It's Time to "Come Out" as a Non-Smoker: An Engaging and Culturally Appropriate Smoking Cessation Program Plan and Evaluation for LGBT Youth

By

Daniel Mackey

A Master's Paper submitted to the faculty of
the University of North Carolina at Chapel Hill
in partial fulfillment of the requirements for
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Abstract

Smoking is the number one cause of preventable death in the world, and accounts for over 400,000 deaths each year just in the United States. Sexual orientation has an effect on the prevalence of smoking rates; a growing body of literature indicates lesbian, gay, bisexual, and transgender (LGBT) individuals smoke at rates that are two times higher than their heterosexual counterparts. LGBT youth are a subgroup of high concern because studies show this population has higher and growing rates of smoking compared to their heterosexual peers. This is alarming because the earlier the age of onset, the more significant the risk is for smoking well into adulthood. Studies have shown that LGBT youth are less likely to want to quit smoking than heterosexual youth. The LGBT population, especially the LGBT youth population experience unique cultural and psychosocial factors, such as minority stress, that contribute to their smoking behaviors. LGBT youth represent an important underserved priority group, and it is crucial we begin to understand factors that influence smoking behavior while they are still young, because this is the window of opportunity where cessation programs have the greatest impact.

The literature shows just a few smoking cessation interventions that are culturally tailored specifically for the LGBT population, and my search of the literature found no results for culturally tailored interventions specifically for the LGBT youth population. With treatment quit rates for the LGBT targeted cessation interventions comparable or better then the quit rates for the cessation programs for the general population, I wanted to develop a culturally tailored smoking cessation program that will be targeted specifically for LGBT youth. I chose to modify the *QueerTIPs for LGBT Smokers: A Stop*

Smoking Class for Lesbian, Gay, Bisexual, and Transgender Communities because this intervention was based off the successful *The Last Drag* LGBT intervention and best practice strategies developed by the American Lung Association's *Freedom from Smoking* and the American Cancer Society's *FreshStart*. *QueerTIPS* addressed issues that were unique to LGBT smokers who are attempting to quit.

This paper describes the changes I made to the *QueerTIPs* intervention to make it appropriate for the LGBT youth population – most notably I added a fun and engaging activity and a food component to each session – and the program planning and evaluation strategies that are necessary for a successful implementation. A review of the culturally tailored smoking cessation interventions that have been used for LGBT adults, and a review of the non-intervention studies targeting attitudes and perceptions toward cessation for youths, LGBT youths, *or* LGBT adults, which both reviews helped guide the development of my program. The evaluation plan utilizes a mixed-methods approach by incorporating both surveys and interviews to obtain both quantitative and qualitative data, which will better inform me and the stakeholders on how to further improve upon this smoking cessation intervention and help reduce the smoking disparity of the hard to reach LGBT youth population.

Introduction

Smoking is the number one cause of preventable death in the United States and the world, in the United States alone, smoking accounts for over 400,000 deaths per year (Fiore, et. al, 2008). Mounting research has found that smoking prevalence is significantly higher, almost twice as prevalent (Levinson, Hood, Mahajan, and Russ, 2012), among the Lesbian, Gay, Bisexual, and transgender (LGBT) population than in

the general population (Burkhalter, Warren, Shuk, Primavera, and Ostroff , 2009). This same disparity is also found in LGBT youth populations, as they have been found to have disproportionately higher rates of smoking then heterosexual youths. Most cessation interventions reported in the literature describe programs that target adults and very few studies have reported on cessation efforts with youth or LGBT populations. Thus, because of their high smoking prevalence, LGBT youth smokers represent an important priority group for smoking cessation focus and efforts.

The goal of this paper is to create a program plan and evaluation for a smoking cessation intervention culturally tailored and modified for LGBT youth. This specific topic and population became of interest to me when I began my practicum experience at the University of Michigan in the Center for Sexuality and Health Disparities working on The Michigan Smoking and Sexuality Study, which focused on sexual minority female youth.

This paper encompasses five sections. The background provides an overview of the smoking disparity in the LGBT youth population and describes possible reasons why this disparity exists. It describes the importance and need for a culturally tailored smoking cessation intervention specifically created for this population. The literature review is housed in this section. The second section of the paper is the program plan, which includes an overview of the culturally tailored smoking cessation intervention for sexual minority youth, a logic model for the intervention, and a plan for the program's implementation. The third section is the evaluation plan – a description of the design to evaluate whether the proposed goals and objectives of the intervention plan were met. The fourth section is the conclusion where the program plan is addressed and related to

gaps in the current literature. The final section is the leadership reflection where I offer my reflections on foreseeable leadership challenges that this intervention might create.

Background

Smoking is the number one cause of preventable death in the world, and accounts for over 400,000 deaths each year just in the United States (Fiore et. al. 2008). Sexual orientation has an effect on the prevalence of smoking rates – LGBT people are significantly more likely to smoke cigarettes (32.8%) than the general population (19.5%) (King, Dube, &Tynan, 2012). Studies have also found very high rates of smoking among LGBT youth. In a venue-based sample of over 500 LGB youth (transgender youth were not included in this study) aged 13-24 years old, 63% were current smokers (Remafedi, 2007). Bisexual youth were found to be at the highest risk, as bisexual boys were twice as likely to smoke regularly as either gay or straight boys and the pattern for girls was seen to be similar (American Lung Association, 2010). The above data demonstrate LGBT smokers represent an important underserved priority groups, especially LGBT youth smokers because the earlier in age a person starts smoking, correlates with daily smoking and lifetime nicotine dependence (Hu, Davies, & Kandel, 2006). In addition, there is limited research on smoking cessation treatments for this group, especially on culturally targeted interventions.

This smoking disparity between the LGBT population and the general population most likely arises because of LGBT specific psychosocial and cultural factors. LGBT smokers and nonsmokers are exposed to unique psychological stressors that probably influence smoking behaviors, such as elevated general stress for example, a person's stress level or the amount of stressful life events, and minority specific stress, such as

internalized homophobia, sexual orientation concealment, discrimination events, stigmatization, and victimization (Meyer, 2003). Minority stress has been highlighted as an important psychosocial influence on LGBT risk factors, and because of these unique risk factors and higher levels of general and minority stress; LGBT individuals experience higher rates of mood and anxiety disorders (Mays and Cochran, 2001). In addition, specific cultural factors also contribute to the disproportionate rates of LGBT smokers for example; salience and identification with the LGBT identity are likely to play a role in smoking behaviors (Meyer, 2003). As a result of the historic and current importance of gay bars in the coming out process and social lives of LGBT people, drinking and smoking have become normalized in the LGBT community and have a synergistic relationship (Eliason, Dibble, Gordon, & Soliz, 2012). Smoking is seen as a social activity, especially in the LGBT youth population. Smoking with a group of other LGBT identified people, not only gives LGBT youth the social space to make friends, but also an outlet for bonding over the stresses of being discriminated and bullied against for being an LGBT youth at school and with their family (National Youth Advocacy Coalition). LGBT individuals, especially youth, are also disproportionally targeted by big tobacco (Washington, 2002). Other reasons LGBT youth cite as reasons to smoke include: hunger, rebelliousness, homelessness, poverty, desire to appear more masculine, attractive, or glamorous, poor self-esteem, lack of a positive role model (Remafedi, 2007). Smoking cessation interventions need to be specifically created to tackle the unique struggles that the LGBT population faces.

In the literature to date, there are few smoking cessation trials focused on LGBT smokers. Of the culturally tailored interventions for LGBT individuals, the initial results

show that the quit rates at the end of treatment are comparable or even better than those reported for smoking cessation interventions for the general population (Dickson-Spillmann, Sullivan, Zahno, & Schaub, 2014; Eliason, Dibble, Gordon, & Soliz, 2012; Harding, Bensley, & Corrigan, 2004; Matthews, Li, Kuhns, Tasker, & Cesario, 2013; Walls & Wisneski, 2010). However, more extensive research is needed to determine the effect of smoking cessation interventions for LGBT population, especially LGBT youth populations. Thus, this project will target the LGBT youth population. When I searched the literature to help guide the development of a culturally specific smoking cessation intervention for LGBT youth, I found no results. I decided to draw upon three smoking cessation interventions created for the general youth population:

Brief Motivational Interviewing in a Hospital setting for Adolescent Smoking: A Preliminary Study (Colby et. al., 1998)

Colby and colleagues conducted a randomized control trial conducted in a hospital setting to test the feasibility of conducting a brief motivational interview (MI) for teenage patients identified as smokers at the time of their hospital visit. Patients were randomly assigned to a 30-minute MI (N=20) or 5 minutes of brief advice (BA) (N=20).

Patients in the intervention group received MI personalized to the teen's goals and behaviors. Each patient watched four short-videotaped scenarios. The tapes were used to stimulate discussion on four content areas: health effects, social consequences, addiction, and financial cost. Individualized assessment feedback was provided in an attempt to increase motivation to change. The interventionist assisted the patient in identifying goals for behavior change, explored barriers to change, and provided advice and strategies where appropriate.

Patients in the control group received brief advice (BA) to stop smoking. This advice consisted of a brief interaction with an interventionist who provided an informational handout identical to the one provided to patients in the MI group and were encouraged to stop smoking and to get assistance if necessary.

The primary outcome was one week point prevalence at follow-up measured by self-report, with abstinence claims confirmed biochemically. In the MI group, 20% were abstinent from cigarettes, compared with 10% in the BA group. During the follow-up period, 72% of the participants from the MI group made a serious quit attempt (longer than 24 hours), compared with 60% of the BA group.

Effectiveness of a High School Smoking Cessation Program (Adelman, Duggan, Hauptman, & Joffe, 2001)

This study was a school based, randomized control study with the purpose of determining the impact of a high school-based smoking cessation program targeting smokers interested in quitting. The authors wanted to see if the smoking cessation class was more effective in the short-term than the pamphlet. Over the full year of the program, the authors wanted to know how effective the school based cessation program was.

Each participant was randomized to one of two groups. The students in group 1 (N=35) received the smoking cessation curriculum immediately after the enrollment period. The smoking cessation curriculum consisted of eight 50-minute sessions administered over a period of 6 weeks. The program took place in an auxiliary classroom during the school day using this weekly curriculum – Session 1: introductions and team building skills. Session 2: self-identification of personal smoking habits and

perceived barriers to quitting. Session 3: individual and group problem solving to develop strategies for quitting. Session 4 and 5: practicing the above solutions. Session 6: mental and physical preparedness to quit smoking and was highlighted with a quit ceremony. Session 7 and 8: prevention of relapse and dealing with withdrawal symptoms.

The students in group 2 (N=39), who received an educational pamphlet on how to quit smoking, were told, “we encourage you to quit smoking on your own,” and were offered participation in the smoking cessation curriculum classes in 3 months time.

Follow-up with a one page questionnaire and measurement of exhaled carbon monoxide and saliva continine occurred at the same four points in time for both groups.

At the end of the curriculum, the classroom group was significantly more likely to be smoke-free (59% vs. 17%), to have tried to quit smoking (82% vs. 54%), and to reduce mean cigarettes per day (7.0 vs. 1.0). Four weeks later, these differences persisted: smoke-free (52% vs. 20%), quit attempt (85% vs. 60%) and reduction in mean cigarettes per day (6.6 vs. 1.6). At 10 and 20 weeks after the curriculum, 41% and 31% remained smoke-free, respectively. Once the pamphlet group participated in the classroom intervention (average attendance of 2.2 sessions) their cessation rates were similar to the initial group: 31% at the end of the curriculum and 27% 10 weeks later. This study demonstrated that a school-based curriculum for adolescent smoking cessation is more effective than an informational pamphlet alone and reduces cigarette use adolescents.

A Successful Approach to reduce youth smoking in Leicestershire (Thomson, 2012)

Thomas conducted *Project Fresh-Start* -- a school based smoking cessation intervention that used a multi-faceted approach that set up school-based cessation services to meet the specific needs of young people. The program trained the members of school nursing teams to become the smoking cessation advisors to the participants, and brief intervention training for the members of the school staff was held in order to promote a whole-school support system and approach to smoking cessation. The program allowed pupils to attend cessation support sessions during curriculum time. Assemblies with tobacco education and promotion of the school based cessation service and a theatre in education performance (TIE) were used. Provision and use of mobile phones for the purpose of texting students to send motivational and reminder texts, opened up a constant line of communication for support and motivation to remain smoke free. Follow-up time was 4 weeks from the set quit-date.

The target schools (N=4195) showed a reduction in smoking prevalence of 8% compared to a reduction of only 5.7% in the comparison schools (N=3414). Compared with the pilot study, 68% more participants set a quit date while using this intervention, which showed that the new approaches were more acceptable and appropriate for meeting the needs of the young service users. There was also an increase in the number of times young people accessed support. In the pilot study, most young people only attended 1-2 sessions but during the present intervention, the majority of young people attended all 6 sessions. Provision of mobile phones to school nurses appeared to be an influential factor in the improvements seen regarding commitment. The phones were used to send reminders about session times and motivational texts. It is notable that where the TIE program was delivered, prevalence reduction was highest. At the 4-

week follow-up, 24% of the high school participants remained smoke free compared to 0% during the pilot study.

Even though these interventions were not measuring LGBT specific target populations, some of the successful strategies used in the different interventions could appropriate for use in a culturally tailored intervention for the LGBT youth population. Motivational interviewing, the use of cell phones for reminders and added motivation and support, theater in education performances, and an actual smoking cessation class in addition with smoking cessation informational materials. These studies also showed that a school-based smoking cessation intervention would probably be the most effective for an adolescent population. However, this approach may be problematic with a target population of LGBT youth because of the sensitive nature and unique circumstances of this population.

The American Lung Association's *Freedom From Smoking* Intervention

I identified three articles (Lando, McGovern, Barrios, & Etringer, 1990; Rosenbaum and O'Shea, 1992; McGovern and Lando, 1992) that used the American Lung Association's *Freedom From Smoking* intervention on a study population of the general public.

Freedom From Smoking was an 8 session, 7-week smoking cessation intervention with each session lasting between 90 minutes and two hours. The first session was strictly an orientation session. Session two was an in-depth discussion of the general health effects of smoking with emphasis placed on the fact participants can quit and the program will provide support and encouragement to reach that goal. The third session taught coping strategies for confronting urges to smoke. The fourth

session was Quit Night where the participants made a public and personal commitment to stop smoking. Two days later, session five was held and withdrawal symptoms and benefits of quitting were discussed. Sessions six and seven focused on maintenance and living a healthier, more enjoyable nonsmoking lifestyle. Discussions included relaxation techniques, exercise or physical fitness programs, avoiding weight gain, and coping with stressful situations. The last session, session eight, was a celebration of their new lives as nonsmokers and awards were given out (McGovern and Lando, 1992).

McGovern and Lando (1992) compared the traditional *Freedom From Smoking* intervention (n=127) and traditional *Freedom From Smoking* intervention with the addition of nicotine gum (n=146). At the end of the intervention, 86% of the participants that used the gum had a seven-day point prevalence of smoking abstinence. The traditional intervention without the use of the nicotine gum was not reported at the end of the intervention. At the three-month follow-up, both the traditional intervention and traditional intervention with the nicotine gum added had a seven-day point prevalence of smoking abstinence of 40%. At the 12-month follow-up, the traditional intervention with the addition of nicotine gum had a seven-day point prevalence of smoking abstinence of 35%, while just the traditional *Freedom From Smoking* intervention had a seven-day point prevalence of 32% (McGovern and Lando, 1992).

Lando, McGovern, Barrios, & Etringer (1990) also conducted another study (n=363) that tested the effectiveness of the American Lung Associations *Freedom From Smoking*. They measured a 24-hour point prevalence of smoking abstinence follow-up at three, six, and twelve months. The point prevalence smoking abstinence of the

participants was 28.93%, 27.27%, and 24.79%, respectively. Quit rates for the last session were not reported (Lando, McGovern, Barrios, & Etringer, 1990). Rosenbaum and O'Shea (1992) also conducted a study with 494 participants to test the effectiveness of the *Freedom From Smoking* intervention. By the end of the intervention, 52% of their study population had quit smoking and at the one-year follow-up, 29% of the participants reported they had a 30-day point prevalence of smoking abstinence. Quit rates for a three-month or six-month follow-up were not reported (Rosenbaum and O'Shea, 1992).

The data reported quit rates for the *Freedom From Smoking* intervention for the general public comparable to and even less than the quit rates reported from the culturally tailored interventions for LGBT adults (Table 1). This comparison was important to make because the LGBT population, both youth and adult, have a higher smoking prevalence than their heterosexual counterparts. The literature from the adult smoking cessation programs demonstrated it was possible to take a smoking cessation intervention created for the general public, such as *Freedom From Smoking*, and successfully tailor it for use by the LGBT population. Thus, the program plan created below is important because it addressed a gap in the literature because there are currently no smoking cessation intervention studies published specifically addressing the LGBT youth population.

Literature Review

The goal of this project planning and evaluation paper was to develop a successful smoking cessation intervention for sexual minority (LGBT) youth. I initially began the literature search to look specifically for interventions that have already been

conducted and specifically target sexual minority youth. After several attempts, I discovered this target population had very little documented research. I decided I needed to change my search strategy. I developed my search terms in PubMed and used PubMed to conduct my literature review. Additional articles were identified and retrieved from searching the references and text of articles obtained through the searches. I used the search "((smoking[tw] OR tobacco[tw] OR cigarette*[tw] OR e cig*[tw] OR electronic cig*[tw]) AND (cessation OR quit* OR control OR treatment*[tw])) AND (sexual minorit*[tw] OR gay*[tw] OR lesbian*[tw] OR bisexual*[tw] OR transgender*[tw] OR homosexual*[tw] OR queer*[tw] OR LGBT*[tw] OR ymsm[tw] OR young men who have sex with men[tw])" in PubMed and received 187 articles. In terms of reviewing these articles, my inclusion criteria were for articles that (1) conducted smoking cessation intervention studies on LGBT adults, (2) non-intervention studies that looked at attitudes and behaviors of youths, LGBT, or LGBT youth toward smoking cessation interventions, and also (3) smoking prevalence studies of LGBT and LGBT youth.

I searched through the 187 articles the PubMed search result provided, and I first looked through the titles and kept the articles I thought would be relevant to one or more of the three categories listed above. After I screened the titles and excluded articles I did not deem appropriate, I was left with 55 articles in PubMed. Articles that were excluded dealt with diseases, such as, HIV, Hepatitis C, Human Papillomavirus, cancer, acute respiratory illness, drug use, reproductive health, second hand smoke, e-cigarettes, and specific racial groups. In order to screen these 50 articles, I chose to read the abstracts of these articles and excluded the articles that did not fit with the

scope of my paper or criteria I had previously defined. Three articles were excluded because they were conducted in China and the cultural differences are too vast for relevance in this paper. Three articles including other health issues and/or populations outside of LGBT were excluded. An editorial comment on an article was excluded. Two articles were excluded because they discussed training and developing leaders to address tobacco disparities. An article that was racially specific was excluded. An article that interviewed LGBT leaders who used funding from major tobacco companies was excluded, and an article proposing to use a bar or club for an intervention venue was also excluded because this type of intervention venue would not be appropriate for LGBT youth interventions. This decreased the number of relevant articles to 38.

Smoking Cessation Interventions for LGBT Adults

From the refined search, I identified six articles describing culturally tailored smoking cessation interventions specifically for sexual minorities (Table 1). Four of the articles (Eliason, Dibble, Gordon, & Soliz, 2012; Walls & Wisneski, 2010; Matthews, Li, Kuhns, Tasker, & Cesario, 2013; Greenwood & Hunt, 2002) based the underlying content of the smoking cessation curriculum off the American Lung Association's Freedom From Smoking (ALA-FFS) group based curriculum; however, each study tailored the ALA-FFS to a culturally competent smoking cessation intervention specifically for the LGBT community and incorporated LGBT specific activities and LGBT smoking characteristics and information, while still maintaining the core cognitive and behavioral approaches and smoking education content used in the standard ALA-FFS.

