

Original Research Article

Campus administrator perceptions of the effectiveness of tobacco-free policies in California universities

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ABSTRACT

Background: In response to high levels of tobacco use among university students, the University of California (UC) and California State University (CSU) systems adopted tobacco-free policies in recent years. While few existing studies capture student response to these policies, there is no research that captures campus administrator perceptions on the effectiveness of these policies. This study was conducted to understand campus administrator perceptions of student compliance to tobacco-free policies in California universities.

Methods: This was a qualitative study to understand campus administrator perceptions of student compliance to the tobacco-free policies on select California universities. Data collection took place between March-May 2018 and included key informant (KI) interviews and a focus group (FG) with campus administrators from selected universities. Content analysis using Atlas.ti software was conducted to interpret results.

Results: Nine campus administrators participated in KI interviews and four further participated in a FG. Overall analysis of the results indicated that all administrators believe tobacco-free policies on their respective campuses are effective in reducing student tobacco use. Additionally, some administrators believed punitive methods were needed, while others felt creation of a cultural norm would be most effective, and all administrators believed smoking cessation programs were helpful resources to ensure policy compliance. Participants further agreed stronger implementation strategies relating to communicating policy provisions are needed to ensure student understanding of policy.

Conclusions: Administrators perceive that tobacco-free policies are effective in reducing tobacco use among university students. It is recommended that additional strategies are utilized to increase student awareness of the policy.

Keywords: College administrators, Tobacco control, Tobacco-free policies, Tobacco-free universities, College students, Policy intervention

INTRODUCTION

While there has been significant progress in reducing tobacco use among young adults, many still continue to use tobacco today.¹ The Surgeon General report states that prevention efforts must be targeted toward young adults ages 18-25, since nearly 90% of all tobacco use starts by age 18. Previous interventions that target this

population focused on increasing student awareness of the adverse health effects resulting from tobacco use. Examples of such health effects include lung cancer, respiratory illness, and increased risk for mortality.²

Previous research also aimed to understand student attitudes and beliefs about using tobacco on campus.³ In a recent study, Seitz et al analyzed over 130,000 survey responses from students, faculty, and staff on university

campuses and found that there was overall support and approval for smoke/tobacco-free campus policies as opposed to interventions focused on increasing student awareness of the adverse health effects resulting from tobacco use.⁴ According to Ickes et al tobacco-free policies on college campuses have the potential to highly decrease tobacco use rates on college campuses.⁵ These findings, in addition to others, have resulted in increased movement toward the adoption of tobacco-free policies on college campuses in recent years, although the effectiveness of these policies remains in question.

Several studies investigated student perceptions on the effectiveness of tobacco-free campus policies, such as a study conducted by Alyanak which focused on evaluating the implementation of a tobacco-free policy across 30 university institutions in Georgia.⁶ Alyanak found, through analysis of student survey responses, that tobacco-free policies were effective and successful in reducing tobacco use on university campuses.⁶ While such studies aimed to understand policy effectiveness through analysis of student responses, there is no existing research available that captures campus administrator perspectives on the same. Additionally, a study by Reindl et al was conducted to determine whether college presidents are in support of tobacco-free campus policies, where it was found that a vast majority of presidents are supportive of such a policy.⁷ However, this study did not capture post-policy implementation results to determine whether there is decreased tobacco use among students on campus. Further, a study conducted by Wechsler et al assessed effectiveness of non-policy interventions, such as tobacco cessation programs, where it was found that stronger interventions are needed for larger impact.⁸ While results of both these studies were useful to conclude that tobacco-free policies may be more effective interventions, there is little data providing information on the effectiveness of tobacco-free policies from the perspective of campus administrators. The purpose of this study was to understand campus administrator perceptions on student compliance to tobacco-free policies within the CSU and UC systems and to understand campus administrator perceptions on the effectiveness of policy enforcement mechanisms, and whether campus administrators perceive smoking cessation programs as an effective resource to reduce student tobacco use on campus.

