

University of Kentucky

UKnowledge

Theses and Dissertations--Public Health (M.P.H.
& Dr.P.H.)

College of Public Health

2014

Improvement of Tobacco-Free Policy Enforcement at the University of Kentucky

Muchen Bai
University of Kentucky

Follow this and additional works at: https://uknowledge.uky.edu/cph_etds



Part of the [Public Health Commons](#)

[Right click to open a feedback form in a new tab to let us know how this document benefits you.](#)

Recommended Citation

Bai, Muchen, "Improvement of Tobacco-Free Policy Enforcement at the University of Kentucky" (2014).
Theses and Dissertations--Public Health (M.P.H. & Dr.P.H.). 17.
https://uknowledge.uky.edu/cph_etds/17

This Dissertation/Thesis is brought to you for free and open access by the College of Public Health at UKnowledge. It has been accepted for inclusion in Theses and Dissertations--Public Health (M.P.H. & Dr.P.H.) by an authorized administrator of UKnowledge. For more information, please contact UKnowledge@lsv.uky.edu.

STUDENT AGREEMENT:

I represent that my capstone and abstract are my original work. Proper attribution has been given to all outside sources. I understand that I am solely responsible for obtaining any needed copyright permissions. I have obtained needed written permission statement(s) from the owner(s) of each third-party copyrighted matter to be included in my work, allowing electronic distribution (if such use is not permitted by the fair use doctrine) which will be submitted to UKnowledge as Additional File.

I hereby grant to The University of Kentucky and its agents the irrevocable, non-exclusive, and royalty-free license to archive and make accessible my work in whole or in part in all forms of media, now or hereafter known. I agree that the document mentioned above may be made available immediately for worldwide access unless an embargo applies.

I retain all other ownership rights to the copyright of my work. I also retain the right to use in future works (such as articles or books) all or part of my work. I understand that I am free to register the copyright to my work.

REVIEW, APPROVAL AND ACCEPTANCE

The document mentioned above has been reviewed and accepted by the student's advisor, on behalf of the advisory committee, and by the Director of Graduate Studies (DGS), on behalf of the program; we verify that this is the final, approved version of the student's capstone including all changes required by the advisory committee. The undersigned agree to abide by the statements above.

Muchen Bai, Student

Angela Carman, Committee Chair

Dr. William Pfeifle, Director of Graduate Studies

IMPROVEMENT OF TOBACCO-FREE POLICY ENFORCEMENT AT THE
UNIVERSITY OF KENTUCKY

CAPSTONE PROJECT PAPER

A paper submitted in partial fulfillment of the
requirements for the degree of
Master of Public Health
in the
University of Kentucky College of Public Health

By
Muchen Bai
Beijing, China

Lexington, Kentucky
April 21, 2014

Angela Carman, Dr.P.H., Chair

William G. Pfeifle, Ed.D., co-Chair

Richard C. Ingram, Dr.P.H.,

Introduction

Smoking has been known as the leading preventable cause of death and premature disease in the United States (DHHS, 2014). Every year, cigarette smoking causes more than 480,000, approximately, one in five deaths (DHHS, 2014). According to the Centers for Disease Control and Prevention (CDC), "smoking causes more deaths each year than all of the listed combined: Human immunodeficiency virus (HIV), Illegal drug use, Alcohol use, Motor vehicle injuries, and Firearm-related incidents" (CDC, 2014). Since 1964, 31 Surgeon General's Reports have revealed the causal relationship between health outcomes and tobacco smoke exposure (DHHS, 2014). The report, *The Health Consequences of Smoking-50 Years of Progress: A Report of the Surgeon General (Surgeon General Report)*, demonstrated that tobacco smoking harms nearly every organ of the body (DHHS, 2014). The list of diseases caused by smoking and tobacco exposure has been continually added over the past half a century, including the traditional respiratory diseases, such as lung cancer and chronic obstructive pulmonary disease (COPD), and other "new casual diseases", such as tuberculosis, ectopic pregnancy and impaired immune function (DHHS, 2014). The data released by the CDC illustrated that smoking can increase the risk "for coronary heart disease by 2 to 4 times", and smokers are 2 to 4 times more likely to be subject to stroke (CDC, 2014). Also, compared to nonsmokers, male smokers are more likely to develop lung cancer by 25 times; the risk is 25.7 for female smokers (CDC, 2014). Smoking can also harm the health of pregnant women, affect the health of fetuses and infants, cause oral health diseases, chronic diseases and many other adverse health effects (CDC, 2014). In conclusion, according to the

Improvement of Tobacco-free Policy Enforcement at the University of Kentucky

CDC, smoking harms overall health, including "self-report poor health, increased absenteeism from work, and increased health care utilization and cost" (CDC, 2014).

Besides smoking and tobacco use, secondhand smoke and third-hand smoke can also harm people's health. According to the CDC, "secondhand smoke is the combination smoke from the burning end of a cigarette and the smoke breathed out by smokers" (CDC, 2014). Any level of exposure to secondhand smoke can cause health problems; infants are affected by sudden infant death syndrome (SID), children are affected by severe asthma attacks, respiratory infections, and ear infections (CDC, 2014). The adverse health effects include heart disease and lung cancer for adults. *Scientific American* (2009) defined "third-hand smoke" as "tobacco smoke contamination that remains after the cigarette has been extinguished." A study revealed that third-hand smoke makes the toxins remain in the carpet, clothes, and other materials (Scientific American, 2009). These toxic materials can linger in these items for a long time, even several days (Scientific American, 2009). Third-hand smoke is a significant hazard for infants and children, which causes SIDS and low cognitive ability (Scientific American, 2009).

People always smoke or first use smokeless tobacco product during adolescence (CDC, 2014). According to the CDC, approximately 9 in 10 people started smoking by age 18, and 99% of smokers started smoking by age 26 (CDC, 2014). The CDC (2014) also points out that "each day an estimated 2,100 youths and young adults who have been occasional smokers become daily cigarette smokers." Between 2005 and 2009, among Americans aged 35 and older, more than 480,000 premature deaths annually were due to smoking (DHHS, 2014). Campus has a huge number of young people. According to the "Association of

Improvement of Tobacco-free Policy Enforcement at the University of Kentucky

American Colleges and Universities (AAC&U) news", as of 2012, 41% of US university or college students are 18-to-24-years-old; students under 25 years-old account for the majority of full-time undergraduates (AAC&U news, 2012). College and university students have some reasons to use tobacco in their lives. First, according to the CDC, young people's behavior is more likely to be influenced by movies and tobacco advertisements (CDC, 2013). Second, young people behavior is more likely to be affected by their peers' perception and their parents' smoking experience (CDC, 2014). Third, young adults, especially for college students, sometimes live under pressure and depression; in their minds, smoke is always a good way to relieve stress and eliminate depression (CDC, 2014). The other factors include low socioeconomic status, lack of skills to resist influence to tobacco use, aggressive behavior, etc. (CDC, 2014). For these reasons above, it is a challenge to make campus absolutely tobacco-free.

In 1964, the Surgeon General's report: "Smoking and Health" initially revealed the health risk of smoking (DHHS, 2014). Many tobacco control efforts have been exerted over the past five decades, including "media campaigns, smoke-free policies, restrictions on youth access to tobacco products, and price increases" (DHHS, 2014). These programs have led to favorable consequences. Adult smoking rates have declined from 42% in 1965 to 18% in 2012 (DHHS, 2014). Among these tobacco control strategies, smoke-free legislation is a key component at the state and local level (DHHS, 2014). According to the CDC, by December 31, 2010, there were 26 states with comprehensive smoke-free laws (CDC, 2011). The smoking prohibited area not only includes worksites, restaurants, and bars, but also includes commercial and home-based child care centers, vehicles, hospitals, prisons, hotels, etc. (CDC,

2011). Smoke-free legislation has been proven to be effective in improving health outcomes. According to the result of a cohort study conducted in California in 1998, for 53 bartenders who were initially exposed to the secondhand smoke, 39 (74%) of them initially reported respiratory symptoms. After the smoking ban, 23 (59%) of the 39 bartenders did not have the symptoms any more ($P < 0.001$) (Eisner, Smith, & Blanc, 1998). For 41 bartenders who initially reported sensory irritation symptoms, 32 (78%) of them no longer had the symptoms after the smoke-free policy went into effect ($P < 0.001$) (Eisner, Smith, & Blanc, 1998). In addition, Study results have demonstrated that secondhand smoke increases the risk of heart disease and heart attack; smoke bans reduce heart attacks and smoke-free policies have a significant impact on public health (Institute of Medicine, 2009).