The Last Drag (Eliason, Dibble, Gordon, & Soliz, 2012) was a community-based intervention conducted at the San Francisco LGBT Community Center and was specifically tailored and targeted for LGBT adults. The participants (N=233) ranged in age from 21-78 years old with a mean age of 44.5 years. At baseline, the average number of cigarettes smoked per day by the participants was about 18.4 cigarettes and 73% of the participants had intentions to quit smoking within the next 30 days. The average number of quit attempts of the participants was not reported in this study. At the end of the last session (session 7), 59% of the participants had self-reported they had quit smoking. This study conducted follow-up phone interviews at one, three, and six months after the last class session, and they discovered that 53%, 36%, and 36% had stayed abstinent from smoking at those follow-ups, respectively. Another community-based, culturally specific intervention that used *The Last Drag* curriculum (Walls & Wisneski, 2010) was targeted at LGBT adults (N=44), ranging in age from 18-62 years old (M=35.5), in Colorado at five different community organizations that identified with the LGBT community. At baseline, the average number of cigarettes these participants smoked per day was 17.8 cigarettes and 47.7% intended to quit smoking within the next thirty days. The average number of previous quit attempts this group experienced was six. On the last class (session 7) of this intervention, 88.9% of the intervention participants had self-reported they had stopped smoking. This study intervention contained no follow-up measures.

As previously mentioned, *The Last Drag* uses the ALA-FFS for it's underlying smoking cessation content; however, this smoking cessation intervention was culturally tailored and created for use by the LGBT community, in fact, it was the first smoking

cessation intervention specifically created for this population (Eliason, Dibble, Gordon, & Soliz, 2012). Since it has been used in multiple studies, a brief description of the intervention is provided: *The Last Drag* was a 6 week, seven session smoking cessation intervention providing education within an LGBT supportive group, using LGBT specific innovative activities and smoking information (Eliason, Dibble, Gordon, & Soliz, 2012). In the tailored curriculum, the creators of *The Last Drag* incorporated culturally appropriate language, an LGBT group facilitator, information about the tobacco industries intentional targeted marketing and sponsorship toward the LGBT community, and information about tobacco use's specific impact on the LGBT community and the specific risk factors LGBT people face (Walls & Wisneski, 2010). Homework was given at the end of each session so the participants have an opportunity to apply the newly learned skills outside of class. Session one consisted of orientation, pre-test, and distributing the participant manuals. The second week (session 2) the participants developed a plan to quit smoking and are taught and informed of the process and tools need. The third week contained sessions 3 and 4 held 48 hours apart. Session 3 was quit night and session 4 was becoming a non-smoker and developing a strong peer support network. Week four (session 5) taught short-term strategies in order to remain smoke-free, and week five (session 6) focused on maintenance and teaches effective long-term strategies to remain smoke-free. During the last week (session 7) a post-test was administered and then there is a celebration held for all the participants (Eliason, Dibble, Gordon, & Soliz, 2012).

Matthews and colleagues used the ALA-FFS as a base and created three similar community-based, culturally tailored smoking cessation interventions for LGBT adult

smokers – *Call It Quits* (CIT) (N=105), *Bitch To Quit* (BTQ) (N=33), and *Put It Out* (PIO) (N=60) (Matthews, Li, Kuhns, Tasker, & Cesario, 2013). The proceeding data averages the results from some of the measures of the three interventions listed above because individual results were not provided in the article. The interventions were conducted in Chicago at the Howard Brown Health Center (HBHC) and community organizations, all of which are LGBT friendly. The interventions were open to self-identifying LGBT smokers who were between the ages of 18-65 years old with the average mean for all three programs being 40.48 years old. The mean ages for the individual interventions CIT, BTQ, and PIO are 41.5 years, 38.0 years, and 40.3 years, respectively. At baseline, the highest proportion (39.9%) of the participants smoked between 11-20 cigarettes per day. Of the participants in the study, 57.2% had the intention to quit smoking at the beginning of the intervention. The study did not report the average number of previous quit attempts that the participants experienced. The post-treatment analysis showed an average of 32.3% of all the participants self-reported having a seven-day point prevalence of abstinence from smoking. However, individually, *Call It Quits* measured a self-reported seven-day point prevalence of abstinence from smoking of 39.5%; 27.27% of the participants in *Bitch To Quit* self-reported having a seven-day point prevalence of abstinence from smoking; and of the participants taking *Put It Out*, 23.33% self-reported having a seven-day point prevalence of abstinence from smoking (Matthews, Li, Kuhns, Tasker, & Cesario, 2013). The study did not measure any follow-up data. All three articles claimed quit rates comparable with mainstream smoking cessation interventions for the general public.

These three interventions were developed based on the ALA-FFS program, which was selected as the design base because it incorporated several of the best practices for treating tobacco use, such as, skill building and preparation for quitting, social support within the sessions, and optimal treatment dosing (Matthews, Li, Kuhns, Tasker, & Cesario, 2013). However, this smoking cessation intervention was developed for the general population; thus, it needed to be tailored to the culture, norms, and beliefs of the LGBT community to address the unique factors associated with this populations smoking behaviors. The authors first focused on different strategies to increase the level of trust and acceptability of the program, which included, hosting all cessation programs at LGBT community organizations, employing LGBT identified counselors, and placing LGBT specific images on all recruitment and program materials. Then, culturally specific content needed to be included into the cessation materials for example, a discussion of health concerns for LGBT smokers; the role the smoking plays in the LGBT culture; stress due to homophobia as triggers for smoking relapse; ways to increase social support for nonsmoking relationships between bar culture, drinking, and smoking; tobacco markets targeting the LGBT community; providing LGBT specific smoking statistics and facts; and including themes such as full body health and community empowerment (Matthews, Li, Kuhns, Tasker, & Cesario, 2013). All of the above material was created into an LGBT culturally tailored smoking cessation intervention called *Call It Quits*, which was later renamed *Bitch to Quit* and *Put it Out*. *Call It Quits* was the original smoking cessation intervention that these authors created and *Bitch To Quit* and *Put It Out* were based on that core CIQ intervention; however, there were variations in each intervention, including program

name, assessment measures, and number of session (Matthews, Li, Kuhns, Tasker, & Cesario, 2013). CIQ consists of eight weekly sessions of 90-minute classes, and was the only one of the three that had LGBT ex-smokers serve as peer support "buddies." BTQ also consisted of eight weekly ninety-minute sessions, however, peer support "buddies" were not included in this program. PIO consisted of six weekly 90-minute sessions and offered free nicotine replacement therapy patches to its participants (Matthews, Li, Kuhns, Tasker, & Cesario, 2013).

The Queer Tobacco Intervention Project (QueerTIP) used the proven best practices of the ALA-FFS and the American Cancer Society's *Fresh Start* and built upon *The Last Drag* curriculum. This pilot study was conducted in LGBT community organizations in San Francisco – Lyon Martin Women's Health Services, New Leaf, LYRIC. There was not a lot of statistical information reported of this pilot study of QueerTIPs; however, the average age of the 18 participants was 37 years old, and the average participant had been a smoker for twenty years. Mean cigarettes smoked per day, participant's intention to quit smoking, average number of quit attempts per participant, and follow-up data were not reported. However, it was reported that 40% of the participants had quit smoking by the last QueerTIPs class, which is similar to quit rates achieved by the mainstream American Lung Association and American Cancer Association interventions (Greenwood & Hunt, 2002).

The goal of *the Queer Tobacco Intervention Project* (QueerTIP) for LGBT smokers was to build upon, revise, and improve the already successful *The Last Drag* smoking cessation intervention. The authors of this intervention still wanted to use the ALA-FFS and *Fresh Start* (American Cancer Society) because they offer the baseline

best practices that a smoking cessation intervention should contain. The creators of *The Last Drag* used the ALA-FFS general population intervention and created a smoking cessation program specifically for the LGBT population. In order to improve *The Last Drag*, the authors of QueerTIPs also used “Out and Free” by Emily Brucker, an LGBT specific smoking cessation book (Greenwood & Hunt, 2002). In addition to providing clinically proven cessation help, this LGBT culturally specific intervention provided a safe and supportive environment to discuss sensitive issues, addressed the unique issues LGBT smokers face when attempting to quit, and appealed to the diverse LGBT communities, regardless of age, ethnicity, economic status, gender or sexual orientation, HIV status, and location (Greenwood & Hunt, 2002).

QueerTIPs for LGBT Smokers is held over an eight week time period consisting of nine 2-hour sessions with two “booster sessions” occurring three and six months after the session 9. The creators decided to expand the usual seven sessions in order to elicit greater support among the participants (Greenwood & Hunt, 2002). Week 1: Session 1 is used to educate the participants about what to expect from the class, instill hope, build social support, and explore unique health issues LGBT smokers face. Week 2: Session 2 explored the reasons why LGBT people smoke by identifying patterns and triggers; discussed the role smoking plays in one’s identity (appear more masculine or feminine), community (role of gay bars), and daily life experiences (stress from homophobia); and identified quit smoking tools. Week 3: Session 3 addressed feelings related to the anticipated quit night, stages of grief, identified and reaffirms reasons for quitting, building on LGBT specific coping skills. Week 4: Session 4 was quit night during which the participants celebrated and supported each other and also learned

about unique LGBT problems that arose during the quitting process. Session 5 occurred during the same week as session 4 (2-3 days later) and supported quit efforts, reviews and problem solves lapses, reinforced the importance of group support, and individual and community empowerment. Week 5: Session 6 focused on maintenance issues, prepared participants to handle ongoing social pressure in LGBT communities to smoke, and encouraged identification and use of non-bar social scenes. Week 6: Session 7 explored the cycle of shame and addiction, reinforced assertiveness skills and coping strategies, continued to update maintenance plans and relapse prevention, and discussed how to be "out" as a nonsmoker. Week 7: Session 8 continued to identify short- and longer-term maintenance plans, discussed how tobacco companies target LGBT communities, identified modes of discrimination and oppression, and discussed smoking as a social justice issue. Week 8: Session 9 celebrated the smoke-free lifestyle that the participants have adopted and encouraged on-going social support and contact. Sessions 10 and 11 occurred three and six months, respectively, after session 9 and celebrated the participants' smoke-free lifestyle, encouraged continued social support and contact, problem-solving strategies about relapse triggers and coping strategies (Greenwood & Hunt, 2002).

Both of the next articles were pilot studies of smoking cessation interventions specifically tailored to gay men in the United Kingdom (Harding, Bensley, & Corrigan, 2004) and Switzerland (Dickson-Spillmann, Sullivan, Zahno, & Schaub, 2014). Both used the same mainstream smoking cessation intervention – Smoking Cessation Training and Research Program (SCTRP) – an approved treatment program by the National Health Service (NHS). The UK's Gay Men's Health Charity (GMFA), a

community-based charity in London, developed a culturally appropriate intervention for gay men by modifying the NHS approved SCTRP. This culturally tailored smoking cessation intervention was used in both studies with slight modification between the two. The important aspects of this intervention are group work, peer support, discussion of nicotine replacement therapy (NRT), and performing carbon monoxide (CO) testing (Dickson-Spillmann, Sullivan, Zahno, & Schaub, 2014; Harding, Bensley, & Corrigan, 2004).

The first pilot study was conducted in London at the GMFA Community Center. The study targeted gay smokers. Participants (N=69) had an age range of 23-63 years of age with the average age being 37.1 years. At baseline, the highest proportion (39%) of the participants smoked between 11-20 cigarettes per day. Participants who thought their chances of quitting on this attempt were either extremely high or very high were 54% at baseline. The men in this study had an average number of previous quit attempts of 2.8 attempts. At the last class (class 7), 64% of the men self-reported they quit smoking and they were all confirmed to have quit by using a CO monitor. This study contained no follow-up measures (Harding, Bensley, & Corrigan, 2004).

The second pilot study in Switzerland, *Queer Quit*, used the same curriculum as the UK pilot study above, although, slight modifications were made to *Queer Quit*. This intervention took place in conference rooms in Zurich and targeted gay men (N=70) over the age of 18 who had a strong intention to quit. This study provided no age range, yet provided the mean age of men to be 42.96 years of age. The study did not report the average number of cigarettes the participants smoked per day at baseline. The study did not report the average intention to quit at baseline of the men; however, an

eligibility requirement was the men had to have a *strong* intention to quit. At baseline, the average number of quit attempts this group of men experienced was 3.38 attempts. At the last session (session 7), 65.7% of the men self-reported they had been smoke-free, and this number was confirmed by the use of a CO monitor. At the six month follow-up, 28.6% of the men had self-reported they had not smoked during the previous seven days. Both of these studies reported their culturally tailored interventions for gay men produced quit rates comparable to other group smoking cessation interventions that were used in the general public (Dickson-Spillmann, Sullivan, Zahno, & Schaub, 2014).

Both of the interventions referenced above used the culturally appropriate, modified version of the NHS approved Smoking Cessation Training and Research Program (SCTRP) created specifically for gay men by the UK's Gay Men's Health Charity (GMFA). Both of the interventions used gay-identified male facilitators to teach the 7 weekly sessions. In London, the sessions were held at the UK's Gay Men's Health Charity (GMFA) lasted for 2 hours each, while in Zurich; they were conducted in conference rooms around the city and lasted for 2.5 hours each. The aim for this intervention was to create a non-judgmental environment where gay men could talk freely and address socializing in the gay community, recreational drug use, sexuality, HIV, and the impact of these on their motivations and ability to become a nonsmoker. A few modifications were made from the general population intervention: the SCTRP used "quit buddies", although the modified intervention created "quit cells" of 3 to 4 participants because it has been shown that reliance on more than one person for support is more reliable. The modified intervention incorporated exercises of

assertiveness to help the participants clearly communicate the intention to remain smoke free (Harding, Bensley, & Corrigan, 2004). The group discussions focused on culturally specific contexts to gay men. Queer Quit maintained the program structure; however, it made a few changes to the educational content by updating the prescription medication used to treat smoking addiction, and adapting smoking prevalence statistics to Switzerland (Dickson-Spillmann, Sullivan, Zahno, & Schaub, 2014).

The main topics for each week of this culturally appropriate smoking cessation intervention are: Week 1: information on the course content and facts about smoking and smoking cessation, potential side effects of smoking cessation were discussed with strategies to minimize them, and the use of nicotine replacement therapy (NRT) and prescription medication. Week 2: information on what to expect when you quit smoking and how to deal with the reactions, information about carbon monoxide and its harmful effects, and preparations were made for quit day such as a personal action plan and information on a smoking diary. Week 3: this was quit day, information on how to use NRT, role playing of assertive refusal of cigarettes, formation of quit support cells, and personal statements of cessation. Week 4: Discussed the challenges encountered during the first week of cessation and explored alternative/holistic stop smoking ideas. Week 5: group discussion of the past weeks experiences, information of health benefits achieved, and weight gain issues. Week 6: group discussion of the past week and identified current and future support networks. Week 7: group discussion of past weeks events, visible health benefits, expansion on social support network, and celebration of everyone's hard work and progress (Spillmann, Sullivan, Zahno, & Schaub, 2014; Harding, Bensley, & Corrigan, 2004).

Table 1 summarizes the six reviewed studies the search yielded on smoking cessation interventions for the LGBT population; it is noteworthy all served the adult LGBT community because the mean age ranged from 35.5 to 44.5 years of age. This highlights the lack of interventions that target the LGBT youth population. All of the above articles were based off of proven and successful interventions created for the general population, for example, the American Lung Association's Freedom From Smoking (ALA-FFS) intervention or the National Health Service's Smoking Cessation Training and Research Program (SCTRP). However, these mainstream smoking cessation interventions were just used as a template and the cessation "best practices" of each were fitted together with culturally appropriate information for LGBT smokers. For example, all of the interventions had the goal of creating a culturally tailored smoking cessation intervention specifically for the LGBT population where the participants were in a supportive, non-judgmental, and safe environment where they could talk openly about the struggles they faced as an LGBT person, and what factors lead them to smoke. All of the interventions were taught by an LGBT facilitator who was thoroughly trained in leading smoking cessation interventions and dealing with the LGBT population, and all but one intervention explicitly stated it was held in an LGBT community center or organization. These studies demonstrated the ability to enroll and retain LGBT smokers into a community-based and intensive group smoking cessation intervention. It is important to note through out all the studies, the quit rates of the culturally tailored interventions were on average consistent with the outcomes associated with the interventions for the general population, ALA-FFS and SCTRP.

Further research needs to be conducted on culturally tailored interventions for LGBT adults and especially for the LGBT youth population.

Non-intervention studies targeting attitudes and perceptions toward cessation for youths, LGBT youths, *or* LGBT adults

I identified eight non-intervention studies that measured the attitudes and perceptions youth, LGBT youth, or LGBT adults have toward quitting and smoking cessation interventions (Table 2).

Preventing Tobacco use among lesbian, gay, bisexual, and transgender youths (Remafedi & Carol, 2004)

Within LGBT communities, the awareness of tobacco related problems and resources for smoking prevention and cessation were quite inadequate. In addition, the lack of information pertaining to tobacco use among the LGBT youth population was hindering attempts at creating culturally specific approaches to prevention. Thus, Remafedi and Carol initiated this study to conduct formative qualitative research focused on participants' recommendations for the development of preventive interventions.

The study involved face-to-face semi-structured interviews with 30 LGBT youths and 30 interactors. The LGBT youth participants were defined as male, female, and transgender people, under the age of 25, and who have adopted an LGBT identity or who have sex with the same sex, regardless of perceived sexual identity. The interactors were defined as people with in-depth knowledge or experience with the LGBT youth population, but who were not apart of their immediate social networks.

The suggestions offered by the LGBT youth participants fell into three different categories: (1) optimal process of prevention and cessation programs, (2) specific

strategies to promote tobacco prevention and cessation, and (3) general strategies to foster nonsmoking. The LGBT youth participants recommended adopting culturally specific approaches for LGBT youths and directly involving LGBT youths in prevention planning. LGBT youth respondents recommended hosting recreational activities in smoke-free settings, physical activities that might distract people from smoking, or smoke-free dances. Also, hosting discussions and education about tobacco effects and cessation strategies and ongoing support of tobacco avoidance and cessation. At these gatherings, several of the participants noted the importance of the presence of food and entertainment. Many of the LGBT youth respondents noted the importance of building social support for nonsmoking and building up the individuals' self-esteem and positive identification within the LGBT community in the interest of smoking prevention. On the other hand, the LGBT youth participants stated that passive educational strategies such as lectures, seminars, and educational video formats would disinterest them, and pressure to quit smoking and antismoking activism would discourage participation in prevention and cessation programs.

A majority of the interactors emphasized success of tobacco prevention programs for LGBT youth required their active participation in program planning, development, and implementation and also empowering youth to adopt leadership roles and feeling a sense of ownership of the programs was important. The participants thought culturally specific programs were important for LGBT youths. A holistic approach to cessation programs was important and cessation programs should be designed with the whole person in mind because LGBT youth face many other issues such as substance use, school, home, identity, etc. Another theme seen by the

interactors' interviews was the use of role models in cessation programs to provide LGBT youths with examples of people and behavior to emulate: youth workers modeling behavior on a daily basis, testimonials by people who have quit smoking, LGBT lawyers, nurses, doctors, and journalists as mentors, events the feature LGBT celebrities or important members of the community. For prevention strategies, the majority of interactors suggested entertainment, recreational activities, food, and money. Prevention programs should encourage youths by helping them feel good about themselves and build-up self esteem, celebrate and embrace their identity as LGBT, counteract negative and apathetic attitudes about health and smoking cessation and feel connected to the community. They need to feel that people are personally invested and interested in them as a person. For prevention strategies, it is important to address the stress of coming out or being LGBT in a non-LGBT dominant culture. Some of the interactors emphasized it is important to remember with all the stressors in an LGBT youth's life, smoking prevention or cessation could be among the least of their worries. The interactors offered what they thought would negatively affect youth participation in smoking prevention programs: "don't preach", "don't alienate", "be nonjudgmental", "don't blame the smoker", and "you can't tell youth that they shouldn't do something."