METHODS

This was a qualitative study utilizing both key informant (KI) interviews and focus group (FG) data collection methods to understand campus administrator perceptions of the tobacco-free policies on two UC and two CSU campuses. The criterion for campus administrators to participate in the study was that they were employed with their respective university before and after policy adoption in an administrator role, such as director of risk management or student health coordinator. This also included faculty members in dual-roles. This criterion

was established to ensure participation from administrators who have more day-to-day and frequent contact with students. These four universities were selected based on the similarities found in the provisions of their respective tobacco-free policies. Such similarities included the types of interventions implemented (i.e., tobacco cessation programs) and which campus groups the policy applies to (faculty, students or all).

Prior to recruiting participants, officials from each university were contacted to request authorization to collect data. Once this authorization was received, the first author utilized the “directory” function on each university’s webpage to cold call and/or email campus administrators to ask whether they would be willing to participate in this research study. Some universities had webpages that listed contact information for key campus administrators which were utilized to contact campus administrators. The first author conducted brief phone calls with those who responded to this outreach to explain what their participation would entail and to provide more information about the study. The response rate was approximately 2%; 400 administrators were contacted. The first author spoke with those that responded to this initial email and asked questions to determine whether they fit the inclusion criteria to participate in the study. Ultimately, nine administrators that met this criterion agreed to participate. Once informed consent was received, KI interviews were scheduled with the administrators. The consent form provided space for the campus administrator to indicate whether they would be willing to participate in FG after completing the KI interview. Those who indicated their willingness to participate in both received emails upon conclusion of the KI interview with a link to a Doodle poll, which allowed for scheduling of the FG. Finally, upon conclusion of the KI interviews, all participants received a “thank you” note with a gift card. Those who participated in the follow-up FG additionally received a gift coffee mug.

A total of nine consented campus administrators participated in KI interviews conducted during March-May 2018 via Zoom technology. There were five participants from UC campuses and four from the CSU campuses. Each KI interview lasted between 30-40 minutes and was digitally recorded. The interview questions focused on understanding campus administrator perceptions of overall tobacco use on campus post-policy adoption, their perception on student compliance to the policy and their perception on the effectiveness of smoking cessation program available on their respective campuses.

After the KI interviews were completed, four of the nine campus administrators (one from each selected university) self-selected to participate in a focus group. The focus group was conducted and recorded via Zoom technology in May 2018 and lasted a total of 40 minutes. Each of the campus administrators provided consent to record the interview. Once consent was received, the first

author facilitated introductions which included an ice breaker question. Then, upon informing participants that the purpose of the FG was to summarize key findings on overall effectiveness of tobacco-free policies on university campuses and to present recommendations for improving student compliance to these policies, the FG was conducted.

To analyze responses from the KI interviews, the Atlas.ti software and three coding methods were used: descriptive, topic and analytic coding.⁹ The descriptive coding method was used to obtain descriptive information about the campus administrators such as their role on campus, their area of expertise, and the number of years they have been employed with their respective university. The topic coding method was used to find patterns within the topics/themes. A grouping methodology was applied by taking the notes that the first author took during each KI interview and grouping common statements under the same topic/theme. Finally, analytic coding was used to build context from the KI interview and formulate discussion questions for the FG.

RESULTS

Campus administrator demographics

Participating administrators served in various roles, which often included dual-roles as instructional faculty. Examples of their primary roles included director of risk services and student health center coordinator. Collectively, administrators represented various university departments, such as risk services, student wellness center, university visitor center, social work, art and theatre (Table 1).

Table 1: Campus administrator demographics.

Campus administrator role	Total percentage (%)
Risk services	1 (11)
Wellness center	1 (11)
Visitor center	1 (11)
Academic department (Social work, art, theatre)	3 (33)
Total	9 (100)

When asked about their involvement in the passing, implementation or enforcement of their campus policy, five administrators (56%) stated previous involvement in the passing and implementation of the policy, such as by serving on committees focused on developing educational materials which were disseminated to students upon policy implementation. Others advocated for a tobacco-free policy prior to policy implementation by sending letters to university leadership, conducting cigarette butt counts, and administering surveys to determine overall campus support for the policy (Figure 1).

