

2014

Adolescent and Community Adult Perceptions of Adolescent Tobacco Use

Susan M. Franko
Walden University

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>

 Part of the [Public Health Education and Promotion Commons](#)

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Health Sciences

This is to certify that the doctoral dissertation by

Susan Franko

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee

Dr. Michael Dunn, Committee Chairperson, Public Health Faculty
Dr. Aimee Ferraro, Committee Member, Public Health Faculty
Dr. Nancy Rea, University Reviewer, Public Health Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2014

Abstract

Adolescent and Community Adult Perceptions of Adolescent Tobacco Use

by

Susan M Franko

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

School of Health Sciences

Walden University

November 2014

Abstract

In 1964, the Surgeon General issued the first report that linked smoking cigarettes as a direct cause of emphysema, heart disease, and lung cancer. Despite this landmark publication, the primary cause of preventable deaths each year in the United States continues to be related to the use of tobacco. Regardless of decades of health education and resources available to inform society that the use of tobacco products can have deleterious effects on health, adolescents continue to experiment with them. The purpose of this study was to gain a better understanding of the influences of adolescent tobacco use. Based on the social cognitive theory, this qualitative study involved adolescent individual interviews and community adult focus groups to compare the perceptions of what influences adolescents to use tobacco. Responses of both the adolescents and community adults were coded, categorized into themes, and ranked based on their similarities and differences. The most notable findings in the adolescent group was their indifference to smoking, whereas the community adults had strong negative perceptions of smoking. Moreover, the media was not felt to be a strong influence; however, adolescents thought it was somewhat of an influence. Tobacco use of peers was not determined to be a strong influence in the perceptions of either groups. The impact for positive social change is a better understanding among both adolescents and adults of the perceptions of adolescent smoking. This enhanced understanding indicates a need to denormalize smoking behavior to subsequently decrease the number of adult smokers and tobacco-related deaths.

Adolescent and Community Adult Perceptions of Adolescent Tobacco Use

by

Susan M Franko

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

School of Health Sciences

Walden University

November 2014

Dedication

I dedicate this dissertation to my precious grandchildren Soria Evelyn, Asher Stewart, and Cameron Sullivan in the hopes that you all live long and happy tobacco-free lives.

Acknowledgments

I would like to thank my committee chair Dr Michael Dunn and posthumously acknowledge committee member Dr John Kowalczyk for their willingness to guide me through this process. I would also like to recognize Dr Aimee Ferraro for her willingness to step into the position as committee member following the unfortunate loss of Dr K. I am very grateful to my husband Fred for his tireless support and love. Your patience through this process will never be forgotten and reveals what an amazing partner you are. I would also like to acknowledge the support I received throughout this process from two of my closest friends, Elizabeth and Arlene, who each in their own way provided enduring encouragement of my educational endeavors, as well as our children and their spouses, Scott and Erin and Erika and Tia.

Table of Contents

List of Tables	iv
List of Figures	v
Chapter 1: Introduction to the Study	1
Background of the Study	2
Problem Statement	5
Purpose of the Study	6
Theoretical Framework	7
Nature of the Study	8
Research Questions	8
Operational Definitions	9
Assumptions	9
Limitations	10
Delimitations	10
Scope	11
Significance of the Study	12
Summary	13
Chapter 2: Literature Review	14
Literature Search Strategy	14
Theoretical Frameworks	15
Primary Socialization Theory	16
Social Identity Theory	17

Social Network Theory	19
Social Cognitive Theory	22
Friendship Homophily	31
Adolescent Tobacco use Influences	36
Peer	
Influence	36
Friends, Relationships, Social Crowds and Peer Groups.....	41
Influence of Family and Friends	55
Media Influence.....	58
Review of Adolescent Smoking Influences	59
Heuristic Model: Role of Media Influence in Adolescent Smoking Initiation.....	60
Smoking in the Media.....	66
Assessment of Influence of Movie Tobacco use	69
Connecting Exposure to Media Smoking with Youth Tobacco use	71
Review of Qualitative Methodology.....	75
Summary	77
Chapter 3: Research Method.....	80
Research Methodolgy and Design	80
Role of the Researcher	82
Interview Protocol.....	83
Participants.....	84
Data Collection	85

Protection of Participants	88
Structured Interview Guide.....	89
Data Analysis	90
Exemplar	92
Validity and Reliability.....	92
Summary	93
Chapter 4: Results.....	94
Introduction.....	94
Study Location	94
Population	95
Recruitment.....	95
Piloting.....	95
General Recruitment	96
Structured Interview Guide and Individual Interview Protocol.....	97
Data Collection	99
Theme Analysis of Transcripts	102
Research Questions.....	104
Results of Perceptions by Research Question.....	104
Additional Findings	111
Data Saturation.....	119
Data Quality	119
Summary.....	120

Chapter 5: Discussion, Conclusions, and Recommendations	122
Introduction.....	122
Interpretation of Findings	124
Peer Influence	124
Media Influence	124
Community Influence	125
Attitudes toward Tobacco use.....	126
Normalization	126
Conclusions.....	127
Limitations of Study	128
Recommendations for Action	132
Recommendations for Future Research.....	135
Implications for Social Change.....	137
Conclusion	140
References.....	142
Appendix A: Correspondance with Primary Author of Structured Interview Guide	165
Appendix B: Correspondance with Primary Author for Permission of Figure use.....	167
Appendix C: Modified Adolescent Individual Interview/Community Adult Focus Group Protocol	168
Appendix D: Raw Transcripts of Adolescent Individual Interviews/Community Adult Focus Groups	169
Curriculum Vitae	186

List of Tables

Table 1. Demographic Profiles for Participating Schools87

Table 2. Adolescent Individual Interviews and Community Adult
Participants.....101

Table 3. Adolescent and Community Adults Participants' Gender102

List of Figures

Figure 1. National health interview survey, 1965-2011.	3
Figure 2. The Heuristic model for the effect of media exposure on smoking initiation....	62
Figure 3. Adolescents' perceptions of what influences tobacco use	105
Figure 4. Community adults' perceptions of what influences tobacco use	107
Figure 5. Comparison of adolescent and community adult perceptions of what influences tobacco use.....	108
Figure 6. Population of tobacco use.....	112
Figure 7. Feelings of tobacco use	114
Figure 8. Tobacco rules at school	116
Figure 9. Quitting smoking.....	118

Chapter 1: Introduction to the Study

According to the United States Department of Health and Human Services ([USDHHS], 2012), the prevalence of adolescents who revealed past-month cigarette smoking was at an all-time low of 12.7%, which accounted for a 55% decrease in adolescent-reported smoking from the 1996 and 1997 highest rate of 28.3%. Despite the steady decrease in adolescent tobacco use, by the age of 18 years, about two-thirds of people below the age of 20 have experimented with smoking, with the highest amount of cigarette experimentation taking place between the ages of 13 and 16 years respectively (Duncan, Tildesley, Duncan, & Hops, 1995; Giovino, 2002). This population of adolescent smokers has the potential to turn into chronically addicted tobacco users for life.

Peer relationships and the influence of peers are frequently cited as major factors related to nicotine use among adolescents (Flay et al., 1994; Pierce, Distefan, Kaplan, & Gilpin, 2005). These studies provided the suggestion that adolescent friendship lines are usually characterized by smoking behavior, where cigarette smokers make friends with fellow smokers, and nonsmokers are friends with fellow nonsmokers (Gilman et al., 2009; Michell & Amos, 1997). Noncigarette smokers who fraternize with smokers reveal a higher tendency for gravitating towards nicotine use in comparison to adolescents without friends who smoke (Chassin et al., 2008; Flay, Hu, & Richardson, 1998; Urberg, Luo, Pilgrim, & Degirmencioglu, 2003). Additionally, transitions to elevated degrees of nicotine or tobacco use have been associated with the encouragement and approval from

friends (Flay et al., 1998), and this encouragement advises that smoking is enjoyable and increases social popularity and status (Darling & Cumsille, 2003).

Background

The majority of adult tobacco users became addicted to nicotine while they were in their teens. According to Freedman, Nelson, and Feldman (2012), 80% of tobacco users began their addiction before the age of 18. Decades of health education and federally-funded resources available to inform adolescents and adults that the use of tobacco products causes a multitude of physical ailments has helped to reduce the overall number of smokers; however, since the late 1990s, the previous decline in adolescent smokers has remained stagnant and well above the goal set by Healthy People 2020 as depicted in Figure 1 below (Rosen & Maurer, 2008). This highlights the fact that lingering factors remain that continue to influence adolescents to initiate smoking and serve as a barometer of the status quo. Adolescent smokers often turn into adult smokers, continuing the chain of risky behavioral patterns.

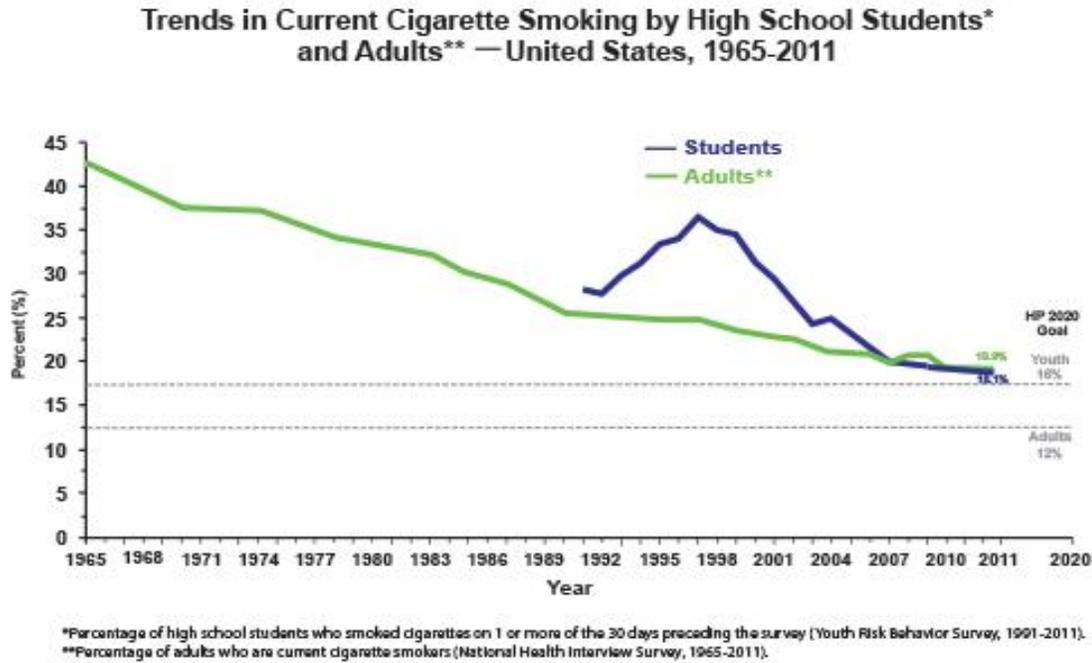


Figure 1. Trends in current cigarette smoking 1965-2011 (CDC.gov)
www.cdc.gov/tobacco/data_statistics/tables/trends/cig_smoking/

Based on the previous research, Flay et al. (1998) maintained that the social influence of peers is a strong influence in the individual's decision to use tobacco or other substances. Adolescents are typically very social and tend to follow the opinions and actions of their peers. Based on this orientation, they may be more easily swayed or feel pressured into trying a negative health behavior of their peers just for the sake of blending into the peer group or acquiring group acceptance. Thus, to decrease the current rate of tobacco use in the United States, concentration needs to be placed on existing efforts and resources on prohibiting adolescents from beginning the use of tobacco products or at least curtail their initiation. Johnson, Kalaw, Lovato, Baillie, and Chambers (2004) found that youth who did smoke wanted to experience what smoking was like, but did not like the feeling of becoming dependent on tobacco. Studies done by

Ellickson, Bird, Orlando, Klein, and McCaffrey (2003) and Lakon, Hipp, and Timberlake (2010) collected data, using quantitative and mixed methods, on the social context of adolescent smoking behavior and smoking frequency patterns of adolescents. Furthermore, studies by Kaestle and Wiles (2010) and Langlois, Petosa, and Hallam (1999) discussed the most effective way to educate adolescents on the dangers of smoking were designed to aid in smoking prevention. Still others stressed smoking cessation in this age group (Breslau & Peterson, 1996; Sargent, Mott, & Stevens, 1998; Siqueira, Rolnitzky, & Rickert, 2001).

The information gleaned from previous studies has helped to enhance tobacco prevention education at the local, state, and national levels to provide information and education on the dangers of tobacco use to guide youths into making healthy choices for themselves. I also reviewed previous studies of many different aspects of adolescent tobacco use; however, they have not considered the adolescents' perceptions and those of their parents. As public health educators, it is necessary to elucidate the gaps between the perceptions of adolescents and the perceptions of adults to provide adolescents with tools of empowerment to stay away from tobacco as well as to assist parents and other adults with antitobacco education that will reach adolescents and be meaningful to them. Adolescents' perceptions should drive proactive health education. The likelihood of reaching adolescents with proactive health information should make them more receptive if it is based on their own views and opinions.

Problem Statement

This research attempted to determine how relationships between adolescents and peers, role models, family, and the potential role of viewing smoking in the media act to influence the adolescents' decision to smoke. Answers gleaned through this research can prove imperative to proactive antitobacco education to truly reach adolescents and help them decide against tobacco use. Smoking has definitely declined over the past several decades as noted in Figure 1; however smoking cancers of the lung and bronchus account for 31.1% of all cancer deaths in the research area of Fulton County, New York (American Cancer Society, 2012). Therefore, the research will determine what factors influence adolescent smoking in this community, based on the perceptions of adolescents and the perceptions of community adults.

Despite the extensive research identifying links between adolescent peer relationships and tobacco use (Bauman & Ennett, 1996; Urberg, Luo, Pilgram & Degirmencioglu, 2003; Ennett & Bauman, 1994), the general understanding concerning how peers influence each other's smoking behavior remains grossly inadequate. For instance, the processes by which teenagers are socialized to smoke, encompassing both being influenced by and influencing their peer relations, is not very evident. The degree to which the smoking of cigarettes or variables associated with tobacco smoking are related to the decisions of adolescents to opt in or opt out of relationships with peers is also not known. Even less is obvious about the parallel or complementary process of selection, where adolescents are chosen by peers to belong to group friendships or cliques or are kept out of such relationships on the basis of tobacco use. The limitations stated

above in the general understanding of peer influences to youthful smoking are based partly on the limitations placed by conventional methodologies and their capacity for providing only a surface level appraisal of peer relationships. Academic studies such as Fisher and Bauman (2006) and Chuang, Ennet, Bauman, and Foshee (2009) have taken into consideration peer relationships and peer behaviors on the influence of adolescent smoking. Chuang et al. (2009) also added the influence or parental behaviors into their study.

Purpose of the Study

The purpose of this study was to collect and compare the perceptions of adolescents and the perceptions of adult community members, which may include parents of current, future, or previously school-aged children, on what factors they believe influence adolescents to initiate tobacco use. This study was conducted in Fulton County New York, where smoking-related mortality is well over the New York state average. Lung and bronchus cancer crude mortality rate per 100,000 people collected between 2009 to 2011 shows New York State's mortality rate at 46.2, compared to 65.6 in Fulton County (NYSDOH, 2014). According to the 2003 Expanded Behavioral Risk Factor Statistical Surveillance report, percentages of smokers in New York State by county range from 16.0% to 30.8%, with Fulton County having the second highest rate at 29.7%. Moreover, the Center for Disease Control and Prevention (2008) listed smoking statistics for adults 18 years of age and older nationally at 21%, and 2007 currently smoking high school students at 20%. Because of the high incidence of smoking in Fulton County and

because I have a vested interest as a resident and community health educator, I decided to invest my research in my own residential area.

Social cognitive theory, most commonly associated with Bandura (1986), was used as the basis of this research to support the findings and conclusions. Adolescent empowerment, proactive activities, and dialogue on the part of parents and adult role models can be useful to halt the devastating effects of tobacco on our nation. Positive social change can occur when the influences on adolescent smoking are understood by parents, adolescents, and educators. This information can only help to augment existing tobacco control prevention programs, with a greater understanding of how to resist the internal and external influences of adolescent tobacco use. In this research, I pondered the factors that may influence the development of tobacco smoking habits among adolescents to determine which has the strongest influences on smoking among adolescents. This research employed social cognitive theory as its theoretical framework. This is because social cognitive theory explains how individuals acquire behavior and habits by learning from the contextual social interactions and relationships (Mischel, 1973). Moreover, heuristic models were employed for the purpose of summarizing proposed relationships between psychological mediators, risk factors for smoking, and tobacco use behavior (Sargent, Heatherton, & Ahrens, 2002).

Theoretical Framework

Multiple qualitative theories specific to social norms were reviewed and considered during this research to explain, predict, and attempt to understand the existing knowledge related to tobacco use. The qualitative nature of the research multiple social

types of theories, related mainly to both internal and external influences. The theory that best fit this research and to provide answers to the research questions based on the structured interview guide was determined to be social cognitive theory.

Nature of study

This study was qualitative in nature and consisted of two disparate groups: adolescents and community adults, which may include parents. I used a structured interview guide that was previously developed and published in a peer-reviewed journal. This qualitative scripting tool was used after receiving permission from the original authors (Plano-Clark et al., 2002). This structured interview guide was used both in the community adult groups and also as the scripting tool in the individual adolescent interviews that were done with each child, in order to protect the privacy of their responses. I carried out all the research as this must be a hands-on process in order to understand the time and effort needed from the point of choosing a topic to the production of the finished study (Charmaz, 2006).

Research Questions

Based on the purpose of the study, the research will explore the following areas:

1. What are the perceptions of adolescents concerning what influences adolescent tobacco use?
2. What are the perceptions of community adults concerning what influences adolescent tobacco use?
3. What are the similarities and differences in the focus groups and interview groups' perceptions on what influences adolescent tobacco use?

Operational definitions

Decision to smoke: Cognitive appraisal and the adolescent making the decision to smoke as defined by Pierce, Choi, Gilpin, Farkas, and Merritt (1996), and Umeh and Barnes (2011).

Familial or role model smoking: The influence on adolescent smoking as defined by Gilman et al. (2009).

Perceptions of adolescents on what influences adolescent tobacco use: Subjective or objective results of the individual interviews with adolescents based on use of a scripting tool developed by Plano-Clark et al. (2003).

Perceptions of community adults on what influences adolescent tobacco use: Subjective or objective results of individual interviews with adolescents based on use of a scripting tool developed by Plano-Clark et al. (2003).

Teenage, adolescent, and youth: These terms are interchangeably employed throughout the study and refer widely to the developmental phase between puberty and majority (Merriam-Webster, 2011).

Assumptions

This research assumed that adolescent smoking behavior was influenced by social learning from peers, relatives, and the media. Behaviors and choices observed during the child's developmental process can lead to future behaviors and choices throughout their lifetime. Addictive behaviors observed can be modeled by the child and become ingrained within their lifestyles. This research was carried out in schools, as the school setting is often a site that adolescents come together and explore and experiment with

tobacco products. Peer groups can influence adolescent tobacco use due to their strong social impact.

Limitations

The major limitation of this study was its defined geography to one county in upstate New York; therefore, findings of the study cannot be compared with a larger representative sample. Cost and time were also limitations as there was only one researcher. Furthermore, availability and willingness of community adults to participate in the research was a limitation. This was based on the limited access to community adults due to their work schedule and interest in attending a focus group purely on a voluntary basis.

Another limitation was that the adolescent individual interviews were required to be done after the end of the school day in the schools' cafeterias. This decreased the availability of the adolescents due to homework, sports, theater, and bus pick up schedules. Although I presented as many options as were feasible such as before the beginning school bell, early evening sessions, or weekend sessions in order to all participants to facilitate their participation, this limitation was real and could not be avoided.

Delimitations

This research was conducted with a sample of adolescents from one county in upstate New York who attend required Health Education classes. Since these students were assigned to attend Health Education class as their required curriculum for

graduation, they may have been more likely to participate in the individual interview process than if they were randomly recruited.

The community adults who participated in the focus survey were those who responded to me directly or were recruited with the help of the school districts' Parent Teacher Association/Parent Teacher Student Association (PTA/PTSA) members who either personally distributed the structured interview guide or discussed it with their friends, acquaintances, and fellow parents. Community adults were also recruited by distribution of the focus group by the adolescents within the Health Education classes and/or by the suggestion of the Health Education teachers in the school districts. The community adults did not need to have a student in the Health Education class, nor in the school district present or past. The potential delimitation in the PTA/PTSA, student, and Health Education teachers' recruitment could have been skewed by those parents who may be more difficult to contact, based on their work schedule, or even their level of engagement with their children's school activities.

Scope

The individual interview protocol for this study was carried out within the confines of Fulton County, New York with adolescents who were attending the required school health education program and a group of community adults who attended focus groups. I scheduled the adult focus groups at such a time when the majority has availability to facilitate participation, which in each of the community adult groups was in the late afternoon or early evening.

Significance of the Study

The results acquired from this study can help fill the void created by an absence of studies concerning the perceptions of adolescents and community adults on the factors they believe influence adolescent tobacco use. No previous research has employed such an approach or perspective, thus highlighting the unique and imperative orientation of the study. This research also provides an empirical and theoretical base for the formulation of policies and programs aimed at reducing the rate of adolescent smoking and the overall size of the current smoking population in our society to be more closely aligned with the Healthy People 2020 initiative goals.

The goal of this research was to impact positive social change by decreasing adolescents' tobacco use. With a better understanding of why adolescents continue to experiment with tobacco products and by identifying and defining triggers, we can tailor more effective prevention programs to assist parents, community adults, community public health educators, and institution educations in this fight.