A recent survey revealed that there is an increasing number of people who are using various tobacco products, especially youths and young adults (DHHS, 2014). Tobacco products include bidis, chew, cigarettes, cigars, cigarillos, little cigars, dip, dissolvable tobacco, electronic cigarette or e-cigarette, hookah, kreteks, pipe, and other smokeless products (Type of Tobacco Products, retrieved from http://www.ct.gov/dph/lib/dph/hems/tobacco/tobacco_products.pdf). All forms of tobacco use can cause adverse health effects and addiction (Type of Tobacco Products, http://www.ct.gov/dph/lib/dph/hems/tobacco/tobacco_products.pdf). Even though the prevalence of cigarette smoking has significantly declined since 1964, the prevalence of tobacco product use increased recently, especially among young people (DHHS, 2014). U.S. middle school and high school students who use electronic or e-cigarette products, more than doubled between 2001 and 2012 (DHHS, 2014). Multiple flavored tobacco products also fascinate youth and young adults (Villanti, Richardson,

Improvement of Tobacco-free Policy Enforcement at the University of Kentucky

Vallone, & Rath, 2013). Unlike smoke, smokeless tobacco use is less obvious and more diverse. The increased use of tobacco products makes campus tobacco-free policy compliance be more difficult.

In Kentucky, the percentage of adults (age>18) who smoked cigarettes was 29.0% in 2011, and across all states and D.C., Kentucky ranked 51st among the states (Tobacco Control State Highlights, 2012). The percentage of adults who use smokeless tobacco was 6.8% in 2011, and across all states and D.C., Kentucky ranked 43nd among the states for smokeless tobacco use (Tobacco Control State Highlights, 2012). The University of Kentucky (UK) is located in the state with a high smoke and tobacco use prevalence, which means that UK may have more smoking students, employees and visitors, which is also a big challenge for UK tobacco-free policy enforcement.

The purpose of this thesis is to overcome the enforcement challenges and improve campus tobacco-free policy at UK. UK is a comprehensive university with a huge number of young people with diverse backgrounds. As mentioned above, the young students, staff, faculty and visitors are likely to smoke or use tobacco products on campus. UK has implemented a complete tobacco-free policy since 2009 (<http://www.uky.edu/TobaccoFree/>); a number of campaigns have been launched for four years (Hahn et al., 2012). Even though the tobacco-free policy has been proven to be effective for reducing tobacco-use rate, such a policy is nothing without effective implementation. It is impossible to persuade everybody not to smoke or use tobacco products on campus; it is also a huge challenge to monitor behaviors everywhere and all the time on campus. Thus, knowing how to improve UK campus tobacco-free policy compliance still remains a challenge. To resolve this problem,

this thesis makes a comparative analysis of the differences between UK's tobacco-free policy implementation plans and the other benchmark universities' plans; A specific attention is given to UK implementation barriers of policy enforcement. Through implementation plan collection and key informant interviews, this thesis will identify the gap of the policy implementations between UK and other universities in the United States. This thesis will provide recommendations for compliance improvement in the last chapter.

Literature Review

This chapter reviews the previous work regarding tobacco-free policy implementations for public places and college campuses, evaluates the existent programs and approaches for tobacco-free policy implementation, and identifies the successes and barriers of the implementation at the University of Kentucky (UK). The key words and phrases that are used in this research as follows: policy, implementation, policy implementation, smoke-free policy, and tobacco-free policy. Before describing the details of smoke/tobacco-free policy implementation, the definitions of core concepts will be clarified. The citations of this thesis basically from previous publications and studies for tobacco-free policy implementation at the UK, successes and barriers for the policy enforcement will be illustrated at the end of this chapter. The bibliography is basically from the following references: published result of survey, online encyclopedia articles, online textbooks, web log posts, published journal articles, the website and publications for the Centers for Disease Control and Prevention (CDC), Ordinance Report for Lexington-Fayette County, and the Administrative Regulation for the University of Kentucky.

Improvement of Tobacco-free Policy Enforcement at the University of Kentucky

Two important concepts should be distinguished at first. "A smoke-free policy is one that limits or eliminates the use of smoke-producing tobacco. The primary concern of a smoke-free policy is secondhand smoke " (Benefit of tobacco-free policy, p.1). While "tobacco-free policy limits and eliminates the use of any tobacco product, including but not limited to, spit tobacco, snus, other "smokeless" products, hookah, etc." (Benefit of tobacco-free policy, p.1). Besides, "a tobacco-free policy also addresses tobacco sales, marketing and sponsorship. The acceptance of tobacco industry funding is not allowed. Some tobacco-free policies have also required the college or university to divest all stocks held in tobacco companies" (Benefit of tobacco-free policy, p.1). The smoke-free policy addresses the issue of secondhand smoke exposure, while the tobacco-free policy highlights population health, including tobacco users (Benefit of tobacco-free policy, p.1). In terms of the concepts of policy and policy implementation, "policy is a guiding principle used to set direction in an organization" (Anderson, 2005). In the field of public health, the policy can be seatbelt laws and tobacco control policies. Dr. Wayne Hayes (2002) points out that implementation is "to put into effect according to some definite plan or procedures". In this thesis, plans and procedures are used as data to evaluate the campus tobacco-free policy implementations. According to Dr. Wayne Hayes (2002), policy implementation involves three basic elements. First, organization, which means organizing an agency and its personnel with authority to delegate the responsibilities of implementation (Hayes, 2001). Smoke/tobacco-free campaign on campus should have one or several strong sectors for the policy implementation. Second, interpretation, according to Dr. Wayne Hayes, means "translating legislative intent into operating rules and guidelines" (Hayes, 2001). For example, A specific rule such as

Improvement of Tobacco-free Policy Enforcement at the University of Kentucky

smoke/tobacco-free policy, the intent for population health promotion and disease prevention is translated into specific local smoke/tobacco-free rules. The third element is the application, which includes taking advantage of resources and cooperating with other initiatives and agencies for ongoing application (Hayes, 2001). Successful tobacco-free policy implementation relies on the campaigns that involve various partnerships.

Public place smoke-free policy implementation

"Smoke-free policies include public-sector regulations and private-sector regulations that prohibit smoking in indoor spaces and designated public areas" (CG-Tobacco use, 2013).

"State and local ordinances establish smoke-free standards for all or designed indoor spaces and workplaces, as well as outdoor public places" (CG-Tobacco use, 2013). "Private-sector

smoke-free policies may ban tobacco use on private property or restrict smoking to designed outdoor locations" (CG-Tobacco use, 2013). The public place smoke/tobacco-free policies

can not only reduce the exposure to secondhand smoke, reducing the prevalence of tobacco use, but also help to encourage smoke cessation and improve population health outcomes

(CG-Tobacco use, 2013). "As of 2011, 25 states and the District of Columbia have laws that prohibit smoking in indoor areas of worksites, restaurants, and bars" (CDC Features, 2011).

The smoke-free laws are different from state to state (CDC Features, 2011). Kentucky has no statewide smoking restrictions (CDC, 2011). The smoke-free Amended Ordinance for

Lexington-Fayette County was enacted and implemented in November, 2008. It requires 100% smoke-free workplaces and enclosed public places

(<http://www.mc.uky.edu/tobaccopolicy/Ordinances/Reports/Lexington.html>).

There are some enforcement examples regarding public place tobacco/smoke-free policy

Improvement of Tobacco-free Policy Enforcement at the University of Kentucky

implementation. For indoor areas, Marriott Hotel has implemented the indoor smoke-free policy since 2006; it serves in more than 2,300 properties all over the world (<http://www.marriott.com/marriott.mi?page=smokefree>). According to the smoke-free policy for Marriott Hotels, "smoking is not permitted within the hotel buildings." (<http://www.marriott.com/marriott.mi?page=smokefree>). Guests are reminded that the hotel is smoke-free at the time of reserving rooms, housekeepers are trained to observe smoking. Offenders will be fined due to the policy violation (<http://www.marriott.com/marriott.mi?page=smokefree>). For outdoor areas, in April 2009, the result of a survey conducted by the Santa Barbara County Public Health Department revealed that having a strong multi-media educational campaign and signage at entryways and high traffic areas plays an important role in the policy enforcement (Frequently Asked Questions Regarding Enforcement of Tobacco-Free, downloaded from <http://center4tobaccopolicy.org/community-organizing/local-campaign-websites/tobacco-free-parks-beaches-in-santa-barbara/>). In addition, an increasing number of companies are becoming smoke/tobacco free. Some companies do not hire tobacco users anymore (Fennell, 2012). For this point, 100 percent campus tobacco-free policy is helpful for students to apply for jobs at companies with tobacco-free policies (Fennell, 2012). Campus is a special public place, which implements smoke/tobacco-free policy for both indoor areas and outdoor locations. Also, campus is always huge, and it always has a large number of people with various ages, races, backgrounds. Thus, 100 percent tobacco-free policy implementation is a challenge for universities and colleges.