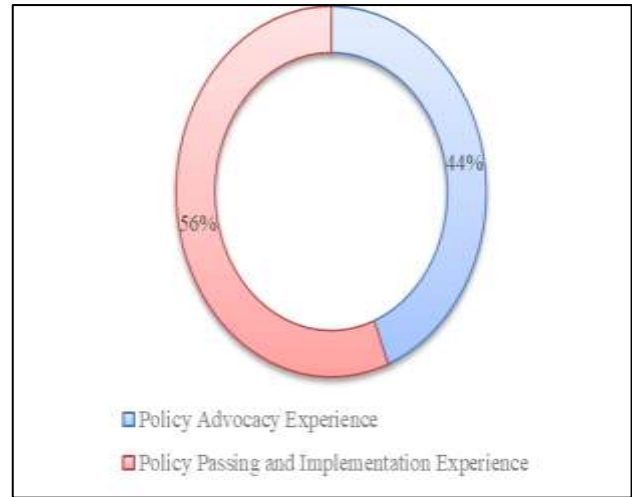


Figure 1: Campus administrator experience in policy advocacy, passing and implementation.

With regard to enforcement, seven administrators (77%) stated involvement in policy enforcement, such as through creation of signage and identifying signage placements on campus. Additional involvement included launching a student ambassador program focused on training students to enforce the policy among their peers. Several administrators also served on the UC system-wide taskforce which focused on policy compliance and the development of educational materials for tobacco-free campuses (Figure 2).

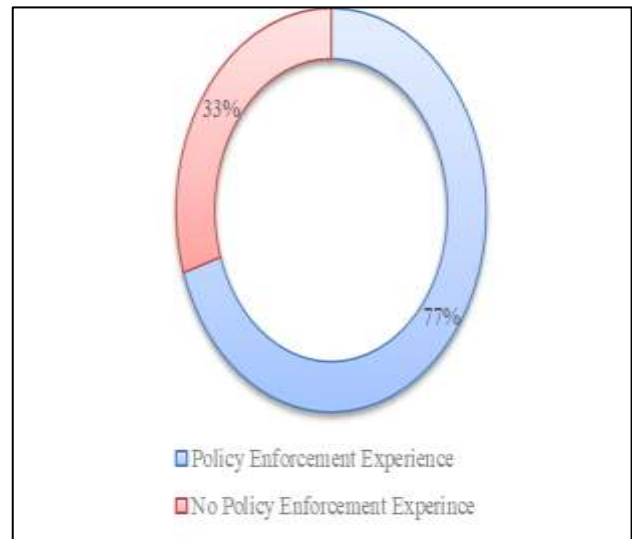


Figure 2: Campus administrator experience in policy enforcement.

Perceptions on tobacco use on campus

Overall, all administrators believed the tobacco-free policy implemented on their respective campus seemed to be effective in reducing tobacco use among students. It was specifically stated that, “While there are still hotspots observed on campus, such as by the library and behind

the student health center, there appears to be less prevalence within the same hotspots than before the tobacco-free policy was implemented". All administrators agreed that a majority of individuals still seen using tobacco in these hotspots are international students from native countries where using tobacco is the norm. One administrator also stated that prior to the passing of the policy in 2013, only seven students requested services through their student health center to reduce or quit their tobacco use. After policy implementation, in 2014, this number more than quadrupled in size, and over 30 students received services at their student health center to reduce or quit tobacco use. In 2017, this number went up further to 43 students.

There were differences between campuses in tobacco use prior to policy adoption. For instance, some campus administrators reported that while the policy seems to be effective, there was insignificant tobacco use among students prior to policy passing for there to be a noticeable change in tobacco use after the policy was passed. Alternatively, other administrators observed high smoking prevalence prior to policy passing, which they now believe has subsided substantially post-policy passing, stating that "The other day I breathed deeply and felt that there was finally no smoke in the air".

