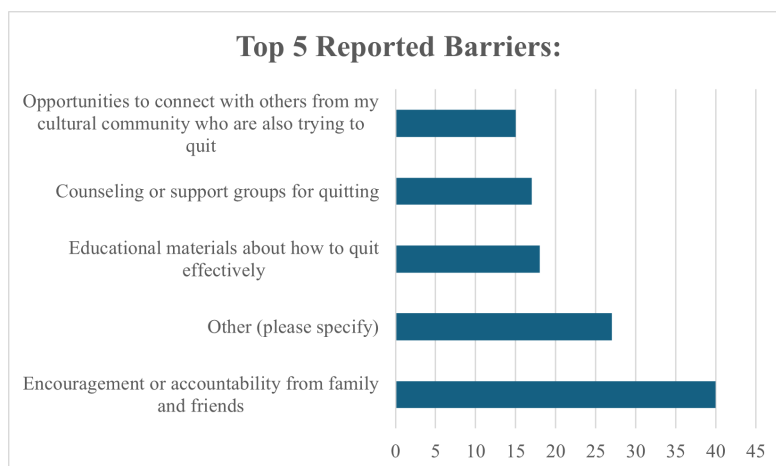
Figure 1.1:

Figure 1.1 shows the top five most reported barriers to quitting tobacco/nicotine among Latinx college participants, with encouragement or accountability from family and friends being the most frequently selected.

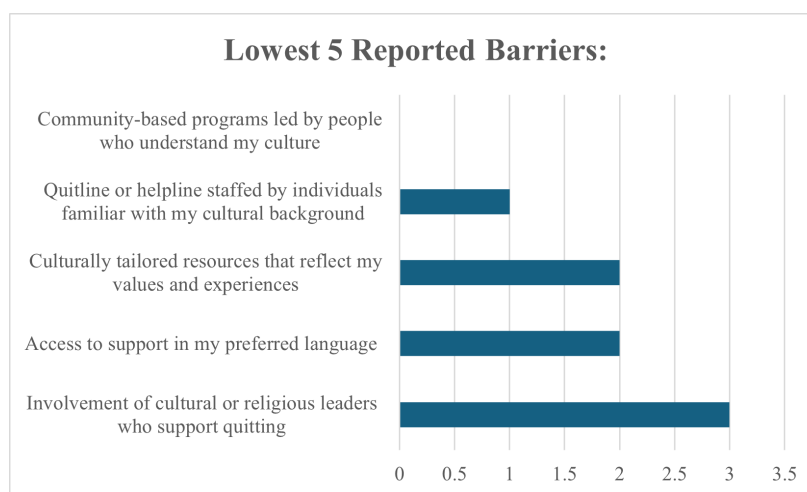
Figure 1.2:

Figure 1.2 shows the five least reported barriers, highlighting that culturally specific resources and programs were selected the least by participants.

Perceived Helpfulness of Culturally Relevant Cessation Services (Q261)

Participants responded to Q261, which asked, “You mentioned the need for culturally relevant or specific support. Please rate how important the following elements would be in helping you quit.” Responses were rated on a 5-point Likert scale (1 = Not important at all, 5 = Extremely important). The item rated highest in importance was free counseling or therapy provided on campus ($M = 3.91$). Other top-rated items included support groups with people from similar backgrounds ($M = 3.87$), being offered services in both English and Spanish ($M = 3.81$), encouragement or accountability from family and friends ($M = 3.76$), and opportunities to connect with others from their cultural community who were also trying to quit ($M = 3.64$), as shown in Figure 2.1. The items with the lowest mean ratings included text messaging support programs ($M = 3.15$), quitlines or helplines ($M = 3.19$), peer mentorship or buddy systems ($M = 3.23$), educational materials about how to quit effectively ($M = 3.35$), and involvement of cultural or religious leaders ($M = 3.41$), as shown in Figure 2.2.