From the two sets of participant's interviews, several key themes regarding prevention and implications emerged: LGBT youth should be involved in the design and implementation of interventions; prevention programs should support positive identity formation as well as nonsmoking; the approach to prevention programs should be entertaining, supportive, interactive, and should involve enjoyable and engaging activities; cessation programs should address the psychosocial and cultural

underpinnings of tobacco use, support healthy psychosocial development, and consider offering pharmacological smoking cessation aids.

Intention to quit smoking among lesbian, gay, bisexual, and transgender smokers (Burkhalter, Warren, Shuk, Primavera, & Ostroff, 2009)

This study aimed to (1) identify behavioral, normative, and control beliefs that underlie, respectively, the Theory of Planned Behavior (TPB) constructs of attitude, subjective norm, and perceived behavioral control in a sample of LGBT smokers; (2) determine if relevant psychosocial variables not directly captured in the TPB could add value to in explaining variation in intention to quit smoking in this population; (3) discover findings that would aid in formation of an appropriate LGBT smoking cessation intervention.

LGBT specific measures examined individuals' feelings about being LGBT, assessed the individual's engagement in and evaluations of the LGBT community, explored participants' experiences as LGBT identified, and assessed perceived stigma of for being LGBT. Perceived stress and depression symptoms were also measured. Alcohol use and illicit drug use were measured.

The sample included 101 LGBT identified smokers with a mean age of 39.4 years with the average number of cigarettes smoked per day being 14.7. Among the tobacco use and smoking variables, number of quit attempts in the past year was associated with intention, with those reporting a history of two to five quit attempts having a significantly higher intention to quit smoking then 0 – 1. Attitude was the only measure that was significantly related to intention to quit smoking. Among behavioral beliefs, "ideal self" was the most strongly associated with intention to quit, with "health of

lungs” and “longer life” following behind. Among normative beliefs, “partner/lover thinks I should quit” was most correlated with intention with “most people whose opinions I value” followed closely. The descriptive normative belief “most people who are important to me have quit” as well as the injunctive normative belief that “most people who are important to me think I should quit”, were all correlated with intention. The only two control beliefs that were correlated with intention were: “achieving an important goal” and “having a health symptom/illness made worse”. The depression and stress levels were high in this study population.

The above results showed more positive attitudes and the belief that smoking abstinence will make these LGBT smokers feel more like their ideal selves while also improving health and longevity were related with greater intention to quit smoking. Concerns about health were some of the strongest motivators for smokers to quit. Perceived approval and support of partners, loved ones, and others and beliefs that future goal achievement and life aspirations would make it easier to quit smoking are positively correlated with intention. It can be suggested that smoking cessation interventions may be more effective if they identify and highlight the links between personal goals and aspirations, achieving abstinence from smoking, and health concerns. LGBT individuals experience higher levels of perceived stress and minority stress, which usually leads to greater prevalence of depression, thus, it would be beneficial for smoking cessation interventions to integrate culturally tailored stress management into the curriculum.

Smoking Cessation Treatment Preferences, Intentions, and Behaviors Among a Large Sample of Colorado Gay, Lesbian, Bisexual, and Transgendered Smokers (Levinson, Hood, Mahajan, & Russ, 2011)

The main objective of this study was to survey a large sample of LGBT smokers in order to gauge their preferences, intentions, and behaviors related to evidence-based smoking cessation treatments. The final sample included 1633 LGBT smokers between the ages of 18 years to 54 years, which 66% of the population was 18 – 35 years old.

Of the participants in this study, 80.4% smoked daily with almost one-third (31%) of them smoking twenty or more cigarettes per day. Among the participants (47.2%) who did try to make a quit attempt in the past year, the methods they used were nicotine replacement therapy (NRT)(28.2%), telephone quit-line (7.4%), and cessation prescription medicine (>1%). When responding about what cessation aid they intended to use in their next quit attempt, the participants responded with NRT (28%), quit-line support (13.3%), and fewer than ten percent reported they would use the Internet, a cessation class or program, or prescription cessation medication. Regarding NRT, the participants were uneducated about this cessation option and held inaccurate beliefs about negative implications, and participants said if they could acquire NRT cost-free, interest in using this cessation aid would increase. Almost one-third of respondents (30.5) were less likely to use quit-lines not offering LGBT-identified coaches, and one-fifth (21.3%) were less likely to use a quit-line that does not address sexual orientation or gender identity in coaching. Among the participants with a regular doctor, 25.2% were somewhat uncomfortable or very uncomfortable asking their doctor for smoking cessation help. Within this group of LGBT smokers, four factors were significantly

associated with preparation to quit smoking and should be examined further for possible utilization in cessation interventions: daily smoking, ever having used NRT, a smoke-free home rule, and comfort asking one's doctor for cessation advice.

It can be concluded LGBT smokers, like smokers from all populations, have different cessation preferences and needs in an intervention; thus, cessation interventions should include both evidence-based cessation aids not tailored specifically for the LGBT population and also should incorporate specific LGBT tailored coaching and counseling. Since smoke-free home policies were associated with intention to quit smoking, interventions should incorporate and develop effective, LGBT tailored campaigns or communications strategies that individuals, such as a non-smoking partner, and communities can utilize to encourage the adoption of a smoke-free home. Also, educational campaigns might be a useful solution to address the misinformation concerning the use of NRT, and increase this methods use in the LGBT community, which has to potential to increase quit attempts. This study showed about a quarter of the participants were uncomfortable seeking their physician's advice for smoking cessation help, which was an evidenced-based method to increase quit attempts. This uneasiness could be from fears of homophobic reactions, stigmatization, confidentially concerns, or even past negative experiences, whatever the cause may be, it was suggested that use of evidence-based support for smoking cessation might be increased by making it available in LGBT-identified community venues. Evidence-based smoking cessation aids appeared to be well accepted among LGBT smokers who were attempting to quit, thus, cessation interventions should focus on increasing motivation to

quit and should attempt to increase community access to these evidence-based cessation aids.

Beliefs and Perceived Norms Concerning Smoking Cessation Program Recruitment Among African American Teen Smokers: What Appeals to Youth and What Turns Them Away (Peters, Meshack, Kelder, Springer, & Agurcia, 2011)

Since there was little known about how to motivate youth to participate in smoking cessation programs, the authors wanted to increase their understanding of culturally appropriate recruitment strategies; thus, they used a qualitative approach to explore the beliefs and perceived norms that enabled the youth's participation in smoking cessation programs. The sample population consisted of 53 African American youth who were current smokers and ranged in age from 15 to 19 years old. In person focus group interviews were used to collect data.

When asked the question, "What caused you to think about quitting cigarette smoking?", most boys identified personal fitness followed by peer pressure, aesthetics, and family sickness as causes of their smoking cessation contemplation. The girls in the group cited causes such as, personal health followed by family sickness and personal fitness. When the youth participants were asked what they thought about smoking cessation programs, both the boys and girls responded they were not effective followed by the programs caused smoking and lack of activities. When asked, "what would personally motivate you to stop smoking," the responses differed across genders. The boys reported parental encouragement followed by partner encouragement, personal health, and parental cessation would motivate them the most, while the girls said younger family smokers followed by environmental change, personal health, and

parental cessation. When the participants were asked to identify actions health professionals could take in order to motivate youth to actively participate in cessation interventions, both genders highlighted effective source communication as the most important. The boys added attractive source communication, direct communication, and professional sources of communication and real information as motivators. The girls stated they would be motivated by direct communication and real information. When the participants were asked, “If there were an ideal program that would help students your age stop smoking, what would that program consist of?” There was a major difference between the genders on this question, the boys highest was affected smoker/direct communication followed by attractive ex-smoker/direct communication, food/fun activities, and activities/rap contest. The girls said the ideal programs would include food followed by affected smoker/direct communication, fun activities, and music. Both boys and girls overwhelmingly reported they would receive encouragement from their peers if they attempted to stop smoking.

This study utilized a qualitative approach to investigate relevant beliefs and perceived norms for the participation of this sample in smoking cessation interventions. Even though a large number of participants said smoking cessation programs they were familiar with were not effective, caused smoking, or lacked activities, the research showed when people were faced with interventions that challenged their existing behavior or beliefs, then the participants tended to come up with counterarguments to refute those programs and their strategies. The cognitive dissonance theory embodies this phenomenon by explaining that when individuals were faced with the negative outcome of a personal decision, they were more likely to rationalize their decisions and

behavior as a defense mechanism. This highlights a common struggle with teen smokers because they often developed counterarguments that made them mentally resistant to cessation interventions and responded to them in a defensive manner. This behavior would likely render cessation interventions ineffective at changing a smoker's behavior if the smoker developed enough counterarguments toward the program. Thus, when recruiting participants for a smoking cessation intervention, it is crucial to address counterarguments in a culturally sensitive way. The research and information provided helpful insight on how best to maximize participation in smoking cessation programs by making the programs inviting, fun, and informative to the target population.

Tobacco Control Recommendations Identified by LGBT Atlantans in a Community-Based Participatory Research Project (Bryant, Damarin, & Marshall, 2014)

This study collected data on LGBT tobacco use in Atlanta, which has one of the highest proportions of LGBT residents in the United States. The main purpose of this formative research study was to collect qualitative data in order to identify recommendations for culturally relevant smoking cessation interventions and identify next steps for future prevention and treatment within the LGBT community of Atlanta. The data presented in this study concerned LGBT views on strategies for promoting tobacco cessation, and came from four focus groups and a community meeting. The four focus groups had a total of 36 participants who all self identified as LGBT, and the focus groups were split into identified smoking status – two current smokers groups, one former smoker group, and one group for nonsmokers. Data were also collected during a community meeting that included 30 participants, including research participants, public health officials, research team members, members of the Atlanta

LGBT community, and other relevant community stakeholders. This group was not split by smoking status and was an open-ended discussion forum unlike the focus groups, which were asked the same core questions. The study participants ranged in age from 23 to 58 years old.

During the focus groups, the smoking cessation strategy most popular and most supported was LGBT-focused tobacco cessation programs followed by raising community awareness of the LGBT smoking disparity, expanding smoke-free community space, getting LGBT organizational leaders to refuse tobacco sponsorship money, and helping pass higher tobacco taxes. However, it is important to realize support for different strategies varied with smoking status. For example, current smokers favored creating targeted smoking cessation programs and expanding smoke-free spaces. Nonsmokers also preferred smoke-free spaces, but also were interested in raising awareness and getting organizations to refuse tobacco sponsorship. While ex-smokers equally showed support for tailored cessation programs, awareness raising, and raising tobacco taxes. These findings suggested participants' personal experiences with tobacco shaped their perceptions of how the community could best promote cessation.

A major theme of the focus groups' conversations was also considering the effectiveness of each cessation suggestion. The effectiveness of LGBT-tailored smoking cessation programs was supported and reinforced by the majority of participants, one participant said, "…someone saying 'we understand the special set of circumstances that you bring with this addiction'…would be so important." When discussing the efficacy of the strategies, some participants offered ways to improve

upon different strategies, making them more effective. For example, concerning the strategy of awareness raising, one participant added, “I would propose education from people whom have went through difficulties or illnesses or complications in smoking…” The other theme addressed during the focus groups was the feasibility of each strategy – whether they could be realistically accomplished. Discussions revolved around expanding smoke free spaces and the role of environmental smoke revealed that smoke-filled LGBT venues had large roles in furthering tobacco use. Within the different focus groups, current and former smokers commonly claimed they picked up smoking when they formally “came out” and began attending gay bars where smoking were the norm and a large form of communication and community. Thus, not surprisingly, numerous focus group participants saw smoky bars and nightclubs as a large problem, although, some participants was not confident about the feasibility of making these venues smoke-free stating “Bars aren’t just going to do that…” However, some participants were optimistic and offered suggestions for making this more feasible, for example encouraging community organizations to choose smoke-free venues for events or maybe even offering bars financial incentives.

Focus group members also had a chance to suggest their own strategies to decrease smoking in the LGBT population; one suggestion was to provide financial assistance to low-income LGBT individuals for the purchase of cessation products. The second comment was the importance of using LGBT spokespeople or “role models” to promote cessation in the LGBT community, which supports findings on cessation findings with LGBT youth.

At the community meeting, the suggestion receiving the most attention was the need to raise awareness about smoking throughout the LGBT community. The members of this meeting discussed the use of a pro-cessation publicity campaign. Also, strategies to make the above suggestions more effective included adding a focus on overall wellness and the inclusion of topics such as nutrition, tying smoking to social justice issues, clearly explaining why cessation matters to the LGBT community, avoiding the perception of being judgmental, using “sexy” “buzz words” and logos, and using nontraditional outreach techniques such as social media. The feasibility of smoke-free community spaces was also largely discussed, with participants suggesting that bars and other venues could possibly be convinced to go partially or completely smoke free by being rewarded with the pleasure of hosting special events and/or advertising their support for the health of the whole LGBT community. Also discussed were the ideas of providing financial aid for the purchase of cessation products, the use of LGBT “role models” to support cessation, ensuring that all cessation strategies include and reach every segment of the LGBT community including the groups who are hard to reach, such as youth, low-income, homeless, transsexuals, and people of color. In order for a pro-cessation strategy to be effective, it must take into account the vast diversity of the LGBT community.

Queer Quit: Gay smoker’s perspectives on a culturally specific smoking cessation service (Schwappach, 2009)

The main objective for this study was to investigate smoking and intention to quit in a sample of men who self-identify as gay or bisexual and currently smoke, and to also explore their attitudes and potential use of a gay-specific smoking cessation group

program. The study used a mixed-method design that included a quantitative survey and two focus groups among gay smokers.

The survey, which was completed by 325 regular smokers (age range of 23 – 52 years old) who self identified as being gay or bisexual, consisted of five different parts. Among the study population, idealizing attitudes towards smoking were very common, for example, one-third of the gay smokers thought smokers met and conversed with other men easier and men who smoked were more attractive. Over half of the participants reported they had the intention to quit smoking in the next month (20.7%) to the next six months (42.0%). When these men were asked to select three situations where they felt they would have a hard time avoiding smoking, the majority (71.1%) selected “going out to the gay scene, parties, or clubs”. Over half of men (58.2%) reported the biggest fear they had when thinking about quitting was weight gain. Of the men who planned on quitting, close to half (42.2%) said they would be most likely to participate in a group-cessation program for gay men, while 33.5% reported they would be interested in participation and informing themselves about details of the program. When the participants were asked to think about their next quit attempt and choose a cessation method they would prefer, 71% identified a group program for gay men, with the main reasons for this choice being expectations regarding similar living situations as other participants, the ability to talk openly about private or intimate issues, and no need to disguise oneself.

Two focus groups with 13 gay smokers (both with an average age of 37 years old) were also used as a qualitative method to gain a more in-depth knowledge of gay men’s attitudes. The main themes discussed were men’s attitudes and preferences

towards specific group smoking cessation intervention tailored for gay men, their willingness to use the cessation intervention, and their expectations and wishes regarding the intervention. From the focus groups, it was discovered smoking and going out to the gay scene went hand-in-hand for the participants and attempting to quit correlated with attempting to stay away from the gay scene. The participant's made it clear smoking was seen as a bonding element within the gay community and they feared as a nonsmoker, they would lose this element. At the beginning of the focus group, the participants were uncertain about a specific group cessation intervention for gay men because they felt the categorization of "group" or "group therapies" had a negative connotation, and was a sign of weakness in the gay community, which would conflict with their yearning for strength, masculinity, power and authority. However, with more discussion, the participants became more open to the idea and saw group interventions as an opportunity to build an alternate community and to receive support. It would provide an environment where they could remain themselves and be surrounded by people who understand and who are experiencing the same daily hardships simultaneously. It would be an accepting, warm environment. During the focus groups, the men expressed a strong preference for participating in a cessation intervention specifically tailored for gay men, while a general smoking cessation program would not be of interest to them.

The participants' expectations for a group cessation included an instructor who is a respected gay male who had gone through the struggles himself and knows the "scene". He must be supportive, friendly, "one of the guys", trusting, and warm. The men expected the group sessions to be strict and structured at the beginning, while

progressively getting more flexible as the sessions continued. The participants voiced their preference for follow-up meetings, support in avoiding relapses, and their desire to have the group act as a stable bond between members. In the intervention sessions, they wished to get information and support for anticipated weight gain when they quit and cessation medication. It was important that these tailored interventions reflect gay men's special needs and provided strategies that allow them to participate in gay activities as non-smokers. Also, gay organizations and healthcare providers play an important role and need to be more involved in telling gay men the serious health risks smoking causes them.

"I did it my way" – An explorative study of the smoking cessation process among Danish youth (Dalum, Schaalma, Nielsen, Kok, 2008)

The main objective of this study was to explore what cognitive and behavioral strategies adolescents' use in their attempts to quit smoking and their attitudes and beliefs towards smoking cessation and cessation interventions. Qualitative interviews were conducted with former daily smokers who all tried to quit smoking on the same day. The study was comprised of twenty-six participants – 18 smokers who failed to quit and 8 former smokers who successfully stayed smoke free – who were 15 to 20 years of age. The interviewees were grouped as current smokers or former smokers and interviewed separately.

Individuals who were committed to quit smoking were motivated by negative health experiences or fear of long term health consequences, realized they needed to be willing to invest time and energy and make sacrifices to stay smoke free. Commitment can be negatively affected by negative side effects of smoking cessation

such as, weight gain and craving symptoms that do not diminish. On the other hand, commitment can be increased if the positive outcomes are being experienced such as, improved fitness, increased olfactory sense, improved respiration, and financial savings. Commitment to the cessation program was necessary to discuss at the very beginning of the intervention.

In general, the interviewees had negative attitudes towards the idea of smoking cessation interventions. Many of the participants expected formalized outside support to be patronizing and incapable of understanding the actual situation and struggles of young people. Will power and motivation were viewed as the most important determinants of smoking cessation, and the idea of contacting a professional counselor for support was unnecessary to these participants. As one person stated, “I would feel stupid if I called someone and said: I want to quit smoking, help me.” Contacting someone for help was considered irrelevant for smoking cessation, and only done in the case of alcohol or drug addictions. However, some positive attitudes toward smoking cessation interventions were easy access via SMS/ Internet and the chance of winning an attractive prize used as a motivational incentive.

It was suggested that smoking cessation interventions for adolescents be flexible in both structure and content, and were designed to stimulate a positive learning environment where coping, commitment, and self-efficacy was developed in an individual, self-enhancing process. Smoking cessation coordinators or facilitators should not only focus on conventional settings, but should explore using peer-group support in places like youth clubs, the Internet, and/or SMS text messaging. It was important for the facilitator to communicate that many other factors such as coping skills to deal with

cravings and developing a strong social support network are also important aspects to stay smoke free. Adolescents need flexibility and room for trial and error on different methods so they can learn what works best for them.

Smoking Cessation Interventions in San Francisco's Queer Communities (QueerTIP Coalition, 2002)

The Queer Tobacco Intervention Project (QueerTIP) Coalition's main goal was to develop a culturally tailored smoking cessation class for the LGBT population, while also being able to serve the needs of hard to reach, diverse subgroups of the LGBT community. Thus, the QueerTIP Coalition developed a needs assessment survey that was administered at four community youth events – 224 LGBT and heterosexual youth with an average age of 18.6 years old and 26 LGBT.

When the youth participants were asked what they would like to see in a smoking cessation class, they responded they would like LGBT specific services (90%), and would like an LGBT class that used LGBT images (64%) and mixed gender classes (64%). The youth wanted to hear LGBT ex-smokers discuss their cessation journey (56%) and have LGBT-sensitive/friendly doctors present (55%). HIV/AIDS, depression, and suicide were seen as high priorities for youth; thus, smoking would need to be part of the total health approach. Youth reported that anti-smoking ads did not appeal to them (67%). The youth said (79%) they would recommend an LGBT specific cessation class to their friends. Also, about 68% of current smokers were interested in quitting now or at a later date.