Perceptions on student response to enforcement

There were mixed perceptions on student response to policy enforcement mechanisms. There was consensus on the fact that the reason stronger enforcement mechanisms were not implemented in both systems was because there were system-wide mandates to enforce the policy primarily through educational means. Given this, some administrators felt implementing stronger enforcement mechanisms would be highly effective. For instance, some campus students are fined for using tobacco in student housing areas which administrators believe is effective because "Students would rather comply with the policy than jeopardize their student housing privileges". It was also stated that "Strengthening enforcement mechanisms should be a priority although the system-wide mandate to enforce primarily through educational means is a barrier. Also, the police department would have to allocate resources to impose punitive enforcement measures, which does not appear to be a priority at the moment".

Alternatively, other administrators felt that punitive enforcement measures would instill fear among students which is not the desired outcome. These administrators felt it necessary to "create a no-tobacco use norm" for optimal policy compliance. They proposed increased signage as a means to achieve this within targeted areas, such as university visitor centers, student housing areas, behind major buildings, and in less populated areas. This suggestion was perceived positively among all administrators.

Perceptions on effectiveness of smoking cessation programs

All participants perceived smoking cessation programs as effective in increasing student compliance to the tobacco-free policy. It was specifically stated "If the policy isn't enforced through punitive measures, then the only other way to increase compliance is to offer resources so that students have the necessary tools to comply with the policy". Administrators further believed that offering smoking cessation programs would help achieve a tobacco-free norm on campus, which "enforcement will only, do to a certain extent". Administrators representing campuses that currently offer smoking cessation programs stated that their program has been effective.

Campus administrator recommendations

All participants agreed that additional measures could have been instituted to increase awareness of the tobacco-free policy among students. To increase awareness, participants recommended these specific measures: (a) notices on flat screen television screens, (b) placing flyers in residential halls and housing areas, (c) utilizing social media applications such as Twitter and Facebook, (d) sending notifications via university applications. When asked how signage can be strengthened, campus administrators stated that many students are unaware that parking lots are part of the university campus, hence increased signage in these areas would be effective in increasing awareness. It was further recommended that incorporating signage on campus shuttles would also be effective to increase awareness. Lastly, it was stated that targeted signage could be effective to increase student compliance since hotspots are frequently changing since, as a result of the policy, students have moved to less visible areas to use tobacco. Signage containing messaging that yields an emotional student response, such as the environmental impact of using tobacco, was also found as an effective strategy on a couple campuses.

Further, campus administrators further felt that there is a strong need to increase awareness among social groups, such as Greek organizations. International student groups also require increased awareness as these students originate from countries where tobacco use is a norm, hence adjusting to a tobacco-free campus norm is difficult for this group. Lastly, when asked how such a tobacco-free norm could be achieved on campus, all campus recommended that in addition to signage, trainings for faculty/staff should be incorporated so that faculty/staff are able to enforce the policy to students.

Overall, all study participants expressed positive influences of the tobacco-free policy on their respective campuses on student intention to use tobacco on campus. All participants observed decreases in overall student tobacco use on campus after policy implementation and further stated that providing students with resources to quit their tobacco use likely increases student motivation

to comply with the policy. Finally, all participants collectively recommended that future efforts to increase policy compliance would focus on raising student awareness to the policy through strategic efforts such as targeted signage.

DISCUSSION

Results of this study are consistent with existing research available on the effectiveness of tobacco-free policies in educational institutions. Research indicates that there are three things that must be done to ensure successful adoption of tobacco-free policies on college campuses: “tell”, “treat”, and “train”.¹⁰ To “tell” means to ensure adequate and timely communication about the policy provisions, specifically who is affected, and how the policy will be enforced. Strategic placement of signage is an important piece of this process. This aligns well with the results of this study as all the administrators agreed that signage should be placed in targeted areas to respond to changes in hot spots.

To “treat” entails offering treatment services, such as cessation resources, to accompany the policy.¹⁰ Research indicates that the integration of tobacco education and prevention programs in addition to the policy is most effective to ensure policy.¹¹ This also aligns with study results as all study participants stated that having smoking cessation programs is useful and necessary to increase policy compliance.