Summary

In Chapter 1, I introduced the research, defined the purpose of the study to be accomplished, the theoretical constructs that were used and related theories, the basis of the population, and the research questions.

In Chapter 2, the review of the literature on the various behavioral theories is discussed in-depth, along with the reasons for using social cognitive theory as the qualitative research methodology. The literature review thoroughly reviewed reviews the

currently available pool of peer-reviewed research and serves to highlight the significance of this study.

In Chapter 3, I discuss the research methodology that was employed and the data collection process and statistical analysis. Chapter 4 reveals the results of both the adolescent individual interview and the community adult focus groups. Chapter 5 concludes the research and includes the discussion and recommendations of the findings, as well as suggestions for further research.

Chapter 2: Literature Review

The purpose of this research was to collect and compare the perceptions of adolescents and the perceptions of adult community members on what factors they believe influence adolescents to initiate tobacco use. This research was conducted in Fulton County, New York, where smoking-related mortality is the second highest in New York State. This research used data from peer-reviewed resources to investigate the influence of social relationships and media exposure to the smoking behavior among adolescents. This study employed social cognitive theory as the overarching theoretical framework of human behavior acquired via observation. This chapter will demonstrate the current research based on adolescent smoking behavior.

Literature Search Strategy

The most current research related to this topic was reviewed and will be discussed. The research reviewed related to smoking influences came from searching peer-reviewed literature within the previous decade. This literature has been gathered from a wide variety of academic resources encompassing academic peer reviewed journals and other books. Keywords in searching for this literature included *teenage smoking, adolescents and smoking, peer influence and smoking, smoking and youth, and decision to smoke*. Search terms used to research theories related to tobacco use included *social cognitive theory, social identity theory, and social influence on adolescent smoking*.

The aforementioned keywords were applied in a search of academic journal and research databases such as Ovid, Medline, Elsevier, and Psych Articles. This was also in

addition a search of research studies on Google and Google Scholar. Articles that came back from the search that seemed relevant to the study were the ones used in the review. Many resources emerged in the search and these will be reviewed in the course of highlighting the significance of the current research.

Theoretical Frameworks

Various theoretical bases have been employed for the purpose of explaining the process by which social relationships influence the various health-risk behaviors of individuals, such as alcohol, drug, and tobacco use. The perspectives of some of these theoretical bases were taken into consideration in the course of writing this research study, encompassing social cognitive theory, which is a derivative of social learning theory (Bandura, 1986). Despite the fact that social cognitive theory is the major theoretical framework employed by this particular study, some other theories relevant to the research topic were also considered before finally settling upon this theory. These are social identity theory (Abrams & Hogg, 1990), primary socialization theory (Oetting & Donnermeyer, 1998a; Oetting, Donnermeyer, Trimble, & Beauvais, 1998b), and social network theory (Granovetter, 1973; Wasserman & Faust, 1994) respectively. This study concentrates on social cognitive theory for qualitative data collection; however, a discussion of primary socialization, social identity and social network theories will also take place due to the emphasis of these respective theories on social processes, such as interpersonal influence, friend selection, and behavioral imitation. The insights provided by the study of these theories allow me a more thorough comprehension of smoking habits in the context of these social processes. Additionally, a holistic consideration of

these theoretical bases avail me a multidimensional view point of this phenomenon, ranging from a close consideration or assessment of the person and their cognition to the wider social sphere. Delving a notch further than this particular study, the social theoretical bases presented forthwith may also be considered within the contextual setting of a wider theoretical framework elucidating cultural and biological environmental factors related to tobacco smoking, for instance, the triadic theory of influence.

Primary Socialization Theory

Primary socialization theory is underlaid by social learning principles (Oetting & Donnermeyer, 1998a; Oetting et al., 1998b). Primary socialization theory is actually a reformulation of the peer cluster theory of drug initiation formulated by Oetting and Beauvais (1986). In parallel to social cognitive theory, this theoretical base assumes that social behaviors and norms are acquired via learning in social contexts and highlights three basic contexts, encompassing the family, school, and peer clusters respectively. Local institutions and the media are also deemed paths of influence, but as exerting nonimmediate effect on behaviors and social norms via their influence or impact on families and peer clusters. This approach also carries a consideration of the personality traits of the individual, like self-esteem, anxiety, sensation seeking, and psychopathology, all as indirect factors influencing social deviance and drug use. Particularly, the personality of an individual would be considered as influencing behavior to the degree that it influences their basic socialization processes; for instance, raising the tendency that a teenager will or will not be successful in bonding with socially deviant peers.

Primary socialization theory additionally centers on the relational links existing between adolescents and their family, social environments, and peers, because such links stand as avenues for transmitting information concerning or relating to social norms and behaviors. In parallel to the perspective of relational bonds, social bonding theory as proposed by Hirschi (1969), maintains that when the bonds between teenagers and other individuals around them are well-built and there is a prosocial influence, teenagers are not required to be engaged in behaviors like alcohol, drug, and cigarette smoking. Nevertheless, in a situation in which the bonds between teenagers and their immediate family and social spheres such as the school are weak, the position of peer clusters is elevated, in addition to the tendency that these clusters will be comprised of teenagers who are involved in promoting social norms and behaviors in favor of social deviance and substance use. Forget that the school and family are deemed possible information points for social deviance and substance use, peers are deemed a primary source of transmission.

Social Identity Theory

Social identity theory as proposed by Abrams and Hogg (1990) places emphasis on a person's self-concept as a member of a social group and categorizations of unique or exclusive social groups. Based on this approach, a youth's self-concept is deemed an amalgamation of various self-images, each of which is found within a progressive continuum where personal attributes are located on one end ("I am a smoker") and social categorical attributes are located on the other end of the continuum ("I am a member of the smoking group"). The degree to which an individual's personal or social identity is

ascendant in a particular situation is deemed imperative in the determination of the behavior of the individual. In a situation where personal identity is salient, the person is expected to act in accordance to his or her personal norms and with minimal or negligible regard to the norms of the social group.

Contrastingly, in a situation in which social identity is more salient, the individual is expected to perform in accordance with the group and, thus, to inculcate the social identity of the group into their individual self-concept. It is the integration of the group's social identity into the self-concepts of the adolescent that is, based on this approach, imperative to the development of homogeneity within teenage peer groups. Instead of considering parallels among members of a group as the product of social pressures toward conformity, the assumption of social identity theory is that group members take up as their own social norms and behaviors that are pivotal to the group's social identity (Abrams & Hogg, 1990). Within peer groups where smoking status is pivotal to the group's social identity, group members have a higher tendency of being similar to each other on the basis of their smoking habits.

If smoking is insignificant to the identity of the group, heterogeneity of smoking among group members has a high tendency of being observed. Social identity theory is also directed on the incorporation of the notions of social comparison theory as proposed by Festinger (1954), particularly in assuming that group members compare themselves to other groups and perpetually strive to attain encouraging definitions of identity. In a situation where social comparison culminates in positive appraisals of social identity, the person acquires motivation to maintain the behaviors that are ascendant to their personal

and social identity. Nevertheless, in a situation of negative appraisals, the individual is expected to change either his or her behaviors or his or her cognitive self-evaluations. For instance, if a person is a tobacco user, and tobacco users have low social status, the hypothesis is that the person will either change the tobacco use behavior or engage in cognitive and behavioral schemes for allowing him or her be defended against negative self-perceptions (Falomir & Invernizzi, 1999). In the last instance, a person may have an overestimation of the pleasure of tobacco use for offsetting its low social identity status. Thus, the expectations are that these persons would become more heavily attached to their tobacco use identity.

Social Network Theory

Social network theory places emphasis on the interdependence between individuals and, thus, the relational bonds existing between individuals within a social sphere (Holland & Leinhardt, 1978; Knoke & Kuklinski, 1982; Wasserman & Faust, 1994). A social sphere or system implies a targeted population that can, to a higher or lower extent, be determined by particular boundaries, for instance, pupils in an elementary classroom, or a residential context. Social network theory entails the assumption that the individuals in a social sphere are involved in interactions with each other and serve as important reference points in each other's decision-making processes. The relation existing between persons are considered as avenues for transferring information or resources all through the social system. Such transfers are reinforced, fostered, or curtailed by the environment, and the opportunities or impedances it provides for interactions between members of the social system. Therefore, the location of an

individual in the social network and the individual's pattern of relations with other individuals affect his or her behaviors, attitudes, and perceptions.

Theorists of social network theory have collectively discussed such locations on the basis of the person's categorization as closely bonded group members, loosely bonded liaisons, and unrelated (or comparatively unconnected) isolates (Knoke & Kuklinski, 1982; Wasserman & Faust, 1994). There have been discussions of these social positions on the basis of the attributes of teenagers in each grouping and their interaction with other members in the social system. The social network approach also assesses the distribution or exchange of information within a social system, like the way tobacco use norms may be transmitted within and communicated across a social system. Thus, it implies that exclusions have been made between persons central in the social system and that individuals are negligible or insignificant. Pivotal persons are individuals who are extremely obvious and connected, while insignificant or negligible persons are less apparent and connected more loosely (isolates and liaisons). Although it would be natural to continue with the assumption that central or pivotal persons would have the highest amount of influence within a social sphere, this is not usually feasible.

Granovetter (1973) maintained that central persons are vital to the adoption of a concept or behavior when the issue in question is not controversially oriented, but insignificant or negligible persons are deemed important only when the issue is controversial. This divergence is elucidated on the basis of the amount of social pressure experienced by central people in comparison to insignificant persons. Regardless that a central individual has a high tendency of experiencing high social pressures for

conformity, the negligible or peripheral person is not (Granovetter, 1973). As a result of their marginal status, individuals who are peripheral have more liberty to choose the kind of ideas and behaviors to adopt and have a higher tendency in comparison to central persons to adopt concepts that are controversially oriented, such as tobacco use. Once some peripheral persons adopt a controversial concept or behavior, their bonds and relationships to distal parts of the social system permit its propagations throughout the social system (Granovetter, 1973). Therefore, in divergence to the popularly held notion of adolescent smoking as a peer group phenomenon, there is a suggestion from social network theory of the imperative of looking outside the peer group and considering the wider or more extensive social system in comprehending the etiology and development of smoking habits.

All of the theories avail in the study a theoretical spine for comprehending social processes and the position of such processes in the decision of adolescents to be engaged in health-risk behaviors, such as tobacco use. Regardless of the fact that the theories vary in the particular social and cognitive processes in which they converge, they collectively place significance on the type of peers with whom adolescents associate. By implication, while other factors are explicitly considered, each individual theory either states vividly or indirectly suggests that the social norms and behaviors of adolescent peers are intrinsic determinants of behavior. Concisely, these theories provide the suggestion that when adolescents interact with others who smoke cigarettes and reinforce smoking behavior, there is a high tendency for them to smoke cigarettes as well. Nevertheless, when the

primary contacts of teenagers are nontobacco users and/or antismoking peers, there is a very low tendency for them to be involved in this behavior.

Social Cognitive Theory

In the course of this literature review, it becomes imperative to carry out an intensive review of social cognitive theory based on its salient position within the scope of the current study. In the realm of psychology, social cognitive theory posits that segments of the knowledge acquisition of an individual can be directly tied to observing other individuals within the context of experiences, social interactions and external media influences. Social cognitive theory originated from work in the terrain of social learning theory proposed by Miller and Dollard in 1941. They proposed that if an individual were under the motivation to learn a specific behavior, then that specific behavior would be acquired via vivid observations. By imitation of these apparently observed actions, the individual observer would reinforce that learned behavior and would benefit from positive reinforcement (Miller & Dollard, 1941). The proposition of social learning underwent expansion and theorization by Albert Bandura, a Canadian psychologist from 1962 to the present day. Nevertheless, the theorists most popularly linked to social cognitive theory are Walter Mischel and most prominently, Albert Bandura.

Social cognitive theory is founded upon the basis that individuals learn by observing the actions of other individuals and that human thought processes are pivotal to comprehending the complex nature of human personality. While social cognitists concur that there is a considerable amount of influence on development conjured by learned behavior expressed in the environment in which an individual develops, they are of the

belief that the individual, and thus cognition, is just as significant in understanding moral development (Santrock, 2008).

Individuals learn via direct observation of the actions of other individuals, with the environment, behavior, and cognition all as the fundamental factors in informing development. These three facets of impact are not rigid or autonomous; instead, they are all reciprocal. For instance, each behavior observed can alter an individual's approach to cognition, just as the environment an individual grows up in will no doubt impact future behaviors.

Social cognitive theory places considerable emphasis on a wide difference between the ability of an individual to be morally proficient and morally performing. Moral competence entails possessing the capacity of performing a moral behavior, while moral performance reflects following an individual's notion of moral behavior in a particular context. Moral competencies encompass the capabilities of an individual, the knowledge possessed by an individual, the various skills possessed by an individual, the general awareness of an individual concerning moral rules and regulations, and the cognitive ability of an individual to construct behaviors. In as much as the development of an individual is concerned, moral competence is the development of cognitive-sensory processes; concisely stated, being in the knowledge of what is deemed right and wrong. By comparison, moral performance is informed or consequently affected by the prospective merits and rewards that motivate an individual to behave in a particular way (Santrock, 2008). For instance, the moral competence of an individual may tell him or her that substance use is wrong and frowned upon by the larger society; nevertheless, if the

merit or incentive for substance use is a substantial sum, his or her moral performance may reflect a divergent perspective of thought. Within that construct is located the central point of social cognitive theory. Social cognitive theory works around the complex process of knowledge acquisition or learning precisely correlated to the observation of behavioral models. The models could be oriented around interpersonal imitation or media origins (Bandura, 1988).

In the course of illustrating that individuals learn from observing others, Bandura (1988) carried out an experiment titled “Bobo Doll Behavior: A Study of Aggression.” In this study, he exposed a collection of children to a violent and aggressive video. After watching the film, the children were placed in a room with a Bobo doll and were observed as to how these children behaved towards it. Via this empirical study, Bandura found out that children who had been exposed to the violent film subjected the dolls to more violent and aggressive behavior, while children not exposed to the film did not. This study reflects social cognitive theory based on the fact that it reveals how individuals re-enact behaviors they see in the media. In this particular context, the children in the study merely played out or mimicked the model of aggression they learned directly from the film.

Based on the observations, the individual observer is not under any expectations of actual merits or demerits but expects parallel outcomes to his or her imitated behaviors and enables these effects to work. This segment of social cognitive theory largely depends upon outcome expectancies. These expectancies are largely informed by the environmental context that the individual observer grows up in; for instance, the expected

outcome for drunk driving in the United States is a fine, with prospective penitentiary sentence, while the same charge in another nation may result in the death penalty (McAlister, Perry & Parcel, 2008). In the educational sector, teachers play the role as model in the learning acquisition of a child. Teachers model both underlying curriculum of virtuous living and material objectives respectively. Teaching staff need to be committed to the development of high self-efficacy levels in their students via appropriate recognition of their accomplishments (McAlister et al., 2008).

Bandura (1989) also maintained that the most efficient means of displaying moral development would be through the consideration of various factors, be they cognitive, social or environmental. The association between the three previously stated factors offers even more insight into the composite idea of morality. Additionally, social cognitive theory maintains that learning has the highest tendency of occurring if there is a tightly bound identification between the individual observer and the learning model and if the observer also has considerably sufficient self-efficacy. Self-efficacy beliefs play the role of a significant or imperative set of proximal determinants of individual affect, motivation and action which work on action via cognitive, motivational and affective intervening processes respectively. Identification enables the individual observer to feel a personal *tete-a-tete* connection with the individual from which the behavioral model is being imitated and will have a higher tendency of achieving those imitations if the observer has the feeling that they have the capacity to be successful with the imitated action.

As discussed by Krohn, Skinner, Massey, and Akers (1985) discussed social learning or vicarious learning as the process of knowledge acquisition from the behavior of other individuals, is a pivotal concept of social cognitive theory and self-efficacy. Adolescent behavior, especially risky behaviors could witness observed behaviors of other individuals and then re-enact the same actions. Vicarious learning is an appendage of social modeling which is one of the approaches to increasing self-efficacy. Social modeling does not only entail the observation of behavior but also the reception of guidance and instruction in the course of completing a particular behavior.

Since the basis of this study will center on adolescents and tobacco use behavior, this literature review will now proceed with a review of the literature linking social cognition and the adolescent brain. Steinberg (2007) described in detail the cognitive process associated with adolescent development and behavioral patterns which served to liken the cognitive brain process to that of systematic bombarding of internal and external stimuli for vast amounts of processing at any given moment. In other words, the relationship between brain activity and an increase in hormonal activity might be considered similar to an extreme emotional state frequently blinded by raging hormones. The frontal lobe region, a fully developed region for conceptual understanding, typically serves to regulate emotions and is responsible for the behavioral activation and inhibition in adults. However, in the adolescent brain, the Amygdala region, a region somewhere between that of the fully developed region and that of the preadolescent developmental region, generally controls situational systems or instances (Steinberg, 2007).

Recent literature included an emphasis on temperament development as a precursor to behavioral problems (Frick & Morris, 2004). Conduct problems, otherwise known as anti-social behavior, have met with numerous issues regarding proper terminology and unbiased assessment protocol, among others (Krueger, Markon, Patrick, Benning, & Kramer, 2007). However, researchers have notably expressed a need for behavioral disorder assessment and the integral relationship between the influence of external stimuli and aggressive behavioral patterns or tendencies (Burt & Mikolajewski, 2008).

The adolescent years are difficult enough for most youth. The adolescent mind undergoes a remarkable change process during the adolescent years, and the changes can encompass uncertainty, anxiety, and even a sense of desperation. At some point in a young adult's development span, peer interaction and support become a high priority. Young adults prefer peer relationship interaction, the similarities with their friends and congregation with groups of individuals with similar personalities or interests. Hence, it is reasonable to presume individuals with varieties of behavioral orientations such as tobacco use might tend to gravitate toward individuals or groups with similar behavioral patterns. Therefore, an understanding of the tendencies and the relevant external stimuli, such as peer pressure or the influence of the environment might contribute to the knowledge of individual and group smoking behaviors in association with individual behavior.

Social cognitive and social learning theories (Bandura, 1986) considers both social processes and cognitive mediation respectively as being imperative or significant

to acquiring and maintaining behavior, such as tobacco use. Based on this approach, behavioral learning is achieved via the observation of other individuals engaged in a particular behavior and progressive modeling of this specific behavior, in addition to the rewards or punishments and favorable or unfavorable evaluation related to such a behavioral orientation. Although social cognitive theory places considerable emphasis on social contacts with other individuals, it fails to place parallel attention on all associations. The immediate impacts of parents and peers are viewed as primary social factors, and indirect reference groups, like the media, are viewed in this approach as secondary factors. Adolescents are considered as having the higher tendency of imitating the smoking or non-smoking behavior of those individuals with whom they have the highest rate of personal interaction, both in duration and frequency. Additionally, more intimate relationships that take place previously in the experience of teenagers are viewed as being more important in the process of social learning in comparison to those that are less intense and emerge later.

According to social cognitive theory an individual acquires some of these behaviors by social imitation. When an adolescent begins smoking, experiences with the new behavior become progressively important in regards to whether or not the behavior continues, and observation of the smoking or non-smoking other individuals decreasingly so. Smoking experiences serve the purpose of modifying the teenager's definition of tobacco smoking, with positive experiences reinforcing more favorable attitudes. Furthermore, experiences with tobacco use also avail the teenager immediate information concerning merits and demerits related to smoking, encompassing those that are socially

oriented and those that are internal or intrinsic to the individual: for instance, physiological reactions and cognitive self-reinforcement. Social cognitive or social learning theory predicts that smoking will progress to a higher frequency or more sustained patterns, to the level that reinforcement, exposure to tobacco use models, and favorable definitions are not counteracted by negative sanctions and unfavorable definitions of cigarette smoking.

Miles and Huberman (1994) describe qualitative research as data “usually in the form of words rather than numbers” which have been used in the social and political sciences.” Qualitative research has become more commonly used since the 1970s in the fields of “psychology, sociology, linguistics, public administration, organizational studies, business studies, healthcare, urban planning, educational research, family studies, program evaluation, and policy analysis” (p.1). According to Denzin and Lincoln (2011), qualitative research “is a situated activity that locates the observer in the world. Qualitative research consists of a set of interpretive material practices that make the world visible”(p.3, 4). Qualitative research particularly seeks to collect deep information regarding human behavior and the attributes that influence or inform such behavior. The discipline investigates the “why” and “how” of decision making, not just “what”, “when” and “where”. Thus, slighter but more precise samples are more frequently needed instead of wide random samples.

In addition to collectively concurring on the significance of the type of people adolescents associate, each previously mentioned theory avails the study a distinct contribution to the comprehension of how adolescents influence the behavioral

orientation of each other. Particularly, social cognitive theory which reveals the mechanism of social influence will be the theoretical framework for this research.

The holistic theoretical framework of social influence presented in this study takes an extensive perspective in specific consideration of social interactions, setting off, most extensively, with the social system and culminating, more specifically, with the individual's cognitions. Geographic location determines the amount and sort of teenager with whom another teenager interacts and, in the case of cigarette smoking, their exposure to cigarette smoking or non-smoking models of behavior and social norms. Avenues reveal the possibility for information and social impact to flow throughout the social system. From this perspective, the willingness of adolescents to adopt the social behaviors their peer group is obviously elaborately interwoven with their level of connectedness within the social system. Adolescents with connections to just one peer group are deemed closed within this group and, thus, with a higher tendency of adopting the norms of the group than a youth with connections to multiple peer groups. Awareness of the social mapping also allows the research an image for comprehending the processes of social comparison between social or peer groups, particularly, providing an in-depth image of how group norms and behaviors may be modulated by individuals belonging to other groups or the social system in general (Lloyd, Lucas, & Fernbach, 1997; Lucas & Lloyd, 1999).