Figure 2.1:

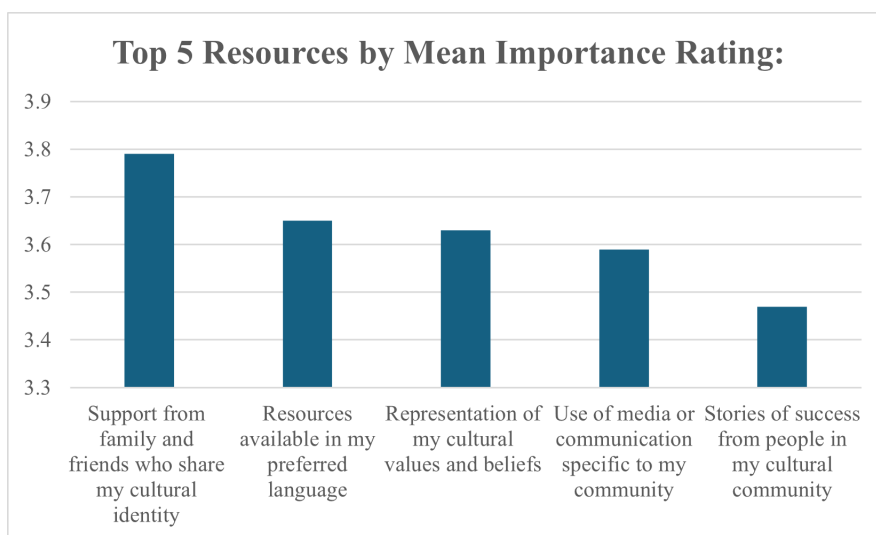


Figure 2.1 shows the top five culturally relevant resources with the highest mean importance ratings among Latinx college participants, with support from family and friends who share their cultural identity rated the highest.

Figure 2.2:

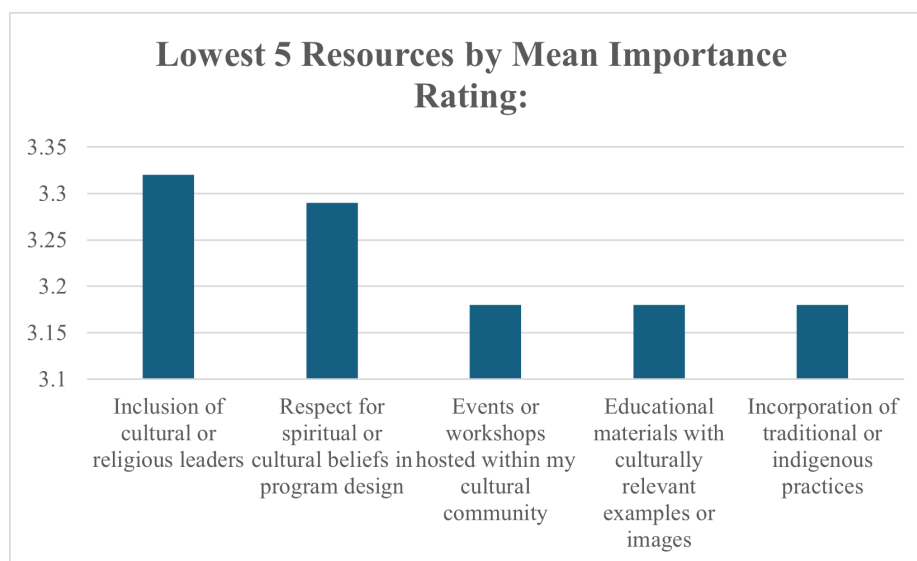


Figure 2.2 shows the five culturally relevant resources with the lowest mean importance ratings, with traditional practices and culturally themed materials rated the least important.

Discussion Section

Key Findings and Cultural Implications

The results of this study highlight several culturally relevant factors that Latinx college students perceive as helpful when attempting to quit tobacco or nicotine. Across both Q260 and Q261, encouragement or accountability from family and friends consistently emerged as one of the most valued supports, followed by bilingual services and group-based opportunities grounded

in shared cultural experience. These findings suggest that interpersonal connection and cultural familiarity may carry more practical weight than formal, institution-driven interventions such as helplines or messaging programs. These resources, although widely available, were rated significantly lower in perceived helpfulness.