Finally, “training” entails ensuring that campus administrators and student leaders understand the provisions of the policy and can approach those violating the policy.¹⁰ Two universities selected for this study have student ambassador programs where students are recruited and trained annually to be able to simultaneously enforce the policy and provide education and awareness to students about the policy. These efforts have received positive feedback from administrators at both schools, and it would be worthwhile incorporating a similar training program on other campuses as well. Student ambassador programs are also proven as successful mechanisms in ensuring campus policy compliance on other campuses.¹²

In terms of enforcement, a majority of administrators stated that punitive enforcement mechanisms would be unfair, especially to students addicted to nicotine with less self-control than other students. This supports the findings of Kumar, O’Malley and Johnston whose results indicated that the greater consequences for non-compliance to the policy were associated in students being less likely to decrease their tobacco use and an increased approval for cigarette use in general.¹³ Kumar and authors also found that some schools have resorted to punitive measures such as expulsion to enforce their policy, which did not result in a change in student attitude regarding tobacco use.¹³ Some administrators also felt that punitive measures would be effective, which supports

the findings of Fallin-Bennett et al whose study captured key informant responses representing 16 California universities.¹⁴ In their study, many key informants expressed a need for stronger enforcement measures, but also conveyed that it is challenging to incorporate these measures through police or security. During the focus group discussion for this study, many campus administrators also stated that there was little to no buy-in from campus police or the administration to allocate additional resources to increase enforcement. Hence, it was agreed that creating a social norm of no tobacco-use would be most effective in increasing student compliance.

Consistent with existing research, which concludes that quit attempts among students significantly increased as a result of campus-wide tobacco-free policies, the overall finding of this study is that tobacco-free policies are associated with reduced tobacco use among students in the CSU and UC systems.¹⁰ Hahn and authors also found that an increased number of students sought cessation and treatment services after policy implementation.¹⁰ This aligns with the results of this study as administrators observed an increased number of students seeking cessation services after the policy was implemented. Finally, our study findings are consistent with the results of Hahn and authors, who recommend movement toward a tobacco-free campus norm in lieu of punitive enforcement measures.¹⁰ We believe saturation of themes took place in the final stage of this study when all study participants were asked for their recommendations regarding factors campus administrators should consider when developing tobacco-free policies on other college campuses in the future.

Limitations

A limitation is that most administrators that responded to outreach efforts were those that supported and were in favor of the policy. This could be because these individuals were passionate and invested in preventing nicotine addiction among students and ensuring success of the policy. Another limitation of this study is the low sample size for the FG. This was not the case with the KI interviews as saturation was achieved due to the consistency of responses and consensus among administrators. Possible reasons for both limitations is because the first author received minimal response to recruitment efforts, which could be due to busy schedules and because the FG was conducted at the end of the instructional term, which is the time when administrators focus their time on concluding their courses. Another limitation is that due to the qualitative design of this study, it is difficult to make a definitive causality between the policy and student tobacco use behaviors, as the reductions in tobacco use could be the result of external factors, such as media or personal influences, rather than the tobacco-free policy itself.

Strengths

A strength of this study is that it provides an assessment of campus administrator perceptions, which is not found

in other studies that were examined. The observations provided by campus administrators are valuable in understanding what factors may help increase student compliance to tobacco-free policies, and what factors currently limit or pose barriers to compliance. Since student self-report data may pose bias, these additional administrators' perceptions help to validate self-report data and provide context behind responses students may self-report. Campus administrator responses also provide insight on tobacco use behaviors, which students may otherwise refrain from sharing with external researchers.

Another strength of this study is that multiple data collection methods were utilized, which helped to funnel down initial data captured from the KI interviews. The incorporation of a FG allowed administrators from all campuses to share information with one another to recommend findings that can be applied to other universities that are moving toward tobacco-free campuses or are interested in strengthening existing policies. Finally, all campus administrators selected for participation in this study have been employed with their respective university campus both prior to and after passing of their university's tobacco-free policy. This allowed for campus administrators to combine their perceptions of tobacco use on campus from before the policy was implemented and after implementation, which may not be 100% possible if capturing data from students only, since students are only enrolled with the university for as long as they need to complete their academic programs.