Social cognitive theory exposes the role of individual factors as they influence vulnerability to peer pressure or influence. Adolescents' current and past relationships with family members, caregivers, school teachers, friends and media exposure are

deemed as possible role models of teenage social behavior. Furthermore, personality traits, particularly those that influence peer relationships, and previous experiences in interactions and with particular behaviors are taken into consideration. On a final note, the particular mechanisms of acquiring behavior and social influence can be deemed using the almost mathematical formula presented in social cognitive theory (Lloyd, Lucas, & Fernbach, 1997; Lucas & Lloyd, 1999). On a parallel note, the balance of interactions with tobacco users and non-tobacco users, opportunities for observing and imitating the mechanics of tobacco use and cognitive appraisals concerning the merits and demerits related to this behavior are accounted for. Here, interactions within the social sphere and attributes of the person combine, and the personal interpretation of the adolescent concerning this information is eventually imperative in the determination of behavior. This theoretical framework allows the study a set of perspectives for a more vivid view on multiple aspects of peer pressure, and when and how this influence influences the behavior of the individual, in addition to group, smoking. Research efforts concerning peer behavior usually fail to specify the theoretical viewpoints guiding the research or the existing assumptions involved & the selection of variables (Poland, Stockton, Ashley, Pederson, Cohen, Ferrence, & Buli, 1999; Frohlich, Potvin, & Gauvin, 2002).

Friendship Homophily

In line with the popular saying that "birds of a feather flock together", academic studies provide the suggestion that youths belong to friendship groups with other teenagers or peers akin to themselves (Kobus, 2003). Parallels between teenagers, also

referred to as friendship homophily, have been noticed all over a variety of feature encompassing gender, socioeconomic status, ethnicity, normative beliefs, attitudes, cigarette smoking, alcohol and drug use, school performance, engagement in deviant behavior and sexual behavior among others. Apparent or visible features, such as gender and race, and those that aid or reinforce physical proximity, such as age and school grades, have emerged as serving as a fundamental filter for friendship selection and the formation of peer groups. Behaviors, such as substance use, have been found to be the next most significant dimension for the formation of such groups. This precedes similarities in attitudes, such as academic interests and aspirations, peer activity participation, and lastly by psychological states (Van de ven, Greenwood, Engels, Olsson, & Patton, 2010).

The parallels existing within a friendship dyad usually emerge prior to the initial contact between prospective friends. This implies that, characteristics in social contexts, such as academic institutions, serve the purpose of segregating individuals who are characteristically divergent, and for congregating those who are similar. Proximity aids or impedes opportunities for contact, for instance, in residential neighborhoods, classroom assessments, alphabetical-by-last-name seating and locker sequences and participation in school extracurricular activities. When teenagers select friends of the same social orientation, they set up relationships with other individuals who are apparently parallel on a variety of other characteristics as well. Observations of homophily between friends and members of the same peer groups actually have more advanced disjointedness than homogeneity between such teenagers. In line with the previous suggestions, some

specific characteristics are more salient in the determination of friendship and necessitate similarity, while others are less salient and permit for more heterogeneity among friends. Thus, it is on the basis of these last features that influence apparently has the highest impact (Sakuma, Sun, Unger, & Johnson, 2010).

Parallels among friends reveal issues with both the processes of friend or peer selection and peer pressure. Academic studies in this area have collectively attributed results concerning or relating to findings about friend-based parallels to peer influence. Some studies (Simons-Morton & Chen, 2006; Kobus, 2003; Mercken, Snyders, Steglich, & de Vries, 2009) have provided the important suggestion that, in doing so, the position of peer influence has been incorrectly overestimated, while that of selection has suffered some considerable neglect. There are two major issues concerning this overestimation of peer influence. In the first instance, cross-sectional research findings have commonly confounded the impacts of influence and selection. This implies that, by assessing peer similarities at just one time frame, it is impossible to embark on a determination of the level to which parallels between friends existed at the onset of the peer relationship and stood as the foundation upon which the friendship (selection) was initiated or developed in the duration of the relationship (influence). On a second note, results concerning parallels between teenagers or youths, to a certain level, show the projection of the participants' behavior onto their friends. As shall be elucidated later in this review, directly examining the behavior of friends is imperative to accurately understanding peer influence.

In the later part of the 1970s, research efforts by Cohen (1977) and Kandel (1978) provided a considerable challenge to the peer influence perspective or approach for friendship homophily. On a more specific note, both scholars provided results that implicated the significance of previously existing homogeneities in friend relationships and provided the argument that such selection-based parallels are as significant as influence, if not more so, in explaining apparent parallels within friendship dyads. Rodriguez, Tscherne, and Audrain-McGovern (2007) revealed parallel conclusions in the assessment of homogeneities between adolescent friends in their sexual behavior. In both research efforts, longitudinal and sociometric procedures were employed, allowing the studies to match adolescents who identified each other as friends and to carry out an observation of changes and stability in both friendships and identified behaviors. A few other studies were carried out for the purpose of disaggregating the roles of selection and influence with regards to teenage smoking (Mermelstein, 1999).

A direct examination of the roles of selection and influence in teenage or youth smoking can be seen in the work of Pierce, Distefan, and Hill (2010). This study matched teenagers into dyadic friendship couples at biennially spaced time-frames and assessed the stability of these targeted relationships, in addition to the smoking behavior of each member of the dyad. By carrying out a comparison of teenagers in stable versus unstable relationships on transformations in smoking, the study was capable of partitioning the roles of influence and selection. Results offered some support for the process of influence, providing insight into the fact that teenagers in stable relationships have the tendency of becoming more similar to each other in tobacco use behavior in the duration

of the research study year. Nevertheless, more reinforced support was found for the process of friend acquisition, with findings revealing that when teenagers changed friendships they had the elevated tendency of selecting as friends, other teenagers or adolescents whose tobacco use habits were parallel to theirs.

Slightly different methodological procedures were used in Engels, Knibbe, Drop, and de Haan (1997) assessment of selection and influence. In this study, the smoking behavior of targeted youth and their perceptions of friends' tobacco use were assessed at age 14 and again three years later at age 17. At this second time point, youth were additionally asked to report on the degree to which their peer group had changed over the past three years. Support was found for the process of influence, in that proportionally more non-smokers with smoking friends transitioned to smoking behavior than did non-smokers with non-smoking friends. Support was also found for the process of selection, whereby in establishing new relationships, youth were found to select as friends those with smoking habits similar to their own.

It is important to note that results from the latter study reveal the significance of both the process of selection and influence respectively, in the homogeneities that are apparent between friends on tobacco use, in addition to other behaviors. Evidently, more studies are required for addressing the differential role of the processes of socialization and selection respectively. Longitudinal studies are needed to provide an assessment of the more short-lived aspects of youth peer relationships and the beginning of tobacco use. Such a study should encompass the use of more closely distributed measurement periods

and/or real-time measurement procedures; for instance, ecological momentary assessment (Mercken, Candel, Van Osch, & de Vries, 2011).

Adolescent Tobacco Use Influences

Peer Influence

The term “peer pressure” is a popular colloquialism, which when put into perspective in line with tobacco or nicotine use stirs up images of youths or adolescents teasing, encouraging, taunting and even bullying one another to have a “toke”. Nevertheless, when put into perspective in regards to research on social influence, this image seems to be a misnomer. This implies that, research results provide the salient suggestion that pressures to engage in cigarette smoking are widely normative, and not coercive or direct, in orientation. Mercken et al. (2011) explains that instead of experiencing direct peer pressures to engage in tobacco smoking, adolescents provide reports that they experience an internal self-pressure to engage in smoking if others individuals around them do. Thus, the decision to try tobacco smoking for the first time has been attributed to adolescents’ attempts to avoid possible exclusion by peers, to acquire social approval, for facilitating social interactions and for the purpose of achieving a sense of individual independence or autonomy (p.171).

Despite the fact that assessments of initial tobacco use experiences place the occurrence of first-time smoking in the context of peers, adolescents tend to provide reports that in the course of their decision-making concerning smoking, peer pressure is not considered as dynamic. Rather, adolescents reveal that the decision to experiment with tobacco emerges before or prior to the actual first time smoking incidence and that

such an initial experience with cigarette smoking were actively sought out. Contrastingly, adolescents who have never tried tobacco smoking have revealed that they intentionally evaded tobacco use situations (Sherman, Chassin, Presson, Seo, & Macy, 2009).

Other studies discussed how the role of social influences affects the perceptions of youth, in regards to the prevalence of tobacco smoking and their imitation of tobacco smoking behaviors in the acquisition of cigarette use. For instance, in line with estimates of tobacco use prevalence, results provide the significant suggestion that those adolescents who are of the view that smoking is at high prevalence rates are at an elevated risk of initiating this behavior. The decision to use tobacco has, therefore, been defined or identified as a prevalence-induced behavior. With regard to imitating or copying behaviors, results from studies are also in line with theoretical perspectives, suggesting that teenagers or adolescents who engage in cigarette smoking adapt their smoking behaviors for the purpose of conforming to that of other adolescent tobacco users. For instance, in an experimental assessment of social influences on tobacco use behaviors, Ellickson et al. (2003) used adolescent tobacco users as confederate models of behavior. Results from this research effort indicated that when adolescents who smoke were exposed to the confederate smoker, they changed their tobacco use behavior in ways that were in line with the behavior of the model, encompassing number of cigarettes smoked and the frequency of the puffs. These results are in line with theoretical frameworks that were reviewed in the previous chapter of this current study, which shed light on the significance of behavioral exposure, mimicking and modeling respectively.

Empirical proof that pressures to smoke cigarettes are subtle and surreptitious in orientation, some studies provides the suggestion that obvious pressures are intrinsic to decision-making in regards to cigarette smoking. For instance, Gilman et al. (2009) provides the argument that pressures to engage in cigarette smoking are implicit in the majority of smoking contexts, and cite adolescents' concurrence to cigarette offers, oral encouragement and coercion as proof of such pressure. Nevertheless, other results provide the suggestion that direct pressures are obvious when it comes to pressuring or coercing friends not to engage in smoking, with even current tobacco smokers discouraging nicotine use. More studies are required for the purpose of understanding overt and covert peer pressures to tobacco use, in addition to the pro-tobacco use or antismoking direction of these pressures. The variation between covert and overt peer pressures in cigarette use commencement and maintenance is of specific significance in the consideration of the development of viable programs for preventing adolescent smoking. This implies that, on the basis of the disposition or likelihood of scholars in this area of enquiry to translate peer homogeneity as proof of peer pressure, some substance use prevention programs have been created that are directed towards social influence, for instance by teaching adolescents the best ways of resisting peer pressures toward conformity (Lantz, Jacobson, Warner, Wasserman, Pollock, Berson, & Ahlstrom, 2000).

Proof of the efficacy of these programs has been ambiguous, perhaps revealing just partial comprehension of the roles of peers in substance use behaviors. By implication, while some research efforts offer proof of the positive merits of programs for the prevention of substance use targeting peer influences (Tobler & Stratton, 1997;

Botvin, Griffin, Diaz, Miller, & Ifill-Williams, 1999), other studies provide suggestions that such merits are only modest or transient (de Vries, Backbier, Kok, & Dijkstra, 1995; Hansen, 1992). Furthermore, other studies reflect no merit what so ever (Peterson, Kealey, Mann, Marek, & Sarason, 2000), and yet other studies provide indication that such programs may exert an iatrogenic effect (Donaldson, 1995; Dishion, McCord, & Poulin, 1999).

Studies investigating the differential impact of prevention programs that make use of social influence strategies provide the suggestion that they are profitable when they improve or augment the ability of adolescents to resist inert social pressure, such as modeling. Nevertheless, they are not effective when they categorize deviant peers together, increase perceptions of the prevalence of substance use, or simply teach particular refusal skills to tackle, for instance, explicit drug offers. Regardless, in their review of the available literature, Lantz et al. (2000) provide the conclusion that of the available or existing school-based programs for deterring adolescent cigarette smoking, those that place emphasis on social influences are more successful in comparison to those specifically directed towards the improvement of adolescents' self-esteem or those that educate teenagers on possible health risks and negative consequences of smoking.

Various questions concerning the role of peer pressure to adolescent smoking remain unanswered and demand further investigation. For instance, it is not evident how peer pressure transforms when a single member of a peer group initiates, increases, reduces, or desists cigarette smoking. On a similar note, there is very minimal knowledge

concerning the degree to which particular social contexts (such as parties) affect tobacco use (Frohlich et al. 2002).

Is it the tobacco use behavior of friends while in these contexts or environments, or mere exposure to the environment (and other smokers in these settings) that elevates the risk of adolescents for initiating cigarette smoking? There is a large amount that is still unknown concerning the degree to which imitating tobacco use reflects the desire of teenagers to have someone with whom to share their experiences (Kobus, 2003). Do adolescent friends use tobacco for the purpose of gaining a sense of belonging? The consequences of non-conformity to peer pressures are also not known. What are tolerance thresholds of adolescents in regards to 'hanging out' with peers with divergent smoking habits? Furthermore, there is very little information concerning the point at which an adolescent becomes known as a cigarette smoker. Are the pressures heaped upon never smokers, infrequent cigarette smokers and tagged smokers the same, or do they vary? Studies throw more insight into these questions and hold promises of elucidating some of the delicate, and probably more significant, aspects of peer influence on adolescent smoking.

In a bid to a more objective comprehension of the orientation of peer influence and peer pressures, various factors demand consideration. For instance, it is imperative to consider the fact that not all behaviors are equally susceptible to change, that friendship groups vary on the basis of how much conformity they demand, and that the degree of potential influence is curtailed by the initial levels of homogeneity or heterogeneity between friends. Additionally, it is imperative to consider that some friends have higher

influential than others, with individuals being most influential in their region of expertise; for instance, the straight-A student in academics or the captain of the basketball team in athletics (Avenevoli & Merikangas, 2003). Furthermore, in line with theory, the influential orientation of a specific friendship is also dependent upon the amount of sources of possible influence and whether or not the messages carried by these numerous sources are concurrent or conflicting. Having multiple friends who support and are involved in the same behavior definitely has a different level of influence in comparison to having one friend supporting a behavior or multiple friends advocating for various, and maybe conflicting behaviors. Additionally, it is imperative to note the fact that the pressures exerted by peers are not a single directional pressure that either encourages or impeded a particular behavior, but is more probably a boundary-maintaining factor that maintains upper and lower limits on tolerable behaviors (Avenevoli & Merikangas, 2003).

Friends, Relationships, Social Crowds, and Peer Groups

This literature review would be incomplete without the significant consideration of the fact that the contribution of peers to teenage smoking is informed by the point of reference used for perceiving peer relationships. Possible perspective approaches encompass best friendships, romantic relationships, peer groups and reputation-based social crowds. Therefore, this literature review shall embark of a review of studies concerning these domains.

A considerable number of research efforts published within the past two decades have assessed the homogeneities between youth and their best friends in cigarette

smoking. The larger proportion of this efforts placed emphasis on the behavior of adolescents' best or closest friends by means of the report of respondents concerning the behaviors of friends (Flay et al., 1994, Flay, Hu, & Richardson, 1998; Webster, Hunter, & Keats, 1994; Fergusson & Horwood, 1995; O'Loughlin, Paradis, Renaud, & Gomez, 1998; Epstein, Williams, Botvin, Diaz, & Ifill-Williams, 1999; Ennett, Faris, Hipp, Foshee, Bauman, Hussong, & Caid, 2008). Findings from these efforts provide the suggestion of parallels between friends in their tobacco use behaviors and attitudes. Nevertheless, as mentioned, there have been arguments that such results are not perfect based on the fact that they reflect the projection of respondents concerning their own behavior onto their friends (Ennett & Bauman, 1994; Bauman & Ennett, 1996), also referred to as a "rater effect". These kind of correlations between the behaviors of respondents and their respective perceptions of friend behaviors are deemed unused and to offer deceptive overestimates of friendship homophily. In much more recent times however, a comparatively lesser amount of research endeavors have matched adolescents with their best friends and examined their level of homogeneity on tobacco use behavior (Bricker et al., 2006a; Campbell, Starkey, Holliday, Audrey, Bloor, Parry-Langdon, & Moore, 2008). Despite the fact that these research efforts are akin to those employing less refined measures of peer homogeneity, they provide the suggestion of a lesser level of concordance between adolescents and their friends.

It is quite interesting to note that just a few research efforts have carried out any valid examination of the differential influence of best friends against friendship groups. Results from this research provide suggestions that the behaviors of best friends are the

most suitable predictors of youth tobacco use, alcohol use and drug use, particularly for females, of course at some age levels more than others. Nevertheless, in the course of assessing the role of best friends and friendship groups at various stages in smoking, for instance commencement and maintenance, findings reveal that friendship groups are most exertive at the initial phases of cigarette smoking, while best friends have the highest effect on progressive or sustained use (Bricker, Peterson, Anderson, Leroux, Rajan, & Sarason, 2006a). These results reflect the significance of both best friends and friendship groups respectively, in addition to the suggestion of the imperative of future studies that disaggregates their differential influence on adolescent tobacco use.

Interest in romantic relationships begins typically in early to middle adolescence. In order to attract potential romantic interests, teenagers choose to engage in behaviors that allow them to portray the right social image. For girls, this image involves typically matters of physical appearance while, for boys, the priority is commonly based on athletic abilities (Michel & Amos, 1997). It is not uncommon for this process of image portrayal to involve engagement in health-compromising behaviors, such as excessive dieting, sexual behavior, cigarette smoking and alcohol and drug use (Brown, Dolcini, & Leventhal, 1997). Such social images and attendant behaviors are depicted vividly in the media, in television shows, movies, video games and magazines targeted at youth (Wakefield, Flay, Nichter, & Giovino, 2003). As such youth are on a daily basis bombarded with messages about what constitutes and how to achieve a certain ideal or social image.

Qualitative research results show that tobacco smoking is a major factor concerned with image portrayals (Mermelstein, 1999). According to some adolescents, the "right image" may encompass tobacco use while for others, not taking to cigarettes may be pivotal. For instance, popular girls have observed to use cigarettes in addition to alcohol and drug use, wear the "right" clothes and date, for the purpose of maintaining their elevated status in the social ladder of stratification, their apparent popularity and the social image sophistication and sex appeal. Furthermore, adolescents have been observed to monitor or change their individual behavior or outlook, encompassing "trying on a cigarette" to depict the desired image. Such image depiction seems to be particularly significant for adolescent girls, as they try to be appealing to their male counterparts and attractive to other girls in the perpetual process of social comparison.

Many romances that begin in adolescence are not typically sustainable, some relationships actually last long. When these relationships move progressively from preliminary attraction, to passive dating, to sustainable relationships, and even possibly to enduring relationships of commitment, this romantic associate becomes a progressively significant attachment figure and point of influence. Nevertheless, even the short-lived relationship has a high tendency of having considerable influence. For instance, boyfriends and girlfriends have an elevated tendency of having important roles in the decisions of adolescents concerning whether or not to commence or continue cigarette smoking. Furthermore there is also an increased likelihood of these teenagers for modulating tobacco use behavior such that an adolescent who smokes may choose to hide

his or her nicotine use from a non-smoking romantic associate for the purpose of maintaining a relationship (Dishion & Owen, 2002).

Within the tendency of such influence, there is very minimal knowledge concerning the parallels existing between romantic partners at the onset of a relationship and those that emerge in the duration of adolescent romances. There is an apparent need for more studies assessing the effect of romantic relationships on the health-risk behaviors of adolescent. This is particularly true with regard to the romantic relationships of bisexual and homosexual adolescents and among non-middle-class and non-white demographics (Dishion & Owen, 2002).

On the basis of their relative instability, dissolution of adolescent romantic relationships is routine. The emotional responses that adolescents have to these relationships cessation is usually intense and, thus, have the tendency of resulting in detrimental health outcomes. In the wake of an adolescent romance, it is common for teenagers to experience symptoms of withdrawal, depression and disruption of other social relationships, and indulgence in unhealthy lifestyles for coping, such as excessive smoking and substance use. The duration of these symptoms is usually transient; however their sequelae can be enduring. Studies are required which more insightfully study the progression of romantic relationships and their consequences, and their impacts on teenagers' cigarette smoking at various stages in the relationship (Hoving, Reubsaet, & de Vries, 2007).

A considerably recent trend in the peer-smoking studies has been to use social network assessment for examining social factors in relation to cigarette smoking. Via the

use of these approaches researchers find the opportunity of taking a multi-dimensional perspective at adolescent smoking in the context of peer groups or peers. For instance, there is a possibility of identifying adolescents as members of closely bound peer groups, loosely- knit liaisons or relatively disjointed isolates and make comparisons between adolescents who belong to each of these categories on their tobacco use behavior. On a second note, there is a possibility of making comparisons between peer groups for assessing, for instance, the level of homogeneity among peer group members and/or comparing groups on the basis of membership profiles or group characteristics. On a third note, when looked at longitudinally, there is a possibility of examining the processes of selection and socialization in the decision to use tobacco use, continuation and termination of tobacco (Kobus, 2003). Additionally, also longitudinally, there is a possibility of examining the transmission of information or contagion all through the social structure, such as tobacco use, in addition to the relationship between transformations in friendships and tobacco use patterns. On a final note, there is a possibility of considering adolescents and their behaviors on the basis of their centrality, status, the density of their peer groups and their peripheral status in the social structure. Despite the possible merits of social network statistical and methodological procedures as a way to comprehending behavior within the confines of peer groups, only a few research efforts have made use of this analytical perspective (Kobus, 2003).