Campus tobacco-free policy implementation

Improvement of Tobacco-free Policy Enforcement at the University of Kentucky

"One in five college students are tobacco users" (Ickes, Hahn, McCann, & Kerckmar, 2013). Compared to other public places, such as hotels, restaurants and workplaces, campus is open and huge, which makes it harder to effectively enforce the tobacco-free policy. As of January 2, 2014, there are at least 1,182 college or university campuses in the U.S. that have 100 percent smoke-free policies for both indoor and outdoor areas across the entire campus, including residence (ANRF, 2014). An increasing number of institutions have more comprehensive implementation actions, which include "establishing fully tobacco-free campuses by banning the use, sale and advertisement of tobacco products on campus" (Hanover research, 2010). On the one hand, these campus smoke-free policies have led to expected successes. According to a cross-sectional survey conducted in Indiana University and Purdue University, students exposed to the smoke-free campus policy demonstrated significant change regarding smoke (Seo, Macy, Torabi, & Middlestadt, 2011). Compared to the control group, the favorable changes are as follows: smoking behavior (16.5% to 12.8%, $p < 0.001$), perception of peer tobacco-use (73.6% to 66.8%, $p < 0.001$), and smoking norms (45.5% to 40.4%, $p < 0.001$) (Seo et al., 2011). On the other hand, the 100 percent campus smoke/tobacco-policy enforcement remains challenging. First, a huge number of people, including students, staff and faculty, live, work and study on campus; it is hard to let everybody respond positively towards the non-smoking/tobacco use policy. A cross-sectional study from the American University of Beirut shows that from 545 randomly participating students, 58.6% of students were satisfied to a large extent with the ban and 57.2% of the students considered it is justified (Chaaya et al., 2013). The percents are relative low and not acceptable.

Tobacco free-policy implementation at the University of Kentucky

The academic medical center campus initially implemented the policy in November 2008 (Hahn et al., 2012). One year later, UK implemented tobacco-free policies for the entire campus, announced that "UK became completely tobacco-free on all campus grounds and parking areas on November 19, 2009" (<http://www.uky.edu/TobaccoFree/>). The regulation clarifies that the "use of all products, including but not limited to cigarettes, pipes, hookah, cigars, e-cigarettes, chew, snuff, snus and other non-combustible tobacco products are prohibited on all campus grounds and parking areas" (<http://www.uky.edu/TobaccoFree/>). This policy requires the compliance for all the members of the university community, including faculty, staff, students, volunteers, patients, vendors, and visitors (Ickes et al., 2013). According to "the University of Kentucky Administrative Regulation 6:5", "the use of all tobacco products are banned on all property that is owned, operated, leased, occupied, or controlled by the University" (University of Kentucky Administrative Regulation 6:5, 2009). The "property" refers to buildings and structures, grounds, parking structures, enclosed bridges and walkways, sidewalks, parking lots and vehicles, as well as the personal vehicles in these areas (University of Kentucky Administrative Regulation 6:5, 2009).

By January 2014, the UK campus tobacco-free policy has been implemented for four years. A number of efforts and activities have been implemented for policy compliance on the entire campus. The Tobacco-Free Campus Task Force (TCTF), which has representatives of 28 sectors of the university community "was appointed by the university president about 11 months before the tobacco policy was in effect for the entire campus" (Hahn et al., 2012). The TCTF met regularly, and 200 people were involved in implementation planning and

Improvement of Tobacco-free Policy Enforcement at the University of Kentucky

communication activities (Hahn et al., 2012). A strategy called 3 "Ts" are used to improve the policy compliance. The first "T" is "Tell", which means appropriate and timely communication throughout the campus (Hahn et al., 2012). "Communication policy was a top priority to prepare the policy implementation" (Hahn et al., 2012). People on campus can clearly know about how to comply with the policy at any time with the appropriate notification and communication. The second "T" is "Treat", which means providing evidence-based tobacco treatment services to control tobacco use (Hahn et al., 2012). Cessation groups and individual counseling options are offered (Hahn et al., 2012). The purpose of this "T" includes both policy enforcement and health promotion for the campus members. The third "T" is "Train", which is to train supervisors, faculty, administrators, and student leaders to approach violators in a firm, appropriate and effective way (Hahn et al., 2012). This "T" plays an important role in increasing the compliance of tobacco-free policy on the UK campus. "Students who refuse to comply with the policy are reported to the Dean of students for violating the Student Code of Conduct" (Part 1, Article 2, Prohibited Conduct: "Violation of other published University regulations or policies") (Hahn et al., 2012). Potential sanctions are as follows: disciplinary warning, reprimand or probation, suspension and even expulsion (Hahn et al., 2012). Faculty and staff violators are reported to their manager and academic dean (Hahn et al., 2012). The employee violators are subject to the corrective actions and repeat violators are subject to the possible termination of employment (Hahn et al., 2012). Report line, including online report form and emails, was developed by UK's Tobacco-Free Task Force and the report lines are available for everyone on campus (<http://uknow.uky.edu/content/uk-tobacco-free-policy-violators-report-line-now-available>). Tobacco-free Take Action (TFTA!) was

Improvement of Tobacco-free Policy Enforcement at the University of Kentucky

launched in Spring 2011 by TCTF to facilitate the tobacco-free policy enforcement on the UK campus (Hahn et al., 2012). The members are designed as Ambassadors who were trained to use the appropriate way to approach the violators, including responding, documenting and reporting violations (Ickes et al., 2013). For this program, the ambassadors can observe violations and evaluate compliance at the selected "hotspots", which are based on the cigarette butts clean-up and violation complaints (Hahn et al., 2012). September through October 2011, a study was conducted to target three hotspots on UK campus to evaluate the effects of tobacco-free policy implementation. Ambassadors were paired to target the "hotspots" for two or three hours at a time one day per week (Ickes et al., 2013). The ambassadors were required to observe and approach the violators, they were also required to ask for personal information from people who refuse to comply with the policy, and report these violators to the appropriate office (Ickes et al., 2013). As a result, during the nearly one month study period, a total of 529 violators were observed by the ambassadors and they were able to approach 62.8% of them. 67.8% of the approached violators showed positive response while nearly 30.7% approached violators showed negative responses (Ickes et al., 2013). The ongoing TFTA! program shows that from October 28th, 2013 to January 10th, 2014, there were a total of 455 violators observed, 302 (66.4%) of them were approached (TFTA! Ambassador Data Summary, 2014). During this period of time, totally 21 repeat violations were reported, 4 reports with names and 5 violations were reported by people not including ambassadors (TFTA Ambassador Data Summary, 2014).

The literature review above shows that an increasing number of campuses in the U.S have smoke/tobacco-free policies, some favorable changes have been made. More and more

Improvement of Tobacco-free Policy Enforcement at the University of Kentucky

people have recognized that campus is not the right place to smoke and use tobacco products.

By attending the cessation program and using the tobacco-replacement substance, some smokers and tobacco users started to think about the harm of smoke and tried to quit smoking.

The four-year tobacco-free policy implementation at the University of Kentucky has led to some successes. People on campus knew about the campus tobacco-free policy by receiving emails from the university president (Hahn et al., 2012). People may also stop smoking by seeing the sign of "Welcome to our Tobacco-free campus" on campus (Hahn et al., 2012).

The three "T" strategy has significantly enhanced the awareness of tobacco-free policy compliance on the entire campus through policy communication, cessation assistance, and violation report approach. Also, "TFTA!" is an effective program, which led to favorable progresses. Many violators can be persuaded to comply with the campus tobacco-free policy with Ambassadors' appropriate approach (Ickes et al., 2013). A few violators were forced to comply with the policy.

Meanwhile, barriers of complete policy enforcement exist at UK. As a university in the United States, UK's main compliance challenges are similar to other campuses, including compliance evaluation barriers, attitude barriers and enforcement barriers. Results of an attitude survey in May, 2009 illustrated that for the 1402 individuals on campus who completed the survey, only 64% of students, 77% of faculty and 63% of staff showed positive feelings toward the tobacco-free policy (Campus Tobacco Survey, University of Kentucky Tobacco-free Campus Initiative Treatment and Addiction Management Committee, 2009). TFTA! and its ambassadors also face to challenges for violators approach. Few student ambassadors are only assigned to observe and approach the violators at three hotspots on

campus in a limited time every week (Ickes et al., 2013), which is insufficient for such a huge campus. Also, the student ambassadors may not be the most appropriate people to approach the policy violators (Ickes et al., 2013). The lack of specific authorities may generate more non-compliance (Ickes et al., 2013). UK is located in a state with high tobacco-use rate, perhaps UK may have more smoking visitors, patients, employees and students (Kentucky Tobacco Facts, 2007). In conclusion, the barriers include insufficient campus behavioral monitor, negative response for ambassadors' approach, and ineffective corrective action

To overcome these barriers and facilitate enforcement, this thesis tries to identify that if there are differences of the campus smoke/tobacco-free policy implementations between the University of Kentucky and its benchmark universities. According to these differences and gaps, as well as the specific challenges for UK, this thesis will give recommendations for improvement in the last chapter.