The review of these articles, summarized in table 2, identified little is known about the attitudes, beliefs, and perceptions of smoking cessation interventions of the

LGBT youth and LGBT adult populations. LGBT youth and LGBT adults would prefer a culturally tailored smoking cessation intervention specifically targeted at the LGBT population rather than a general smoking cessation program. These cessation programs should target all the specific problems and disparities this population faces, and should be a safe environment where the participants can feel free to discuss any problem or topic. The participants expect the program to be created and facilitated by an LGBT ex-smoker. Both adult and youth interventions should be supportive and bonds should be made between the participants. Peer support is expected.

Youth interventions should be entertaining, interactive, engaging, support positive identity formation and self-efficacy, and should address psychosocial and cultural aspects of tobacco use and healthy psychosocial development. Youth interventions should include testimonials from LGBT ex-smokers, have LGBT role models promote cessation, culturally sensitive health provider, include full body health aspects, and include food, fun activities, and music. However, even though the majority of the studies showed most participants would prefer a culturally appropriate group smoking cessation program, other youth and adults did not like this idea, they viewed cessation interventions as ineffective, patronizing, causing smoking, lacking fun activities, and not understanding youth struggles. Gay men, at first, thought that “group therapy” had a negative connotation and was a sign of weakness and would conflict with their yearning for strength, power, and masculinity. The LGBT population may be hesitant to quit smoking because of concerns about gaining weight and potential inability to participate in social outings such as going to bars and clubs. It was also important to note that adolescents do not like being told what to do, and will often make

counterarguments to justify their bad behavior, so it was very important to deliver the cessation message in the proper way. Many youth, especially LGBT youth deal with several different cultural stressors and might be worried about "coming out" or trying to find their true identity, with this being said, it is important to remember smoking cessation was one of the last things they are worried about, so that was why it was important to frame smoking cessation in to a full body health package. All of the above characteristics, attitudes, and beliefs are important to remember when developing an LGBT tailored smoking cessation intervention.

Program Plan

Logic Model

A logic model is a visual and systematic framework, a picture, of how the program is expected to work. This "road map" highlights how the program will proceed, by showing the relationship between the resources you need to operate the program, the planned activities, and changes and outcomes the program is expected to bring (W.K. Kellogg Foundation, 2004). An important benefit of a logic model is that it facilitates communication between internal and external stakeholders, including funders (Issel, 2009), and allows them to visualize the sequence of related events and understand how human and financial investments can contribute to achieving the program goals and lead to program improvements (W.K. Kellogg Foundation, 2004). Table 3 shows the logic model created for the development of a culturally tailored smoking cessation intervention for LGBT youth.

The inputs needed for this program include: certified and knowledgeable intervention facilitators, high school or college student volunteers, local physicians, and

program participants. A venue to host the intervention sessions is very important. Ideally, the intervention will be held at a local LGBT community center or an LGBT friendly organization that can accommodate 20 to 30 people. The selected venue needs to have a space where the activities and games can be conducted for example, a large open room or a gymnasium. Reliable financial support and funding is also necessary to make this a successful intervention. For example, funding can be received through grant money from the Master Settlement Fund, the American Cancer Society, or the American Lung Society. Local or national organizations can offer donations and financial support, for example, county or state health departments, local colleges or institutions, the National LGBT Tobacco Control Network, American Cancer Society, American Lung Association, and the Coalition of Lavender Americans on Smoking and Health (CLASH). Options for state and local/community funding are very dependent on the location of the intervention for instance; San Francisco, CA, would have many more funding resources then rural Yancey County, NC. Also, materials and resources such as, computers, printers, whiteboards, other office supplies will be needed for logistics and the in-class group and individual activities. Lesson materials from other proven, successful smoking cessation courses, such as *The Last Drag* and *Freedom From Smoking*, will be needed in order to create a successful intervention for LGBT youth smokers who want to become smoke free. Materials for different games and activities before the cessation class and the food and drinks for the meals after the cessation class need to be procured.

Critical activities to be conducted include: developing and creating a facilitator guidebook, training manual, evaluation plan, and evaluation tools (baseline

surveys/evaluations, surveys/evaluations after each session, wrap-up surveys/evaluations, and follow-up surveys/evaluations). These documents, surveys, and evaluations will be created and modified using successful interventions that have previously been created both for the general population and LGBT population, relevant literature, professional expertise of LGBT smoking cessation specialists, and other stakeholders. I will also need to recruit and train two professional LGBT identified intervention facilitators and two to four late high school or college aged, LGBT, ex-smokers for extra support and help. It would be beneficial if some of these facilitators and younger helpers were attractive (Peters, Meshack, Kelder, Springer, & Agurcia, 2011). All of the facilitators and high school/college aged helpers need to be trained and certified as smoking cessation specialists by the American Cancer Society or the American Lung Association and as a LGBT smoking cessation specialist by an LGBT organization or group (Greenwood & Hunt, 2002). The high school/college volunteers will also undergo peer-support training. The facilitators should be culturally competent, a member of the LGBT community, and have prior experience in leading support groups and making educational presentations, especially to the youth populations. The facilitators and the younger helpers should be knowledgeable about the historic and current role that bars play in the social life of the LGBT community, in addition to the role that alcohol and tobacco play in the lives of LGBT people, both youth and adult (Soliz, 2006). It might be an advantage for these people to be involved in the social life of the LGBT community, so they have first hand experience in the location where the intervention is being conducted. Three of the studies (Peters, Meshack, Kelder, Springer, & Agurcia, 2011; Bryant, Damarin, & Marshall, 2014; QueerTIP Coalition,

2002) indicated that youth participants would like to be told certain medical information by actual doctors or health care providers; thus, it might be advantageous to seek out an LGBT or LGBT friendly physician or healthcare provider to deliver this information to the youth. These people can usually be found at or through local LGBT community organizations, or another good resource to utilize would be The Gay and Lesbian Medical Association website, which offers a provider directory of LGBT or LGBT friendly healthcare providers. I will also need to create and distribute informational fliers and other recruitment media with the hope of recruiting LGBT identified youth (13-18 years of age) who want to or are ready to quit smoking to participate in the intervention. Advertising and recruiting for the LGBT youth population could be a challenging task because a lot of this population could be "hidden" or not out of the closet yet. Some of these youth might be reluctant to be involved in anything that was connected with the LGBT community, especially if they might run into classmates or other people that they know. Recruitment for this population does have its challenges. With this being said, schools would probably not be the best place to display fliers or other advertising media; however, I still would post fliers in schools for exposure. I would also post fliers at LGBT community centers and LGBT youth organizations. I would ask the organizations to post fliers, put a descriptive blurb in weekly newsletters, and have them send a descriptive email out to their email listservs to try to generate interest in this intervention. I would also have the local gay bars display fliers on their community board and if they have weekly emails, I would ask them to put an descriptive informational blurb of the intervention in their email. Even if this population does not attend gay bars, someone who knows an adolescent LGBT smoker might refer that youth smoker to the

intervention. Advertising and recruiting was another aspect that really depends on the location where the intervention will be conducted because more challenges and roadblocks would potentially arise in smaller, more conservative, or rural areas.

Outputs for this program include: the delivery of a culturally appropriate group smoking cessation intervention for between 15-20 LGBT self-identified youth smokers consisting of 13 sessions – 9 weekly sessions and four follow-up session occurring 1 month, 3 months, 6 months, and 12 months after the last weekly session. The creation and execution of nine engaging and fun activities, one activity before every cessation lesson, are appropriate for 13-18 year old participants. A weekly dinner or heavy snacks that will be provided after each cessation lesson. Fun and engaging activities and the dinner/snacks are included in this intervention design because according to studies done on youth populations, games and food were reported to make this population more inclined to participate in the interventions. This intervention will offer the LGBT youth participants a fun, supportive, safe, encouraging, culturally appropriate, and judgment-free space to successfully become nonsmokers.

If the appropriate outputs – the programs, services, and activities – are created, delivered, and implemented successfully as planned, we will be able to measure short-term outcomes. For example, from the first session to the last session, session nine, I want to have a 70% retention rate. I chose to use this number because the *Queer Quit* Intervention study reported a retention rate of 67% on its last session (Dickson-Spillmann, Sullivan, Zahno, & Schaub, 2014); thus, I want to set my target higher than the retention rate cited by Dickson-Spillmann and colleagues. I plan to measure this session attendance using the attendance logs that will be kept each session. This will

allow me to calculate this retention rate and will also allow me to see how many sessions each person attended. At the end of session nine, the last weekly session, I plan to have each participant self-report his or her seven-day point prevalence of smoking abstinence, and I also will biochemically verify this measure by using a carbon monoxide (CO) monitor. This outcome goal is to have 75% of the participants have a CO verified self-report of a seven-day point prevalence of smoking abstinence. I chose 75% because Walls and Wisneski reported an abstinence rate of 88.9% on the last class (2010) and Dickson-Spillmann and colleagues reported a 65.7% quit rate on the last class of *Queer Quit* (2014); thus, I decided to choose a reasonable yet challenging target that is between those two quit rates. From the first session to the last session, the outcome goal would be to have each participant's nicotine dependence decrease. In order to measure each person's nicotine dependence, they will need to complete a modified version of the Fagerstrom Tolerance Questionnaire (FTQ), which has been validated for use by adolescence. By the session nine, the participants will have decreased the number of cigarettes that they smoke per day. This outcome will be measured by the participants self-reporting the number of cigarettes that they smoke per day on a survey that will be administered at baseline and on the last weekly session. Another outcome this intervention is hoping to address is to decrease the anxiety, depression, and minority stress that each participant feels from being an LGBT person or other culturally related stressor situations, because these internal and external stressors have been shown to lead to higher rates of smoking and relapse within the LGBT youth population. To measure a participant's level of anxiety, the participant will complete the Beck Anxiety Inventory (BAI) at baseline and on the last

weekly session. The participant's level of depression will be assessed using the Beck Depression Inventory (BDI-V) at baseline and session 9, the last weekly session. In order to measure the minority stress factors, the participants will complete the Internalized Homophobia Scale, Level of Outness Scale (sexual orientation concealment), the Experience of Discrimination Scale, and the Modified Devaluation-Discrimination Scale (stigma consciousness). All four of these measures will be taken at baseline and session nine, and then compared.

If we are able to successfully implement short-term outcomes during the intervention, then we hope to be successful with long-term smoking cessation outcomes. For example, on the last follow-up session, the twelve-month follow-up, I hope to have a sixty percent retention rate. I chose to use this number because in their study, Dickson-Spillmann and colleagues reported a 54.3% retention rate on their last follow-up session, which was at six months (2014); thus, even thought knowing it was going to be challenging, I decided I wanted to set this interventions retention goal slightly higher than *Queer Quits* follow-up retention rate. I plan to measure this session attendance using the attendance logs that will be kept each session, including follow-up sessions. This will allow me to calculate this retention rate and will also allow me to see how many sessions each person attended. At the six month and twelve-month follow-up interviews, I plan to have each participant self-report his or her seven-day point prevalence of smoking abstinence, and I also will biochemically verify this measure by using a carbon monoxide (CO) monitor. This outcome goal is to have 45% and 40% of the participants, respectively, have a CO verified self-report of a seven-day point prevalence of smoking abstinence. I chose 45% and 40% because *The Last Drag*

reported a six-month follow-up quit rate of 36%, which was the same as the three-month follow-up quit rate in the same study (Eliason, Dibble, Gordon, & Soliz, 2012). My six-month follow-up quit rate is slightly higher at 45% because I wanted to challenge this intervention and its participants – adolescents enjoy competition and challenges. I chose 40% as my 12-month follow-up goal because as Eliason and colleagues showed in *The Last Drag* (2014), when participants have made it that far, it can be a good indication of a behavior change, however, LGBT youth have so many internal and external stressors and temptations that it is easy for them to relapse, so their could be some variation. At the twelve-month follow-up session, the outcome goal would be to have each participant's nicotine dependence substantially decrease or be close to zero. In order to measure each person's nicotine dependence, they will need to complete a modified version of the Fagerstrom Tolerance Questionnaire (FTQ), which has been validated for use by adolescence. By the 12-month follow-up interview, the participants will have substantially decreased the number of cigarettes that they smoke per day or have become completely abstinent. This outcome will be measured by the participants self-reporting the number of cigarettes that they smoke per day on a survey that will be administered at baseline and on the follow-up interview. At the twelve month follow-up interview, the anxiety, depression, and minority stress that each participant feels from being an LGBT person or other culturally related stressor situations has decreased and the participants feel more comfortable with themselves, or have learned to channel these feelings and emotions into positive activities such as focusing on full body health and wellness. To measure a participant's level of anxiety, the participant will complete the Beck Anxiety Inventory (BAI) at baseline and at the twelve-month follow-up

interview. The participant's level of depression will be assessed using the Beck Depression Inventory (BDI-V) at baseline and the last follow-up session. In order to measure the minority stress factors, the participants will complete the Internalized Homophobia Scale, Level of Outness Scale (sexual orientation concealment), the Experience of Discrimination Scale, and the Modified Devaluation-Discrimination Scale (stigma consciousness). All four of these measures will be taken at baseline session nine, and on the twelve-month follow-up interview, and then compared for effectiveness.

Program Context

We chose to use *QueerTIPs for LGBT Smokers: A Stop Smoking Class for Lesbian, Gay, Bisexual, and Transgender Communities* intervention because it was based off of the first successful smoking cessation intervention targeted for the LGBT population, *The Last Drag*, even though all of the study participants have been adults. Greenwood and Hunt also incorporated the "best practices" from the American Cancer Society (*FreshStart*) and the American Lung Association (*Freedom From Smoking*), *Out and Free* by Emily Brucker, and expertise and experiences from the LGBT community and research partners and stakeholders (2002).

All of these resources were used to develop a new culturally relevant smoking cessation intervention appropriate for the diverse LGBT communities regardless of age, ethnicity, socioeconomic status, gender, sexual orientation, HIV status, or location (Greenwood and Hunt, 2002). The *QueerTIPs* intervention explicitly addresses issues unique to LGBT smokers who are trying to quit, provides a safe and supportive environment to explore these issues, and provides clear cessation guidelines in each session. For example, the role smoking plays on one's identity – in order to appear

more masculine or feminine – and in dealing with the stress of living in a homophobic culture and society are discussed as possible triggers for relapse. Greenwood and Hunt used *Out and Free* to present opportunities to learn to apply the coping skills developed during the "coming out" process or while dealing with a culturally induced stressful life situation to the process of becoming a nonsmoker and its related stresses (2002). They also described the role of gay bars and bar culture where smoking was very popular and often promoted, and the participants' need to seek out non-bar social and recreational activities to reduce social pressures to smoke. The intervention also discusses the intentional targeted marketing campaign that big tobacco companies fund toward the LGBT population.

To each of the nine sessions, we decided to add an engaging activity and food because the research showed (Remafedi and Carol, 2004; Peters, Meshack, Kelder, Springer, & Agurcia, 2011) adolescents would attend smoking cessation programs that incorporated these options. Instead of just having facilitators as the leaders, we also incorporated the use of older high school/college LGBT ex-smokers as "peer buddies" (Levinson, Hood, Mahajan, & Russ, 2011; Peters, Meshack, Kelder, Springer, & Agurcia, 2011; Bryant, Damarin, & Marshall, 2014; Schwappach, 2009; Matthews, Li, Kuhns, Tasker, & Cesario, 2013) and for some of the sessions we have asked an LGBT friendly doctor to be present (Peters, Meshack, Kelder, Springer, & Agurcia, 2011; QueerTIP Coalition, 2002). Having an LGBT ex-smoker present throughout the intervention gives the participants someone to relate to, a success story, and someone to strive to be. The ex-smoker gives them encouragement to know that this process can be successful and is worth all the struggles in the end. Having the doctor present for

some of the more scientific classes about body harm gives the participants a professional opinion, which many adolescents will listen to more so because of his credentials and title (Fernandez and Dickerson, 2014).

We will also offer incentives throughout the intervention to keep retention rates up and to entice the participants to stay smoke free (Remafedi and Carol, 2004; Peters, Meshack, Kelder, Springer, & Agurcia, 2011). A $15 Wal-Mart gift card will be awarded on the last session to participants who attended either eight or all nine sessions. A $20 Wal-Mart gift card will be awarded to any participant who self-reported and was biochemically verified to have a seven-day point prevalence of smoking abstinence on the last class. The participants will receive a $10 Wal-Mart gift card for each follow-up interview they attend and will receive a $30 Wal-Mart gift card for self-reporting and being biochemically verified to have a seven-day point prevalence of smoking abstinence on the twelve month follow-up interview.

Text messaging and e-mail support will be available for the participants to utilize throughout the entire intervention (Dalum, Schaalma, Nielsen, Kok, 2008; Thomson, 2012). The participants will have the phone numbers and email addresses of the facilitators and of the high school/college LGBT “peer buddies” to text them for support and encouragement whenever needed. The facilitators and high school/college peer supporters will have the numbers of the participants as well, and will send them reminder messages about sessions and supportive and motivational messages throughout the week (not in excess). All of the participants will have each other’s numbers as well and are encouraged to act as a supportive network with each other outside of class.

The original *QueerTIPs* intervention was composed of nine two-hour sessions held over an eight-week period with two "booster" sessions at three months and six months. This was already expanded from the traditional seven or eight sessions smoking cessation interventions typically consist of because Greenwood and Hunt wanted to facilitate greater support among participants (2002). However, the intervention that we proposed below and in table 4 modifies the two follow-up sessions and extends them to four – one month, three months, six months, and twelve months. This may seem like a long follow-up period; however, the thought process was many LGBT youth smokers relapse several times because of the myriad of pressures and stressors they deal with daily. Even if they have relapsed after the intervention, then hopefully they will still come back to the follow-up interviews where we will be able to talk with them and motivate them to quit again. This population needs the extra support and motivation to stay smoke free.

We decided to incorporate motivational interviewing techniques into the follow-up interviews since they will be one-on-one and to further support and encourage the participants to stay smoke free or to become smoke free. As defined by Miller and Rollnick, motivational interviewing is "a collaborative, person-centered form of guiding to elicit and strengthen motivation for change by helping clients explore and resolve ambivalence" (2002). It is the facilitator's job to help the participant sort through the mixed feelings of becoming a nonsmoker and to encourage the participant to feel motivated to make the change. The facilitator must use four core principles of motivational interviewing: express empathy, roll with resistance, develop discrepancy, and support self-efficacy (Miller and Rollnick, 2002). Colby et. al. demonstrated in their

study that motivational interviewing is feasible with youth and produces encouraging and positive outcomes (1998).

The modifications to the existing intervention (table 4) were made to make the present intervention more attractive for LGBT adolescents and attempt to incorporate all five strategies that Kreuter et. al. outlined to create a culturally relevant smoking cessation intervention for LGBT smokers: peripheral strategies, evidential strategies, linguistic strategies, constituent-involving strategies, and sociocultural strategies (2002).

Program Implementation

Session 1: Orientation: QueerTIPS and Expectations

Since this is the first session, it is important to explain to the participants what they can expect from this program and how it will meet their needs. Reassure the participants that the content of the course has been adapted from clinically proven methods used by the American Cancer Society and the American Lung Association to help people quit smoking. Let them know, however, that this particular program has been modified to address the unique needs and issues facing LGBT smokers – this program is offered by LGBTs for LGBTs in LGBT settings (Greenwood and Hunt, 2002).

The main objective of this first session is extremely important to emphasize and to make sure every participant understands because it is essential to helping this group quit smoking – “create a safe and comfortable place for lesbian, gay, bisexual, and transgender people to be open about their fears, situations, families, challenges, and hopes” (Greenwood and Hunt, 2002).