This review has just started to address the first three points. Results from these works are going to be elucidated going forward. Kremers, Mudde, & de Vries (2001) employed social network analytical procedures for categorizing ninth grade adolescents

as members, isolates and liaisons, and for comparing adolescents in these social positions on their tobacco use behavior. Their results showed that in four of the five participant schools, adolescents who were cut off from their peers had a higher tendency of smoking in comparison to those who were either members or affiliates. These results were startling based on the fact that they contradicted popular knowledge of tobacco use as a peer group phenomenon. These researchers provide some potential explanations in a bid to understanding this unexpected result, encompassing the possibility that social isolation results in tobacco use, that tobacco use may result in isolation, that a third variable like depression may also be associated with both, or that adolescents determined to be isolates may belong to groups that exist outside the school environment.

It is thus evident that studies are required for understanding this relationship better. Maybe most profitable would be research efforts that in addition to assessing social position and cigarette smoking also examined possible moderator variables, like age, ethnicity, depression and residential space or social environment. Additional to studies comparing adolescents on their status in the social structure, a few social network studies have placed emphasis on only those teenagers who belong to peer groups and assessed the degree of homogeneity or heterogeneity within and between these groups (Ennett & Bauman, 1994; Urberg, Degirmencioglu, & Pilgrim, 1997). Findings from this research show a pattern of intra-group similarity and inter-group difference in smoking behavior. Adolescents who use tobacco have a tendency of belonging to groups with other tobacco users, the larger proportion of these groups being made up of a blend of both tobacco users and non-users. Contrastingly, adolescents who do not use tobacco or

nicotine have a tendency of belonging to peer groups that are almost totally made up of non-smokers. On a more important note, the larger proportion of peer groups has been marked by the non-smoking status of members. This provides the suggestion of the possibility that, in contradiction to popular comprehension of smoking as a peer group occurrence, members of peer groups may actually discourage smoking.

Analysis of social network has also been employed in the examination of the relative role of selection and influence in observations of the similarity of tobacco use among teenage peer groups. For instance, with the help of longitudinal data from this research, McMillan, Higgins, & Conner (2005) analyzed changes in both friendships and cigarette smoking in the duration of a year. Results are in line with those elucidated previously in this study. On the basis of influence, non-smokers who stayed in committed friendships with tobacco users were found to be at a more elevated risk for smoking at the close of the year. Concerning selection, adolescents whose friendships changed in the course of the year were found to choose friends similar to them on smoking or non-smoking behavior.

Additionally, to the provision of an in-depth consideration of the peer context of adolescent tobacco use, the research efforts highlighted above offer proof of the viability of social network analysis as a means of assessing peer influences to adolescent cigarette smoking. Regardless of this viability, these procedures have been underused. A significant reason for this underutilization encompasses the chronological shortcoming of mathematical theory and computer processing for handling these analytical procedures (Valente, 2010). Progress in technology has improved these shortcomings, in addition to

leading to the development of various computer-based software programs capable of handling this analytical procedure. Another factor related to the underutilization of social network analytic approaches entails the imperative requirements for virtually holistic sampling of the specific population. Almost complete analysis is imperative to the accuracy of social network findings, where with each non-sampled person there are an undetermined number of relationships to sample participants. Although it is suitable for analytical intents, near-complete sampling is not characteristically realistic or of any practicality, thus curtailing the possible applicability of this otherwise advantageous research approach.

For the sake of discussion, it is important to note that other methods for assessing social networks have been identified, for instance, social cognitive mapping (Cairns, Leung, Gest, & Cairns, 1995). Akin to social network analysis, in social cognitive mapping, the research participants required to state the adolescents whom they associate or fraternize with. Additionally, they are asked to highlight the social structure, encompassing identifying the social groups existing within the structure and adolescents who are not members of these groups.

Assessments of these data have revealed elevated uniformity between the view of each participant concerning the social system and the perceptions of the social structure on the basis of their peers. Thus, Mercken, Candel, Willems, and de Vries (2007) provide the suggestion that, employing this method, it may be feasible for a limited set of youth to offer a precise presentation of the peer networks existing within a social structure, therefore, precluding the imperative of examining all individual members. It is an

apparently effective method to assessing teenage peer relationships, and thus far this approach has not been employed in investigating peer relationships and adolescent tobacco use. This highlights the significance of this current study.

The imperative for future studies to replicate these social network studies, studies that employ other measures like social cognitive mapping, especially related to the transmission of information all over the social structure is required. In this latter light, researchers may consider carrying out a research for identifying a subset of tobacco users in a social structure, and when this demographic has been determined, interviews could be carried out with these teenagers, examining both circumstances relating to their decisions to engage in tobacco use and determination of particular related to peers who chose to use tobacco either by modeling or coercion. Employing a snowball sampling approach (Goodman, 1961; Biernacki & Waldorf, 1981) for identifying the non-salient demographic of influential peers, further interviews could be carried out with these adolescents for the purpose of gaining a retrospective perspective into the path of influence. However and as stated earlier, this specific research will employ social cognitive theory.

In the course of assessing health-risk behavior of adolescents, it becomes imperative to consider the contribution of social reputation-based crowds. The reputation or stereotype of a particular cluster offers adolescents a social marker that translates which teenagers are parallel to each other on the basis of social orientation or behavior, abilities and interests. These stereotypes also serve as guidelines of preferred behavior for individuals who identify with the particular social crowd, maybe even further than the

influence of the specific peers whom they fraternize. The potentially ascendant effect of crowd stereotypes over that of exposure to peer models of tobacco use is suggested by the results of studies that adolescents' views of tobacco use prevalence are more significant in ascertaining the smoking behavior than are direct pressures to use tobacco. To the degree that adolescents overestimate the frequency of tobacco use behavior, maybe due to buying into the social reputation of a crowd, they may also experience elevated pressures to smoke. These kinds of reputations and stereotypes are strengthened by media influences, particularly those geared toward adolescents (Wakefield et al., 2003).

Some research endeavors have been carried out for the purpose of assessing specifically the association between social crowd affiliations cigarette smoking (Mosbach & Leventhal, 1988; Sussman, Dent, & McAdams, 1994; Michell & Amos, 1997). On a consistent note, results from this work reveal the significance of crowd affiliation in the tobacco use behaviors of adolescents with individuals who belong to particular crowds having a higher tendency of smoking in comparison to those who belong to other crowds. As will be discussed elaborately within this research, the features of adolescents who are members of various tobacco using crowds vary, in addition to their reasons for indulging in tobacco use behavior. Six social crowds were identified by Michell & Amos (1997) via the use of social network analysis, focus groups and interview data. These crowds are: *Top boys* - Social elite male students; *Top girls* - Social elite female students; *Low-status students* - Students with low social stratification status within the school's social sphere; *Middle students* - Students occupying a middle status within the school's social sphere;

Trouble-makers - School social deviants; and *Loners* - Students with low self-esteem who are usually reserved.

This study done by Michell and Amos (1997) found that teenagers consistently reported that *Top girls*, *Low-status students* and *Trouble-makers* had the higher tendency to engage in smoking behavior; nevertheless, members of each of these social crowds were found to use tobacco for various reasons. Results provide the suggestion that *Top girls* opted into smoking in addition to alcohol and drug use, wear the "right" clothes and date for the purpose of maintaining their social status at the top of the social stratification. Although these girls perceived themselves as having the liberty to smoke or not, others deemed them to be under the most pressure to use tobacco. Cigarette smoking was related to their social identity or status, such that the decision to not use tobacco threatened this identity, and a subsequent protracted downward drop from the elevated position in the social hierarchy. In variation from their popular counterparts, *Low-status students* (largely girls) were found to use tobacco based on the fact that they were desperate to go to any lengths for the sole purpose of attaining popularity. This kind of girls had the higher tendency of reporting that they were coerced or forced into trying a cigarette by more popular girls, and to have a lesser tendency of accepting personal responsibility for their individual tobacco use behavior. Contrastingly, low-status boys, known as *Trouble-makers*, revealed a characteristic of risky behaviors, encompassing alcohol and drug use, and fighting, and were largely disenfranchised from the educational institution. On the part of these adolescents, tobacco use seemed to be one of a variety of other high-risk behaviors that they indulge in (Michell & Amos, 1997).

Findings from the previously mentioned study by Michell and Amos (1997) also provide the important suggestion that the various reasons among non-smokers for not indulging in tobacco use differed according to crowd affiliation. Both boys and girls in the middle status group seemed content in their position at the middle of the social stratification and, therefore, did not experience considerable pressures toward social conformity. These adolescents agreed to have reinforcing relationships with family and friends, not being overwhelmed with social images and did not perceive cigarette smoking as an issue. *Top boys* were perceived by others as confident, outgoing, good-looking and popular. Their low levels of smoking seemed to express the significance they placed on extracurricular activities and the recognition that tobacco use would be disadvantageous to athletic performance. The group defined as *Loners* were totally unrelated to other peers. Not only did these teenagers refrain from smoking, they were vehemently in opposition to the idea of cigarette smoking.

In another significant research concerning social crowds, Mosbach and Leventhal (1988) determined and defined four crowd groups. These groups are *Dirts*, *Hotshots*, *Jocks*, and *Regulars*. *Hotshots* and *Dirts* opted into cigarette smoking, while *Regulars* and *Jocks* abstained from smoking behavior. *Dirts* were mostly made up of males who were considerably passive about the health consequences of tobacco use, use alcohol heavily and engaged in high-risk behaviors. Their tobacco use behavior did not seem to be connected to difficulties in warding off peer pressure, but rather to reflect their individual motivations to engage in tobacco use. These adolescents seemed to select each other as friends, with tobacco use behavior preceding the formation of a group.

Contrastingly, *Hotshots*, who were usually females, used tobacco for the purpose of maintaining their social status. These girls were aware of the detrimental outcomes of tobacco use, nevertheless opt into smoking anyway. For these adolescents, peer influence was very instrumental even to an ascendant level in their tobacco use decisions. Also akin to the results presented by Michell and Amos (1997), the athletic orientation of *Jocks* seemed to stand as a protective borderline against high-risk behaviors such as tobacco, alcohol and drug use.

While trying to replicate Mosbach and Leventhal's (1988) results, de Vries, Engels, Kremers, Wetzels, and Muddle (2003) isolated five social crowds, encompassing the four previously mentioned and a fifth group defined as *Skaters*. In line with the work of Mosbach and Leventhal (1988), these researchers discovered that *Dirts* (both boys and girls) had a higher tendency of smoking, and to be markedly high in risk-taking. De Vries et al. (2003) differed slightly by maintaining that *Hotshots* were the least likely to use tobacco. In the course of explaining the variations between the *Hotshots* in their research and that of Mosbach and Leventhal (1988) and de Vries, et al. (2003) identify differences between their work and the former's research participants. The revelation that local community and residential environments are pivotal factors in adolescent smoking is in line with Wilcox (2003). Longitudinal analyses of these adolescents provide the suggestion that adolescents' year 1 self-identification with a specific social crowd was a prediction of year 2 status as a tobacco user. These researchers provide the suggestion that non tobacco users' identification with social crowds that use tobacco preceded their

decision to use tobacco, and not a reverse process, where tobacco use informed crowd affiliation.

The results of de Vries et al. (2003) offer reinforced proof that social crowds and the stereotypes or images adolescents' hold of these crowds influence decisions concerning smoking or non-smoking. Crowd affiliation seems to offer adolescents a sense of social identity, which may also encompass tobacco use. On the part of some adolescents, smoking could be symbolic of numerous things, like status and popularity. For other adolescents, tobacco use seems to be a characteristic of other high-risk and renegade behaviors that depict a very divergent social image.

In an effort to explain the factors involved in teenagers' identification with a particular social crowd, Dishion and Owen (2002) used qualitative research approaches for the purpose of examining variations between teenagers referred to as *Jocks*, *In-betweens* and *Burnouts*. Interviews with *Burnouts* and *Jocks* showed that while the lives of the *Jocks* are situated inside the confines of the school and its extracurricular activities, the lives of *Burnouts* usually lie outside the borders of the educational institution, to an age-dissimilar group of family and friends in their residential environments and the local community at large.

Influences of Family and Friends

Various research studies have been carried out which assess or conduct inquiry into the numerous roles of peers and parents on the smoking behavior of adolescents. Results from this endeavor are composite. Some research efforts allude to the salient or ascendant role of peers in adolescents' tobacco use (de Vries et al., 1995; Crone,

Reijneveld, Willemsen, van Leerdam, Spruijt, & Hira-Sing, 2003) Other results provide the important suggestion that the role of parents is parallel to or ascendant to that of peers (Bauman, Carver, & Gleiter, 2001; Avenevoli & Merikangas, 2003). Nevertheless, other research findings provide the suggestion that there is a divergence between the role of parents and peers, with greater and lesser levels of influence at various stages in tobacco use behavior (Bricker, Peterson, Leroux, Anderson, Rajan, & Sarason, 2006b).

In their comprehensive literature review, Avenevoli and Merikangas (2003) arrived at the conclusion that the relationship between peer tobacco use and youth smoking is strong, with findings offering superior proof suggesting that the tobacco use behavior of peers is more closely related to youth smoking than to the tobacco use behavior of parents or siblings. Irrespective of the vital or pivotal role of peers in adolescent tobacco use, there is proof suggesting that particular parental/familial features can serve as protective factors for decreasing the susceptibility of adolescents to peer influences that promote tobacco use behavior. For instance, youths have a lesser likelihood of smoking when parents take part in activities with their children, monitor the behavior of their children, use positive parenting practices (Simons-Morton & Chen, 2006), are supportive, do not use tobacco themselves, vocalize vehement opposition to tobacco use behavior and have stable marriages. Furthermore, in families where the home environment is secure and where the contribution on education is robust, adolescents have been found to have a lesser number of friends who use tobacco and less intention to engage in smoking behavior themselves.

These results provide an indication that while peers may be more directly related to the tobacco use behavior of youths, parents are not an imperceptible source of influence. There is an apparent likelihood that the influence of parents is precedent to that of peers, and that their impacts are associated with the types of peers adolescents select as friends. By the time adolescents attain the age of puberty, the foundation has been established for teenagers to take the next few moves into a path of life that will or will not most possibly entail tobacco use behavior and an array of other behaviors. Longitudinal studies that takes a prospective assessment of tobacco use, commencing from elementary-school-aged teenagers, is most appropriate for disaggregating the impacts of parents and peers in adolescent smoking. To date, studies employing this approach provide suggestions concerning the equal impact of peers and parents alike (Bauman et al., 2001; Bricker et al., 2006b).

Results from studies show that teenage peer relationships play a vital part in teenage tobacco use. Adolescents who are friends with tobacco users have been found to have a higher tendency of smoking themselves than those who only have non-smokers as friends. Romantic partners, best friends, peer groups and social crowds have all been found to play a vital role in the smoking or non-smoking behavior of adolescents.

In some contexts, peer influences encourage tobacco use and, in other contexts, they discourage it. The modalities underlying peer influence seem to be more discrete than is popularly held. This implies that instead of being the outcome of direct and intimidating pressures, decisions related to tobacco use behavior have been found to show predetermined dispositions concerning fitting in, popularity, social approval and

individual autonomy. The media and parents have also been found to play an important role in smoking or non-smoking of adolescents. These contexts seem to work partly, via the moderation of the association between cigarette smoking and peer influence. For some adolescents, parents and parental practices serve as a defensive line against tobacco use and peer influences on tobacco use while, for others, there is no such buffer.

Concerning the media, to the degree that an adolescent social system subscribes to these images and accepts them as a part of their social culture, persons within such a social structure will, to higher or lower degree, decide to accept this image as their own and engage in cigarette smoking or not accordingly.

Media Influence

Continuing with the significance of social cognitive theory it is imperative to review literature on the contribution of media influence on tobacco use behavior among adolescents. Concerns relating to the effect of the electronic visual media or movies go back a long way in history. The first video camera was invented in the year 1895. In the course of about 10 years, the city of New York enacted local movie censorship legislation, and by the year 1921, the governor of the state of New York signed far reaching state censorship legislation as the only means for solving what everybody agrees to have progressed into a dire evil. By 1934, the tendency of federal censorship moved movie distributors into the adoption and enforcement of the Hays Production Code. This code contained voluntary movie production regulations restricting how violence and sex could be portrayed. However, these guidelines were later abolished in the year 1968 and

subsequently replaced with the current and contemporary rating system, which still rates movies on language, sex and violence (Carnagey, Anderson, & Bushman, 2007).

Regardless of the popular concern, there is very minimal proof supporting an immediate impact or influence of the media or movies on the behaviors for which these media projections are rated. The larger proportion of the evidence that associates viewing media violence to aggression targets video and television violence. The same could be applied to the few published research efforts concerning the link between human sexual behavior and media exposure. In this context, the spotlight has mainly been on television. Contrastingly, a wide array of literature is emerging concerning the link between watching movie projections of tobacco use and the adoption of tobacco use behavior, a behavioral result or consequence that has considerable health implications and which does not factor into the movie ratings structure (Collins, Elliott, Berry, Kanouse, Kunkel, Hunter, & Miu, 2004).

Review of Adolescent Smoking Influences

The commencement of smoking behavior characteristically takes place in the course of childhood or adolescence. Smoking is determined in teenage demographics by self-report, and if guaranteed anonymity, teenagers provide more reliable and accurate reports of tobacco use (Murray & Perry, 1987). The National Youth Tobacco Survey (NYTS) monitors cigarette smoking among nationally characteristic cross-sectional samples of U.S. teenagers. In 2004 the NYTS was carried out on 27,727 students in schools all over America. The incidence or popularity of tobacco use is dependent on the orientation of the particular question, and in context for acquiring the data. On a general

note, researchers studying teenagers in middle school employ “ever smoked” or “current smoking” as outcomes, while researchers studying high school students employ “current” or “daily smoking”. The results showed that White non-Hispanic adolescents were as likely to be current smokers as American Indians, however were more likely to be smokers than all the other racial and ethnic groups (Rudatsikira, Muula, & Sizika, 2009).

Attitudes relating to smoking make predictions of indulging in smoking in the near future. Attitudes predicting tobacco use encompass positive expectancies (Dalton, Sargent, Beach, Bernhardt, & Stevens, 1999) and intentions to engage in tobacco use (Choi, Gilpin, Farkas, & Pierce, 2001; Flay et al., 1998). Intent to engage in tobacco use has been pooled with resistance to peer urges to engage in tobacco use to assess “vulnerability to tobacco use” among teenage “never smokers”. Teenagers are vulnerable if they are incapable of ruling out tobacco use definitely in the coming year or if peer group member offered a “toke”. Vulnerable teenagers have a double tendency to engage in tobacco use sometime in the future (Pierce, Choi, Gilpin, Farkas, & Merritt, 1996; Unger, Johnson, Stoddard, Nezami, & Chih-Ping, 1997).

Heuristic Model: Role of Media Influence in Adolescent Smoking Initiation

Since social cognitive theory relates to the acquiring of behavior via social observation, it becomes imperative to review the influence of the media on the onset of smoking behavior among adolescents. Heuristic models are employed for the purpose of summarizing proposed relationships between psychological mediators, risk factors for smoking and tobacco use behavior. Sargent et al. (2002) made the proposition of a heuristic model integrating what is ascertained concerning numerous risk factors

predicting tobacco use initiation, encompassing parental involvement; cognitive beliefs; temperament; and social learning factors, such as peer impact. The model makes the significant consideration of multiple reciprocal interactions among these health-risk factors leading to teenage tobacco use behavior. The heuristic model expresses how each of these risk factors is linked to media exposure in addition to attitudes concerning tobacco use.

Despite the fact that some recent research effort provide the suggestion nicotine dependence maybe commence early during tobacco use uptake process (DiFranza, Rigotti, McNeill, Ockene, Savageau, St Cyr, & Coleman, 2000; DiFranza et al., 2002a; DiFranza, Savageau, Rigotti, Ockene, McNeill, Coleman, & Wood, 2002b), the opinion on this particular issue holds that social influences are the fundamental motivation underlying teenage experimental tobacco use (Lynch & Bonnie, 1994). Longitudinal research efforts provide the suggestion that teenage tobacco use is an opportunistic behavior and adolescents are capable of using tobacco intensively at a party one night and not engaging in such a behavior for a protracted period. This irregular tobacco use pattern varies from the adult pattern of tobacco use. Figure 2 below illustrated the Heuristic of how the media effects smoking initiation in adolescents.