Methodology

The first two chapters demonstrate that there remain challenges to achieving an absolutely smoke/tobacco-free campus for universities and colleges. As mentioned before, campuses always have common successes and challenges regarding this issue. This thesis focuses on the insufficient implementations that hamper the complete tobacco-free policy implementation at UK. Meanwhile, this thesis assumes that other universities and colleges may do a better job at UK's weak points, and there are some differences between UK's tobacco-free policy implementation plan and other universities' smoke/tobacco-free policy implementation plans. This chapter tries to make a comparative analysis of these universities' plans according to the differences and gaps and identifies UK's particular barriers for

effective policy enforcement.

In terms of the sample universities, fortunately, the University Review Committee of the University of Kentucky identified 11 benchmark universities in 2011 (<http://www.uky.edu/iraa/content/current-benchmarks-identified-university-review-committee>). Benchmark institutes are used to evaluate UK's tuition, salaries, diversity, retention and graduation rates (<http://www.uky.edu/iraa/content/benchmark-comparisons>). An analysis of benchmark institutions provides decision-making for programmatic change and enhancements (<http://www.uky.edu/iraa/content/benchmark-comparisons>). The benchmark universities include Michigan State University (MSU), the Ohio State University (OSU), the University of Arizona(UA), the University of California - Davis (UC - Davis), the University of Florida (UF), the University of Iowa (UI), the University of Michigan - Ann Arbor (UMich), the University of Minnesota - Twin Cities (UMinn) , the University of Missouri - Columbia (Mizzou), the University of North Carolina at Chapel Hill (UNC), and the University of Wisconsin - Madison (UW-Madison) (<http://www.uky.edu/iraa/content/current-benchmarks-identified-university-review-committee>). To compare and contrast, this thesis inducts qualitative analysis as the methodology. The research instruments include two parts, collected universities' smoke/tobacco-free policy implementation plans and activities, and simultaneously interviewed key informants of the UK Tobacco-free project. The implementation "plans" include procedures, reports, proposals, recommendations, and the simple announcements on websites. The interviewees were the associate Dean of Student, co-chair of UK Tobacco-free Taskforce, the director of Tobacco-free Take Action! (TFTA!) and one of the TFTA! student ambassadors. Specific

Improvement of Tobacco-free Policy Enforcement at the University of Kentucky

attention is given to the enforcement barriers. By comparing and contrasting the universities' implementation plans, this research hopes to find that what could be learned from other benchmark universities combined with UK's particular conditions to overcome UK's barriers.

The first research method is to collect implementation plans online. According to the "American Nonsmoker's Rights Foundation", as of January 2, 2014, UA is not one of the smoke/tobacco-free campuses (ANRF, 2014). Therefore, UA is not a qualified sample university for this research. Plus UK, a total of 11 universities are enrolled in this research. OSU, UC-Davis, UF, and UK are entire tobacco-free campuses; UI and UMich are entire smoke-free campuses; MSU, UMinn, Mizzou and UW-Madison are partly smoke-free campuses, which means smoking is only prohibited within the buildings and within 25 feet around the properties. UNC prohibits smoking for designed locations.

To deeply understand the four-year tobacco-free policy implementations at the University of Kentucky, the interviews of key informants of the tobacco-free project are necessary. The interview questions focused on the policy enforcement and compliance barriers. The first interviewee was one of the co-chair of the UK Tobacco-free Taskforce; the questions for her were the background of the UK tobacco-free project, including the organization and personnel of the Taskforce, source of funding, violation report lines, the barriers of compliance evaluation, the ongoing research and programs. The second interviewee was the associated Dean of Student; the questions were about the policy enforcement and potential punishment for student violators, including report collection, the process of dealing with the violations, and the average number of received violators. The third interviewee was the director of Tobacco-free Take Action! (TFTA!); the purpose of this

interview was to clarify the details of TFTA! program, including the number, qualification, working areas and working schedule for the tobacco-free ambassadors. Specific attention was given to their barriers. The last interviewee was one of the five student ambassadors; this interview gave more attention to the challenges of their work, especially for approaching violators.

This thesis will get the answer of the research question through comparing and contrasting the universities' implementation plans for each comparative university regarding the campus smoke/tobacco-free policies. As mentioned in the literature review, according to Dr. Wayne Hayes (2002), organization is one of the three basic elements of policy implementation. Communication was a top priority for policy implementation (Hahn et al., 2012). This thesis also focuses on the improvement of policy enforcement. Thus, smoke/tobacco-free policy organization, policy communication, and policy enforcement are the three comparative points for this research. The Result chapter will provide the similarities and differences between the implementation plans and identifies the potential gaps between UK and other benchmark universities.

Result

In general, the 11 sample campuses have similar smoke/tobacco-free policies. Most of the universities are similar to the University of Kentucky, which states that "all buildings, vehicles and other properties, which are owned, leased, occupied by the university are smoke/tobacco-free" (University of Kentucky Administrative Regulation 6:5, 2009). The policies for outdoor areas are also similar, as the policy statement of UF, the smoking and tobacco-free areas include, but are not limited to, parking lots, grounds, plazas, courtyards,

Improvement of Tobacco-free Policy Enforcement at the University of Kentucky

entrance and exit ways (Tobacco-free policy, retrieved from <http://www.tobaccofree.ufl.edu/downloads/tobaccopolicy.pdf>). As UK states that the policies apply to all university members, including students, staff, faculty, and visitors (University of Kentucky Administrative Regulation 6:5, 2009). Meanwhile, a few universities have slightly different policies. For example, Michigan State University (MSU) states that "smoking will not be permitted in any closed spaces", and "smoking will not be permitted near exits and entrances of the building." (<http://www.hr.msu.edu/documents/uwidepolproc/smokefree.htm>). Similarly, at the University of Minnesota (UMinn), "smoking is prohibited in all facilities owned or leased by the University of Minnesota", "smoking is also prohibited within 25 feet of the exterior entrances to University owned facilities or facilities fully leased to the University" (<http://policy.umn.edu/Policies/Operations/Safety/SMOKING.html>). Mizzou and UW-Madison also only have "indoor" smoke-free policies (<http://smokefree.missouri.edu/policy/smoking-policy.php> and <http://eao.wisc.edu/policies/smoke-free.html>). Before January 1, 2008, UNC only prohibited smoking inside its building and facilities. Beginning January 1, 2008, the policy prohibited smoking in state - owned vehicles and "in the outdoor areas controlled by the University up to 100 feet from University facilities" (<http://policies.unc.edu/policies/no-smoking/>). Beginning May 4, 2011, smoking is prohibited in an identified and limited campus ground, which is called "Kenan Woods" (<http://policies.unc.edu/policies/no-smoking/>). In terms of the private vehicle within the smoke/tobacco-free areas, most of the universities ban using tobacco in private vehicles within the smoke/tobacco-free areas. UMich is an exceptional university, it rules that "smoking is permitted in private vehicles parked on the U-M campus" (

Improvement of Tobacco-free Policy Enforcement at the University of Kentucky

umich.edu/smokefree/qa.html). In addition, unlike UK, some universities prohibit sale and advertisement in of tobacco products in their policy statements. MSU rules that "cigarettes and other tobacco products will not be sold on the university grounds." (<http://www.hr.msu.edu/documents/uwidepolproc/smokefree.htm>). OSU also encourages no one smoke or use tobacco products in the surrounding neighborhoods (<http://tobaccofree.osu.edu/>). OSU and UC-Davis clearly state in their policy statements that sale and advertisement of tobacco products are banned in their owned, leased, operated properties and sponsored events (<http://hr.osu.edu/public/documents/policy/policy720.pdf> and <http://manuals.ucdavis.edu/ppm/290/290-10.pdf>). However, there is not any sale or advertisement prohibition in UK's policy statement. Basically, the 11 comparative universities have common implementation plans and activities. There are not significant differences between UK and the other studied universities. In specific, some universities have implemented a policy for almost two decades, as MSU and UW-Madison; overall, they have very brief and general implementation plans, which only include simple policy statement, smoke-free areas and other prohibitions (<http://www.hr.msu.edu/documents/uwidepolproc/smokefree.htm> and <http://eao.wisc.edu/policies/smoke-free.html>). MSU mentions smoking cessation assistance, but not specific enough for the plan analysis in this thesis (<http://www.hr.msu.edu/documents/uwidepolproc/smokefree.htm>). UMin and Mizzou also have relevant simple policy statements without detailed implementation plan (<http://policy.umn.edu/Policies/Operations/Safety/SMOKING.html>). For this reason, this thesis will mainly compare and contrast the implementation plans between the rest of the seven universities. Most of the universities prefer a single specific sector to manage the