It is imperative to build trust, respect, and dialogue with and between the group members. Generally speaking, LGBT people expect to feel out of place, isolated, or

alienated if they join new groups or attend public events. Emphasize that all people in the room are equals and that this group is a “safe space” where everyone should feel and is accepted, respected, valued, and heard. Also remember the participants that what is said in the room, in the “safe space”, stays in the “safe space” and should not be discussed outside of the room. It is important that the participants build trusting peer relationships within the group (Greenwood and Hunt, 2002).

Part of building trust, respect, and dialogue in a group of LGBT participants is to address the issues of homophobia, bi-phobia, and transphobia. Also, discuss the difference between personal/internalized, interpersonal, and institutional homophobia, bi-phobia, and transphobia. Make it clear even in a group of all LGBT people, these “phobias” can still be present, and this is not acceptable – hurtful remarks and/or actions will not be tolerated. Open up the group for discussion on the different “phobias” and, if they feel comfortable, have them give personal stories. This is a group of supporters and a place for all LGBT people to feel comfortable. Also in this session, it is important to discuss general and culturally specific LGBT determinants, disparities, and statistics of smoking (Greenwood and Hunt, 2002).

Close to the end of the session, break the group up into small subgroups and have them tape a large white piece of paper on the wall. On this paper, the group will write down the expectations that they have for themselves, the class, the facilitators, other group members, and people outside of the program. Discuss as a group having all each participant talk. While the participants are still in the groups, hand out the “Stages of Change Ladder” and have the participants’ share where they think they fall on the ladder in their groups, then as a class. Also, have the groups come up with a list of

reasons why they smoke, then discuss these as a group and have other groups offer suggestions on how to mitigate those risks. Then, ask the group members to each identify their top three reasons for quitting on the paper. Then discuss these as a group. Identifying commonalities will allow people to work together and hold each other accountable (Greenwood and Hunt, 2002).

Before next session: Have the students try to remember to long the cigarettes that they smoked – what time of day, how many, and why they felt like they needed a cigarette. Have them write down 10 reasons why they want to become smoke-free (Greenwood and Hunt, 2002).

Separate the students into new groups of 3 or 4 and have them eat the dinner together in these new groups. This will foster new discussions, relationships, and hopefully identify new commonalities that the group members have between each other

Session Activity: These activities are about meeting everyone in the group, developing relationships, and building trust. The first activity is a good icebreaker and is called “Riding the Bus”. In this activity, set up three chairs at the front of the room, this will be “the bus”. Have the facilitators start riding the bus by having each one introduce him/herself, age, grade, career, hobbies, a fun fact about themselves or an experience they had and when and why they started smoking. Then have each participant take a turn riding the bus. The idea is to get a conversation going like actual people who were riding a bus, once one person gets off the bus, another group member leaves the audience and gets up and fills the vacant chair. This process keeps happening until everyone has had a chance to “ride the bus”. This activity is a great way for people to get to know each other, find commonalities that they have with each other, and to feel

comfortable speaking in front of each other. The next activity is called the “trust fall”. One person stands on an elevated surface while the other group members stand in two parallel lines facing each other and extending out their arms firmly holding onto the wrists of two different people across from them ensuring a tight, interlocking web of arms. The facilitator asks both the “faller” and the “catchers” if they are ready. If both say yes, then the facilitator will tell the “faller” to yell “FALLING” right before the “faller” makes the fall. The team of “catchers” will successfully catch the “faller”. The goal of this activity will be for each member and facilitator of the group to gain trust of one another, which is extremely important.

Session 2: Quitting and Coming Out

There are three main goals for this session: (1) to form the process of quitting into a new but familiar context for LGBT people, (2) to explore the roots of smoking and how these roots are related to current life contexts and triggers, and (3) to educate participants on the variety of quit tools and methods that are available to them. Quitting is an extremely challenging habit to break and one that takes time and commitment, yet the rewards of being smoke-free are huge for the smoker and everyone involved in the smoker’s life. For LGBT smokers, it would be beneficial to liken the process of quitting to something familiar to them and the LGBT experience they have had such as coming out as an LGBT person or dealing with a daily/life-related stress because of being an LGBT person. It is suggested that the same skills used in coming out as an LGBT person and/or coping strategies for daily/life-related stress could be used by LGBT smokers to quit and remain abstinent from smoking (Greenwood and Hunt, 2002).

Coming out is a life-changing event that like smoking is an arduous journey that encompasses both challenges and rewards. Using this unique, culturally appropriate approach may offer the participants a new angle to view the process, time, commitment, support, energy, ups, and downs of quitting and could increase motivation and skills by providing LGBT smokers the psychological and emotional space to maintain a difficult to change behavior. Drawing on this comparison, the goal is to help the participant realize that the same inner strengths and resources used to come out can also be used to quit. It places quitting within a context of strengthening one's own pride and empowerment to live life by one's own terms. This is a necessary shift in perspective. After this is explained, show the stage of change chart, which has columns for both smoking and coming out. This makes the conversation more concrete. Then break the group into pairs and have each person discuss his/her coming out story or daily/life stresses they encounter. Do not pressure anyone who feels uncomfortable – coming out is a very individualistic and private experience for some (Greenwood and Hunt, 2002).

It is important for smokers to explore their history of smoking to learn about what sets them off, what situations, environments, or feelings are strongly associated with smoking – the participant's personal triggers. This will explore all the questions – the what, when, where, why, and how of starting to smoke and the individual smoking patterns that the participant has. Do any of these cues come from being an LGBT person? In order to become a nonsmoker, the participant needs to understand his/her smoking past (how it is linked with being LGBT) and why this person smokes. There are both common reasons for smoking and LGBT influenced reasons for smoking. Having the participants identify their triggers will help the participants understand what they are

trying to accomplish by smoking a cigarette at that time. Gaining this understanding will better help a smoker recognize that trigger and develop ways of dealing with that trigger in alternative ways (Greenwood and Hunt, 2002).

The third focus for this session is to educate the participants of the variety of smoking cessation tools available to them, consider the various quitting options each participant has, and begin to develop a preliminary quit plan. Some smoking cessation alternative techniques and methods include pharmaceutical products, nicotine fading and tapering, and quitting “cold turkey”. The participants need to realize quitting is a very individualistic process, and each person should choose the tools and a path that is most appropriate for that person’s needs, wants, lifestyle, and addresses his/her individual trigger. However, smokers who use a secondary cessation method are proven to be more successful at quitting. (Greenwood and Hunt, 2002).

Remind participants to continue to keep an honest record of the cigarettes that they have smoked daily – what time of day, how many, and why they felt like they needed a cigarette. Have them write down perceived benefits and barriers to quitting.

Have the participants sit with a different group of people at dinner.

Session Activity: This activity is called “Killing your body, one puff at a time” is modeled after the classic game Battleship. However, with this game it is going to be a human form and instead of sinking battleships, it will be killing organs of the body. This is going to take some space and planning on the facilitator’s part. The gym or room needs to be divided into two sections by some sort of divider, and an 11 by 11 grid needs to be taped out on the ground. The squares across the top will be labeled with 10 diseases that smoking can cause and down the side will be labeled with 10 chemicals

that are in cigarettes. Each side will have a large poster board in order to keep track of the opponent's grid. Each organ that the facilitator choices to use will have a corresponding number of spaces for example: heart – five spaces; brain – four spaces; lungs/respiratory tract – 3 spaces; kidneys – 3 spaces; immune system – 2 spaces. These may need to be adjusted for the amount of people in the program. The teams go back and forth calling out one disease and one chemical until one team successfully kills all the organs, which symbolizes a person dying as a result of a life-long smoking addiction. Take this opportunity to teach the participants about the different chemicals that are in cigarettes, common household products/cleaners they can be found in other than cigarettes, and what diseases smoking can cause and how it can negatively affect your life.

Session 3: Quitting for Better Health: Get Ready…Set

The main objectives of this session are: (1) to examine the links between smoking and health, and to focus in particular on LGBT health concerns, (2) to anticipate the impact of quitting on the mind – body – spirit of LGBT smokers, (3) to explore the concerns, and anticipate the grief, loss, and anger of preparing to quit, and (4) to begin to develop tools and skills to quit by preparing the first 24-hour plan.

Even though the negative health consequences are the same for LGBT smokers as they are for the general population, there are unique health concerns among LGBT smokers (HIV/AIDS or hormone replacement therapy) that are usually not addressed in standard smoking cessation classes. There are also a number of other health concerns such as alcohol, other drug use, weight, and body image issues that are exacerbated by societal homophobia and other form of LGBT discrimination. It is important to reinforce

that this is a “safe space” and that all participants should feel comfortable discussing their health issues with people who are knowledgeable, open, and accepting. This is a non-judgmental zone. During this session, the facilitators and an LGBT friendly physician will be present to explore certain LGBT specific concerns, as well as all concerns, which will help engage the participants and intensify their motivation to become a non-smoker (Greenwood and Hunt, 2002).

The Impact of quitting will have a drastic effect on the participant’s total mind, body, and spirit. The immediate effects of quitting and nicotine withdrawal are the same for everyone. The participant who is going through nicotine withdrawal will experience chemical and physiological consequences, such as cravings, upset sleep patterns, inability to concentrate, etc, as well as psychological, behavioral and emotional consequences, such as anxiety, irritability, shakiness, etc. The participants need to be aware of these changes to their body and mood so they can be expecting them and can have a plan to combat them (Greenwood and Hunt, 2002).

Preparing to quit and giving up smoking are generally very difficult for every smoker. Because the anxiety of quit night increases each session, the participants somewhat go through the five stages of grief – denial, anger, bargaining, depression, and acceptance. For some participants the thought of quitting might be too overwhelming and instead of quitting, they stop coming to the sessions. Encourage the participants to comeback even if they don’t think they can go through with it. At this time in the discussion, let the participants discuss their feelings or thoughts about quitting and the stages of grief. The facilitators should recognize students who they think would have a hard time and provide additional support to them. This is a sensitive population

and quitting may be difficult for LGBT smokers because their identity as a smoker may be intertwined with their identity as a LGBT person. If smoking is strongly linked to their coming out story, sexual orientation, or gender identity, then these participants may have a difficult time separating themselves from their smoking identity. There are also other aspects of the LGBT community that make quitting more difficult, for example, the important role gay bars play in the social gay scene and act as gathering centers for LGBT people. Encourage the group to discuss these issues, barriers, and feelings in an open discussion. Offer suggestions and allow other members to offer suggestions on how to best overcome these possible problems associated with quitting. Also, this is a good time to remind the group of their main reasons for quitting and of the negative health aspects of smoking (Greenwood and Hunt, 2002).

The next aspect of this session is to help prepare the group members for Quit Night by offering specific coping strategies. The initial cravings, upset sleep schedule, anxiety, nervousness, crankiness, triggers, etc. will be the hardest humps to get over and coping strategies can certainly help ease these occurrences. Thus, it is imperative to get the participants thinking of a plan they can utilize when these feelings and emotions begin. Some coping strategies to teach the participants are – The 5 D's: **D**elay, **D**rink Water, **D**eep Breathing, **D**o Something, **D**iscuss with friend. (Delay: The urge to smoke will go away in 5 to 10 minutes whether you smoke or not!; Drink water: Drink 6-8 glasses of water per day; Deep Breathing: Take 3 deep breaths, meditate, listen to soothing music, learn to relax; Do something: Get up and do something to take your mind off of cigarettes, develop an exercise plan, channel your aggravation into a healthy positive activity; Discuss with friend: Call and talk to a supportive friend about

your problems, possibly a former smoker who has quit). Relaxation, deep breathing, and visualization skills. (8 Steps). Fill your time by continuing to practice positive life changes such as eating healthier and exercising more (Greenwood and Hunt, 2002).

It is important in this session to make sure that everyone has each of the facilitators' and each other's contact information (phone number, email address). Setting up a group text thread might be a good idea. Also, the facilitators and ex-smoker volunteers need to be available to answer text messages, phone calls, and emails. Setting up check-up times might be a good idea, while also being available as needed.

Remind participants that Quit Night is next session. Tell them to have their last cigarette before class and to attempt to scale down this week by using coping mechanisms that they think might work for them. Also encourage every group member to come back next week, regardless of smoking status next week. Also, if participants plan to use nicotine replacement therapy, remind them to go to their doctor for the "OK" or consult the physician at the meeting (Greenwood and Hunt, 2002).

Have the students sit at a table with a different group for dinner/snacks and have them discuss what coping strategies they might want to use.

Session Activity: This activity will be an interactive theater performance. If the facilitator can locate a theater company in town, at a local college, or local high school that would be willing to create and act out "high-risk" situations where someone is being peer pressured to smoke or around a lot of smokers or other challenging situations and the actors are demonstrating ways to say no and standing their ground. Then also demonstrating situations that the person gave in and smoked. After each scenario, the facilitator should stop and ask a participant in the audience to explain what he saw, then

ask follow-up questions about preventing this issue or what the person did correctly. Then towards the end, have program participants draw a scenario out of a hat and it is their turn to act these out. Interactive theater is a great way to practice situations and to get game plans in line when these challenges and high-risk situations occur.

Session 4: Go! Quit Night and the Next 24-48-72 Hours

The big night has finally arrived…Quit Night and becoming a nonsmoker. All the participants should have had their last cigarette before the beginning of the meeting. If the participants have their cigarettes and/or paraphernalia on them, have them get it out and ready to throw away. There may be a lower turnout for this meeting because participants who have not quit might feel ashamed and not show up, reach out to them after the meeting. Encourage the whole group to keep coming back to the sessions even if they have not stopped smoking. Some participants may need a more flexible quit date. It is important to remain supportive and encouraging to everyone. Make sure (if possible) all the chairs are arranged in a circle and have a *Last Drag* Survival kit waiting for each participant (Greenwood and Hunt, 2002).

This session acts as multiple things: a celebration, support group, problem-solving session, and a time to hear and tell testimonials. Everyone deserves to be congratulated for being there, especially the participants that have quit. Emphasize to each of these people the pride that they are exhibiting in themselves and the journey of freedom that are beginning to embark on. Have the participants tell their quit stories. These can be likened to “coming out” stories, which LGBT people are often very interested in hearing because they can relate to them. Similarly, the other LGBT people in the room can relate to your quit story – when you smoked your last cigarette, what

you were thinking at that moment, what are you (or have you been) going through, what are your emotions, how are you coping? All of those questions can be asked to a person who has just come out of the closet as well. Telling both of these stories to a friend or a group of people can be a very satisfying, reinforcing, and uplifting experience not only because people can usually relate, but because a great deal of knowledge, advice, support, coping tools, etc can be communicated and learned by all parties involved. Ask each participant what the immediate positive and negative effects on the mind, body, and spirit are and how the participant is or isn't coping. Then, invite your guests and college/high school volunteers to speak, who are former LGBT smokers. Ask them to tell the participants their quit stories. Have them hit on specific topics during their stories. Then allow any participants to ask the guest speakers questions. Talk to the participants about what to recognize as nicotine withdrawal and what they can anticipate with nicotine withdrawal. Help them modify their 24 hour quit plan and help them develop their 48 and 72 hour quit plans by identifying triggers, coping plans, and resources available to them (Greenwood and Hunt, 2002).

Pass a large trash bag around, and have anyone who has his or her cigarettes and/or smoking paraphernalia on then drop it into the trash bag. This is somewhat of a "cleansing ritual". As the bag is passed from one person to the next, each person is asked to answer the question, "What quitting and becoming smoke free means to him or her in a positive statement." After each person makes their statement, make sure that you lead the class in a round of applause to show your encouragement and support. Talk to the group and ask them to commit to being smoke free for the next few 2-3 days until the next session. Have them fill out the *Last Drag* Contract. At the end of class,

remind them of the benefits of quitting smoking, Other benefits of quitting smoking, What to do when cravings come, Recovery symptoms (all handouts) (Greenwood and Hunt, 2002).

Remind the participants: Cravings will come but they will only last for 3 – 5 minutes. The craving will pass whether you have a cigarette or not. During these cravings, reach out to a classmate or your facilitator. We are all here to support each other! If they slip up and have a cigarette, put it out and keep going! Practice and use the 5 D's when a craving comes. Remind yourself why you want to become smoke free. Relax and remove yourself from stressful situations. Breathe. Begin to take care of yourselves in other positive ways. REMEMBER your contract and that we will meet again in 3 days! Stay Smoke Free! Contact your classmates, support network, or your facilitators often for extra encouragement and support (Greenwood and Hunt, 2002).

At this stage, they can eat dinner with anyone they feel most comfortable eating with.

Session Activity: This is going to be a stressful and somewhat emotional class for the program participants, and they might even blame the facilitator for these feelings or have pent up anger or aggression toward the facilitator. So a good way for them to release these emotions would be to have the facilitators in a dunk tank. (If a dunk tank cannot be located maybe the participants could pie the fascinators' face). Make sure to have a cigarette cut out where the trigger for the booth is. So the participants will be throwing balls at cigarettes. Hopefully this will allow the participants to release some anger, have some fun and laughs when their facilitators get dunked, and take their mind off of potential cravings. After this the facilitator will lead the group in a series of

relaxation, stretching and deep breathing exercises and techniques, which will calm the participants down and get them ready for the class portion of the session.

Session 5: Staying Out of the Smoking Closet Day-by-Day

This session will occur 3 days after Quit Night because added support, encouragement, and structure during this first week is necessary for most people to stay smoke-free. This will be a difficult time for your participants, emotions are more than likely going to be running higher than usual – be prepared for this. The main focus for this session is to celebrate remaining smoke free for the last 72 hours and to problem solve if participants experienced lapses. This session will better equip the participants to remain smoke free (Greenwood and Hunt, 2002).

In this session, ask each participant to discuss his/her own experiences with remaining smoke free for the last 2 to 3 days – how do they feel? What issues have they encountered? What are their concerns? Are they reaching out to their classmates, friends, and facilitators? Are they getting the emotional support that they need to stay smoke free? What coping strategies have they been using?

During this session, it is important to address how “slips, lapses, or relapses” are handled in the group. The concept of relapse prevention and the relapse prevention model should be discussed. All of this should be done in a gentle, supportive, and non-judgmental manner, but with enough force that each participant can learn from these events. The participants will learn to better identify and anticipate the triggers they will face, and they will learn to better strengthen or gather the necessary tools to beat the triggers and achieve their goal of staying smoke free. Reinforce the parallels between quitting smoking and the skills and resources the participants used in coming out or

dealing with a life stressor that relates to being an LGBT person. Tell the participants when they quit an addiction, they should feel good about themselves, feel increased pride, and feel control of themselves and their destiny. Have the participants relate the pride and freedom themes they resonate with as being an LGBT person to being smoke free (Greenwood and Hunt, 2002).

At the end of the session, break the participants up into small groups and have each participant share with each other about the benefits they have personally gained from quitting and the benefits they wish to gain in the future. Come back in the group and discuss them in the group. Make sure to clap after each person to show support and encouragement. Also, go over: “thoughts that get in the way”, how to use “Assertive Communication” with friends, the list of ways people “Avoid Smoking”, the American Lung Associations “52 Proven Stress Reducers”, “Special Suggestions to Get Back on Track”, “If you had a Slip or Two” (handouts) (Greenwood and Hunt, 2002).

Remind the participants: Cravings will come but they will only last for 3 – 5 minutes. The craving will pass whether you have a cigarette or not. During these cravings, reach out to a classmate or your facilitator. We are all here to support each other! If they slip up and have a cigarette, put it out and keep going! Practice and use the 5 D’s when a craving comes. Remind yourself why you want to become smoke free. Relax and remove yourself from stressful situations. Breathe. Begin to take care of yourselves in other positive ways. Take at least one walk a day; this will reduce stress while helping maintain your weight. REMEMBER your contract and that we will meet again in 3 days! Stay Smoke Free! Contact your classmates, support network, or your

facilitators often for extra encouragement and support. Celebrate and reward yourself with small victories (Greenwood and Hunt, 2002).