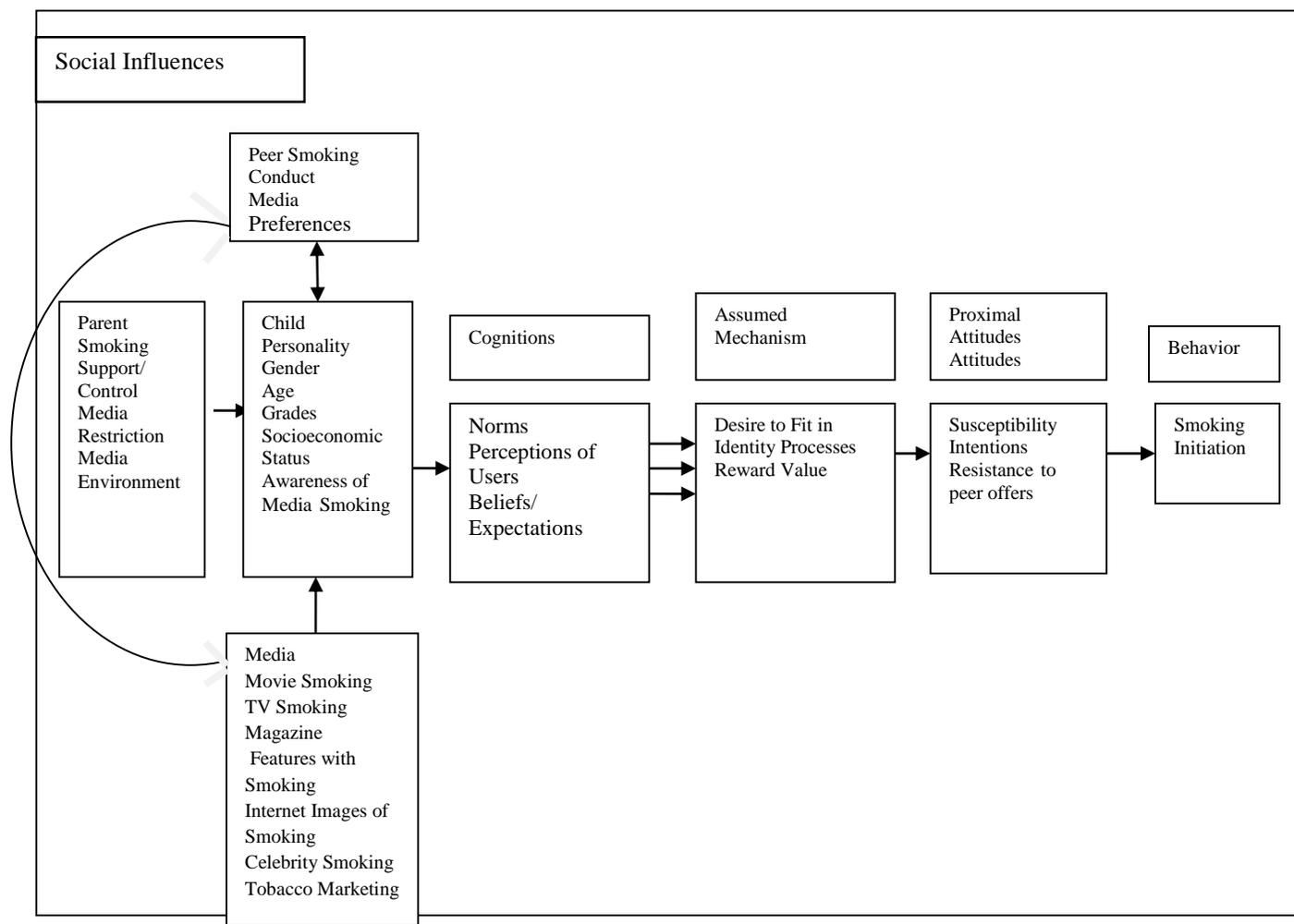


Figure 2. The Heuristic model for the effect of media exposure on smoking initiation. adapted from Sargent, J.D., (2005). Smoking in Movies: Impact on Adolescent Smoking. Adolescent Medicine Clinics, 16, 345-370. Used with permission.

Furthermore, the most established predictors of tobacco use onset and maintenance of tobacco use behavior during the teenage phase are social factors (Flay et al. 1994), encompassing peer tobacco use (Kobus, 2003), community smoking, exposure to cigarette marketing, family smoking and parenting or care-giving factors (Unger, Cruz,

Schuster, Flora, & Johnson, 2001; Jackson & Dickinson, 2003). These impacts are combined optimally into a social-cognitive model as explained by Bandura (1986), in which teenagers are impacted by the actions and attitudes that of mentors and role models within their contextual or immediate environment.

Based on the social cognitive theory, this model commences with the assumption that in childhood individuals pick up behavioral cues via observation of the behaviors of other individuals in their social environment. Children mimic the behavior of their caregivers or parents, other role models and peers, particularly those with whom they readily admire and identify. Media has been determined as an intrinsic social learning factor influencing cognitive beliefs and expectancies respectively (Collins et al., 2004). Media exposure has numerous possible influences on future smoking behavior. It could directly result to norms and beliefs that buttress or reinforce smoking, such as bogus consensus beliefs concerning tobacco use norms, or it can reinforce it indirectly via its influence on peer association. On the part of some teenagers, exposure to visual electronic media is a social activity teenagers go to the movies in groups or usually in the company of their peers. Therefore, the progression of preferences for movie stars or for particular types of entertainment is not an occurrence that takes place in a vacuum, but is informed by what is considered as being “cool” for the group with whom a teenager or youth identifies. Individuals belonging to the social reference group are dynamic co-conspirators in their cult following for particular media icons or certain movies. As a result of the potency of peer association (Sussman et al., 1994), peer media preferences may influence exposure to tobacco use in the media.

Significant measurable features or facets of the social and media environment and reactions to these factors to be taken into consideration in entertainment studies are shown. In the same way peer media preference may impact exposure to entertainment media tobacco use, so may caregiver or parental factors. Parents determine the orientation of media exposure based on the fact that they are responsible for creating and managing the domestic media environment (Flay et al., 1998). They determine the orientation of the domestic media environment via their purchasing behavior, which informs the number or TVs in the home, the size of the TVs, what channels to watch, the kind of other entertainment hardware connected to the TV, the sort of magazine subscriptions, internet availability, and the speed of internet access. Parents are in control of the distribution pattern of domestic entertainment hardware. This decision has a considerable effect on the rate of media exposure and whether the media is viewed in isolation or in the context of family (Roberts, Henriksen, & Christenson, 1999). Furthermore, parents may also have a far reaching influence by laying down rules concerning home media usage and by restricting certain menus or media avenues.

Pivotal to the heuristic model is the notion that peers and media affect teenage self-concept. The model provides the indication that in the quest for identity, teenagers pick up behaviors that are parallel to the image that they desire to have for themselves and pass on to others—images of individuals that are obtained from their media and social environment (Gibbons & Buunk, 1999). This process compels them to choose certain fashion paradigms; adopt idiosyncratic speech formats; express a particular

preference for specific types of media and music; and adopt specific behaviors, such as tobacco use.

A significant means for measuring risk prototypes in teenagers is by asking about their beloved celebrity and assess the on- and off-stage tobacco use status of such a celebrity (Tickle, Sargent, Dalton, Beach, & Heatherton, 2001). Not all children exposed to tobacco using role models try smoking; thus, there is a need for consideration concerning other risk factors, such as temperament (Wills, Cleary, Filer, Shinar, Mariani, & Spere, 2001) for the purpose of holistically explaining tobacco use. However, it is intrinsic to collate data on these other factors based on the fact that they are confounders that must be controlled for to measure the independent influence or impact of the media exposure. For instance, evidence has accumulated that rebellious children, risk-taking children, and sensation-seekers have a higher tendency to engage in substance use (Burt, Dinh, Peterson, & Sarason, 2000). A longitudinal research effort by Burt et al. (2000) comparing numerous temperamental factors, risk-taking and rebelliousness were the only features of 5th grade children that were important predictors of tobacco use by 12th grade. Sensation seekers also have an elevated tendency to look for exciting forms of media projections and have a higher likelihood of associating with deviant peer groups and use drugs, alcohol and tobacco. Rebellious and high sensation-seeking teenagers are also the children who have problematic or bedeviled relationships and poor communication with their caregivers or parents, which consequently, aids higher deviant peer group association and higher media use, including movies (Burt et al., 2000).

Therefore, temperament has a significant impact on relations with peer affiliation, parents and exposure to media, but also has direct influences on individual behavior.

What is evident from the model is that numerous factors must come into consideration upon assessing the role that exposure to media tobacco use might play in an epidemiologic research effort of teenage tobacco use. First, it is imperative to identify a means for measuring the media exposure with precision and accuracy. Next, it is imperative to select an outcome. Outcomes can be spread from ‘ever tried smoking a cigarette’ (a rational outcome in an early teenage demographic) to ‘daily smoking’ (a suitable outcome in a late teenage or adolescent demographic). Social impact factors would be expected to make up the majority in the research focused on tobacco use, but not necessarily in the research of daily or monthly (current) tobacco use, based on the fact that nicotine addiction becomes a major influence behind the maintenance of the behavior for more intensive tobacco users. On a final note, information must be collated on an array of other factors that could bewilder the link between the teenage tobacco use behavior and media exposure.

Smoking in the Media

Many research studies have emerged seeking to assess media smoking via the use of content analysis, a research method employing coders for systematically counting and characterizing media inputs. Content analyses of the highest selling movies within the last decade provide the indication that the larger proportion of the movies (87%) projected tobacco use; nevertheless, smoking only made up for a minimal proportion of screen time (Dalton, Tickle, Sargent, Beach, Ahrens, & Heatherton, 2002). In about 75%

of movies, cigarette smoking exposure accounted for lower than 4% of total screen time. It is however important to note that cigarettes are the most popular form of tobacco used, seconded by cigars, with negligible or minimal use of smokeless tobacco. Nicotine use characteristically rises with the “maturity” of the censorship rating. For instance, while movies with a PG-13 rating contain an average of four smoking scenes, movies with an R-rated designation contain an average of eight smoking occurrences (Dalton et al., 2002).

Smoking also varies according to the genre of the movie. It is more popular in dramas than in science fiction, comedies, or child or family genres. Nevertheless, a lot of children’s movies project smoking behavior. Content analyses of animation movies made for the child demographic that were released between 1937 and 1997 provided an indication that more than two thirds of the movies portrayed smoking behavior. The quantity of smoking incidences in movies is not significantly related to their market success (Dalton et al., 2002). Assessment of changes over the years in the rate with which smoking is portrayed on screen reveals some disparities between movie projections of tobacco use and the social reality of tobacco use behavior. In Dalton et al. (2002) content analysis of the highest selling movies from 1988 to 1997 was performed and found there were a total of 1400 major characters, and within this particular cluster of movie characters, smoking was found to be at 0.25; this was not contradictory with the incidence or popularity of tobacco use among U.S. adults around the same period. Furthermore, there was no increasing or decreasing trend in the average amount of tobacco use depictions in films around this same period, irrespective of dropping tobacco

use prevalence among the population of the United States. In a sample of highest selling movies in the United States from the year 1950 to 2002, the amount of tobacco use incidents per 5-minute interval of a particular movie fell from 10.7 per hour in 1950 to a low of about 4.9 in the year 1980–1982 but rose to 10.9 in 2002.

Another important research effort discovered or revealed that after an initial drop in the frequency of portraying smoking in the 1970s and mid-1980s, the frequency of smoking projections rose (Stockwell & Glantz, 1997). The projection or portrayal of tobacco use in children's animated movies failed to fall between 1937 and 1997 respectively (Goldstein, Sobel, & Newman, 1999). Therefore, the side of the debate that on-screen tobacco use mirrors social realism fails to hold up on the basis of trends for the frequency of tobacco use portrayal in films in recent years, where the content of the film seems to be divergent with falling tobacco use rates in the U.S. population.

Furthermore, it is imperative to note that these findings raise questions relating to the role of movies in amplifying the idea of tobacco use being popular. It is also significant to note that numerous research efforts observed a pattern of elevated tobacco use portrayal in the later parts of the 1980s and early 1990s; this era comes after the time bracket for which there is recorded proof of paid tobacco product placement contracts taking place in relation to movies film (Mekemson & Glantz, 2002).

Research efforts concerning brand placement in films provide the indication that the practice takes place frequently, irrespective of a voluntary contract by the tobacco industry to halt payment for their brands to be depicted (The Cigarette Advertising and Promotion Code incorporated a voluntary ban on paid product placement around 1991).

A sample composed of the highest selling movies within a span of 10 years (1988 to 1997), revealed that the most highly marketed or promoted U.S. tobacco brands made up for the highest proportion of brand appearances or in U.S films; there was no drop or reduction after 1991 (Sargent, Tickle, Beach, Dalton, Ahrens, & Heatherton, 2001a). The larger proportion (85%) of the movies contained some smoking, with particular brand appearances in about 28% of the total movie sample. Tobacco brand appearances were as widespread in movies suitable for teenage viewers as they were in movies for more mature viewers. Despite the fact that 27 cigarette brands appeared in the sampled films, four tobacco brands made up for about 80% of brand depictions, which include Camel (11%), Lucky Strike (12%), Winston (17%), and Marlboro (40%). Other content analyses of recent films contained in a sample from the later periods of the 1990s revealed that brand depictions for the Marlboro brand appeared five to six times with more frequency than for other cigarette brands (Roberts et al., 1999). The parallels between the marketing promotion agenda of the cigarette manufacturing industry and the exploits of the American movie industry—when making movies for international distribution—provides the significant suggestion that movies serve as a worldwide means of advertisement for tobacco brands, based on the fact that about half of the demand for these movies come from abroad (Roberts et al., 1999).

Assessment of Influence of Movie Tobacco Use

Movie tobacco use influence has been assessed or quantified in two ways. The first measurement encompassed or entailed determining favorite movie stars, which derives from the identity formation process. The process of identity formation is a means

by which exposure to movie smoking might influence a teenager's perceptions in relation to tobacco use. Teenagers create their individual identities by acquiring segments of the identities of other individuals they admire. Theoretically, as teenagers are exposed to films or visual electronic media, there is a progressive development of preferences for media icons. After the determination of star preference, teenagers look for films in which the preferred media star plays (this is the basis for the widely accepted impact of a main character or star on the commercial success of a film). A major strategy for measuring the influence of a film is by determining star preference for a particular sample of teenagers and to ask whether the screen tobacco use status of the movie star has a connection to the tobacco use status of the teenager. A significant problem with the favorite star assessment strategy is that teenagers have the tendency of choosing a wide array of stars; it is not thus possible to determine tobacco use status on all selected favorite stars which results in loss of sample (Distefan, Pierce, & Gilpin, 2004).

Furthermore, another means for measuring exposure to media tobacco use is a two-tier method that directly assumes or approximates exposure to film tobacco use. The first tier of this measure entails content assessment to ascertain the amount of tobacco use contained in the film sample of interest. Based on the fact that teenagers cannot be surveyed on all films, the second stage of this measure entails special survey techniques presenting the teenager with a list of film titles randomly selected from the wider content-analyzed sample. This direct analysis method has the merit that exposure to tobacco use in a film can be approximated directly and in an unbiased manner for all teenagers in the survey sample (Distefan et al., 2004).

Connecting Exposure to Media Smoking with Youth Tobacco use: Favorite Star

A relationship between star tobacco use and teenage tobacco use was first reported by Distefan and his fellow researchers (Distefan et al., 2004) using the California Tobacco Survey. Teenagers were required to state two of their favorite male and female actors. The investigators assessed the on- and off-screen tobacco use behavior for the top 10 favorite female and male actors and ascertained if there was a relationship between favorite star tobacco use status and tobacco use status of the teenager. Favorite star differed by gender (Tom Cruise and Brad Pitt emerged as the top two actors for girls while Arnold Schwarzenegger and Jim Carrey were the top two actors for boys).

Favorite stars varies considerably among teenage "ever" and "never smokers"; most favorite stars of "ever smokers" had used tobacco on- and off-screen in comparison to favorite stars of the "never smokers". In an analysis of multiple variables, teenage "never smokers" preferring the favorite stars of teenage "ever smokers" were considerably found to have a higher tendency of being vulnerable to tobacco use, even after adjustment for determined markers of teenage tobacco use and demographic variables; this impact was just a little weaker in comparison to exposure to family and friends and who smoke.

This research effort was followed by another study by Tickle et al. (2001) in which teenagers were asked to state their favorite movie star. The research assessed tobacco use status of favorite star for all stars named by five or more teenagers. Once more, tobacco use status of favorite star was related to tobacco use status of the teenager. For favorite stars who were tobacco users in two previous movies, the adjusted odds of

tobacco use was about 1.5; for tobacco using stars who were smokers in three or more previous movies, the adjusted odds of tobacco use was at about 3.1. Tobacco use status of the movie star also was closely related or associated with the vulnerability to tobacco use among the "never smokers". Distefan et al. (2004), in a longitudinal follow-up of the initial California adolescent sample, revealed that teenage "never smokers" who named or chose a movie who used tobacco in a movie had a 1.4 times higher tendency of taking up tobacco use behavior over the follow-up period of 4 years, even after controlling for other baseline effects or variables. The impact or influence on future tobacco use behavior was seen only for girls and in boys; future tobacco use behavior was ascertained more viably by participation in smoking or cigarette advertisement campaigns. This research represents one of two longitudinal research efforts linking exposure to tobacco use in films and teenage tobacco use behavior.

Sargent, Beach, Dalton, Mott, Tickles, Ahrens, & Heatherton (2001b) made use of the direct approach of measuring or analyzing exposure to media tobacco use for the purpose of estimating lifetime exposure to media tobacco use from a sample of 601 hit contemporary films among 4919 teenagers from northern New England. The subjects had been exposed to an average of about 30% of the film sample, from which they had seen or viewed an average of about 1,160 film tobacco use incidences. The results of the study revealed a direct linear association between higher media smoking exposure and higher rate of tobacco use behavior through the larger proportion of the exposure range, with the dose-response dropping out past the 95th percentile of media exposure. There was almost no tobacco use among teenagers with little exposure to films, and tobacco use struck a

peak of about 40% above the 95th percentile. The connection between media exposure to tobacco use and teenage tobacco use remained after controlling for a wide array of confounders. The association between exposure to media tobacco use and attitudes toward tobacco use was also analyzed for the northern New England adolescent sample. Exposure to media tobacco use was related to vulnerability to tobacco use, an indexed measure of tobacco use positive expectations, and normative beliefs in regards to adult tobacco use behavior. In line with content assessment, which revealed that teenage film characters are portrayed rarely as tobacco users in films (Dalton et al., 2002), exposure to media or film tobacco use behavior was not related to normative beliefs concerning peer tobacco use behavior. This result was in line with the largely adult-nature of tobacco use portrayals in films. The results of this research provide the suggestion that exposure to tobacco in the media forms attitudes toward tobacco use prior to the decision to carry out the behavior.

Furthermore, tobacco use behavior was also determined for "never smokers" in the study of northern New England teenagers in which exposure media tobacco use behavior was directly estimated (Dalton et al, 2003). The results as presented in the research report revealed that there is a direct linear correlation between higher exposure to electronic media tobacco use behavior and higher rate of tobacco use through the larger proportion of the exposure range. In the study, the results also showed that tobacco use during follow-up was almost at zero for teenagers with minimal exposure to media tobacco use behavior at baseline and was close to about 20% for teenagers in the highest exposure range. The impact persisted in the control for a wide set of covariates,

encompassing other social factor, marketing influences, personality features (e.g., rebelliousness), and style of parenting. The results of this study provide the most viable epidemiologic proof of a connection between exposure to media tobacco use behavior and teenage tobacco use. It is interesting to note that the estimates of the impact of exposure to tobacco use in the media in both longitudinal research were almost similar to estimates acquired for the cross-sectional samples. This provides the suggestion that progressive exposure to media tobacco use and its impact on teenage tobacco use persists over time.

Numerous research trials have emerged in the academia in which the researchers sought to control exposure to media tobacco use and assess short-term impacts on attitudes (Gibson & Maurer, 2000). Among these studies, the Pechmann and Shih (1999) study is very significant and relevant to this particular study based on the fact that it assessed attitudes among teenagers and employed a film that had been edited to eliminate tobacco use (without necessarily changing the content) as a control exposure. The researchers discovered that exposure to tobacco use scenes evoked higher levels of positive arousal in comparison to being exposed to similar scenes without tobacco use.

Regarding the impacts of tobacco use behavior on the emotional arousal of viewers, Pechmann and Shih (1999) revealed that the ratings of adolescents of a film's action or plot or their disposition or desire for recommending the film to peers were no different for the edited version of the same film that was without footage of tobacco use. This result is very relevant to movie makers based on the fact that it provides the suggestion that excluding tobacco use scenes from movies should not detract from their

holistic appeal. Pechmann and Shih (1999) also discovered that teenagers who were exposed to the film with tobacco use had a higher tendency of smoking in the future. Furthermore, the showing of an antismoking promotion placement prior to viewing a film that portrayed a tobacco use blunted the impact of the tobacco use on attitudes. This result carries the implication that presenting antismoking trailers prior to the commencement of movies with tobacco use could alter the impact of pro-smoking movie portrayals or projections on tobacco use behavior.

Review of Qualitative Methodology

This research will follow a qualitative individual interview protocol for the adolescents, and a focus group format that will include community adults. The same interactive tool will be used for each of the groups. I will facilitate both the individual interviews and the focus groups, which is the most effective way to learn to actually do research (Belle, 2005). Using this format, cases can be purposely selected according to whether they characterize, or not, specific features or contextual locations. Subsequent to that, the position of the researcher takes a higher preference based on critical attention in the small group setting. This is due to the fact that in qualitative research the tendency or apparent possibility of the researcher taking a “neutral” or transcendental place is in fact perceived as being more difficult in practical and/or philosophical angles. As such, qualitative researchers are usually called upon to reflect on their position in the holistic research procedure and elucidate this in the final analysis. On the other hand, while qualitative data analysis makes the assumption of the considerable propensity to differ from quantitative studies in the focus on language, symbols and significance as added to

efforts at analysis that are holistic and contextual, rather than reductionist and isolationist. Nevertheless, systematic and transparent efforts to analysis are about often seen as necessary for rigor. For example, numerous qualitative approaches necessitate researchers to decisively code data and distinguish and document themes in a reliable and reliable format.

Qualitative method is often brought in for policy and program assessment research because it can offer solutions to specific significant questions more capably and resourcefully than quantitative methods. This is particularly the situation for understanding how and why certain results were arrived at (not just what was arrived at) but also providing answers to important questions concerning relevance, unintentional effects and effect of programs such as: Were aspirations reasonable? Were there any unintentional effects of the program? Were major players capable of carrying out their obligations? Did processes function as required?

Fowler (2009) added that qualitative methods hold the important merit of allowing more variety in responses added to the ability to become accustomed to new developments or during the research procedure in total or in general. While a qualitative method can be financially tasking and protracted to carry out, numerous areas of research employ qualitative techniques that have been specially intended to produce more concise, cost-efficient and appropriate results. Rapid Rural Appraisal is in fact a suitable and standardized instance of these adjustments in the midst of a host of others. Qualitative approaches yield a vast amount of detailed information concerning any amount of persons or cases. The case study carries a real life scenario and offers the basis for

introduction of concepts, emphasizing comprehensive related analysis of a narrow amount of scenarios or conditions and their connections.