Improvement of Tobacco-free Policy Enforcement at the University of Kentucky

campus smoke/tobacco-free policy project. OSU prefer the collaboration of all the departments and working unit (Tobacco Free Ohio State Policy 7.20, 2013, retrieved from <http://hr.osu.edu/policy/policy720.PDF>). While UNC requires individual administrative procedure at each departments. Steering committees or subcommittees at UC-Davis, UI and UMich are in charge of the policy implementation (http://breathefree.ucdavis.edu/_documents/smoke-free_policy.pdf, http://www.uiowa.edu/~facsen/archive/Agendas/Senate06-07/Feb%206/6-smoking_policy_recommend_111606.pdf, and <http://www.hr.umich.edu/smokefree/docs/committeereport.pdf>). According to the co-chair of Tobacco-free Taskforce at the University of Kentucky, UK has a single Tobacco-free Taskforce, which was established by the President Office. Both UK and UI have smoking ambassadors (Hahn et al., 2012 and http://www.uiowa.edu/~facsen/archive/Agendas/Senate06-07/Feb%206/6-smoking_policy_recommend_111606.pdf). At MSU, the smoke-free policy is managed by the sector of Human Resources (<http://www.hr.msu.edu/documents/uwidepolproc/smokefree.htm>). UF's tobacco-free policy is promoted by the Tobacco Prevention and Cessation Task Force (Tobacco Prevention and Cessation Task Force Recommendations, retrieved from <http://healthygators.ufsa.ufl.edu/wp-content/uploads/2012/05/Tobacco-Task-Force-Report.pdf>). UMinn treats its "smoke-free indoor air" as one of its campus administrative policies (<http://policy.umn.edu/Policies/Operations/Safety/SMOKING.html>), and the Office of Vice Chancellor UW-Madison is responsible for addressing the smoking policy matter (<http://eao.wisc.edu/policies/smoke-free.html>). Before the policy went into effect, and during the initial stages, policy communication was done via multiple channels and

Improvement of Tobacco-free Policy Enforcement at the University of Kentucky

"smoke/tobacco-free" signage was put in the prohibition areas. Key sectors of the university community get involved in the regular policy discussion. All the 11 universities have specific smoke/tobacco-free policy websites, including the policy details and smoking cessation resources. UC-Davis does the best among the 11 universities. From its website, people would know about why it is important to quit smoking through videos. Also, an interesting video on its website vividly disseminates the policy over the campus, an online survey for smoking cessation is also provided (<http://breathefree.ucdavis.edu/index.html>). Last but not least, violation reports and appropriate sanctions play very important roles in policy enforcement. UK, UF and UNC state that student violators will be reported to the Dean of Student and employee violators should be reported to the appropriate supervisor or manager (Hahn et al., 2012, <http://www.tobaccofree.ufl.edu/downloads/tobaccopolicy.pdf>, and <http://policies.unc.edu/policies/no-smoking/>). MSU, UMich highlights that smoking policy violators will be addressed through the disciplinary process and they will be subject to disciplinary action (<http://www.hr.msu.edu/documents/uwidepolproc/smokefree.htm> and <http://www.hr.umich.edu/smokefree/docs/committeereport.pdf>). UC-Davis and UI prefer tutoring and educational approach (http://breathefree.ucdavis.edu/_documents/smoke-free_policy.pdf and http://www.uiowa.edu/~facsen/archive/Agendas/Senate06-07/Feb%206/6-smoking_policy_recommend_111606.pdf). OSU has an enforcement approach that is a little complicate). Public health department at OSU is the primary unit to receive and report the complaint, office of human resources has responsibility to consult with and support the unit that receive the complaint from the public health department (Tobacco Free Ohio State Policy 7.20, 2013, retrieved from <http://hr.osu.edu/policy/policy720.PDF>). And all specific working

Improvement of Tobacco-free Policy Enforcement at the University of Kentucky

units or departments are responsible for receiving the complaints. The particular report line at OSU requires these units to forward the complaints within 5 days (Tobacco Free Ohio State Policy 7.20, 2013, retrieved from <http://hr.osu.edu/policy/policy720.PDF>). Basically, the Office of Student Life addresses policy violations with students, employing or volunteer sponsoring unit addresses policy violations with faculty, staff and student employees (Tobacco Free Ohio State Policy 7.20, 2013, retrieved from <http://hr.osu.edu/policy/policy720.PDF>). In conclusion, all units get involved in the policy enforcement and its "report line" is systematic. UK, OSU, UF, and UNC point out that the compliant received office should "follow up" with the violators. OSU expressly points out that the purpose of the "follow up" is to stop the prohibited behaviors (Tobacco Free Ohio State Policy 7.20, 2013, retrieved from <http://hr.osu.edu/policy/policy720.PDF>). But none of these universities have more details for how to implement the "follow up." An interesting point is that UMich and UNC have opposite views in terms of whether or not the university should impose a fine on the violators,. UMich asserts that they "should not consider to fines" as the primary enforcement means (Smoke-free University Initiative Report, 2010, retrieved from <http://www.hr.umich.edu/smokefree/docs/committeereport.pdf>), while UNC argues that "the Department of Public Safety may issue citations to anyone who violates the policy, up to \$25" (<http://policies.unc.edu/policies/no-smoking/>). Overall, it is hard to see very apparent differences between these universities. The compare and contrast for smoke/tobacco-free policy implementation plans are as the three following tables: Table 1 is the comparison of organization and administration, Table 2 is about the policy communication, and Table 3 is to compare and contrast the policy enforcement for these universities.

 Improvement of Tobacco-free Policy Enforcement at the University of Kentucky

Table 1. Tobacco-free Project Organization/Administration

Single and specific managerial sector	<ul style="list-style-type: none"> • UK - "The Tobacco-free Campus Task Force (TCTF)" (Hahn et al., 2012) • UC-Davis - "A campus smoke and tobacco-free policy implementation steering committee." (http://breathefree.ucdavis.edu/communication/announcements/2013-06-05.html) • UF - "Tobacco Prevention and Cessation Task Force." (Tobacco Prevention and Cessation Task Force Recommendations, retrieved from http://healthygators.ufsa.ufl.edu/wp-content/uploads/2012/05/Tobacco-Task-Force-Report.pdf) • UI - "An ad hoc committee" (Smoke Policy Review Committee Final Recommendations, 2006, retrieved from http://www.uiowa.edu/~facsen/archive/Agendas/Senate06-07/Feb%206/6-smoking_policy_recommend_111606.pdf) • UMich - "A Steering Committee and subcommittees" (Smoke-free University Initiative Report, 2010, retrieved from http://www.hr.umich.edu/smokefree/docs/committeereport.pdf) • UW-Madison - "The office of the Vice Chancellor for Administration" (http://eao.wisc.edu/policies/smoke-free.html)
Collaboration of all the departments	<ul style="list-style-type: none"> • OSU- Multiple university sectors get involved in addressing the matters of tobacco-free campus. Office of Human Resources consults with and supports the working units. (Tobacco Free Ohio State Policy 7.20, 2013, retrieved from http://hr.osu.edu/policy/policy720.PDF)
Individual administrative procedure	<ul style="list-style-type: none"> • UNC - All university departments and work units must establish administrative procedures; the office of Human Resources can assist developments. (http://policies.unc.edu/policies/no-smoking/)

Table 2. Policy Communication

Signage on campus	<ul style="list-style-type: none"> • UK, OSU, UC-Davis, UF, UI, Umich, and UNC have signage and signs in appropriate areas on respective campus.
Website	<ul style="list-style-type: none"> • All the 11 studied universities have respective website for smoke/tobacco-free.
E-mail	<ul style="list-style-type: none"> • UK & UF - Emails about policy are sent to all students and employees on campus (Hahn et al., 2012 and http://news.ufl.edu/2011/06/30/tobacco-free-2/) • UI - "Communicate with campus and public via email and press release." (Smoke Policy Review Committee Final Recommendations, 2006, retrieved from http://www.uiowa.edu/~facsen/archive/Agendas/Senate06-07/Feb%206/6-smoking_policy_recommend_111606.pdf)