CONCLUSION

In summary, this study finds that campus administrators perceive tobacco-free policies as effective in reducing tobacco use among university students. These results point to several implications for practice targeted toward university campus administrators. First, it is important to develop a robust implementation plan prior to implementing the policy to ensure all modes of communication are incorporated to increase policy awareness among the student population. Suggested modes of communication include social media applications, emails, memos, and strategic signage. Second, it is important to ensure those involved in enforcement of the policy are adequately trained to ensure they can approach individuals who are found in violation of the policy and provide education about the policy provisions and available resources that can help them reduce or quit tobacco use on campus. Third, it is recommended that campus administrators take steps to ensure adequate resources are available so that students can access resources to comply with the policy. Smoking cessation programs are one example of such effective resources. A combination of these recommendations will help to promote a cultural shift on campus toward a tobacco-free environment.

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REFERENCES

1. Surgeon General. (2018). Preventing Tobacco Use Among Youth and Young Adults. U.S. Department of Health and Human Services. Available at: <https://www.surgeongeneral.gov/library/reports/preventing-youth-tobacco-use/factsheet.html>. Accessed on June 27, 2018.
2. Centers for Disease Control, 2020. Health Effects of Cigarette Smoking. Available at: https://www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/effects_cig_smoking/index.htm. Accessed on January 29, 2022.
3. Lee JG, Goldstein AO, Kramer KD, Steiner J, Ezzell MM, Shah V. Statewide diffusion of 100% tobacco-free college and university policies. *BMJ*. 2011;19:4.
4. Seitz C, Kabir Z, Greiner B, Davoren M, McIntyre S. Enforcement of Smoke/Tobacco-free Policies at Public Universities in the US. *Tobacco Regulatory Science*: 2018;4(4):22-31.
5. Ickes MJ, Rayens MK, Wiggins A, Hahn EJ. Students' beliefs about and perceived effectiveness of a tobacco-free campus policy. *Policy Polit Nurs Pract*. 2017;18(1):17-25.
6. Alyanak E. Evaluating the implementation of a tobacco-free policy across the 30 institutions of the University System of Georgia. Georgia State University. 2015. Available at: http://scholarworks.gsu.edu/iph_capstone/4. Accessed on May 28, 2018.
7. Reindl D, Glassman T, Price J, Dake J, Yingling F. Perceptions of College and University Presidents Regarding Tobacco-Free Campus Policies. *J Am College Health*. 2014;62:3:193-202.
8. Wechsler H, Kelley K, Seibring M, Kuo M, Rigotti N. College Smoking Policies and Smoking Cessation Programs: Results of a Survey of College Health Center Directors. *J Am College Health*. 2001;49(5):205-12.
9. Biber SH. Analyzing Qualitative Data: With or Without Software. 2010. Available at: <https://www.bumc.bu.edu/crrr/files/2010/07/Hesse-Bieber-4-10.pdf>. Accessed on June 27, 2018.
10. Hahn E, Fallin A, Darville A, Kercksmar SE, McCann M, Record R. The three Ts of adopting tobacco-free policies on college campuses. *Nurs Clin North Am*. 2012;47(1):109-17.
11. Borders TF, Xu KT, Bacchi D, Cohen L, SoRelle-Miner D. College campus smoking policies and programs and students' smoking behaviors. *BMC Public Health*. 2005;5:74.
12. Ickes MJ, Rayens MK, Wiggins A, Hahn EJ. A tobacco-free campus ambassador program and policy compliance. *J Am College Health*. 2014;63(2):126-33.

13. Kumar, O'Malley R, Johnston LD. School tobacco control policies related to students' smoking attitudes toward smoking: National survey results, 1999-2000. *Health Education Behavior*. 2010;32(6):780-94.
14. Fallin-Bennett A, Roditis M, Glantz S. The carrot and the stick? Strategies to improve compliance with college campus tobacco policies. *J Am College Health*. 2016;65(2):122-30.

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