One of the merits of case study research is that it provides wealthy data as a result of the fact that the object of the case is assessed or examined in its natural background. The case study is employed to provide answers to “how” and “why” questions; it is also helpful when there is no power over the state of affairs or behavior of the person to be examined (Stebbins, 2001). A manifold case study is comparable to a sole case study apart from the measures are repeated in more than one site, thus reinforcing the validity and dependability of the findings. The plan and structural organization of qualitative methods is debatably the supplest of the many obtainable research and investigational measures, made up of numerous standard and conventional approaches and setups. From the verge of an individual case study to a wide-ranging survey, this sort of study still requires careful building and planning, but there is in reality no harmonized organization. Case studies and survey constructs are nevertheless the most frequently used methods (Lindlof & Taylor, 2011).

Summary

Although results in other research have offered a considerable sense of the area where peer relationships and adolescent tobacco use are concerned, there are still various voids in the existing knowledge concerning peer influences on cigarette smoking such as the lack of sufficient inquiry into peer influences by Bauman et al. (2001) and Bricker et al. (2006b). All through this literature review, such voids have been isolated, usually with particular recommendations for future studies. Nevertheless, it is important to proceed

with a concise elucidation of the aforementioned comprehensive theoretical framework of social influence presented earlier in this study. This implies attempting to connect research and theory, and to carry out a presentation of theory driven questions concerning the voids in the existing knowledge and directions for future studies. This literature research conclusion will be viewed from the vantage point of the individual and his or her cognitions and proceed outward toward the wider social structure. Social learning theory (Akers, 1973) or social cognitive theory (Bandura, 1986) looks at social and cognitive processes as they affect or inform the acquisition of individual behavior, particularly examining the balance of past and current models of behavior, how favorable or unfavorable a behavior is defined and the attendant rewards and punishments respectively. The results of the study elucidated previously offer proof supporting the applicability of this theory to teenage smoking. For instance, studies overwhelmingly provide reinforcement to the debate that exposure to parenting and peer models of tobacco use elevates the tendency that adolescents will try cigarette smoking (Flay et al., 1998; Latendresse, Rose, Viken, Pulkkinen, Kaprio, & Dick, 2008). Additionally, there is proof suggesting that when definitions of tobacco use are favorable, such as peer and parent approval of tobacco use or perceptions of tobacco use are favorable, such as peer and parent approval of tobacco use or perceptions of tobacco use are high, adolescents have a higher tendency of smoking (Bauman et al., 2001; Bricker et al., 2006a). Furthermore, perceived merits such as popularity, social status and relaxation have been determined as major reasons why adolescents gravitate towards tobacco use (Bricker et al., 2007). These results provide the suggestion of the viability of a social learning

hypothesis to the acquisition of tobacco use behavior, and the need for research endeavors assessing more holistically the assumptions of this theoretical vantage point.

Various questions can be put forth from social cognitive perspectives that demand future inquiry. For instance, it is not vividly obvious what really constitutes exposure to tobacco use. The following questions thus emerge: Is there any necessity for direct contact with someone who smokes cigarettes? Is knowledge that an individual is a smoker enough? What about peer smoking while “chatting” on the internet or on the phone? Does this make up tobacco use exposure? Concerning favorable and unfavorable definitions of tobacco use, studies are required which assesses changes in adolescents’ perceptions of this behavior. What happens to adolescents’ appraisals of tobacco use when they increasingly or decreasingly relate to teenagers who smoke cigarettes? On the basis of merits and demerits of tobacco use, more studies are required to assess perceived social merits, such as popularity, social facilitation, social competence belonging and group entry. Are these benefits imaginary or real? On a holistic note, results buttress the significance of peers and parents in tobacco use behavior (Simons-Morton & Chen, 2006; Avenevoli & Merikangas, 2003), but do not differentiate this influence from that of school or media factors of impact. Is the influence of peers and on teenage smoking more fundamental than that of media and community impacts? Results from studies also provide the suggestion that personality styles and psychological facets of influence, such as depression (Herman-Stahl & Petersen, 1996), affect the peer relationships and tobacco use behaviors of parents, which is as suggested by primary socialization.

Chapter 3: Research Method

The purpose of this research was to collect and compare the perceptions of adolescents and the perceptions of adult community members on what factors they believe influence adolescents to initiate tobacco use. This study took place in Fulton County, New York, where smoking-related mortality is the second highest in New York State. This investigation employed the most suitable methodology to effectively provide an explanation of the factors that influence adolescent tobacco use. This inquiry set out to explore the following research questions:

1. What are the perceptions of adolescents concerning what influences adolescent tobacco use?
2. What are the perceptions of community adults concerning what influences adolescent tobacco use?
3. What are the similarities and differences in the focus groups and interview groups' perceptions on what influences adolescent tobacco use?

Research Methodology and Design

The qualitative design of this research consisted of individual interviews with adolescents and focus groups with community adults and was comprised of loosely structured questions for data collection. A qualitative design was chosen because it is the best method to reveal the genuine substantive issues related to the adolescents' and community adults' perceptions of tobacco use. The application of certain principles to determine credibility of qualitative research is necessary to establish internal validity. According to Ryan-Nicholls and Will (2009), the rigor or strength of the evidence in

qualitative research can be demonstrated by its credibility and internal and external validity. The merit of methodological rigor of qualitative studies must be proven by the acceptance of the instrumentation used and the objectivity of the researcher (Ryan-Nicholls, 2009).

Qualitative methods are important when a topic is apparently too complex for offering answers through the use of an easy and popular "yes" or "no." These kinds of research approaches are much less difficult for organizing and processing successfully and are also very important and necessary when financial budgetary allocations have to be considered (Maykut & Morehouse, 1994). The wider scope undertaken by these designs make sure that some important data are always acquired in the course of the review, while an untested hypothesis in a quantitative study can require a lot of time. Qualitative methods are fundamentally not as reliant upon sample sizes in relation to quantitative methods; a case study, for example, can yield important results with a significantly small sample size (Stebbins, 2001).

Although it is not as time consuming or costly to carry out quantitative research, qualitative approaches still require considerable planning and thought in order to achieve the set objectives of the research and to ensure that the findings arrived at are as precise as possible. It is not feasible for qualitative data to be numerically examined or calculated in a similar way as results from quantitative approaches so can only provide a guide to universal approaches. It is far more susceptible to personal perspectives, and as a direct consequence, can only ever provide observations instead of results. Any qualitative approach design is considerably more distinct and thus possible to be precisely replicated,

implying that they lack the capacity of being academically peer reviewed (Stebbins, 2001). Additionally, critics of the case study approach believe that the study of a minute number of cases has the likelihood of providing no grounds for validity or generality of findings (Flyvbjerg, 2006). Others consider that the intense exposure of the researcher to the case study results in biased results or dismiss case study research as only being effective as an exploratory approach due to limited understanding of this research strategy (Baxter & Jack, 2008). Still, researchers make use of the case study research approach effectively in carefully organized and structured studies of real-life scenarios, problems and issues (Veal, 2006).

Role of the Researcher

I have a lifetime of experience professionally in healthcare and health education experience specifically targeted towards tobacco abuse and cessation. As a Registered Respiratory Therapist, I have seen first-hand the devastation of patients and families that is directly caused by tobacco use. I tried to maintain complete neutrality when administering both the focus groups and individual adolescent interviews; however, because the research was attempting to discern what the groups felt influenced adolescent tobacco use would most likely lead the individuals to note I was against tobacco use. Admittedly, my stretch goal is to eradicate tobacco use in its entirety. Because of my passion, this could also have hindered my objectivity and potentially skewed the answers in both the focus groups and the individual interviews. The participants could have answered the adolescent individual interview questions with the responses they thought I would want to hear, or if they felt annoyed or hurried, they could not answer or even

provide a manufactured answer that did not truly reflect their feelings or perceptions. I do not believe that any of the participants in either the adolescent or community adult groups felt that I had any power over the responses. For the adolescent group, I was not acting as their teacher, and their instructors were out of the range of hearing the adolescent's responses. In the community adult groups, all members seemed to be professionals in their own right, so I would believe my role as the researcher was that of an equal peer. As a fellow community member, the participants knew of the stake I had in the community.

My role as a researcher and observer, especially with the adolescents' interviews, was somewhat defeating. I had hoped to hear that adolescents had negative feelings towards tobacco use. The overall adolescents' indifference to the observation of tobacco use in their communities was disappointing. Furthermore, since the research was done within my home county, it was also disappointing to discern the adolescent's perception of tobacco use does not seem to have changed over several decades.

Interview Protocol

The individual interviews were done with the willing participants from each Health Education class at each school. The research was performed after the end of the school day, in the school cafeteria. A school representative was present to keep the adolescents company while the individual interviews are done with just the adolescent and me. I took notes; however, an audio recorder was used to assist in clarification on notes and to allow me to pay better attention to the participants and watch for any subtle body language or gestures. The only identifying data collected were the class community, class grade, or ages of adolescent participants. Neither the adolescents nor the community

adults were asked of their smoking status. If this information was disclosed, it was not used in the analysis of the data, and the confidentiality of their responses will be protected outside of each interview. Moreover, the responses were cumulative, not individualized by participant. The participants were cautioned not to use any names within the interviews and were informed that if this did happen, the transcript of such shall be redacted. The community adult focus groups used the same tool as the adolescents. Data from the cumulative adolescent interviews and the community adult focus groups were collected and initially analyzed separately.

Participants

The research was carried out with a selected adolescent population from Fulton County in Northeastern New York State. Fulton County's most recent population is 55,531 (NYSDOH, 2010). The specific adolescent research population was with adolescents participating in a required school Health Education program and community adults. This sample was acquired via the convenience method of sampling, which depends on as many members of the selected demographic willing to take part in the research as possible. The participants were taken from the population of adolescents registered in the Health Education classes in Fulton County in Upstate New York. As stated earlier, this county was chosen as a result of the high incidence of smoking in Fulton County mentioned previously in Chapter 1 and because I have a vested interest as a resident and community health educator in Fulton County. The student individual interviews were structured to take as little time as absolutely possible, and they were conducted after school, in each school's cafeteria. The interviews were structured, but the

questions were able to be somewhat open ended. I provided encouragement that the adolescents should feel free to respond as they wish, and if they did not feel comfortable with any of the questions, they were under no obligation to answer. The interviews took place in a very informal and open atmosphere; however, every necessary precaution was taken to ensure their privacy. Furthermore, I was the sole interviewer obtaining objective data, which could only be acquired via face-to-face or first-hand observation as required by qualitative methodology. Within both the adolescent individual interviews and the community adult focus group setting, I was able to get a first-hand account to carry out important observation and recording of nonverbal cues from the participants. Any apparent forms of discomfort or stress experienced by any of the participants could be detected via facial expressions, nervous tapping, frowns, and other obvious forms of body language, unconsciously revealed (Denzin & Lincoln, 2011). It would not be possible for me to pick up these nonverbal cues in a conventional telephone interview. Based on all these, interviews and focus groups assist me in acquiring the desired results and assist in recording the expression of the person being interviewed (Denzin & Lincoln, 2011).

Data Collection

I ensured the collection of an adequate amount of relevant, current, biased, and methodological-error free information. I employed social cognitive theory, which permitted the participants to provide or offer exploratory answers to the questions I brought up and offered the benefit of important insights that other approaches may fail to spot.

Participants were adolescents registered in Health Education classes at high schools in Fulton County, New York and community adults. Data from the focus groups and data from the individual interviews were collected and stratified by the perceptions of the responses related to tobacco use compiled by adolescent and community adult groups. For the community adult groups, I contacted the PTA/PTSA Presidents to help gain access. It was determined that the PTA/PTSA groups would be willing and able to gain access to the largest number of community adults I needed to schedule several sessions outside of the normal work schedules. The questions of the focus groups were exploratory in nature and involved open-ended questions to limit the influence on participants of previous theoretical constructs of caring (Miles & Huberman, 1994). Once completed and accepted by Walden University, each participating school will receive copies of the final results of the study. Table 1 below shows the demographic profiles for the participating schools.

Table 1

Demographic Profile for Participating Schools

School	Student body	Grades	Student racial/ethnic origin	Avg class size
Broadalbin-Perth	657	9-12	98% White 1% Black/African-American 1% Hispanic/Latino	22
Gloversville	976	9-12	91% White 5% Black/African-American 3% Hispanic/Latino 1% Asian/Native Hawaiian/Other Pacific Islander	24
Johnstown	657	9-12	96% White 2% Black/African-American 1% Hispanic/Latino 2% Asian/Native Hawaiian/Other Pacific Islander	23
Oppenheim-Ephratah	127	9-12	97% White 1% Black/African-American 2% Multi-racial	14

Protection of Participants

All individual adolescent interviews and community adult focus group participants' perceptions collected were kept confidential and the anonymity of all participants was maintained. No personal demographics were collected, other than gender notation. All participants in the individual adolescent interviews needed to feel secure in their participation, know they could speak freely to me, and know that their individual opinions and views would not be disclosed. The community adult groups also needed to feel that they could speak freely in the group and that no feedback would be discussed among the group. I provided the participants with a copy of a confidentiality agreement by the use of a consent form stating such. All participants as well as the parents or legal guardians of each adolescent were also provided with a sample of the focus study tool prior to their adolescent's participation in a communication from me. Both adolescents and community adults were assured that this study's participation was purely on a voluntary basis and will in no way reflect the adolescents' Health Education coursework grading.

I was granted IRB approval #11-07-13-0106106 for this research. All participants signed the necessary documentation required by Walden University's Institutional Review Board (IRB), to include Letters of Cooperation from each school district, Adult Consents for community adult participants, Parental Consents and Adolescent Assent forms for adolescent participants. All participants also received the contact information for Walden University's IRB should there be any concerns regarding the proposed research. All original data collection from my notes, audio recordings, and transcriptions of audio

recordings were entered into my computer and all related data were encrypted and only reviewed by me and Walden University. Data used to publish this research will be stored for 5 years according to the Walden University's IRB.

Structured Interview Guide

I emailed the primary author to ask for permission to use a structured interview guide developed by used in a qualitative study published in 2002 by Plano-Clark et al. The researchers in this study used four different high schools as their venues, with school populations ranging from 560 to 2,000. After the primary author, Plano-Clark, consulted with the project's primary investigator, I was granted permission for use of their structured interview guide with the proper citation (email located in Appendix A). I chose this specific structured interview guide because it was developed by qualitative researchers and published in *Qualitative Health Research* to be used with adolescents and seemed to capture the data required to answer the problem statement. This protocol's questions move very naturally though the introductions, then flow into the discussion questions related to where the adolescents have seen tobacco being used around their schools and their communities, and then delve further into how witnessing tobacco use made them feel. This concise protocol encourages diverse perspectives albeit standardized data collection across the school districts. The protocol sought to engage the participants into their views on the role of families, friends, and the media in the promotion of tobacco use and encouraged participants to voice their opinions not only on tobacco use but also on the human aspect of the difficulty of quitting tobacco. The participants in both the adolescent individual interviews and the community adult focus

groups were encouraged to voice their opinions and to relay opinions they hear in their school and community. Asking the participants to speak to their school's enforcement of tobacco abstinence is important knowing that they are most likely aware of the rules but may have an opinion on how diligent the school district is to enforcing them, which could be a barometer on how engaged the school district is with their students and vice versa. The community adults group also had the perspective of living through adolescence and could convey their current opinions on tobacco use around the schools and their communities as well as recollect how tobacco use affected their perceptions growing up.

Data Analysis

Following Creswell's (2008) data analysis steps, the data collected was transcribed and organized by adolescent groups and community adults groups. The transcripts were then reduced to themes via coding and sub-coding. The final step was to graphically represent the data and provide a discussion of the chosen themes. The data collected in the individual interviews with the adolescents and the community adult focus group studies was stratified via open coding, in which specific statements are analyzed and categorized into clusters of meaningful interpretations (Starks & Trinidad, 2007). This data was presented in a descriptive analysis fashion where words, themes and phrases were used in the coding progress (Peshkin, 1993). All information and data was reviewed and triangulated and examined for widespread themes. The goal in the coding process was to measure common themes, describing and verifying the themes, interpreting the themes, and then resulting in the evaluation of the events are related phenomena (Peskin, 1993).

After review of the recordings, the data was organized in the individual adolescent interviews by school district, and then the community adult focus groups by school district. The data was transcribed by school district to illicit any unknown demographic or socioeconomic variances between each district. All school districts in Fulton County, New York are deemed rural; however there are slight variations in the population as noted in Table 1. Data collected was categorized by each individual question. Cumulative data analysis was then performed on all schools within the county using the total adolescent convenience sample population and the total community adult convenience sample population.

Raw data transcripts were reviewed a total of four times over different session to ensure consistency of the analysis. Categories were selected by using the initial research questions and by the identification of all common themes within the data. The objective of coding the data is to identify themes both within each group and among each of the groups. The content of the data analysis was then reviewed by my notes regarding any observational data and both these factors played into the qualitative methodology in this research. In the utilization of this qualitative method, I was better able to understand the perceptions of the adolescents and the community adults towards tobacco use in their communities.

Individual adolescent interviews and community adult focus groups were the formal approach used in this qualitative research. Qualitative research analysis also uses informally structured materials and data such as that found in personal observations.

Exemplar

Results of the most common themes cited from the individual interviews and focus groups will be illustrated in chart format. Each research question will also be presented in charts to explain which themes, or in this case the factors that influence adolescent tobacco, public health efforts should target (Solberg, L., Mosser, G., & McDonald, S. (1997). Miles and Huberman (1994) published a Venn diagram of common themes in qualitative research and depicts how three separate topics, ideas, or opinions can overlap in some area that highlighting common themes.

Validity and Reliability

Raw data collection in a qualitative research is through observation, interviewing, and document review, which the researcher must collect accurately and objectively. To ensure data collection is accurate, I will make use of a script that will be used to prompt discussion in the interviews and focus groups with the participants. This study will use open coding which will assist in analyzing the raw data collected. Shi (1997) explains that a code book is required when open-ended questions are used in order to ensure that the analysis of data is accurately interpreted and connections between the categories are made (p. 300). Codes and categories are defined by the researcher which emerge from their interpretation of the data collected (Kendall, 1999). Strauss and Corbin (1990) define axial coding as a set of procedures which data are put back together in new ways after open coding by making connection between categories. This will be done in this study by using “a coding paradigm involving conditions, context, action/interaction strategies, and consequences” (p.96).

Summary

This chapter provides the groundwork for the research, the theoretical framework, the qualitative structured interview guide used in the community adult group and also used for the individual adolescent interviews, and the use of open coding for data analysis. Chapter four will detail the results and interpretations of the data collection and analysis.

Chapter 4: Results

Introduction

The purpose of this qualitative study was to explore the perceptions of adolescents and community adults on what influences adolescents to use tobacco. The study allowed the participants to express their feelings and perceptions by the use of open-ended questions to facilitate discussion. A structured interview guide was used in both the adolescent groups and community adult groups; however, with the adolescent groups, I interviewed the students individually. This was done to protect their privacy and to make them feel more comfortable discussing the issues, avoiding the possibility of being ridiculed by their peers. Moreover, this individual interview process allowed those who may have been over spoken in a group setting to fully participate. The community adults were asked if they wanted an individual interview or focus groups, and each participant requested focus groups based mainly on time constraints. In addition to providing the results of this research, in this chapter, I will discuss the locations in which the research was conducted and provide information on the tool used, steps taken for recruitment of participants, data collection, results, themes, and evidence of data quality.

Study Location

This research was conducted in five school districts in Fulton County, New York. Permission to perform the research with adolescents was obtained in four out of the six school districts in the county. In one of the five school districts, the PTA/PTSA was on-board for the community adult focus group discussion; however, I never received any return phone calls, emails, or letter requests, which were directed to the Superintendent,

the Principal, and the Health Education Teacher therefore, I was unable to conduct the research with the adolescents. One principal declined to participate due to the school district's recent participation in a similar study on tobacco use by adolescents sponsored by the New York State Department of Health.

Population

The targeted adolescent population in this study population was chosen based on the school districts' graduation requirement to participate and successfully complete a semester in Health Education during their high school years. The total adolescent participation was determined by the school districts' reported average class size ranging from a high of 24 students to a low of 14 students. The community adult population consisted of any adult living in Fulton County, New York.

The participants in both the adolescent and community adult groups were not asked to provide their race or any other socioeconomic information. The ages of the adolescents ranged from 13 to 18 in Grades 9 through 12. The community adults were not asked to specify their ages.

Recruitment

Piloting

The protocol used in this research was developed by qualitative experts and was previously used in the authors' research published in a peer-reviewed journal. Prior to recruiting participants for the adolescent groups, I requested and received permission from the schools to take a few moments prior to the beginning of classes to introduce the individual interview questions to the students. I provided a copy of the protocol to each

adolescent, along with the associated consent forms. Similarly, I met with the participating PTA/PTSA groups to introduce the structured interview guide and discussed the purpose of the research. I requested that the groups discussed the willingness to participate with each other after I excused myself from the meeting, and if they decided to participate, they could contact me via email and we would set up a convenient time for the data collection. I also discussed with each of the groups what the purpose of the research was and the estimated time requirement to participate in the adolescent individual interviews and the community adult focus groups. I informed the adolescents that the interviews needed to be held after the close of school and requested them to be mindful of the time commitment in lieu of other extracurricular activities and responsibilities.