Improvement of Tobacco-free Policy Enforcement at the University of Kentucky

Discussion Forum	<ul style="list-style-type: none"> • UK - "28 sectors met semiweekly during the 10-month planning period"; "about 200 people were involved in planning" (Hahn et al., 2012) • UC-Davis - "Engage the University community and relevant individuals in dialogues regarding the smoke-free implementation." (Smoke-Free Policy Proposal, 2011, retrieved from http://breathefree.ucdavis.edu/_documents/smoke-free_policy.pdf) • UI - "All students, staff, and faculty were invited to two open forums." (Smoke Policy Review Committee Final Recommendations, 2006, retrieved from http://www.uiowa.edu/~facsen/archive/Agendas/Senate06-07/Feb%206/6-smoking_policy_recommend_111606.pdf)
Map for smoke/tobacco-free	<ul style="list-style-type: none"> • UK, OSU, UC-Davis, UF, UMich, Mizzou, and UW-Madison have map for smoke/tobacco-free zone for each campus.
Others	<ul style="list-style-type: none"> • UK - resource fair, individual counseling sessions, brochures, road shows with employee and student groups, and class (Hahn et al., 2012) • UC-Davis - online survey for the willing of quit smoking, videos, and mobile phone app (http://breathefree.ucdavis.edu/index.html) • UF - Employee and student handbooks (http://news.ufl.edu/2011/06/30/tobacco-free-2) • UI - educational activities, comments from students, staff and faculty (Smoke Policy Review Committee Final Recommendations, 2006, retrieved from http://www.uiowa.edu/~facsen/archive/Agendas/Senate06-07/Feb%206/6-smoking_policy_recommend_111606.pdf) • UMich - communication plans, notification for perspective students and employees, regularly evaluation of the effects of communications (Smoke-free University Initiative Report, 2010, retrieved from http://www.hr.umich.edu/smokefree/docs/committeereport.pdf)

Table 3. Policy Enforcement

Disciplinary Actions	Dean of Student Office	<ul style="list-style-type: none"> • UK - address student violations (Hahn et al., 2012) there is a gap between the real sanctions and the paperwork. • UF & UNC - address student violations, and follow up with the student (Tobacco-free policy, retrieved from http://www.tobaccofree.ufl.edu/downloads/tobaccopolicy.pdf and http://policies.unc.edu/policies/no-smoking/)
	Office of Student Conflict Resolution	<ul style="list-style-type: none"> • UMich - address student smoking violators. (Smoke-free University Initiative Report, 2010, retrieved from http://www.hr.umich.edu/smokefree/docs/committeereport.pdf)

Improvement of Tobacco-free Policy Enforcement at the University of Kentucky

	Administrative procedure	<ul style="list-style-type: none"> MSU & UMich - "complaints and violators should be addressed through administrative procedure." (http://www.hr.msu.edu/documents/uwidepolproc/smokefree.htm and Smoke-free University Initiative Report, 2010, retrieved from http://www.hr.umich.edu/smokefree/docs/committeereport.pdf)
Enforcement in employment setting		<ul style="list-style-type: none"> UK - manager and academic dean address the faculty and staff violations (Hahn et al., 2012). UF & UNC - immediate supervisors address and follow up with faculty and staff violator (Tobacco-free policy, retrieved from http://www.tobaccofree.ufl.edu/downloads/tobaccopolicy.pdf and http://policies.unc.edu/policies/no-smoking/).
Corrective action		<ul style="list-style-type: none"> UK & Mizzou - Employee violations are dealt with through corrective action (Hahn et al., 2012 and http://smokefree.missouri.edu/policyimplementation.php). UNC - "Continuing violations may also result in corrective action." (http://policies.unc.edu/policies/no-smoking/).
Peer Support & Educational Approach		<ul style="list-style-type: none"> UC-Davis and UI prefer peer support and educational approach (Smoke-Free Policy Proposal, 2011, retrieved from http://breathefree.ucdavis.edu/_documents/smoke-free_policy.pdf and Smoke Policy Review Committee Final Recommendations, 2006, retrieved from http://www.uiowa.edu/~facsen/archive/Agendas/Senate06-07/Feb%206/6-smoking_policy_recommend_111606.pdf)

In conclusion, the smoke/tobacco-free policy implementation plans and activities are similar between the 11 studied universities. It is also hard to find very significant differences in terms of the three comparative points, although slight differences exist. However, the University of Kentucky can still learn something from these "tiny" differences. Instead of a single taskforce or steering committee, UNC requires that "all university departments must establish procedures that include identification of the employee(s) responsible for understanding the policy" (<http://policies.unc.edu/policies/no-smoking/>). OSU also coordinates multiple university working units for the policy implementation responsibilities (Tobacco Free Ohio State Policy 7.20, 2013, retrieved from

<http://hr.osu.edu/policy/policy720.PDF>). People may clarify the individual's responsibility through such an arrangement. To be clear, the responsibility should be unambiguous and specific. In terms of the enforcement, although some universities propose to "follow up" with the violators, lack of specific "follow up" measures are the common drawback for all the studied universities. UNC mentions fines (<http://policies.unc.edu/policies/no-smoking/>), which remains a debate for this issue. In the following chapters, this thesis will discuss the feasibility of the financial sanctions, and the current campus smoke/tobacco-free policy enforcement. According to the literature review, comparative analysis and key informant interviews, the last chapter will provide the improvements of tobacco-free policy enforcement at the University of Kentucky.

Discussion

Besides UK, many universities point out that the Dean of Student Office and the Office of Human Resources have responsibility to "follow-up" with the violators. However, seldom universities provide specific and effective measures to "follow-up", moreover, to stop the future violations. In terms of the "follow up" implementation, OSU has relative specific steps, "follow up with the involved faculty, staff, students, vendors, volunteers, and/or visitors to ensure that prohibited behavior stops" (Tobacco Free Ohio State Policy 7.20, 2013, retrieved from <http://hr.osu.edu/policy/policy720.PDF>). However, "follow up" only means "send an email to advise them of their responsibilities" (Tobacco Free Ohio State, Policy 7.20: Addressing Violations, 2013, retrieved from <http://hr.osu.edu/public/documents/policy/resources/720smokefreelaw.pdf>). In fact, this measure is not different from UK's warning letter, in regard to the response of repeat violators. UF and UNC also mention the "follow up"

Improvement of Tobacco-free Policy Enforcement at the University of Kentucky

measure, but no more details are found. Simply sending a warning letter or sending an email to involved people cannot ensure the prohibited behavior stop. Repeat violators may not change their behaviors even if receiving a warning letter, as such a "follow up" may be ineffective. At the University of Kentucky, the possible sanctions for student violators include "a disciplinary warning, reprimand or probation, social suspension, and disciplinary suspension or expulsion depending on the magnitude of the violation" (Hahn et al., 2012). However, according to the UK associate Dean of Student, in practice, the first-time violators will receive a warning letter from the Dean of Student Office, the repeat violators will be forced to attend smoking cessation class, which costs \$200. Disciplinary sanctions never happened. The penalty may be effective, but there is a gap between the real sanctions and the paperwork. How to make the sanctions go into effect remains a discussion not just for UK, but for all universities and colleges in the US.

From the compare and contrast for the policy implementation plans above, it is apparent that there are two opposite opinions regarding the policy enforcement. UMich states that "UM should not consider to fines or other explicit penalties as primary enforcement means" (Smoke-free University Initiative Report, 2010, retrieved from <http://www.hr.umich.edu/smokefree/docs/committeereport.pdf>). However, UNC argues that "the Department of Public Safety may issue citations to anyone who violates this policy, which result in a fine of up to \$25, the violators are also subject to additional court costs" (<http://policies.unc.edu/policies/no-smoking/>). Whether or not the university should fine violators who do not comply with the smoke/tobacco-free policy remains a discussion. Other universities in the United States have their own resolutions and reasons. A health professor at

Improvement of Tobacco-free Policy Enforcement at the University of Kentucky

Miami University of Ohio said policies are ineffective without "clearly defined" enforcement; he believes that the financial sanctions are necessary

(<http://www.gwhatchet.com/2013/08/25/gw-follows-more-than-1000-colleges-to-ban-smoking/>). New York University, however, states that the enforcement relies on "peer discipline".

They say "we don't want to be perceived as a police state, there are no fines." They believe that "everyone in the community is adult" ([http://www.gwhatchet.com/](http://www.gwhatchet.com/2013/08/25/gw-follows-more-than-1000-colleges-to-ban-smoking/)

[2013/08/25/gw-follows-more-than-1000-colleges-to-ban-smoking/](http://www.gwhatchet.com/2013/08/25/gw-follows-more-than-1000-colleges-to-ban-smoking/)). On one hand, financial sanctions may be effective to enforce the smoke/tobacco-free policy on campus. People may comply with the policy because of the fear to lose money. Some universities do not want to make the campus be "police station", which means that the campus should not deal with the smoking violation in a very strict manner. For policy enforcement at the University of Kentucky, it is important to find a balanced point between the education approach and the financial sanctions. In practice, according to the associate Dean of Student at UK, the repeat student violators are forced to attend a smoking cessation class, which costs \$200. Unlike other public places, university is a special place. In addition to academic knowledge and skills, warning respect policy is one of the most important parts of the education for students. For this reason, disciplinary action should be the primary mean of enforcement.