At this stage, they can eat dinner with anyone that they feel most comfortable eating with.

Session Activity: Again, after remaining smoke free for a few days, the participants may be stressed and emotional; there bodies are trying to deal with this new change and they are probably dealing with withdrawal symptoms. A good activity for this session would be to do some meditation and yoga. This would attempt to relax them and try to take their mind off of any cravings and negative energy.

Session 6: Staying Out of the Smoking Closet Week-by-Week

This session is similar to the last session, however this session focuses on moving from staying smoke free from day-to-day to the long term, week-to-week. It reinforces that staying smoke free is a commitment and hard work. This process requires ongoing commitment and a lot of support and encouragement from the participant's friends, classmates, families, and facilitators. Remind the participants of all the benefits they gain from not smoking. Go back over relapse prevention strategies and have them continue to build on and use the strengths and resources they used when they came out or when dealing with an LGBT induced stressor. Keep encouraging everyone, especially those who have had a "slip, lapse, or relapse", as they need it the most. Those who have had a "slip, lapse, or relapse", ask them to describe the situation to the group, and ask what their plan in the future would be to mitigate this situation (Greenwood and Hunt, 2002).

Another focus of this session is to how to stay and remain smoke free as an LGBT person with the specific stress situations common in this population. For example, socializing in and around places where smoking is common, friendships, significant others, discrimination, and other health concerns. The participants need to begin to prepare for more complex emotional or psychological issues or fears that are going to occur down the road of becoming a permanent nonsmoker. Also, discuss the importance of staying healthy in all aspects of life. Start to workout regularly and eat healthier foods. These are also ways to relieve stress, stay smoke free, and keep a healthy body image.

A good in class activity would be to go around the room and ask each participant to share their “High” and “Low” point of this past week becoming smoke free. Wait until everyone goes before asking questions and sharing comments.

Go over the list of ways people “Avoid Smoking”, the American Lung Associations “52 Proven Stress Reducers”.

Remind the participants: Cravings will come but they will only last for 3 – 5 minutes. The craving will pass whether you have a cigarette or not. During these cravings, reach out to a classmate or your facilitator. We are all here to support each other! If they slip up and have a cigarette, put it out and keep going! Practice and use the 5 D’s when a craving comes. Remind yourself why you want to become smoke free. Relax and remove yourself from stressful situations. Breathe. Begin to take care of yourselves in other positive ways. Take at least one walk a day; this will reduce stress while helping maintain your weight. REMEMBER your contract! Stay Smoke Free! Contact your classmates, support network, or your facilitators often for extra

encouragement and support. Celebrate and reward yourself with small victories (Greenwood and Hunt, 2002).

At this stage, they can eat dinner with anyone that they feel most comfortable eating with.

Session activity: This activity will be a scavenger hunt around the town where the intervention is taking place. The goal of the scavenger hunt is to create clues that take the participants to safe places where they can participate in fun activities that do not require smoking, alcohol, or other illegal substances. For example, the Movie Theater, parks, gym, basketball and tennis courts, LGBT community centers, community pools, bike trails, running/walking trails, bowling alley, etc. This will have to be tailored to the specific community where the intervention is taking place. Get the participants to take pictures of the item that the clue was referring to and then tally up the score at the end. Then have a discussion with the group explaining what the hidden meaning behind this activity was. Ask for any more ideas of places like this and allow for discussion and questions.

Session 7: Looking inside: Being LGBT and Smoking Triggers

The main goal of this session is to focus on staying a nonsmoker for life, making it a lifestyle by strengthening positive identity and balancing lifestyles of being LGBT nonsmokers. Internal factors related to being an LGBT person that trigger high-risk situations are addressed, which empowers the participants to rely on the innate strengths and resources that they used when they were “coming out” or dealing with a culturally stressful situation. This session teaches the participants about the cycles of shame and addiction and highlights how they are interconnected. These cycles are

relevant for the participants because LGBT people are raised in a society that discriminates, oppresses, and demeans them, and experiences of homophobia, transphobia, racism, and sexism can contribute to LGBT people having shame-based identities. It is important for the participants to recognize the multiple “high-risk” situations that can trigger these feelings of shame, unworthiness, and loneliness, which in turn have the potential to trigger smoking and other addictive behaviors. The participants need to fight through these negative feelings and continue to support their decision to remain smoke free by leveraging the strengths, skills, resources, and experiences that they used and relied on when they were coming out as being an LGBT person or while dealing with an LGBT related stressful situation. This session will also address relapse prevention methods as discussed in previous sessions and discusses the issue of multiple addictions, which is prevalent in the LGBT community. The participants are encouraged to look at the bigger picture of being a nonsmoker and address and make changes to other lifestyle issues such as diet, exercise, and nutrition. The participants are encouraged to continue building their support system and to identify possible long-term support systems. The participants are also encouraged to seek nonsmoking LGBT social-recreational spaces (Greenwood and Hunt, 2002).

In class activity: Have each participant divide a paper in three columns – high-risk situations, coping strategy, benefits. Have the participants identify high-risk situations that they anticipate may happen in the future. Then have them list coping responses and strategies that they might use in those situations. As a result of positive coping, identify the benefits that they will experience (Greenwood and Hunt, 2002).

In preparation for next week's class, have the students be on the look out for tobacco ads that specifically target the LGBT community.

At this stage, they can eat dinner with anyone that they feel most comfortable eating with.

Session Activity: Have the students write a rap, song, poem, free verse, story, journal entry or something creative to bring in and perform in front of the group that has to do with any aspect of their smoking journey thus far. It will be conducted in a supportive and encouraging environment and make sure everyone give a round of applause for each participant. Then after this open mic concept, the participants will be able to participate in a karaoke night. Before the class portion begins, the facilitator should talk a little about what he heard from the participants and ask some probing questions or allow questions from the other participants, which will hopefully create some discussion that might be able to help and encourage other students that may be struggling.

Session 8: Looking Outside: Tobacco Targeting and Discrimination

This session will focus on remaining a nonsmoker even in the so called "enemy territory", identifying and addressing different external forces that contribute negatively to LGBT people and to the entire LGBT community. In the first part of this session, the focus will be on the large role and contribution the tobacco industry has in targeting the LGBT population, especially the youth, and also the role that community sponsorship has and how these forces may work against the health of the LGBT community and the efforts of this intervention. The role and centrality of gay bars, where smoking is very prevalent, within the LGBT community will also be discussed. The other half of this

session will focus on other social and cultural forces such as homophobia, bi-phobia, transphobia, racism, and sexism as negative influences on individual and community behavior and health (Greenwood and Hunt, 2002).

In class activity: Break the participants into smaller groups and have them discuss (1) personal experiences of how larger social forces have negatively impacted their health, including smoking or attempts to remain a nonsmoker. (2) How did they or could they have countered or responded to these larger social forces? (3) How can each of them, on a personal level, prepare for and deal with these forces? Also have the groups develop an LGBT specific ad to combat smoking. Come together as a group and discuss what the groups talked about and also share the ad that each group created (Greenwood and Hunt, 2002).

At this stage, they can eat dinner with anyone that they feel most comfortable eating with. While eating dinner, have the participants talk about and decide what kind of celebration that they want to have for their last weekly session.

Session Activity: This is jeopardy or trivia night. Depending on the number of participants that are enrolled in the intervention and present on this night, break your group into 3 or 4 smaller groups. Create a jeopardy board or just ask trivia questions. Make sure to add questions that reflect back on what each session has covered, statistics on LGBT smoking disparities, smoking as a health issue, and also add current event categories, pop culture, music, sports, etc. Make sure to add categories and ask questions that would interest the participants on top of all the smoking and cigarette questions. Give the winning team a prize.

Session 9: You've Come a LONG Way Baby – You and Your Smoke Free Community

This is the final weekly session of the smoking cessation intervention. This class will focus on strengthening the gains previously made and celebrating everyone's new identity as a nonsmoker. The first part of this class will review the accomplishments of the participants (regardless of the smoking status at this last class). Also, it is important to update and strengthen the long-term relapse prevention plan for each participant, making sure that it addresses the cultural impact of being an LGBT person. This session will have a discussion about the class ending and any concerns that the participants might have or any questions that they might have and also discuss what a smoke-free LGBT community would look like and how it would be created. However, the main part of this session is the celebration. This has been a long and at times an emotional journey for these strong participants, it is time to celebrate everyone and progress and bonds that have been made over these 8 weeks. Celebrate quitting and staying a nonsmoker – LGBT style. This celebration gives the participants a change to socialize amongst (hopefully) friends without alcohol, tobacco, or other drugs. It also provides a safe, positive, and fun environment where the participants can practice, reinforce, and feel comfortable socializing in social spaces without the use of any tobacco or illegal substances (Greenwood and Hunt, 2002).

Session Activity: Obviously, this week there is a celebration for the class for all of their hard work and dedication, which would be the fun activity. This celebration is tailored specifically for each different group. However, when the facilitator hands out the certificates of achievement to each person of the group, each recipient should give a

short speech or a journal entry type response addressing what benefits they have seen in their lives from quitting smoking, different challenging situations they have experienced, ways that they have coped and mitigated challenging situations, but most importantly, they should address their support system/network and thank them even if they are not present and talk about what they look forward to in the coming weeks, months, and years of living a smoke free lifestyle.

Sessions 10, 11, 12, & 13 will be one month, three month, six month, and twelve month, respectively, one-on-one follow-up session using a motivational interview style.

Evaluation Plan

The evaluation plan should be designed along side the development of the program plan, not after the program has already began (Issel, 2009). A proper and successful evaluation allows for the program effectiveness to be measured, provides opportunities for the program to be improved upon, and demonstrates accountability to the program funders (Centers for Disease Control and Prevention, 2011).

The stakeholders were the people and organizations invested in the program, interested in the results of the evaluation, and/or people who had a stake in deciding how the results of the evaluation would be used. Representing the needs and interests of the stakeholders throughout the entire process is critical to a strong program evaluation (Centers for Disease Control and Prevention, 2011). Stakeholders involved in this program plan and evaluation are the National LGBT Tobacco Control Network, the Coalition of Lavender Americans on Smoking and Health (CLASH), the LGBT youth participants, and the American Lung Association. These stakeholders would provide invaluable advice and input into this project. They would be able to help with the

tailoring of the program and add their input from previous attempts at cessation programs targeted at the LGBT population. The LGBT youth will give suggestions on what they would like to see and expect in a program. The training programs of the facilitators would benefit as well. These stakeholders can offer suggestions on securing funding for the project. These stakeholders also might be concerned with how the program will handle the confidentiality of the youth and how the program might handle possible threats of self-inflicted harm or suicide, which are both prevalent in the LGBT youth community. They might be concerned about parental involvement and consent, and how we intend to keep these youth coming back week after week. The stakeholders would be brought into this project from the very beginning meetings during the stages of initiation and planning. All the stakeholders would get together and have collaborative meetings throughout the whole life cycle of the project, but especially in the beginning phases. The stakeholders would be asked for their input on the curriculum for an LGBT youth population and to review the final implementation manual. I would ask the stakeholders to be sponsors and funders for this project and offer suggestions for other willing parties. We would ask them for insight and suggestions on the most effective and appropriate ways to collect date from LGBT youth. They would be asked what outcomes they wanted to measure and what indicators they wanted to use and together we would collaborate and compromise. We would also ask the stakeholders to train the program facilitators by making them both ALA-FFS certified and LGBT certified. Maintaining a strong rapport and engagement with the project stakeholders is crucial; thus, we will keep them up-to-date on the progress of the program with weekly meetings and encouraging them to make suggestions and comments for improvement.

In order to help facilitate the development of the evaluation plan, I first developed well-defined program objectives with the collaborative help of the stakeholders. The short-term objectives I defined were to have an 70% retention rate from the first session to the last session of the class intervention, 75% of the participants self-report a seven-day point prevalence of smoking abstinence during the last in-class session, which will be verified by a carbon monoxide monitor reading. Also by the last in-class session, decrease nicotine dependence; decrease the number of cigarettes smoked; and decrease anxiety and depression resulting from cultural stressors. The long-term objectives I defined were 65% of the participants self-report a seven-day point prevalence of smoking abstinence at the six-month follow-up interview, which will be verified using a carbon monoxide monitor reading. At the twelve month follow-up interview, experience a 60% retention rate of the participants; 45% of the participants self-report a seven-day point prevalence of smoking abstinence, which will be verified using a carbon monoxide monitor reading; nicotine dependence of the participants has severely decreased or at zero; the number of cigarettes smoked by the participants has severely decreased or is at complete abstinence; the anxiety and depression resulting from cultural stressors has severely decreased and the participants feel more comfortable with themselves, or have turned to healthier ways to handle these feelings and emotions. In order to determine if the proposed smoking cessation intervention was successful, the objectives listed above will need to be measured and evaluated.

For the most part, this evaluation plan focuses on the short- and long-term objectives that have been laid out above, which would make this particular evaluation an effectiveness/outcome evaluation plan. This evaluation plan attempts to evaluate

changes in people's attitudes and beliefs and changes in risk or protective behaviors. The purpose of this evaluation is to gain new knowledge about program activities, learn how to improve upon this program since it is the first one being conducted, and determine how effective this program was in helping participants stop smoking. The stakeholders input will be built into the design of this evaluation to enable them to get out of the program and evaluation what they want and so they can use the results in the future to create similar smoking cessation programs or modify to make it more effective. Having the stakeholders support will increase the likelihood the evaluation results will be used to for program improvements (Centers for Disease Control and Prevention, 2011). The evaluation must take into account what *all* stakeholders need to get from the results and how these stakeholders will use the evaluation. For example, stakeholders for this program would use the results to document the level of success in achieving the objectives, identify areas to improve the project, to expand the locations where the project is offered, improve the content of the programs materials, and to solicit more funds or additional partners.

The evaluation design of this project will be a combination of traditional approaches such as quasi-experimental, observational, and pretest – posttest designs. The evaluation outcomes will be compared to other studies completed on the LGBT population, although it will be comparing youth results to adult results, it will be useful for making conclusions on the differences between these two study populations, on the effectiveness of the interventions and to make comparisons between the behaviors and intentions of both groups. They will also be compared with smoking cessation interventions conducted on non-LGBT youth. These results will provide similar insights.

An observational design will be utilized because this is a new intervention with aspects that have not been tested before. Thus, observational data will be collected throughout the implementation phase and will allow the participants to reflect on the strengths and weaknesses of each session. This will allow for improvements to be made and incorporated. This evaluation design also called for pretest – posttest measures. Utilizing a pre- and post-test design gives all the stakeholders evidence that the program was either successful, unsuccessful, or had no impact. These results will tell the stakeholders if it is ok to expand the current intervention or if an extensive overhaul needs to be completed.

The CDC evaluation framework (2011) recommends specific evaluation questions be defined that address certain areas such as implementation, effectiveness, efficiency, and attribution. Implementation: Were the activities and intervention implemented as planned? Effectiveness: Did the intervention address cultural issues that affect LGBT youth in a way that decreases the amount of smokers? Overall, did the intervention decrease the amount smokers? Efficiency: Was the cost and time of the intervention worth the amount of people that it consistently reached over the program lifecycle? Attribution: Were the outcomes a result of the activities and content in the intervention as opposed to an outside force? Table 5 shows a condensed summary of the focus question, indicator, and evaluation method used.

In order to evaluate the smoking cessation intervention effectively, important and specific questions need to be asked and measured. To measure the goal of seventy percent retention rate I needed to know how many sessions each person attended. I measured this by looking at the attendance logs each week and seeing how many

people dropped out of the intervention compared to the amount of people who remained in the program for all nine sessions, which will allow me to calculate the retention rate. Also, knowing that participants' being lost to follow-up was a common occurrence in studies, especially with a follow-up period of one year, I hope to have a sixty percent retention rate at very end of the intervention, which was the 12-month follow-up interview. Having participants present for every session over the whole length of the intervention period was extremely important for program success.

Another main outcome measured is the participant's self-reported seven-day point prevalence of smoking abstinence. This outcome will be measured at baseline, during the last in-class session (session 9), and at the four follow-up interviews. A carbon monoxide monitor reading will verify this measurement. At the end of the in-class sessions (session 9), I would like 75% of the participants to self-report a seven-day point prevalence of smoking abstinence and to be confirmed by having an exhaled carbon monoxide reading of less than 6 parts per million, which correlates to a smoke-free reading. At the six-month and twelve month follow-up interviews, I would like 45% and 40%, respectively, of the participants who attended the interviews to self-report a seven-day point prevalence of smoking abstinence and to be confirmed by having an exhaled carbon monoxide reading of less than 6 parts per million.

Nicotine dependence was also an outcome that would be measured at baseline, on the last in-class session, and at all four follow-up interviews. To measure nicotine dependence, a modified version of the Fagerstrom Tolerance Questionnaire (FTQ), which has been validated for used by adolescence. The modified FTQ was a seven-item questionnaire scored from 0-9, and a score above 6 was considered to represent a

high level of nicotine dependence (Adelman, Duggan, Hauptman, and Joffe, 2001). The objective was for each participant to have a decreased nicotine dependence at the last in-class session (session 9). In order to measure this, the evaluator can look at a participant's nicotine dependence from the baseline FTQ score and compare it to the score that participant receives at the session 9. If the score decreased then the program was a success regarding this outcome. Also, at the twelve-month follow-up interview, the participants will be ask to take the modified FTQ again with hopes that the nicotine dependence score was lower than the score recorded at session 9, or remained at a nicotine dependence of zero.

Assessing the number of cigarettes smoked per day was another measure of interest in this evaluation. The amount of cigarettes each participant smoked per day will be measured at baseline, session 9, and each of the four follow-up interviews. The objective was to have the number of cigarettes smoked per day decrease from baseline to session 9, the last class. The question, "On average, about how many cigarettes do you smoke per day?" will be present on the baseline survey, the post-test survey, and will be asked verbally, face-to-face, during the follow-up interviews. To see if this number has decreased, the evaluator will compare the baseline number with the number provided during the session 9 survey. Also, the answer given to that question at session 9 will be compared to the answer the facilitator receives at the twelve-month follow-up to see if the number has increased, decreased, or stayed constant at zero. The evaluator was hoping for the number of cigarettes smoked per day from session 9 to the twelve-month follow-up to be decreased or constant at zero cigarettes smoked per day.

Another aspect the intervention was attempting to address was to decrease the anxiety, depression, and minority stress that each participant feels from being an LGBT person or other culturally related stressor situations, because these internal and external stressors have been shown to lead to higher rates of smoking within the LGBT youth population. To measure a participant's level of anxiety, the participant will complete the Beck Anxiety Inventory (BAI) at baseline, session 9, and during all four of the follow-up interviews. In order to determine if the level of anxiety the participant was experiencing was decreasing; the participant's session 9 score will be compared with his or her baseline score. The participant's twelve-month follow-up will be compared with his or her session 9 score to see if the participant is progressing in a positive way. The participant's level of depression will be assessed using the Beck Depression Inventory (BDI-V) at baseline, session 9, and at the four follow-up interviews. The objective comparisons will be conducted in the same manner as the participant's measured anxiety level. In order to measure the minority stress factors, the participants will complete the Internalized Homophobia Scale, Level of Outness Scale (sexual orientation concealment), the Experience of Discrimination Scale, and the Modified Devaluation-Discrimination Scale (stigma consciousness). All four of these measures will be taken at baseline, session 9, and at the four follow-up interviews. Also, all of the comparisons to determine level of minority stress will be conducted in the same manner as the participant's level of anxiety and depression described above. The objective was to have every measure listed above decrease with each comparison.