General Recruitment

I exclusively recruited both the adolescent and community adult groups. The participating schools' PTA/PTSA did offer to informally contact other parents to see if they were interested in participating, and I left some extra copies of the structured interview guides and consent forms with them if they chose to distribute them. My contact information was contained on all distributed documents. After obtaining signed Community Agreement letters from the respective school district officials, I contacted the Health Education teacher in each of the study's school districts. Copies of the structured interview guided the parental consent forms, and the adolescent assent forms were mailed to each Health Education teacher with my contact information. Each school district's PTA/PTSA Presidents were contacted to request permission to attend their monthly

meeting. This was done to present my research plan to them and for them to advise me on the most successful way to reach out to community adults in their districts. Only two PTA/PTSA groups out of the four school districts who agreed to let me conduct research on the adolescents invited me to their PTA/PTSA meetings. One of the four school districts had a PTA that served only the grade-school level, so this district would not fit the adolescent population of the research.

Structured Interview Guide and Individual Interview Protocol

A previously published structured interview guide developed by a team of qualitative research experts was used in both the adolescent and community adult groups (Plano Clark et al., 2002). The first discussion question of the protocol was modified from the original as recommended by Walden's IRB. This originally was formatted as "Think back over the course of the past month. Describe for me times when you have or you have seen people using tobacco." This open-ended question asked when the participant had last used tobacco, which was not related to this study's research questions. This question was changed to "Think back over the course of the past month. Describe for me times when you have seen people using tobacco." In order to delve into this further, I asked where the adolescent was when they observed tobacco use, what was going on, who was using it, (without naming names) and how they reacted, and then asked them to provide examples. The next discussion question asked the adolescents how they believed students at their school felt about tobacco use, also with the prompting of "Can you give me an example; could you tell me more; what do you mean by that?" Then, I asked if they could tell the interviewer what the rules for tobacco use at their

school were, if they thought other students knew about the rules, and if they believed the rules were enforced. The next question in the protocol focused on the adolescents' other experiences with observing the use of tobacco and if they believed advertising, films, and television actions at work, home, or with friends played a role on tobacco use. The final discussion asked the interviewee what they felt quitting tobacco was like, and if they thought it would be different to quit if you are younger compared to older people.

I began by obtaining the necessary authorization to conduct the protocol in their schools from each school district's administration. Once this was obtained, the health education teachers were contacted and each verbally agreed to allow the research to be done with their students. The teachers each allowed me to introduce my research during the 10-minute assembly time prior to the start of the class day. At this time, the students were given the individual interview protocol to review and to share with their parents. They also received the parental consent and adolescent assent form to review, sign, and return to their health education teacher prior to the research collection date. I set up tentative data collection dates with each health education teacher, pending receipt of all required permissions.

Individual interviews were scheduled with each school district's health education teacher and students and were conducted in a revolving fashion directly after the school's closing bell. Either the cafeteria or a resource room was used to perform the interviews. In each school district, the health education teacher agreed to chaperone the students while each student was being interviewed.

The community adult focus groups were performed during the PTA/PTSA meetings. The members of these committees agreed to let me perform the focus groups and use up to the first half hour of their scheduled time. The community adult focus groups were members of their respective PTA/PTSA. These meetings have the elected officers of president, treasurer, and secretary, and include the school's principal. The meetings are open to the public to attend; however, any agenda items, such as this community adult structured interview guide, needed to be vetted through the elected members and scheduled in advance. I attended PSA/PTSA meetings at three of the schools. Two school districts agreed to allow me to do the research, and one school district did not answer several emails. The first meeting was to introduce them to the community adult structured interview guide, and the second meeting was during their next monthly scheduled meeting to have them sign the consent forms and collect the groups' data. The same protocol published by Plano Clark et al. (2002) was used in the community adult focus groups. The discussion questions were the same as in the individual adolescent interviews, and the modified question was also removed that queried the community adult's tobacco use.

Data Collection

I reintroduced the individual interview protocol to each student, and when the students were comfortable and agreed to begin, they were asked specifically not to use anyone's name or anyone's tobacco use status, including their own. They were also notified when the audio recorder was turned on and off. Each student in each school district was interviewed in this manner.

The individual adolescent interviews were conducted immediately after school in the school's cafeteria, and in one case in a small multipurpose assembly room. Each school's health education teacher volunteered to be present during the sessions, which kept the other students busy doing their homework while waiting for their turn to be interviewed. The individual interviews took place out of ear shot from the other students, with me facing the group, and the student being interviewed facing away from the group. The time of each interview varied based on the level of engagement with each student, with the longest total interview time lasting approximately 30 minutes to complete.

I implicitly stated to each adolescent participant and community adult groups that they were not to disclose their current or previous tobacco use, and all the adolescent participants were specifically asked not to name any specific students nor reveal any students' tobacco use or other activities. As noted above, both school districts' PTA/PTSA allowed the research to take up the first half of their scheduled meeting to perform data collection. The adults were open to discussing their personal history of tobacco use; however, they were made aware that this information would not be requested. Both the individual adolescent interviews and the community adult groups were made aware prior to beginning the data collection that I would be audio recording their sessions with no name, date, or school district identifiers, and that I was required to keep the original data for a period of 5 years, as set by Walden University's Institutional Review Board. Table 2 shows the number of adolescent interviewees and community adult focus group participants by school district. Table 3 shows the gender of both the adolescent and community adult groups by school district.

Table 2

Adolescent and Community Adult Participants (N=26)

School district	Adolescents	Community adults	Total
Broadalbin-Perth	10	0	10
Gloversville	3	0	3
Johnstown	3	0	3
Oppenheim-Ephratah	3	3	6
Northville	0	4	4
Total	19	7	26

Table 3

Adolescent and Community Adult Participants' Gender (N=26)

School district	Adolescent gender (M/F)	Community adult gender (M/F)
Broadalbin-Perth	4M/6F	0
Groversville	3F	0
Johnstown	1M/2F	0
Oppenheim-Ephratah	1M/2F	3F
Northville	0	4F
Total	19	7

Theme Analysis of Transcripts

Open coding of transcripts was performed to triangulate the findings of both the community adult focus groups and the adolescent individual interviews to recognize emergent versus expected themes. Participants' responses were placed into several theme categories. The steps involved in this qualitative narrative research analysis follow Creswell's (2008) step by step process. First, the adolescents' interviews and the community adults' structured interview guide's recorded data were transcribed by school district. The transcripts were then organized into themes or descriptive categories based on the adolescents' and then the community adults' structured interview guide responses.

As stated earlier, a previously published peer-reviewed structured interview guide developed by a team of qualitative research experts was used in both the adolescent and community adult groups (Plano-Clark et al., 2002). The next step was to read through all collected data to determine the credibility of the information gathered. This was difficult in the adolescent groups, as they seemed not to be as forthcoming with their answers. In addition, they were much more apt to have a neutral or indifferent attitude towards seeing tobacco use both at school and in their communities. The adolescent boys seemed more likely to feel it was a person's right to use tobacco if they chose to. Most of the adolescent girls were also neutral or indifferent about seeing people using tobacco; however a small minority of the girls made negative facial expressions mainly about seeing members of their family using tobacco. No one seemed to be bothered by seeing and reacting to tobacco use by students at their school. The third step of categorization was en vivo coding. This step took common terms used by participants in both groups and placed them into themes. During the next step, the data collected was manually coded which allowed me to appropriately manipulate the transcripts into thematic categories. The coded data and generated themes which were transcribed by each school district were then compared and contrasted as all adolescent and all community adult participants. The themes that emerged were either positive toward tobacco use, negative toward tobacco use, or normalized on seeing tobacco used in their communities. Next, a narrative was crafted to discuss the descriptive information of both the adolescent individual interviews and community adults groups. The final step in data analysis was to

define lessons learned by the qualitative data collected, and to determine if the results confirm previous assumptions or shed light on any unanticipated questions or issues.

Research Questions

As stated in Chapter 1 based on the purpose of the study, the research explored the following areas:

1. What are the perceptions of adolescents concerning what influences adolescent tobacco use?
2. What are the perceptions of community adults concerning what influences adolescent tobacco use?
3. What are the similarities and differences in the focus groups and interview groups' perceptions on what influences adolescent tobacco use?

Results of Perceptions by Research Question

1. What are the perceptions of adolescents concerning what influences adolescent tobacco use?

Five adolescents (26.3%) felt that seeing an actor in a movie smoke could influence adolescent tobacco use, especially if they admired the actor or saw him as a hero in the movie. One adolescent commented that he saw smoking in older movies, and that the smoker was typically an old rich guy. One of these adolescents stated "Yeah, I think seeing grownup smoking on TV and in the movies encourage kids to do it too." The other adolescent stated "If they like that person in the movies that could encourage them to smoke...make them want to be like them." Two adolescents (10.5%) stated that they only saw anti-tobacco advertisements and televised commercials, while three adolescents

(15.8%) noted they did not see tobacco products in the media. Seven adolescents (36.8%) discussed seeing smoking in the movies, at their work, and outside restaurants however did not comment whether this was an influence to adolescent smoking. Other comments that came out of the interviews were from three adolescents (15.8%) who stated they did not see tobacco in the media and two adolescents (10.5%) that they only saw anti-tobacco advertising. One of the adolescents (5.3%) did think that peer pressure played a role in influencing adolescent tobacco use. Figure 3 shows the adolescent respondents' perceptions on what influences adolescent tobacco use.

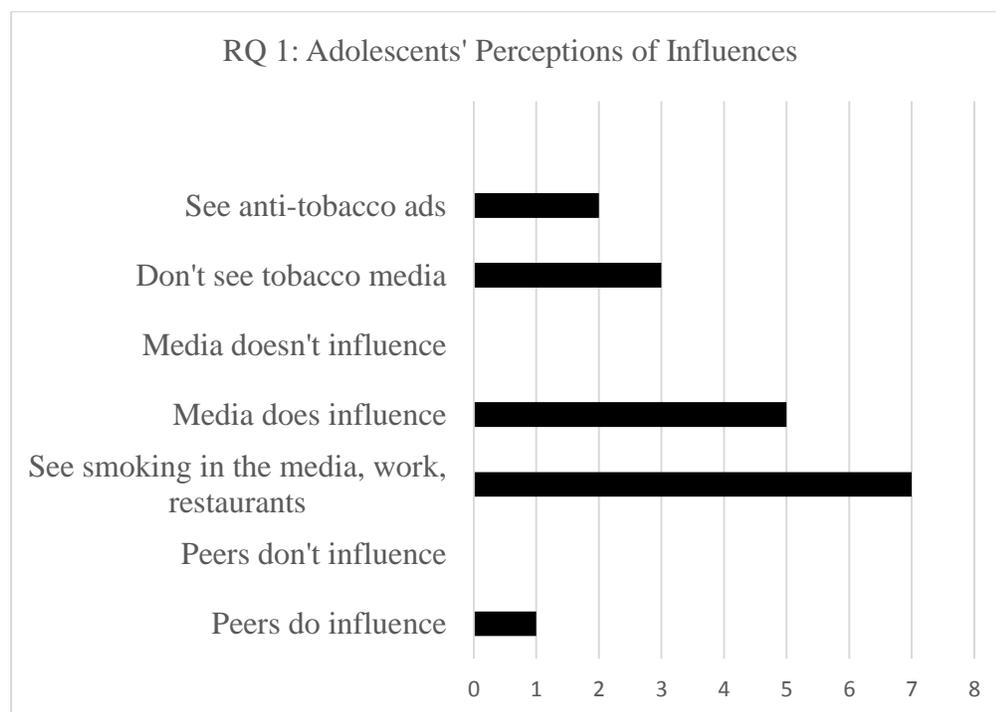


Figure 3. Adolescents' perceptions of what influences tobacco use.

2. What are the perceptions of community adults concerning what influences adolescent tobacco use?

One community adult (14.3%) felt that seeing a popular actor in a movie smoke could influence adolescents to using tobacco. Another community adult (14.3%) noted that advertising used to influence kids to use tobacco, but nowadays with televised advertisements prohibited and with the abundance of anti-tobacco campaigns, advertising was no longer an influencing factor. One community adult (14.3%) in the group stated “I think if the kids decide they wanna smoke, they smoke.”

Five out of the seven community adults (71.4%) did not perceive that adolescents were influenced by seeing smoking in the media, or that there was any level of peer pressure that influenced adolescent tobacco use. Two of the community adults (28.6%) commented that if adolescents saw smoking in a movie, they would know that is was wrong. One of the community adults (14.3%) felt that as long as smoking was not present in kid’s movies, it didn’t bother them. The community adults were more likely to have very strong negative opinions on how they perceived smoking by their families. The community adults also did not comment on the influence of friendship homophily or “Birds of a feather flock together”. Figure 4 reflects the community adult responses on what they perceive influences adolescent tobacco use.

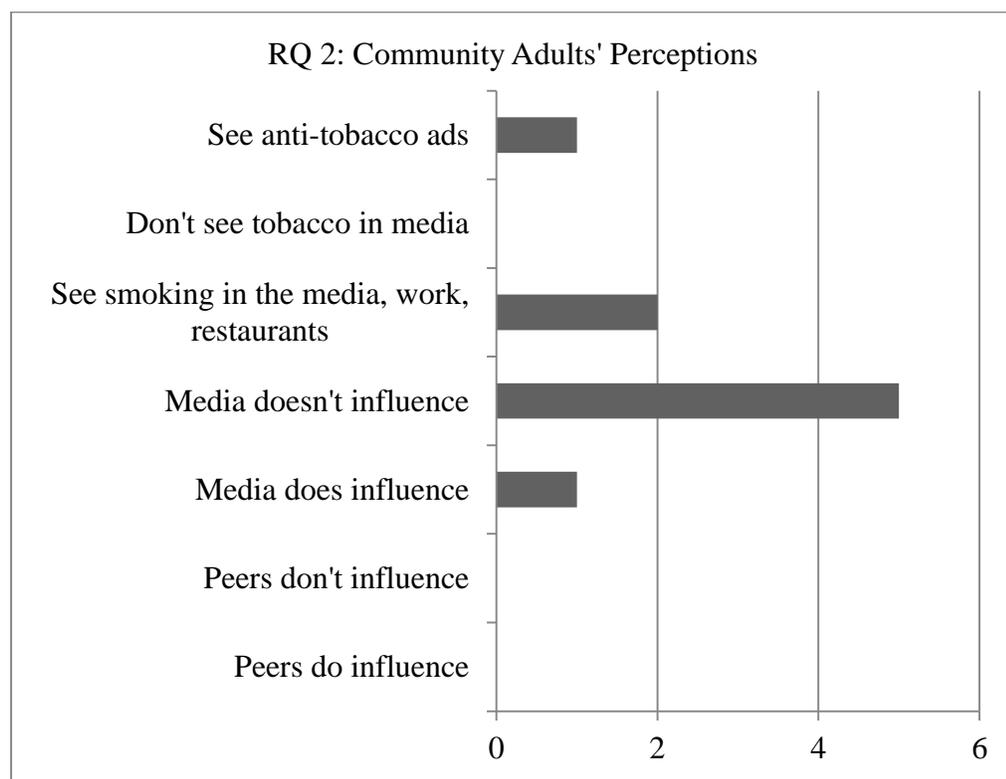


Figure 4. Community adults' perceptions of what influences tobacco use.

3. What are the similarities and differences in the focus groups and interview groups' perceptions on what influences adolescent tobacco use?

Figure 5 compares the responses of the adolescents and the community adults perceptions of what influences adolescent tobacco use.

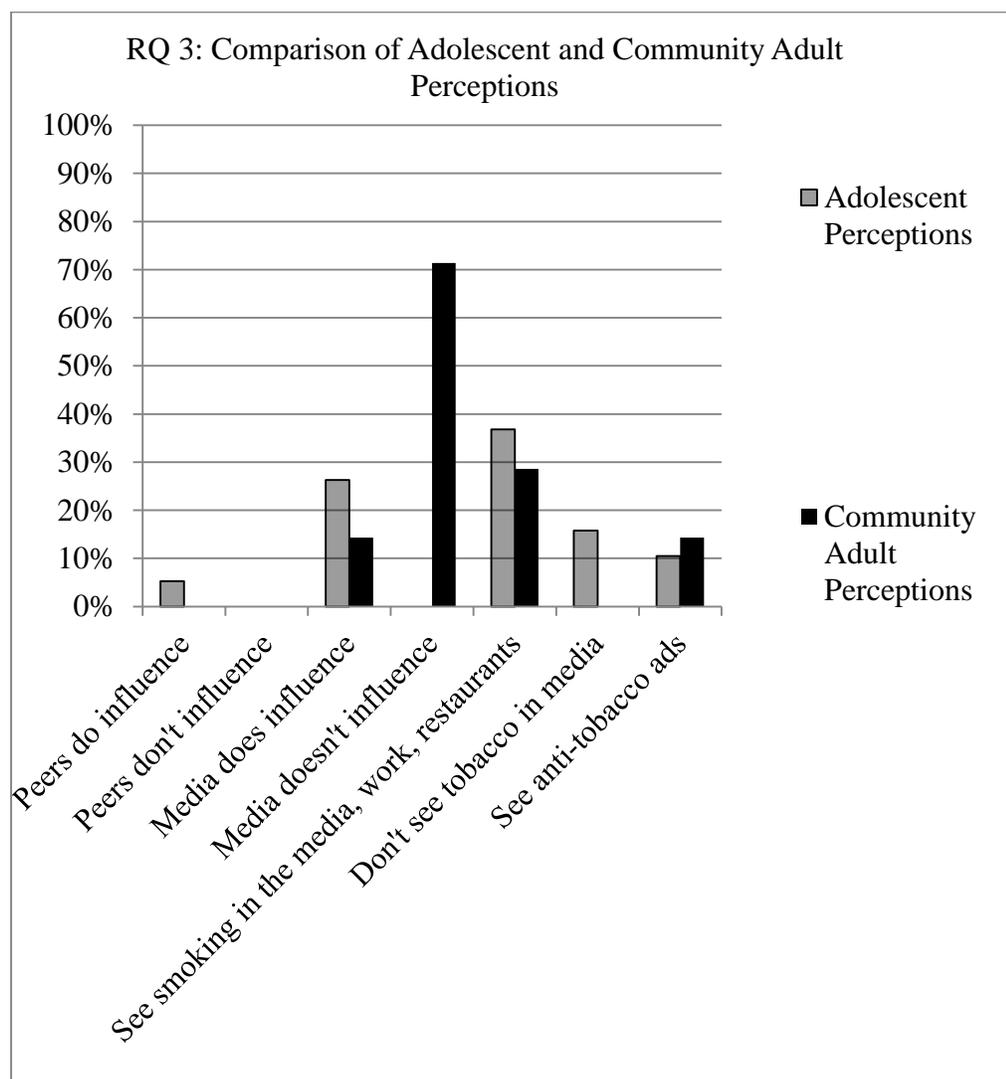


Figure 5. Comparison of adolescent and community adult perceptions of what influences tobacco use.

The first similarity in the responses was that neither group held a strong opinion on influence of peer pressure on adolescent tobacco use. Only one adolescent and none of the community adults commented on this as an influence and this response accounted for 3.9% of the total research population.

Six out of the total research population (23.1%) stated that the media influenced adolescent tobacco use. Only one community adult commented on the media influence, while five of the adolescents in the total study population (26.3%) felt more strongly that smoking in movies was usually done by the hero or the popular star which would account for a heavy influence if an adolescent related to or looked up to that actor or character. While none of the adolescents specifically stated that media, whether it was movies, television, or advertisements did not influence tobacco use in adolescents, 71.4% of the community adult population commented that because of the anti-tobacco campaigns, not only does the lack of tobacco-promotion media been helpful in reducing the number of adolescents who may have used tobacco, the poignant (also called “gross” by one of the adolescents) anti-tobacco messages that show the negative effects of smoking on television and print have been successful in bringing the message to adolescents. Although not all the participants felt that adolescent tobacco use was influenced by of peers, seeing smoking in the community, at work, or in the media some strong comments need to be highlighted. One adolescent stated “I see a lot of smoking in older movies. I guess it does go with the character. You see the old rich guys smoking a lot.” A second adolescent stated “Yeah, I think seeing grownups smoking on TV and in the movies encourages kids to do it too.” One of their peers stated “In the movies, they smoke because they think it looks cool...cigarettes and cigars...”. Another adolescent commented “If they like that person in the movies that could encourage them to smoke...make them want to be like them.” Another adolescent told me “In the old movies you’d see them smoking a pipe or a cigar. Usually the heroes do that”. Only one

of the community adults commented “I think it probably influences adolescents if they see a major actor smoking. In the old movies, smoking was looked at as fashionable. This is what you did back then. Even now, I think when kids see celebrities smoking and using other substances, that’s a sign that they’ve made it.” Despite many comments about the media not being an influence, it is notable that there were such strong opinions that it does indeed influence adolescent tobacco use. Even though the population in this research was limited, these strong comments account for 26.3% of adolescents and 14.3% of community adults who perceive media influences adolescent tobacco use. In light of the many comments regarding the lack of tobacco seen in the media and the multimedia anti-tobacco campaigns, our children are still receiving mixed messages that can guide them towards the use of tobacco.

Differences in the two group’s responses were found in the comments that the media does not influence adolescent tobacco use. Community adults felt strongly that even though adolescents may see tobacco used in movies, they knew it was wrong or that adults would be able to explain that it was wrong. One community adult commented that if adolescents heard of a star or sports hero using a substance, the adolescent would know it was wrong. One community adult commented that the media used to be an influence on adolescent tobacco use but was not any longer. Although adolescents did mention that they saw anti-tobacco advertisements, no one in this group commented that the media was not an influence.

Additional Findings

Outside of the research questions, there were a few distinct similarities and differences that were notable between the two groups. The majority of the participants (65.4%) described where they see tobacco used in their communities, such as at their homes and the homes of family and friends, walking down the street, outside the convenience store, outside church, outside of work, just off of school grounds, outside restaurants, and in cars. Another notable similarity in both groups related to the school kids' knowledge of the tobacco policy at their school and what the punishment if this policy was broken by a student.