Conclusion

In summary, after reviewing the previous literatures, and the smoke/tobacco-free implementation plans of the 11 studied universities, this thesis can conclude the following findings. First, it is not uncommon that people, including students, employees, and visitors smoke or use tobacco products on campus, especially for an increasing number of young

people who use smokeless tobacco products. Second, it is hard for all universities or colleges to monitor the prohibited behavior everywhere, all the time. Therefore, how to improve the policy enforcement is a big challenge for all campuses. Third, in terms of the studied 11 universities and their implementation plans, similar ideas can be found regarding the three comparative points, smoke/tobacco-free policy campuses organization/administrative, policy communication, and policy enforcement. Most of the universities have a single sector to lead and manage the smoke/tobacco-free project, though a few universities require working units to work together and get involved with the policy enforcement. The channels of policy communication are similar between the studied universities, including e-mail and mail, website, video, signage, and forum. Plus, all the studied universities have smoking cessation services. In terms of the policy enforcement, MSU and UMich address the violation complaints through administrative procedures. UF and UNC require the Director of Student to address and follow up with the student violators, while employee violators are usually addressed by their supervisors and managers.

Limitation

The conclusion above is the basic finding of this thesis, which can only prove that the policy implementations are similar between the 11 studied universities. The 11 benchmark universities were provided by the University Review Committee at the University of Kentucky in 2011 (<http://www.uky.edu/iraa/content/current-benchmarks-identified-university-review-committee>), for UK, the benchmark universities would change over time. In the future, there would be more universities become smoke or tobacco-free in the US. Thus, it is not reasonable to say there are not significant differences between UK and all other

universities in the US. For this point, more comparative analyses would be needed. Another limitation is that according to UK's policy, repeat employee violators are reported to their manager and academic dean, the employee violations are treated as any other infraction of campus policy, and even the termination of employment (Hahn et al., 2012). Because unlike a single sector such as the Dean of Student Office, the managers or academic deans are different from one employee to another. To make it manageable this research did not collect the responses of all the managers regarding the tobacco-free policy enforcement at UK. In the future, the data of policy enforcement for employees at UK should be collected.

Recommendations for Improvement

The results of the comparative analysis and key informant interviews provide clues for improvement at the University of Kentucky, even though differences between the implementation plans are not very obvious. In this chapter, I would propose three top recommendations for the improvement of tobacco-free policy enforcement at the University of Kentucky.

The first and the most practical recommendation is that the "warning letter" should require feedback. Timely feedback is one important component of effective communication (Schermerhorn, 2005). For this reason, a "receipt" from the violator should be delivered to the Dean of Students office via mail or email within seven days. For example, a receipt letter could say that the student has received the warning letter, apologizes for the violation, and promises to avoid violating the rules in the future. Moreover, monthly period reports for complying with the policy could be considered. Because of the prevalence of tobacco addiction, it may be hard for some students to comply with the policy on campus, the primary

benefit of such a report is to help these students with self-control. For the students who do not submit receipt or report, they should be subject to disciplinary actions, just as they violate other university regulations and policies, including disciplinary warning, reprimand or probation, social suspension and even expulsion, depending on the magnitude of the violation (Hahn et al., 2012).

The second recommendation is that we establish a "tobacco-free taskforce" and "report line" at each department in UK. Compared to the campus as a whole, it may be easier to communicate and enforce the policy within individual departments and a limited number of people. At first, a survey of tobacco use could be given to see the rate of tobacco use within the department. Each department could establish a "tobacco-free taskforce", which represents different sectors of the department, including students, faculty and staff, smokers and non-smokers. The members of the taskforce will meet regularly and make an implementation plan that is based on their particular conditions. In terms of communication, directors could reinforce the policy during regular meetings, and professors may reinforce the policy in classes. During each semester, the departments may host resource fairs to disseminate the policy implementation and smoking cessation programs. In terms of enforcement, each department could have a mailbox to collect the violation reports. At this point, peer support and supervision will play an important role in the policy enforcement. For example, no smoking or tobacco using during the events, activities, meetings and classes, for both inside and outside areas.

The third recommendation is that UK would recruit more TFTA! ambassadors, the ambassador team should include qualified people. A total of five student ambassadors already

Improvement of Tobacco-free Policy Enforcement at the University of Kentucky

work on UK campus, the Classroom Building and Young Library are two "hotspots" on campus. They focus on those two places and work on the whole campus. Two or three people work together each time. However, it is impossible for only a few people to catch all the violations at the required areas. Although they have received sufficient training (Ickes, Hahn, McCann, & Kerckmar, 2013), the current number of working ambassadors is too small to sufficiently monitor the behavior. According to one of the student ambassadors, missing violation is a big challenge for their work. Thus, increasing the number of student ambassadors is necessary. For example, the program may be more effective by assigning the ambassadors at the south, middle and north of Hilltop Avenue. Also, sometimes student ambassadors do not have enough authority and influence for the violators approached (Ickes, et al., 2013). Sometimes when they approach violators, they can do nothing but let them leave. Thus, the ambassador team should include qualified people, they could be an employee of University Health Services, as well as the employees of academic departments. This thesis could not give an exact number to answer how many student ambassadors are enough and how many employees are enough. It depends on the incidence of violations, the violator's attitude at the approach, and the approach skills of ambassadors. Also, the number of ambassadors may change in different seasons and weather. For example, the number of violations may decrease on the snowy or rainy days. Winter may also bring fewer violations than summer. Currently, the salary for each student ambassador is \$10 per hour, and the five student ambassadors totally work sixty hours per week. For this reason, whether or not this recommendation is practical depends on the funding for tobacco-free project at UK. Thus, further research is needed to identify how many ambassadors should be added.

Improvement of Tobacco-free Policy Enforcement at the University of Kentucky

Finally, in term of whether or not UK should fine the violators, I suggest that UK should find a balancing point between financial sanctions and disciplinary sanctions. UK is a university and complying with the policies is one of the most important parts of education for students, at this point, disciplinary actions should be taken. The campus should establish a "social environment" for the policy implementation, which should be treated like any other campus rules (Hahn et al., 2012), because social norms affect people's behavior (Evans, Stoddart, & Canadian Institute for Advanced Research, 1990, p.63). Sometimes, fines might be effective since people do not want to lose money, because of this, I suggest that disciplinary actions should be the primary means of the policy enforcement, and fines could be the supplementary mean of the policy enforcement. For example, assume that a student is first reported to the Dean of Student Office, they should receive a warning letter from the office, and they should submit a receipt within seven days. In case he or she chooses not to do that, they may be subject to the disciplinary actions according to the magnitude of the violation. If a student is found to break the rules many times, disciplinary sanctions plus penalties might be given.

In summary, smoke, secondhand smoke, third-hand smoke and any other ways to use smokeless tobacco products, are very harmful to people's health. The purpose of smoke/tobacco-free policy and its implementation are not to monitor and punish people, but to prevent disease and promote health as a healthier campus is good for everyone. For this reason, at the University of Kentucky, everybody, including students, faculty/staff, visitors, patients, vendors, and any other university members, have responsibilities to respect and comply with the tobacco-free policy.

Improvement of Tobacco-free Policy Enforcement at the University of Kentucky

References:

1. U.S. Department of Health and Human Services. The Health Consequences of Smoking-50 Years of Progress: A Report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014.
2. CDC - Fact Sheet - Health Effects of Cigarette Smoking - Smoking & Tobacco Use. (2014, February 6). Retrieved from http://www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/effects_cig_smoking/
3. CDC - Fact Sheet - Health Effects of Cigarette Smoking - Smoking & Tobacco Use. (2014, February 6). Retrieved from http://www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/effects_cig_smoking/#cancer
4. CDC - Fact Sheet - Health Effects of Secondhand Smoke - Smoking & Tobacco Use. (2014, March 5). Retrieved from http://www.cdc.gov/tobacco/data_statistics/fact_sheets/secondhand_smoke/health_effects/index.htm
5. CDC - Fact Sheet - Youth and Tobacco Use - Smoking & Tobacco Use. (2014, February 14). Retrieved from http://www.cdc.gov/tobacco/data_statistics/fact_sheets/youth_data/tobacco_use/index.htm
6. CDC - Smoking in the Movies- subsection title - section title - site title. (2013, May 25). Retrieved from http://www.cdc.gov//tobacco/data_statistics/fact_sheets/youth_data/movies/index.htm
7. What is third-hand smoke? Is it hazardous? - Scientific American. (2009, January 6). Retrieved January from <http://www.scientificamerican.com/article/what-is-third-hand-smoke/>
8. State Smoke-Free Laws for Worksites, Restaurants, and Bars --- United States, 2000--2010. (2011, April 22). Retrieved from http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6015a2.htm?s_cid=mm6015a2_w
9. Eisner, M. D., Smith, A. K., & Blanc, P. D. (1998). Bartenders' respiratory health after establishment of smoke-free bars and taverns. *JAMA*, 280(22), 1909-1914.