These outcomes offer insight into how cultural identity and personal networks may shape the way young adults approach cessation. While previous studies have emphasized cultural values such as familismo and respeto in influencing Latinx health behaviors, few have asked students directly what supports they believe would help them quit. This study begins to fill that gap, revealing a preference for accessible, culturally grounded, and community-based approaches that resonate on a personal level.

Contextualizing the Sample and Researcher Positionality

Although the survey aimed to gather a diverse range of perspectives from Latinx college students, the majority of participants identified specifically as Hispanic. This concentration may limit the generalizability of findings to the broader Latinx population, including those with Caribbean, Central American, or South American backgrounds. The responses likely reflect cultural norms more commonly held by Mexican-American students in California's Central Valley. As a researcher who shares cultural and regional proximity to this population, I recognize that my perspective may have enriched interpretation of the data but also shaped how the findings are framed.

Alignment With Prior Research and Unexpected Insights

While the study did not test a formal hypothesis, the findings align with existing literature in cultural public health, particularly the importance of trust, relevance, and cultural congruence

in driving behavior change. However, some outcomes—such as the lower perceived value of involvement from cultural or religious leaders—contradict commonly held assumptions in health equity frameworks. These results challenge researchers and practitioners to reconsider what is genuinely helpful to students versus what is assumed to be culturally appropriate.

Contributions and Practical Significance

These findings contribute to a growing understanding of how Latinx college students conceptualize effective cessation support. Rather than viewing them as passive recipients of services, this research positions students as knowledgeable stakeholders in designing interventions. Cessation programs that center students' lived experiences and cultural context may be better positioned to foster meaningful engagement and long-term success.

Limitations and Future Directions

This study centered on Latinx college students in Central California, offering valuable insight into the culturally relevant resources they believe would support quitting tobacco or nicotine. However, several limitations should be considered when interpreting the results. Due to IRB protocols, outreach was limited at some campuses, particularly community colleges, where approvals were delayed or denied. This restricted the ability to recruit a broader and more representative sample of Latinx students across the region. Although the study aimed to include a diverse Latinx population, the majority of respondents identified as Hispanic and of Mexican-American background, which may have influenced the types of culturally relevant supports emphasized in the findings.

Another limitation stems from the anonymous nature of the survey. While anonymity likely encouraged participation, it also reduced accountability and made it difficult to verify the

accuracy or sincerity of responses. Some students may have misinterpreted questions or responded in ways that did not reflect their actual experiences. Additionally, the research did not incorporate perspectives from cessation service providers or evaluate the structure and effectiveness of existing programs. This limited the study to student perceptions without examining how those perceptions align with real-world resources or interventions.

Future research should explore culturally relevant cessation strategies through a broader lens. Mixed methods designs that include focus groups, interviews, or provider perspectives could deepen understanding of how Latinx college students interact with and evaluate cessation support. Collaborating with service providers would allow for comparison between what students say they need and what is actually offered. Expanding the study to include participants from different Latinx backgrounds and other regions would enhance generalizability and help inform more inclusive, tailored interventions.