To assess the extent to which the modifications made to the intervention (e.g. the addition of the activity before the class and the addition of the free meal time at the end)

engaged the participants, I would implement a short survey at the end of each class containing statements such as – “I enjoyed this weeks activity before the lesson.”, “This weeks activity was engaging.”, “I would like to see this weeks activity modified. If agreed, how?”, “I liked the food that was offered this week.”. On the last survey created for session 9, I would also ask comprehensively about the modifications – “I liked the fact that a fun activity was offered in during each session.”, “Overall, I thought the activities offered engaged me.”, “Overall, I liked the fact that food was offered at the end of each session?”, “Meal time gave me a better opportunity to get to know and bond with the other participants better.” I also want to know if the participants thought the materials and content of each session was appropriate and helpful for use with the LGBT youth population. On the survey that the participants fill out after each session I could make statements as – “To what extent did you feel the content of this session was appropriate for the LGBT youth population? If you disagree, why?” and “I believe the content of this session was helpful in my journey to become a nonsmoker, or stay smoke-free.” I will also ask about this measure more comprehensively on the post-intervention survey completed by the participants on the last in-class session – “To what extent did you feel the overall content offered in this course was appropriate for LGBT youth participants.”, “Please offer suggestions for other topics you would like to see added.”, “I enjoyed this smoking cessation intervention was culturally tailored for the LGBT population.”, “Overall, I thought the content of the intervention and the fact it was specifically tailored for the LGBT population helped me in my journey to becoming a nonsmoker.” For all of the above statements, participants will have answer choices of: strongly agree, agree, not sure, disagree, and strongly disagree. By asking these

questions on a survey given after each session and on the post-intervention survey during session 9, these measures should be answered thoroughly enough to get the information I am looking for.

In order to collect the data that the objectives and indicators present, this evaluation plan will utilize a mixed methods approach. Quantitative and Qualitative data will be collected. Qualitative methods include: open-ended responses on surveys, open-ended interviews and discussion, and observational methods. Qualitative methods include: participant surveys and assessments.

When stakeholders agree the conclusions are justified, they will be more inclined to use the evaluation results for program improvements. The data, first, need to be collected, tabulated, summarized, and compared to other relevant information (Centers for Disease Control and Prevention, 2011). To insure accuracy of the final results, two different stakeholders will enter all the data from the qualitative evaluation into excel and quantitative evaluation into the SAS database. Comparisons will be made between the pre-intervention and post-intervention status of the LGBT youth population. Then the data will be formatted into tables and charts and presented to the stakeholders in a clear and understandable manner. The stakeholders have already negotiated and articulated the standards and values that will be used to consider the program successful. These values can be found in the short- and long-term objectives and outcomes in the logic model (table 3).

The evaluation results can be used by the stakeholders to demonstrate the effectiveness of the smoking cessation intervention, ways this culturally tailored smoking cessation can be improved, modify the program planning of the intervention,

demonstrate accountability for the intervention, and justify the funding received for the this smoking cessation intervention (Centers for Disease Control and Prevention, 2011). After the evaluation is completed, recommendations, actions to consider as a result of this evaluation, will be sent to the different stakeholders identified. After receiving the evaluation results, the stakeholders can begin to prepare to strengthen their ability to translate the results of the culturally tailored smoking cessation intervention for LGBT youth into the appropriate actions, discuss how to proceed with the decision making regarding this population, and identify different areas for program improvement (Centers for Disease Control and Prevention, 2011). Feedback was an essential aspect throughout the entire program and evaluation. Weekly meetings were held with stakeholders and participants; thus, available feedback has been a very important to the part of this project life cycle. The follow-up support we received from the stakeholders while we were analyzing the evaluation results kept us on track and focused on the evaluations main scope. The follow-up support also was vital to hold us accountable for providing strong lessons learned to our stakeholders. One of the most important aspects of the lessons learned is the dissemination of the information. Our stakeholders prefer that we hold a presentation for them to present our findings and that we also send them a formal executive summary of the evaluation plan. We will also post a summary of our evaluation on our organizations website. The program evaluation plan was crucial to measure the usefulness of the program and needed improvements, and it was well integrated into the day-to-day planning, implementation, and management of this culturally targeted smoking cessation intervention (Centers for Disease Control and Prevention, 2011).

Conclusion

When we identified a gap in the literature concerning culturally appropriate smoking cessation interventions specifically for the LGBT youth population, we decided to attempt to fill a small part of the gap by creating a smoking cessation program and evaluation targeted for LGBT youth. Having no definitive research to guide my the development of the program plan, I conducted a review of the literature that included: smoking cessation interventions for youth in the general public, culturally tailored smoking cessation interventions for LGBT adults, and non-intervention studies targeting attitudes and perceptions toward smoking cessation for youth, LGBT youth, *or* LGBT adults.

The majority of the participants in the studies preferred culturally tailored group interventions. The program laid out built on an existing culturally tailored smoking cessation intervention for LGBT adults called *QueerTIPs*. We included different aspects into the program plan, such as offering food and a fun and engaging activity, because the research showed that is what the youth wanted and expected at a smoking cessation intervention. We noticed several of the interventions did not report long-term abstinence or follow-up rates and only used self-report methods, which we viewed as a limitation. We implemented four follow-up interviews over a twelve-month period because it was easy for this population to relapse and the extra support will be beneficial. We decided to biochemically verify the participants' self-report claim with a carbon monoxide monitor. This program plan addressed gaps in the existing literature and contributed a culturally tailored smoking cessation program specifically for the LGBT youth population. Potential findings can hopefully glean information and provide

knowledge about health behavior change in this population and help reduce the smoking disparities that plague LGBT youths.

Leadership

Facilitating a smoking cessation intervention for a group of teenagers would not be an easy task, let alone a group of LGBT teenagers. LGBT teenagers are going through so many changes, and stressful and confusing situations: they are trying to fit in, find themselves, “come out”, be someone they are not, avoid bullying, do well in school, and now they are trying to stop smoking, which for many is a way to cope with all of life’s stresses. During this intervention period, the participants will get frustrated, moody, angry, mean, aggressive, and they will most likely take their emotions out on the facilitator or other students. This is where the facilitator really needs to step up and demonstrate his leadership skills and abilities.

LGBT teenagers have many stressors and emotions going on in their lives and, for most, smoking cessation is the last of their worries. In order for the facilitator to run a successful cessation intervention with this population, he or she will need to have the technical skills down, but more importantly, the utilization of “soft skills” will be essential. Having a strong emotional intelligence will allow the facilitator to manage the difficult conversations that arise during different sessions, and to be an effective communicator and advocator. Emotional intelligence is the ability to feel emotions in response to what others, understand what you are feeling, understand how others are feeling, and being able to move forward constructively with the interest of the larger group at heart (Fernandez, 2007). It has to do with being able to build bridges and cultivate alliances with these teenagers, and being able to mend those if they get damaged. The facilitator

will need to have the ability to empathize, be resilient when difficulties arise, and manage one's impulses and stress as well as those of the students. Leaders with strong emotional intelligence are good at motivating others, which is exactly what the participants want and need. They will also be able to find common ground for solving conflicts, managing stress levels, and providing needed direction for the program participants. A facilitator with strong emotional intelligence creates an atmosphere of cohesion and creativity, which will be essential for LGBT youth in a smoking cessation intervention (Fernandez, 2007). Having a developed emotional intelligence will allow the facilitator to better be assertive, be optimistic, be happy, and deal with stress (which will be both the stress of the facilitator and that of the students) (Fernandez, 2007). Nurturing and developing ones emotional intelligence is essential to be an efficient leader and smoking cessation facilitator.

Having strong and developed soft skills is essential for embracing cultural competence, coping with the stresses of life, and managing difficult conversations. The topics and conversations during the sessions will more than likely get heavy, emotional, and difficult. The facilitator must possess patients, calmness, and objectivity (Fernandez, 2008). The facilitator must be an active listener – devoting all of his or her attention on what the student is saying without judgment. Then for clarity, the facilitator should rephrase what he thinks he has heard. The students may need acknowledgement of their frustration, anxiety, anger, or sense of injustice about their current situation in order to feel heard (Fernandez, 2008). In order to be effective at managing difficult conversations, the facilitator must recognize emotions will get high and the student will possibly be feeling a sense of crisis. The solution to this crisis,

which probably has to deal with becoming a non-smoker, will be a difficult solution for many. However, the answers to difficult solutions usually require adaptive work, or personal change. The facilitator needs to be able to lead the participants through the required change: the change of perspectives, beliefs, and feelings (Fernandez, 2008). The facilitator can accomplish this by reframing the change or issue in a different context, which will allow the participants to see the value in becoming a non-smoker and offer them a renewed sense of commitment to that goal. The facilitator needs to help his students see he cares about them and he has an interest in their success and achievements throughout the intervention, and this success will bring new opportunities and a new life for them (Fernandez, 2008).

Communicating effectively and efficiently during high stress situations, which is inevitable during a smoking cessation intervention for LGBT adolescents, requires certain skills that a facilitator must possess. Having a cultivated set of “soft skills” will also help be successful at this task. A helpful tool to use during a crisis situation a facilitator might encounter during a session is the CCO formula – compassion, conviction, and then optimism and hope. The facilitator first reaches out to the concerned student, next he or she follows with a statement of conviction, and finally the facilitator makes a positive or future focused statement (Fernandez and Dickerson, 2014). When the stakes are high and when people are frightened or concerned, compassion is more important than content. The students want to know the facilitator cares before the students’ care what the facilitator knows, which goes back to the overarching theme of having strong “soft skills”. If the facilitator merely relies on his intelligence during times of crisis, he will lose the trust and confidence of the students,

thus it comes down to the facilitators ability to show his listening, caring, and empathy skills, which will capture the students trust during the hard times (Fernandez and Dickerson, 2014). When the time comes the facilitator has to deliver bad news, research shows that one piece of bad news required three bits of good news to balance it out, and too much bad news causes people to merely shut down and stop listening (Fernandez and Dickerson, 2014). It is also important in a smoking cessation intervention that the facilitator does not promise or guarantee this will work for every participant. Even though that is the goal of the program, each person is different and has different triggers and stresses, thus do not make promises that cannot be delivered. The facilitator's goal of this smoking cessation intervention is to inform the participants and attempt to persuade them to stop smoking. Fernandez and Dickerson provide tools for the persuasive message in the acronym "DUMBO" (2014). The facilitator needs to: Deliver the message and know what he is going to say using comfort, familiarity, and authenticity. Use positive language, both verbal and body. Smoking cessation in the LGBT community is a topic that the facilitator feels passionate about, so when he or she is advocating for this he or she must be engaging. Make a personal connection with each of the participants in the cessation program. The facilitator needs to make eye contact with the participants, act comfortable, and smile when appropriate, these gestures send many messages and fosters trust within the group. Be Brief because more words can confuse people rather than add clarity – more is not always better. Overkill is Out – the facilitator should not add information to the discussion that is not true and should be explicit with his words making sure he is not saying what he doesn't mean. The facilitator needs to motivate but not exaggerate or else risk losing the trust

and attention of the students (Fernandez and Dickerson, 2014). The good facilitator will never let communication crises occur to them, they will have most expected situations and messages prepared and practiced in advance. The goal of the facilitator is to use his developed “soft skills” to help communicate effectively with his students in such a way to increase understanding, empowerment, and hope.

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Program	The Last Drag	The Last Drag	Call It Quits (CIQ)	Bitch to Quit (BTQ)	Put It Out (PIO)	QueerTIP	SCTRP Modified	Queer Quit
Author	Eliason et. al. (2012)	Walls & Wisneski (2010)	Matthews et. al. (2013)	Matthews et. al. (2013)	Matthews et. al. (2013)	Greenwood & Hunt (2002)	Harding et. al. (2004)	Dickson-Spillmann et. al. (2014)
Location	San Francisco LGBT Community Center	Colorado at LGBT community organizations	Chicago; HBHC LGBT friendly community organizations	Chicago; HBHC LGBT friendly community organizations	Chicago; HBHC LGBT friendly community organizations	San Francisco LGBT community organizations	London, UK; Gay men's health community organization	Zurich, Switzerland; conducted in conference rooms
Study Group & Age range (years)	N=233; 21 – 78; mean 44.5	N=44; 18 – 62; mean 35.5	N=105; 18 – 65; mean 41.5	N=33; 18 – 65; mean 38.0	N=60; 18 – 65; mean 40.3	N=18; Mean 37	N=69; 23 – 63; mean 37.1	N=70; Mean 42.96
Time span/number of sessions	6 weeks; 7 sessions; 2 hour sessions	6 weeks; 7 sessions; 2 hour sessions	8 weekly sessions; 90 minute sessions	8 weekly sessions; 90 minute sessions	6 weekly sessions; 90 minute sessions	8 weeks; 9 sessions; 2 hour sessions	7 weekly sessions; 2 hour sessions	7 weekly sessions; 2.5 hour sessions
Intervention	1. Underlying content is based on the ALA-FFS curriculum 2. LGBT culturally tailored 3. Use LGBT: facilitator, group support, language, tobacco information, disparities, risk factors in session lessons	1. Underlying content is based on the ALA-FFS curriculum 2. LGBT culturally tailored 3. Use LGBT: facilitator, group support, language, tobacco information, disparities, risk factors in sessions lessons	1. Underlying content is based on the ALA-FFS curriculum 2. LGBT culturally tailored 3. Hosting programs at LGBT community organization; LGBT identified facilitator 4. LGBT: health concerns, stress due to homophobia, bar culture, targeting by tobacco industry, specific smoking rates, empowerment 5. Peer support "buddy"	1. Underlying content is based on the ALA-FFS curriculum 2. LGBT culturally tailored 3. Hosting programs at LGBT community organization; LGBT identified facilitator 4. LGBT: health concerns, stress due to homophobia, bar culture, targeting by tobacco industry, specific smoking rates, empowerment	1. Underlying content is based on the ALA-FFS curriculum 2. LGBT culturally tailored 3. Hosting programs at LGBT community organization; LGBT identified facilitator 4. LGBT: health concerns, stress due to homophobia, bar culture, targeting by tobacco industry, specific smoking rates, empowerment 5. Free NRT offered	1. Underlying content is based on the ALA-FFS, "Fresh Start", "Out and Free", "The Last Drag" 2. LGBT culturally tailored 3. Safe and supportive environment 4. Addresses unique LGBT issues 5. Appeals to diverse LGBT communities 6. Builds on LGBT coping skills developed while "coming out" 7.Coping strategies 8. Prevention plans	1. Based on NHS approved SCTRP intervention 2. Culturally tailored for gay men; facilitated by gay men 3. NRT use 4. Forming "Quit Cells" or "Quit teams" 5. Non-judgmental environment 6. Use of assertiveness 7. On-going peer support 8. Carbon monoxide monitor	1. Based on NHS approved SCTRP intervention 2. Culturally tailored for gay men; facilitated by gay men 3. NRT use 4. Forming "Quit Cells" or "Quit teams" 5. Non-judgmental environment 6. Use of assertiveness 7. On-going peer support 8. Carbon monoxide monitor 9. Updated with Swiss information
Mean cigarettes per day	18.4	17.8	39.9% smoked 11-20 cigarettes per day*	39.9% smoked 11-20 cigarettes per day*	39.9% smoked 11-20 cigarettes per day*	NR	39% smoked 11-20 cigarettes per day	NR
Intention to quit smoking	73% within the next 30 days	47.7% within the next 30 days	57.2% at baseline*	57.2% at baseline*	57.2% at baseline*	NR	54% thought their chances of quitting were extremely high or very high	Must have a *strong* intention to quit was an eligibility requirement
Average number of quit attempts	NR	6	NR	NR	NR	NR	2.8	3.38
Abstinence at last session	59%	88.9%	39.05%	27.27%	23.33%	40%	64%	65.7%
Follow-up quit stays	1 month – 53% 3 months – 36% 6 months – 36%	NR	NR	NR	NR	NR; 2 "booster" sessions are held at 3 & 6 months after last session	NR	6 month – 28.6%

Table 1: LGBT Specific Adult Interventions

ALA-FFS – American Lung Association Freedom From Smoking; HBHC – Howard Brown Health Center; NR – Not Reported; NRT – nicotine replacement therapy

* All three program's (CIQ, BTQ, PIO) findings were reported in the study as an averaged measure.

Title	**Preventing Tobacco use among lesbian, gay, bisexual, and transgender youths**	**Intension to quit smoking among lesbian, gay, bisexual, and transgender smokers**	**Smoking Cessation Treatment Preferences, Intentions, and Behaviors Among a Large Sample of Colorado Gay, Lesbian, Bisexual, and Transgendered Smokers**	**Beliefs and Perceived Norms Concerning Smoking Cessation Program Recruitment Among African American Teen Smokers: What Appeals to Youth and What Turns Them Away**	**Tobacco Control Recommendations Identified by LGBT Atlantans in a Community-Based Participatory Research Project**	***Queer Quit*: Gay smoker's perspectives on a culturally specific smoking cessation service**	**"I did it my way" – An explorative study of the smoking cessation process among Danish youth**	**Smoking Cessation Interventions in San Francisco's Queer Communities**
Authors	Remafedi & Carol (2004)	Burkhalter et. al. (2009)	Levinson et. al. (2011)	Peters et. al. (2011)	Bryant et. al. (2014)	Schwappach (2009)	Dalum et. al. (2008)	QueerTIP Coalition (2002)
Study Population	30 self-identified LGBT youth under age 25 & 30 indicators – people with in-depth knowledge or experience with the LGBT youth population.	101 self-identified LGBT smokers over 18 years of age (M=39.4 years)	1633 self-identified LGBT smokers between the ages of 18 – 54 years old.	53 African American youth smokers between the ages of 15-19 years old.	36 self-identified LGBT smokers & nonsmokers in the focus groups; 30 community stakeholders. Age range 23 to 58 years old.	325 self-identified gay/bisexual regular smokers (age range 23-52 years) took the survey; 13 gay smokers (M=37 years old) were in the focus groups	26 participants (18 smokers who failed to quit & 8 former smokers who quit) between the ages of 15 – 20 years old	224 LGBT & heterosexual youth (M=18.6 years)
Evaluation Method	Face-to-face interviews	Surveys	Surveys	Focus groups	Focus group & Meeting	Focus groups & Surveys	Face-to-face interviews	Surveys
Aim of Study	To conduct formative qualitative research that focused on: 1. Optimal processes of prevention and cessation 2. Specific strategies to promote tobacco prevention 3. General strategies to foster nonsmoking	1.Determine relevant psychosocial variables that could explain variation in intention to quit smoking 2.Discover findings that would aid in formation of an appropriate LGBT smoking cessation intervention	1. Gauge preferences, intentions, and behaviors related to evidence-based smoking cessation treatments.	1. To increase understanding of culturally appropriate recruitment strategies 2.Explore the beliefs and perceived norms that enable youth to participate in smoking cessation programs	1. To collect qualitative data to identify Strategies for culturally relevant smoking cessation programs & identify steps for future prevention and treatment within the LGBT community	1. To investigate smoking and intention to quit. 2. Explore attitudes and potential use of a gay-specific smoking cessation group program.	1. Explore what cognitive and behavioral strategies adolescents' use in their attempts to quit smoking 2. Their attitudes and beliefs towards smoking cessation and cessation interventions	1. Determine the needs and wants of diverse LGBT subgroups to develop a culturally tailored smoking cessation class for the LGBT population
Main Findings	1. LGBT youth should be involved in the design and implementation of culturally specific interventions 2. Prevention programs should support positive identity formation 3. Entertaining, supportive, interactive, and should involve enjoyable and engaging activities, food, and incentives 4. Address psychosocial and cultural aspects of tobacco use and healthy psychosocial development	1. Positive attitudes, feel more like ideal self, improve health and longevity are related to greater intention to quit 2. Perceived support and approval of partners, loved ones & future goal achievement and life aspirations positively correlate with intention 3. Interventions should include culturally tailored stress management & full body health	1. Interventions should incorporate both evidence based cessation aids and specific LGBT tailored coaching and counseling. 2. Educate this population on the use and benefits of NRT. 3. Make evidence-based support for cessation available in LGBT venues. 4. Increase motivation to quit and access to quit aids	1. Motivation to quit: personal fitness/ health, family sickness. 2. Views on cessation programs: not effective, caused smoking, & lack of activities. 3. In order to participate in program: effective and attractive source communication, professional source 4. Food, fun activities, rap contest, music, affected/ direct source communication	1. Both the focus groups and the meeting said: LGBT focused cessation programs, community awareness of the LGBT smoking disparity, expanding smoke free community spaces, LGBT role models to promote quitting, both saw bar culture as a workable problem. The meeting:Focus on overall wellness.	1. Both groups showed a strong preference for gay tailored program 2. They expect the facilitator to be a gay, ex-smoking male who knows the "scene", is supportive, warm, & trusting. 3. Want follow-up meetings, support in avoiding relapse, support for weight gain, & reflect on the special needs of gay men. 4. Gay bar culture is a challenge	1. Motivation, will power, and/or negative health problems are needed to quit. 2. Negative side effects such as weight gain & cravings can hinder the quit process. 3. Participants saw cessation programs as patronizing and not able to understand actual struggles of youth. 4. Interventions should be flexible, positive learning & self-efficacy taught Use SMS/internet and youth clubs.	1. Youth programs: Prefer LGBT specific programs, would like the use of LGBT images, want to hear LGBT ex-smokers, hear from an LGBT sensitive doctor, use of a total health approach.