Improvement of Tobacco-free Policy Enforcement at the University of Kentucky

10. Secondhand smoke exposure and cardiovascular effects: making sense of the evidence. (2009, October).

Retrieved from

<http://www.iom.edu/~media/Files/Report%20Files/2009/Secondhand-Smoke-Exposure-and-Cardiovascular-Effects-Making-Sense-of-the-Evidence/Secondhand%20Smoke%20%20Report%20Brief%203.pdf>

11. Types of Tobacco Products. (n.d.). Retrieved from

http://www.ct.gov/dph/lib/dph/hems/tobacco/tobacco_products.pdf

12. Villanti, A. C., Richardson, A., Vallone, D. M., & Rath, J. M. (2013). Flavored tobacco product use among U.S. young adults. *Am J Prev Med*, 44(4), 388-391. doi: 10.1016/j.amepre.2012.11.031

13. Centers for Disease Control and Prevention. Tobacco Control State Highlights 2012. Atlanta U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2013.

14. Benefits of Tobacco-Free Policy vs. Smoke-Free Policy. (n.d.). Retrieved from

http://www.tobaccofreeu.org/your_state/documents/TobFreeVSmokeFree.pdf

15. Anderson, C. (2005, April 26). What's the Difference Between Policies and Procedures? - Bizmanualz [Web log post]. Retrieved from

<http://www.bizmanualz.com/blog/whats-the-difference-between-policies-and-procedures.html>

16. Hayes, W. (2002, October 27). Implementation Defined [Web log post]. Retrieved from

<http://profwork.org/pp/implement/define.html>

17. Hayes, W. (2001, July 12). Good Implementation: [Web log post]. Retrieved from

<http://profwork.org/pp/implement/good.html>

18. The Community Guide - TFFRS - Tobacco: Smoke-Free Policies [Web log post]. (2013, June 3). Retrieved

from <http://www.thecommunityguide.org/tobacco/RRsmokefreepolicies.html>

Improvement of Tobacco-free Policy Enforcement at the University of Kentucky

19. CDC Features - 25 States and DC are Smoke-Free. (2011, April 25). Retrieved February 14, 2014, from <http://www.cdc.gov/features/smoke-freelaws/index.html>
20. Frequently Asked Questions Regarding Enforcement of Tobacco-Free . Downloaded from <http://center4tobaccopolicy.org/community-organizing/local-campaign-websites/tobacco-free-parks-beaches-in-santa-barbara/>
21. Fennell, R. (2012). Should college campuses become tobacco free without an enforcement plan? *J Am Coll Health, 60*(7), 491-494. doi: 10.1080/07448481.2012.716981
22. Chaaya, M., Alameddine, M., Nakkash, R., Afifi, R. A., Khalil, J., & Nahhas, G. (2013). Students' attitude and smoking behaviour following the implementation of a university smoke-free policy: a cross-sectional study. *BMJ Open, 3*(4). doi: 10.1136/bmjopen-2012-002100
23. Fennell, R. (2012). Should college campuses become tobacco free without an enforcement plan? *J Am Coll Health, 60*(7), 491-494. doi: 10.1080/07448481.2012.716981
24. Hahn, E. J., Fallin, A., Darville, A., Kercksmar, S. E., McCann, M., & Record, R. A. (2012). The three Ts of adopting tobacco-free policies on college campuses. *Nurs Clin North Am, 47*(1), 109-117. doi: 10.1016/j.cnur.2011.11.002
25. Ickes, M. J., Hahn, E. J., McCann, M., & Kercksmar, S. (2013). Tobacco-free Take Action!: Increasing Policy Adherence on a College Campus. *World Med Health Policy, 5*(1), 47-56. doi: 10.1002/wmh3.20
26. Seo, D. C., Macy, J. T., Torabi, M. R., & Middlestadt, S. E. (2011). The effect of a smoke-free campus policy on college students' smoking behaviors and attitudes. *Prev Med, 53*(4-5), 347-352. doi: 10.1016/j.ypmed.2011.07.015
27. University of Kentucky | Tobacco-free Policy. (2013, November 19). Retrieved from <http://www.uky.edu/TobaccoFree/index.html>

Improvement of Tobacco-free Policy Enforcement at the University of Kentucky

28. University of Kentucky Administrative Regulation 6:5 - Tobacco Policy. (2008, November 20). Retrieved from <http://www.uky.edu/regs/files/ar/ar6-5.pdf>
29. TFTA! Ambassador Data Summary. (2014).
30. Campus Tobacco Survey, University of Kentucky Tobacco-free Campus Initiative Treatment and Addiction Management Committee, 2009, retrieved from <http://www.uky.edu/TobaccoFree/files/SurveySpring2009.pdf>
31. Kentucky Tobacco Facts. (2007). Retrieved from http://www.nass.usda.gov/Statistics_by_State/kentucky/Publications/Pamphlets/tobacco06.pdf
32. University Smoke-Free Policy - Michigan State University. (n.d.). Retrieved from <http://www.hr.msu.edu/documents/uwidepolproc/smokefree.htm>
33. Tobacco-free policy. (n.d.). Retrieved from <http://www.tobaccofree.ufl.edu/downloads/tobaccopoly.pdf>
34. Retrieved from <http://tobaccofree.osu.edu/>
35. The Ohio State University - Office of Human Resources (2013, October 25). Tobacco free Ohio State Policy 7.20. Retrieved from <http://hr.osu.edu/policy/policy720.PDF>
36. UC Davis Policy and Procedure Manual. (n.d.). Retrieved from <http://manuals.ucdavis.edu/ppm/290/290-10.pdf>
37. Healthy Gators Coalition (2008, September). *Tobacco Prevention and Cessation Task Force Recommendations*. Retrieved from <http://healthygators.ufsa.ufl.edu/wp-content/uploads/2012/05/Tobacco-Task-Force-Report.pdf>
38. University of Michigan (2010, September 28). Smoke-free University Initiative Report. Retrieved from <http://www.hr.umich.edu/smokefree/docs/committeereport.pdf>
39. The University of Iowa (2006, November 16). Smoking Policy Review Committee Final Recommendations. Retrieved from

Improvement of Tobacco-free Policy Enforcement at the University of Kentucky

http://www.uiowa.edu/~facsen/archive/Agendas/Senate06-07/Feb%206/6-smoking_policy_recommend_111606.pdf

40. Smoke-Free Indoor Air - University of Minnesota. (n.d.). Retrieved from

<http://policy.umn.edu/Policies/Operations/Safety/SMOKING.html>

41. Smoking Policy | Smoke-Free Mizzou | University of Missouri. (n.d.). Retrieved from

<http://smokefree.missouri.edu/policy/smoking-policy.php>

42. No Smoking | University and Administrative Policies | The ... (n.d.). Retrieved from

<http://policies.unc.edu/policies/no-smoking/>

43. Smoke-Free Policy - Employee Assistance Office. (n.d.). Retrieved from

<http://eao.wisc.edu/policies/smoke-free.html>

44. Breathe Free UC Davis: Home - University of California, Davis. (n.d.). Retrieved from

<http://breathefree.ucdavis.edu/>

45. Implementing 100% Tobacco-free School Policy. (2010, September). Retrieved from

<http://www.mc.uky.edu/tobaccopolicy/KCSP/OnePagers/OnePagerImplementingTobaccoFreeCampuses091210.pdf>

46. The Smoking Policy Subcommittee of the Occupational Wellness Forum (2011, October 25). Smoke-free

Policy Proposal. Retrieved from http://breathefree.ucdavis.edu/_documents/smoke-free_policy.pdf

47. The Ohio State University Office of Human Resources (2013, July 23). Tobacco Free Ohio State, Policy 7.20:

Addressing Violations. Retrieved from

<http://hr.osu.edu/public/documents/policy/resources/720smokefreelaw.pdf>

48. Schermerhorn, J. R. (2005). Management (10th ed.). New York: J. Wiley.

49. Evans, R. G., Stoddart, G. L., & Canadian Institute for Advanced Research (1990). HEALTH FROM AN

ECOLOGICAL PERSPECTIVE. In *Producing health, consuming health care* (p. 63).