References

- Balcazar, H., Rosenthal, E. L., Brownstein, J. N., Rush, C. H., Matos, S., & Hernandez, L. (2011). Community health workers can be a public health force for change in the United States: Three actions for a new paradigm. *American Journal of Public Health, 101*(12), 2199–2203. <https://doi.org/10.2105/AJPH.2011.300386>
- Castillo, M., Ramirez, J. L., Ortega, S., & Nuñez, A. (2022). *Cultural values and tobacco cessation among Latinx college students: A mixed-methods study*. *Journal of American College Health, 70*(3), 345–354. <https://doi.org/10.1080/07448481.2021.1895903>
- Centers for Disease Control and Prevention. (2020, January 30). *Disparities in cessation behaviors between Hispanic and Non-Hispanic white adult cigarette smokers in the United States, 2000–2015*. Centers for Disease Control and Prevention. https://www.cdc.gov/pcd/issues/2020/19_0279.htm?utm_source=chatgpt.com
- Chen, B., Sterling, K. L., Bluestein, M. A., Penedo, E., Kuk, A. E., Harrell, M. B., Perry, C. L., & Pérez, A. (2022). Age of initiation of cigarillo use among young adults: Findings from the Population Assessment of Tobacco and Health (PATH) study, 2013–2017. *PloS One, 17*(3), e0264168-. <https://doi.org/10.1371/journal.pone.0264168>
- Hendricks, R., & Thompson, L. A. (2023). *Barriers to quitting tobacco in underserved college populations: The role of identity and access*. *Preventive Medicine Reports, 31*, 102050. <https://doi.org/10.1016/j.pmedr.2023.102050>
- Ickes, M. J., Wiggins, A. T., Rayens, M. K., & Hahn, E. J. (2020). Student tobacco use behaviors on college campuses by strength of tobacco campus policies. *American journal of health promotion, 34*(7), 747–753. <https://doi.org/10.1177/0890117120904015>
- Investigators from Chapman University Have Reported New Data on Immigrant and Minority Health (Spatial Disparities: the Role of Nativity In Neighborhood Exposure To Alcohol and Tobacco Retailers). (2021). In *Health & Medicine Week* (pp. 2492-). NewsRXLLC. <https://go-gale-com.hmlproxy.lib.csufresno.edu/ps/i.do?p=AONE&u=csufresno&id=GALE%7CA680058323&v=2.1&it=r&aty=ip>
- Lorenzo-Blanco, E. I., Schwartz, S. J., Unger, J. B., Zamboanga, B. L., Des Rosiers, S. E., Huang, S., Villamar, J. A., Soto, D. W., Pattarroyo, M., & Baezconde-Garbanati, L. (2015). Latino/a youth intentions to smoke cigarettes: Exploring the roles of culture and gender. *Journal of Latina/o Psychology, 3*(3), 129–142. <https://doi.org/10.1037/lat0000034>
- Moreno, O., Derlan Williams, C., Muñoz, G., Santana, A., Hernandez, C., de Jesus Elias, M., Chartier, K., Hood, K., Johnson, K., Middleton, T. J., Montemayor, B. N., The Spit For Science Working Group, Vassileva, J., Dick, D. M., & Amstadter, A. B. (2024). Resnicow, K., Baranowski, T., Ahluwalia, J. S., & Braithwaite, R. L. (1999). Cultural sensitivity in public health: Defined and demystified. *Ethnicity & Disease, 9*(1), 10–21. <http://www.jstor.org/stable/45410142>
- Sandhu, R., Runnerstrom, M., & Ro, A. (2023). Youth, family and society: Examining the

- dynamics of e-cigarette use in Latino college students. *Journal of American college health* :71(5), 1557–1564. <https://doi.org/10.1080/07448481.2021.1942887>
- Stephenson, M. T., Velez, L. F., Chalela, P., Ramirez, A., & Hoyle, R. H. (2007). The reliability and validity of the Brief Sensation Seeking Scale (BSSS-8) with young adult Latino workers: implications for tobacco and alcohol disparity research. *Addiction*, 102(s2), 79–91. <https://doi.org/10.1111/j.1360-0443.2007.01958.x>
- Szapocznik, J., & Coatsworth, J. D. (1999). An ecodevelopmental framework for organizing the influences on drug abuse: A developmental model of risk and protection. In E. M. Sloboda & W. J. Bukoski (Eds.), *Drug abuse prevention through family interventions* (NIDA Research Monograph No. 177, pp. 331–366). U.S. Department of Health and Human Services, National Institute on Drug Abuse. <https://archives.drugabuse.gov/sites/default/files/monograph177.pdf>
- VanFrank, B., Malarcher, A., Cornelius, M. E., Schechter, A., Jamal, A., & Tynan, M. (2024, July 25). Adult smoking cessation — United States, 2022. *Morbidity and Mortality Weekly Report*, 73 (29), 633–641. <https://doi.org/10.15585/mmwr.mm7329a1>
- West, J. H., Blumberg, E. J., Kelley, N. J., Hill, L., Sipan, C. L., Schmitz, K. E., Ryan, S., Clapp, J. D., & Hovell, M. F. (2010). Does Proximity to Retailers Influence Alcohol and Tobacco Use Among Latino Adolescents. *Journal of Immigrant and Minority Health*, 12(5), 626–633. <https://doi.org/10.1007/s10903-009-9303-2>