Table 2: Non-intervention studies targeting attitudes and perceptions toward cessation for youth, LGBT youth, *or* LGBT Adults

INPUTS	ACTIVITIES	OUTPUTS	OUTCOMES	
			Short-term	**Long-Term**
People: • Certified and professional intervention facilitators • High school or college student volunteers • Local physician • Program Participants Organizational: • LGBT community center or LGBT friendly organization to hold intervention; preferably including a large room or gym for activities. Funding: • Grant funding • Community donations • Organizational support/donations Materials and Resources: • Computers, printers, & office supplies • Lesson materials from pervious interventions • Materials and equipment for activities • Food and drinks	Develop a facilitator guidebook Develop a training manual Develop an evaluation plan Create evaluation tools such as baseline surveys, weekly surveys, and wrap-up surveys Recruit and train two professional LGBT identified intervention facilitators Recruit and train two to four late high school or college aged, LGBT ex-smokers for extra support and personal stories Identify and recruit a local LGBT or LGBT friendly physician Create and strategically place informational fliers and other recruitment media Recruit self-identified LGBT youth (13-18 years old) smokers to participate in the intervention	A culturally appropriate group smoking cessation intervention consisting of 13 sessions (9 in-class, 4 follow-up interviews) that inform 15-20 self-identified LGBT youth smokers A fun, engaging, and age appropriate game/activity for each in-class session A planned dinner or heavy snack option for every in-class session	Have a 70% participant retention rate from the first session to the last in-class session, session 9 Measured during session 9, 75% of the participants report a seven-day point prevalence of smoking abstinence (self-report and CO monitor) By session 9, decrease nicotine dependence of each participant By session 9, decrease number of cigarettes smoked per day by each participant By session 9, decrease the anxiety and depression each participant feels resulting from cultural stressors	Have a 60% retention rate at the 12-month follow-up interview At the 6-month follow-up, 45% of the participants report a seven-day point prevalence of smoking abstinence (self-report and CO monitor) At the 12-month follow-up, 40% of the participants report a seven-day point prevalence of smoking abstinence (self-report and CO monitor) At the 12 month follow-up, nicotine dependence has severely decreased for each participant At the 12 month follow-up, number of cigarettes smoked per day has severely decreased or is at complete abstinence At the 12-month follow-up, anxiety and depression resulting from cultural stressors has severely decreased and the participants feel comfortable with themselves, or have turned to healthier ways to channel these emotions.

Table 3: Logic Model for the development of a culturally tailored smoking cessation intervention for LGBT youth.

Session	Week	Lesson*	Activity	Activity Significance	Mealtime
1	1	Educates the participants about what to expect from this program, instills hope, builds and encourages social support, trust, and a safe space; explores unique health issues facing LGBT smokers who want to quit.*	"Riding the bus" and "Trust Fall"	These games are "ice breakers". The goal is to get to know each other and build relationships, social support, trust and communication skills between one another.	Break participants into groups of 3 and 4 to have them eat with a new group.
2	2	Explores reasons for smoking, identifies patterns and triggers that lead to smoking, identifies the role smoking plays in a person's identity (e.g. smoking to appear more masculine), community (e.g. gay bars as social hangouts), and daily life experiences (e.g. stresses of being LGBT in a homophobic culture), and quit smoking tools.*	"Killing your body, one puff at a time" – modeled after the game "Battleship".	The game teaches the participants about the negative effects smoking has on the body. Teaches about the different chemicals in cigarette smoke and the diseases smoking can cause that take over one's body and can kill.	Break participants into groups of 3 and 4 to have them eat with a different group.
3	3	Addresses feelings related to an anticipated quit date, stages of grief, reaffirms reasons for quitting, such as health concerns, builds on LGBT coping skills used and developed during the "coming out" process or in dealing with daily cultural stressors, societal discrimination and/or rejection. A 24 hour quit plan is developed.*	Interactive Theater Performance – High risk smoking situations	Performers and participants will act out high-risk situations where they are challenged to smoke or peer pressured. This is a great way to practice high-risk situations and get a game plan in order.	Have the participants sit with a different group and discuss coping strategies.
4	4	This is Quit Night. Participants should have their last cigarette before class. This session is all about celebrating and supporting each other as each stops smoking. A 48-72 hour quit plan is developed. Unique LGBT issues and triggers during the quitting process are discussed.*	Dunk the facilitator in the Dunk Tank and relaxation, stretching, and deep breathing	This is a stressful class. Dunking the facilitator might help the participant keep his mind off of his cravings and have a few laughs. He will be able to release some anger and aggression both with the dunk tank and relaxation techniques.	They can eat dinner with anyone they feel comfortable eating with.
5	4	This session occurs three days after Quit Night. It supports and encourages quit efforts, reviews and problem-solves lapses or difficulties, reinforces group support, and emphasizes individual and community strengths of LGBT to become smoke-free.*	Yoga and meditation	The participants are stressed and dealing with withdrawal symptoms. Yoga and meditation will relax them and attempt to take their mind off of cravings and negative energy.	They can eat dinner with anyone they feel comfortable eating with.
6	5	Similar to the previous session. This session focuses on maintenance issues general to all people and specific to LGBT smokers who have quit. It prepares LGBT smokers to handle on going social pressures in LGBT communities to smoke, and encourages identification of non-bar social-recreational activities.*	Scavenger Hunt	To expose the participants to safe places where they can participate in fun, social activities that do not involve smoking, alcohol, or other illegal substances.	They can eat dinner with anyone they feel comfortable eating with.
7	6	Explores cycles of shame and addiction, reinforces assertiveness skills and coping strategies, continue to encourage and update maintenance plans and relapse prevention planning, and identifies how to be "out" as a non-smoker. *	Writing/perform a song, rap, story, free verse, or poem. Then karaoke night.	This will allow the participants to write about and express their smoke free journey thus far in a supportive and encouraging environment. Challenges and successes should be addressed.	They can eat dinner with anyone they feel comfortable eating with.
8	7	Continues to identify short and longer term maintenance plans, identifies and discusses how LGBT communities are targeted by tobacco companies, identifies and discusses instances of discrimination and oppression. Plans are made for the last class celebration.*	Jeopardy/ Trivia Night	This activity will allow the participants to reflect back over the entire intervention and answer questions about different classes, smoking statistics, as well as general knowledge and pop culture.	They can eat dinner with anyone they feel comfortable eating with.
9	8	This is the last class session. The class celebrates a smoke-free lifestyle and community. On going social support and contact is encouraged to remain smoke free. This session encourages and discusses actions for long-term personal and social community action.*	Celebration and short speech	This is the night that all the hard work is celebrated. It gives the participants an opportunity to mingle amongst friends without alcohol, drugs, or tobacco. The participants will give a short speech addressing what they are looking forward to most and the benefits of a nonsmoker.	They can eat dinner with anyone they feel comfortable eating with.
10	1-month follow-up after session 9	Follow-up one-on-one motivational interviews (if relapsed) and discussions that celebrate living life as a non-smoker, encourage ongoing social support and contact, discuss relapse triggers and how to utilize coping mechanisms and problem solve, and encourage actions for long-term abstinence. *	$10 Wal-Mart gift card as an incentive	To keep the participant coming back to the follow-up interviews, even though the class sessions are over.	Snacks and beverage provided
11	3-month follow-up after session 9	Follow-up one-on-one motivational interviews (if relapsed) and discussions that celebrate living life as a non-smoker, encourage ongoing social support and contact, discuss relapse triggers and how to utilize coping mechanisms and problem solve, and encourage actions for long-term abstinence.*	$10 Wal-Mart gift card as an incentive	To keep the participant coming back to the follow-up interviews, even though the class sessions are over.	Snacks and beverage provided
12	6-month follow-up after session 9	Follow-up one-on-one motivational interviews (if relapsed) and discussions that celebrate living life as a non-smoker, encourage ongoing social support and contact, discuss relapse triggers and how to utilize coping mechanisms and problem solve, and encourage actions for long-term abstinence.*	$10 Wal-Mart gift card as an incentive	To keep the participant coming back to the follow-up interviews, even though the class sessions are over.	Snacks and beverage provided
13	12-month follow-up after session 9	Follow-up one-on-one motivational interviews (if relapsed) and discussions that celebrate living life as a non-smoker, encourage ongoing social support and contact, discuss relapse triggers and how to utilize coping mechanisms and problem solve, and encourage actions for long-term abstinence.*	$10 Wal-Mart gift card as an incentive $30 gift card if verified smoke-free.	To keep the participant coming back to the follow-up interviews, even though the class sessions are over.	Snacks and beverage provided

Table 4: Program Plan Summary of a culturally tailored smoking cessation intervention targeting LGBT youth smokers.

* Greenwood, G. L., & Hunt, C. (2002). QueerTIPS For LGBT Smokers: A Stop Smoking Class for Lesbian, Gay, Bisexual and Transgender Communities.

	Question	Indicator	Evaluation method
Implementation	Were the activities and intervention implemented as planned?	• I enjoyed this week's activity before the lesson. • This week's activity was engaging. • I felt the content was appropriate for the LGBT youth population? If you disagree, why? • Mealtime gave me a better opportunity to get to know and bond with the other participants better.	• Surveys and open-ended responses. • Observations • Interview
Effectiveness	Overall, did the intervention decrease the amount of smokers?	1) Measured during session 9, 6-month follow-up and 12-month follow-up, 75%, 45%, and 40%, respectively, of the participants report a seven-day point prevalence of smoking abstinence. 2) By session 9 and at 12-month follow-up, decrease nicotine dependence of each participant.	1) Participants will self-report then be biochemically verified using a Carbon Monoxide monitor. 2) Adapted version of Fagerstrom Tolerance Questionnaire (FTQ) for adolescence.
	Did the intervention address cultural issues that affect LGBT youth in a way that decreases the amount of smokers?	1) Decrease level of anxiety at the end of session 9 and at 12-month follow-up. 2) Decrease level of depression at the end of session 9 and at 12-month follow-up. 3) Decrease level of minority stress factors at the end of session 9 and at 12-month follow-up. 4) I enjoyed this smoking cessation intervention was culturally tailored for the LGBT population. 5) Overall, I thought the content of the intervention and the fact it was specifically tailored for the LGBT population helped me in my journey to becoming a nonsmoker.	1) Beck Anxiety Inventory (BAI) 2) Beck Depression Inventory (BDI-V) 3) Internalized Homophobia Scale, Level of Outness Scale, Experience of Discrimination Scale, Modified Devaluation-Discrimination Scale (Stigma consciousness) 4) Survey and Interview 5) Survey and Interview
Efficiency	Was the cost and time of the intervention worth the amount of people that it consistently reached over the program lifecycle?	• Have a 70% participant retention rate from the first session to the last in-class session, session 9. • Have a 60% retention rate at the 12-month follow-up interview. • The amount of sessions each person attended	• Attendance logs
Attribution	Were the outcomes a result of the activities and content in the intervention as opposed to an outside force?	• I believe the content of this session was helpful in my journey to become a nonsmoker, or stay smoke-free. • Overall, I thought the content of the intervention and the fact it was specifically tailored for the LGBT population helped me in my journey to becoming a nonsmoker.	• Survey • Interview

Table 5: Specific Evaluation Questions, Indicators, and Evaluation Methods

References

Adelman WP, Duggan AK, Hauptman P, Joffe A. Effectiveness of a high school smoking cessation program. Pediatrics. 2001;107(4):E50.

American Lung Association. (2010). Smoking out a deadly threat: Tobacco use in the LGBT community (Annual report). *Retrieved from American Lung Association website: http://www. LungUSA. org*.

Bryant, L. & Damarin, A. K. & Marshall, Z.(2014). Tobacco Control Recommendations Identified by LGBT Atlantans in a Community-Based Participatory Research Project. *Progress in Community Health Partnerships: Research, Education, and Action* 8(3), 269-279. The Johns Hopkins University Press. Retrieved April 13, 2015, from Project MUSE database.

Burkhalter, J., Warren, B., Shuk, E., Primavera, L., & Ostroff, J. (2009). Intention to quit smoking among lesbian, gay, bisexual, and transgender smokers. *Nicotine & Tobacco Research*, *11*(11), 1312-1320.

Centers for Disease Control and Prevention. (2011). Introduction to Program Evaluation for Public Health Programs: A Self-Study Guide. Atlanta, GA: Centers for Disease Control and Prevention.

Colby, S. M., Monti, P. M., Barnett, N. P., Rohsenow, D. J., Weissman, K., Spirito, A., ... & Lewander, W. J. (1998). Brief motivational interviewing in a hospital setting for adolescent smoking: a preliminary study. *Journal of consulting and clinical psychology*, *66*(3), 574.

Dalum P, Schaalma H, Nielsen GA, Kok G. "I did it my way"--an explorative study of the smoking cessation process among Danish youth. Patient Educ Couns. 2008;73(2):318-24.

Dickson-Spillmann, M., Sullivan, R., Zahno, B., & Schaub, M. P. (2014). Queer quit: a pilot study of a smoking cessation programme tailored to gay men. *BMC Public Health*, *14*, 126. doi:10.1186/1471-2458-14-126

Eliason, M. J., Dibble, S. L., Gordon, R., & Soliz, G. B. (2012). The last drag: An evaluation of an LGBT-specific smoking intervention. *Journal Of Homosexuality*, *59*(6), 864-878. doi:10.1080/00918369.2012.694770

Fernandez CP. "Managing the Difficult Conversation". J Public Health Manag Pract 2008;14(3):317-19.

Fernandez, C.P., & Dickerson, V. (2014). Effective Advocacy and Communication. [PowerPoint slides].

Fernandez CSP. "Emotional intelligence in the workplace". J Public Health Manag Pract 2007;13(1):80-2.

Fiore, M. C., Jaen, C. R., Baker, T. B., Bailey, W. C., Benowitz, N., & Curry, S. J. et. al. (2008). Treating tobacco use and dependence: 2008 update US Public Health Service Clinical Practice Guideline executive summary. *Respiratory care*, *53*(9), 1217-1222.

Greenwood, G. L., & Hunt, C. (2002). QueerTIPS For LGBT Smokers: A Stop Smoking Class for Lesbian, Gay, Bisexual and Transgender Communities.

Harding, R., Bensley, J., & Corrigan, N. (2004). Targeting smoking cessation to high prevalence communities: outcomes from a pilot intervention for gay men. *BMC Public Health*, *4*, 43. doi:10.1186/1471-2458-4-43

Hu MC, Davies M, Kandel DB. Epidemiology and correlates of daily smoking and nicotine dependence among young adults in the United States. Am J Public Health 2006;96:299-308.

Issel, L.M. (2009). Health Program Planning and Evaluation: A Practical, Systematic Approach for Community Health (2nd ed.). Sudbury, MA: Jones and Bartlett Learning.

King BA, Dube SR, Tynan MA. Current tobacco use among adults in the United States: findingsfrom the National Adult Tobacco Survey. Am J Public Health 2012; 102(11):e93-e100.

Kreuter MW, Lukwago SN, Bucholtz RD, Clark EM, Sanders-thompson V. Achieving cultural appropriateness in health promotion programs: targeted and tailored approaches. Health Educ Behav. 2003;30(2):133-46.

Lando, H. A., McGovern, P. G., Barrios, F. X., & Etringer, B. D. (1990). Comparative evaluation of American Cancer Society and American Lung Association smoking cessation clinics. *American Journal of Public Health*, *80*(5), 554-559.

Levinson AH, Hood N, Mahajan R, Russ R. Smoking cessation treatment preferences, intentions, and behaviors among a large sample of Colorado gay, lesbian, bisexual, and transgendered smokers. Nicotine Tob Res. 2012;14(8):910-8.

Matthews, A. K., Li, C., Kuhns, L. M., Tasker, T. B., & Cesario, J. A. (2013). Results from a Community-Based Smoking Cessation Treatment Program for LGBT Smokers. *Journal Of Environmental & Public Health*, *2013*984508. doi:10.1155/2013/984508

Mays, V. M., & Cochran, S. D. (2001). Mental health correlates of perceived discrimination among lesbian, gay, and bisexual adults in the United States. *American Journal of Public Health*, *91*(11), 1869-1876.

McGovern, P. G., & Lando, H. A. (1992). An assessment of nicotine gum as an adjunct to freedom from smoking cessation clinics. *Addictive behaviors*, *17*(2), 137-147.

Miller, W.R., Rollnick S. (2002). Motivational Interviewing: Preparing People for Change, Vol. 2. New York: Guilford.

Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. *Psychological bulletin*, *129*(5), 674.

National Youth Advocacy Coalition. (ND). Coming out about smoking: A Report from the National LGBTQ Young Adult Tobacco Project.

Peters, R. J., Meshack, A., Kelder, S. H., Springer, A., & Agurcia, C. (2011). Beliefs and Perceived Norms Concerning Smoking Cessation Program Recruitment Among African American Teen Smokers: What Appeals to Youth and What Turns Them Away. *Journal Of Ethnicity In Substance Abuse*, *10*(3), 246-255.

QueerTIP Coalition. (2002). Smoking cessation intervention in San Francisco's queer communities. *Science-to-Community Series, Prevention #11*. Retrieved from www.ari.ucsf.edu/science/s2c/queertip.pdf.

Remafedi G, Carol H. Preventing tobacco use among lesbian, gay, bisexual, and transgender youths. Nicotine Tob Res. 2005;7(2):249-56.

Remafedi, G. (2007). Lesbian, gay, bisexual, and transgender youths: Who smokes, and why?. *Nicotine & Tobacco Research*, *9*(Suppl 1), S65-S71.

Rosenbaum, P., & O'Shea, R. (1992). Large-scale study of freedom from smoking clinics--factors in quitting. *Public Health Reports*, *107*(2), 150.

Schwappach, D. L.B. (2009), *Queer Quit:* Gay smokers' perspectives on a culturally specific smoking cessation service. Health Expectations, 12: 383–395. doi: 10.1111/j.1369-7625.2009.00550.x

Soliz, G. (2006). *The Last Drag: A Lesbian, Gay, Bisexual, Transgender, HIV-positive Stop Smoking Program* (p. 82). San Francisco, California.

Thomson, H. (2012). A successful approach to reduce youth smoking in Leicestershire. *British Journal of School Nursing*, *7*(9), 441-447.

Walls, N. E., & Wisneski, H. (2011). Evaluation of smoking cessation classes for the lesbian, gay, bisexual, and transgender community. *Journal Of Social Service Research*, *37*(1), 99-111. doi:10.1080/01488376.2011.524531

Washington, H. A. (2002). Burning love: big tobacco takes aim at LGBT youths. *American Journal of public health*, *92*(7), 1086-1095.

WK Kellogg Foundation. (2004). WK Kellogg Foundation Logic Model Development Guide.