The responses of questions one and two of the protocol were coded together, due to the similarities of perceptions found regarding how seeing tobacco use made them feel and what they thought kids at their schools thought about tobacco use. Twelve adolescents (63.2%) noted that they see either adolescents, parents, family, or adults using tobacco or a combination of several of these people using tobacco on a regular basis. Thirteen adolescents (68.4%) stated they see people using tobacco all the time, with some commenting that they see everybody in their family smoking. Figure 6 shows who the adolescents and community adults saw using tobacco.

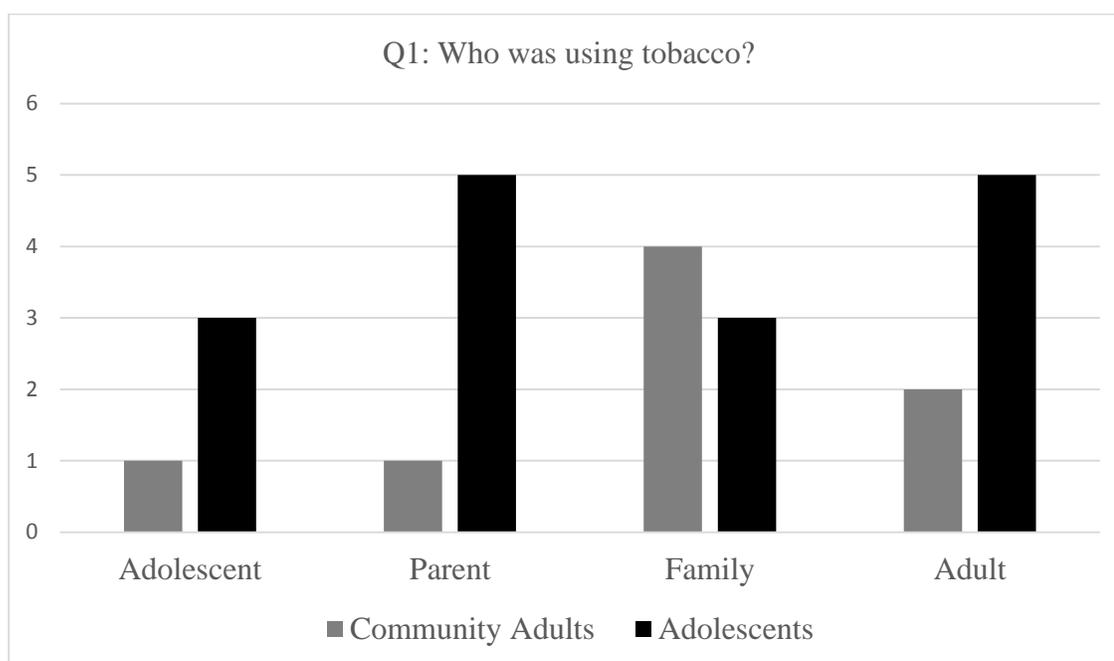


Figure 6. Population of tobacco users.

Question one asked where they had seen tobacco being used, and how they reacted. Differences were found in perceptions of negativity toward seeing tobacco used. One adolescent (3.4%) and two community adults (18.2%) stated it made them feel disgusted. Three adolescents (10.3%) and five community adults (45.5%) had a negative response towards seeing tobacco used. The largest difference was found in category coded “indifferent” towards seeing tobacco used. Twenty-five adolescents (86.2%) stated that it was the tobacco users’ choice, whereas on two community adults (18.2%) felt it was the users’ choice to use tobacco.

When the adolescents were asked how seeing smoking in their community made them feel, six (47.4%) described negative feelings, disgust, or said it was “gross”. Twelve

adolescents (63.2%) had a normalized response, commenting that it did not bother them, they did not care, they did not notice smoking in their communities, nobody at school talks about seeing tobacco used, or everyone is used to seeing it. One adolescent (5.3%) stated that kids think smoking is cool, and kids smoke because of peer pressure.

The most important finding in this research was found in the idea of indifference and normalization of tobacco use. This perception is very problematic and may be the reason why some kids initiate smoking despite the knowledge that smoking is so bad for them. It's the "Why not? Everyone else is doing it" attitude. Figure 7 reflects the feelings of the participants about seeing tobacco use in their communities.

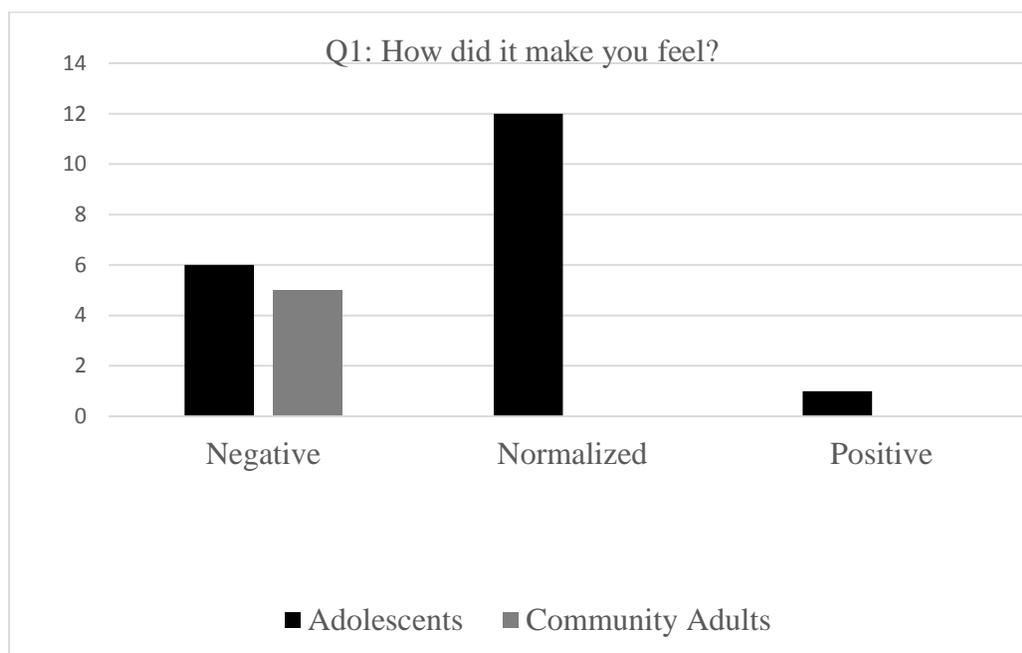


Figure 7. Feelings about tobacco use.

Next, the groups were asked about their knowledge of the tobacco-free school zone policies. Based on the fact that 89.5% of the adolescents and 100% of the community adults commented that the kids were well-aware of the school's anti-tobacco policies and its punishments, it was interesting that only one adolescent (5.3%) felt that the rules were enforced and 52.6% of the adolescents felt that the rules were not enforced. In the community adult groups 14.3% stated the rules were enforced, and 28.6% responded that the rules were not enforced. Schools need to have an anti-tobacco policy however the actions need to be completed. Based on adolescents' comments regarding the lack of enforcement despite school personnel seeing adolescents smoking, it reinforces the normalization of seeing tobacco used. Regardless of the true enforcement rates, 81.2% of the research population perceived that the rules were not enforced. Even

though this discussion question was not one of the research questions, it does seem to reinforce the attitude of the indifference to smoking also by the lack of perceived enforcement. Another difference between the two groups was in the tobacco-free school zone rule enforcement. One community adult felt that enforcement was being carried out. Figure 8 shows the responses of the groups regarding the adolescents' knowledge of the tobacco-free school rules and the enforcement of those rules.

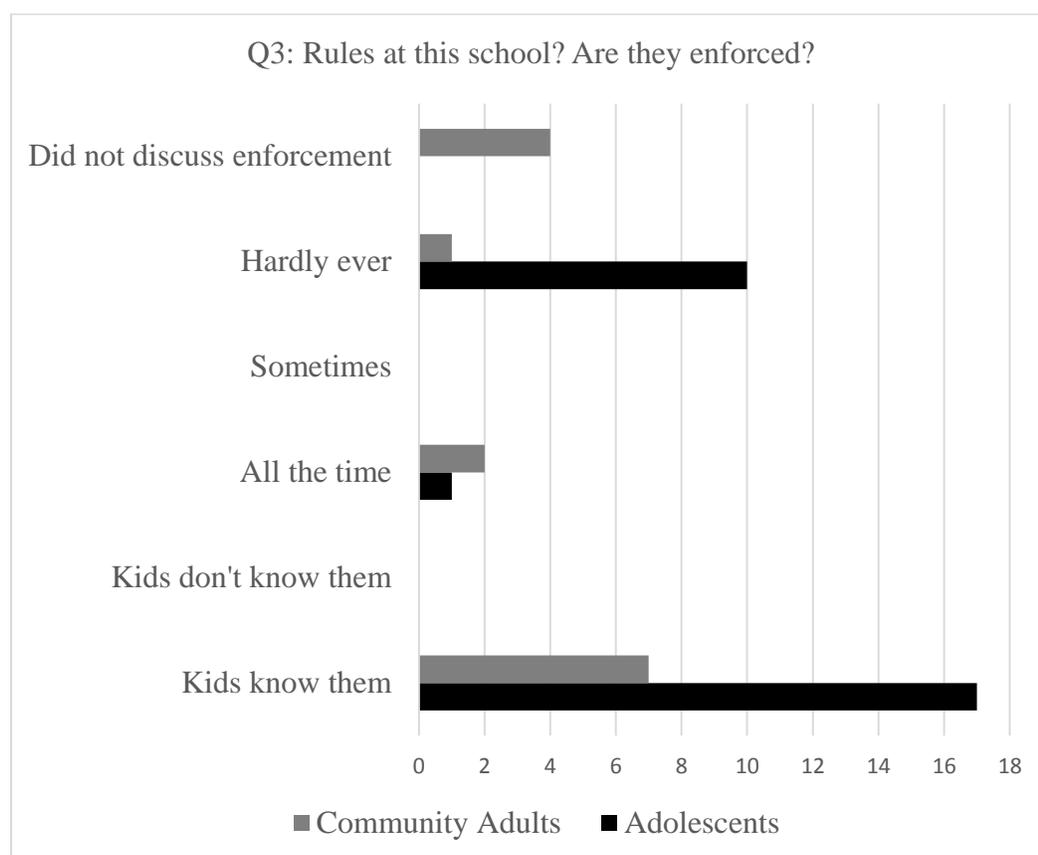


Figure 8. Tobacco rules at schools.

With the final discussion question the groups were asked what they thought quitting smoking was like and if they thought it was different for younger people compared to older people. Similar findings were noted in both groups. Six adolescents (42.9%) and four community adults (22.2%) noted that quitting tobacco was hard. Two community adults (11.1%) thought quitting smoking was easy, and actually both of these community adults disclosed that it was easy for them to quit. One adolescent (7.1%) said that quitting was easy with the use of nicotine-replacement gum. Both groups discussed

that quitting was harder for older people versus younger people, with affirmative comments from four adolescents (28.6%) and two community adults (11.1%). One adolescent (7.1%) shared that quitting was hard for kids and adults. Two community adults (11.1%) stated they never smoked, so did not know how hard it was to stop using tobacco. One of the community adults explained that her in-laws were finally able to quit smoking aided by the use of the nicotine-replacement patch, however I did not code this response into the category of 'easy with gum/patch' because as she stated it still took them a very long time to become completely smoke-free. The use of the external tool such as the patch or gum only acts as a physical drug replacement, and does not replace the social aspects of smoking or the habitual routines associated with smoking (i.e.: smoking on the way to work every day, smoking on your work break, smoking with you morning cup of coffee, etc). Like overcoming any addiction, situational awareness is an important aspect. Just as the earlier external influence discussion question of relation of peer influence, media influences, influences at work or in the community related to adolescent tobacco use, in order to successfully abstain from smoking, the smoker needs to remove themselves from activities related to smoking. Figure 10 illustrates the respondents' perceptions on the difficulty of quitting smoking and if quitting is different for younger people or older people.

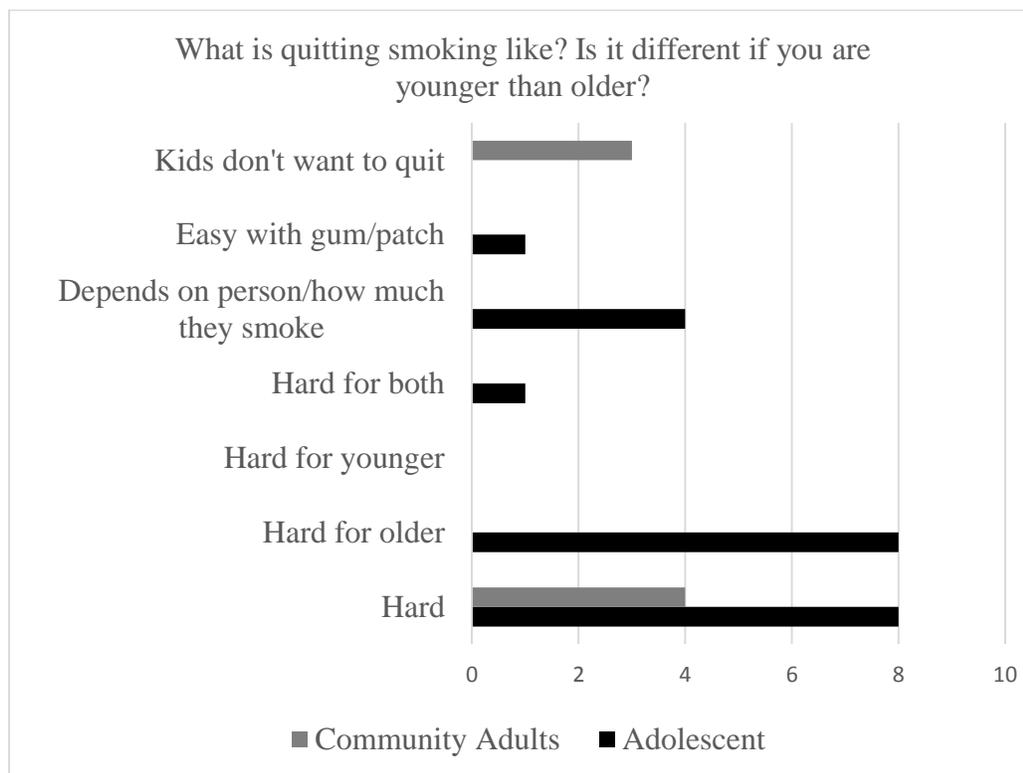


Figure 9. Quitting smoking.

Although the focus of this research was to determine the perceptions of the participants on what influences tobacco use, it was interesting to hear their thoughts on what quitting smoking was like and if they thought it was different for younger people versus older people. The adolescents seemed to understand that the addiction of tobacco was a learned behavior that increased over time based on their responses that quitting smoking was hard. It was optimistic to hear that adolescents thought quitting smoking was hard (42.1%) and harder in the older population (42.1%) because it gets at the idea that the longer someone smokes creates a stronger habit that is harder to get rid. Four

adolescents (21.1%) specifically stated that the difficulty in quitting smoking depended on the person and how much or how long they smoked.

Data Saturation

It was originally proposed that there would be the potential of 14-24 adolescents per health education class based on the school district's size, however only a total of 19 students were able to be recruited from all districts. In the community adult focus groups, the original proposal was to have groups with between six and ten participants. Since only two community adult groups were successfully recruited, the total number of participants was limited to seven. As noted by Mason (2010) qualitative data samples need to be large enough to allow important perceptions to be discussed, but just enough for no new information to be discussed. Despite the lower than anticipated participants, this population provided a saturation of responses, as many of the common perceptions were reiterated within both the adolescent and community adult research population. Although the population of participants in both the adolescent and community adult groups were small, data saturation was determined adequate due to the recurring themes found throughout the data collection and analysis phases of the research.

Data Quality

I recorded all interviews and focus group participants. Body language and gestures were noted at the time of the research and reviewed along with the audio recordings. I transcribed the recorded interview and focus groups discussions after reviewing each audio no less than three times during different sessions for clarity.

Once all sessions were transcribed and coded into emergent themes of which some required the use of sub-codes as a further level of a descriptor. A qualitative codebook was generated and this was reviewed by my committee member. This committee member ensured reliability and validity of the coded data.

Summary

Data was collected by me and recorded after receipt of the appropriate written permissions from the school districts' leaders, verbal permission of the school health education instructors, as well as written permission from the adolescents, their parents, and community adults. Transcription was done by me. All research-related documents, references, and recorded audio will be kept securely for a period of five years, as per Walden IRB regulations.

Chapter 4 focused on the data collected on both the adolescent individual interviews and the community adult focus groups conducted in five school districts in Fulton County, New York. The chapter began with a description of the location of the research and followed with sections on recruitment, data collection, and results. Data analysis revealed the emergence of themes. The themes described the adolescents' perceptions of what influences adolescent tobacco use, what the community adults' perceived influences adolescent tobacco use, and the similarities and differences between the two groups of participants.

The main findings in the results were the adolescents' high percentage of normalization or indifference to the observation of tobacco use in their surroundings. It appears as if tobacco use is a common experience to them as it occurs in their everyday

life, it can be seen everywhere, and there are often no consequences even when school policies attempt to prohibit smoking. Social cognitive theory explains how individuals acquire behavior and habits by learning from the social interactions and relationships. According to social cognitive theory an individual acquires certain behaviors by social imitation. When an adolescent begins smoking, experiences with the new behavior become progressively important in regards to whether or not the behavior continues, and observation of the smoking or non-smoking other individuals decreasingly so. Social cognitive theory predicts that smoking will progress to a higher frequency that is destined to become a regular part of a person's routine.

In spite of the fact that a minority of respondents (26.3% of adolescents and 14.3% of community adults) felt that the media influenced adolescent tobacco, a majority of the adolescents gave responses stating they saw tobacco used everywhere, all the time, all of their family smokes. Despite the lack of adolescent respondents specifically citing the influences of the observance of peers, family members, adults, TV/movies, advertising, and school policy as influencing adolescent tobacco use, their responses of seeing tobacco use as an everyday event does indicate that it is a constant influence. Most of the participants said these influences were not very strong; however this comes back to the idea of indifference and normalization. A summary, conclusion, and recommendation based on the results presented in this chapter will be elaborated in Chapter 5.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

A qualitative method using a peer-reviewed and previously published structured interview guide was used by permission of the authors in this research. This protocol was modified per recommendations of the Walden IRB Committee for the use in the adolescent population. Instead of having the adolescents in a focus group, it was determined that the adolescents would be more comfortable if they were interviewed individually, one to one with me. Additionally, the IRB recommended a change be made to Question 2, which was originally "Think back over the course of the past month. Describe for me times when *you have* or you have seen people using tobacco." I removed the words *you have* from the protocol that would be used in both the adolescent and community adult groups. I also specifically informed each adolescent not to disclose their tobacco use or specifically name or infer anyone who used tobacco in the course of their discussion with me. The discussion questions were crafted to determine the qualitative perceptions of adolescents and community adults in order to illicit their unbiased responses.

I coded the findings of the recorded transcripts into themes. The most distinct findings were related to the adolescents' observation of tobacco use and how they described what others at their school thought about seeing tobacco used. Six adolescents (31.6%) stated negative feelings that seeing tobacco used was disgusting or gross. Five of the community adults (71.4%) stated feeling negatively towards seeing tobacco used in their communities. Twelve adolescents (63.2%) described a normalization to tobacco use

stating they did not care, they did not notice it used, they were used to seeing it, and nobody talks about tobacco use. One adolescent stated that other adolescents kids at their school thought smoking was cool, and this adolescent was the only one to offer that peer pressure was the reason others smoke. None of the community adults answered indifferently or normalized towards seeing tobacco used.

In Chapter 2, I defined the literature reviewed in preparation for this research, and this literature was again reviewed after the data were collected and transcribed. When an adolescent begins smoking or any other socially-motivated behavior, this experience becomes progressively important in regards to whether or not the behavior continues based on social feed-back. Experiences of smoking and related to smoking modify the adolescent's perception of acceptance and foster positive reinforcement of favorable attitudes. Social cognitive theory predicts that smoking will progress to a higher frequency or more sustained patterns, to the level that reinforcement, exposure to tobacco use models, and favorable definitions are not counteracted by negative sanctions or stigma (Brandon, Herzog, Irvin & Gwaltney, 2004).

Social cognitive theory exposes the role of individual factors as they influence vulnerability to peer pressure or influence (Brandon et al., 2004). Adolescents' current and past relationships with family members, caregivers, school teachers, friends, and media exposure are deemed as possible role models of teenage social behavior. This research focused on what adolescents and community adults perceived are influences of adolescent tobacco use, and the groups were asked the groups if they felt that seeing peers using tobacco was a factor, if seeing tobacco used in the media was a factor, and if

seeing tobacco used in their communities was a factor. The following section will cover more findings and how they related to the broader literature on adolescent tobacco use.

Interpretation of Findings

Peer Influence

Peer influence or peer pressure did not seem to be a strong influence regarding the perceptions of adolescent tobacco use. One adolescent (5.3%) did state peer pressure as an influence; however, this was not noted at all in the community adult groups. Having friends who used substances, including tobacco, was found to be the most powerful influence in adolescent tobacco use in a study done by Loke and Mak (2013). Avenevoli and Merikangas (2003) concluded that the tobacco use behavior of peers is more closely related to youth smoking than to the tobacco use behavior of parents or siblings.

Media Influence

Green and Clark (2013) found that smoking portrayals in movies influence adolescent tobacco use, especially if the adolescent feels connected to the character. Exposure to media tobacco use was related to vulnerability to tobacco use, an indexed measure of tobacco uses positive expectations and normative beliefs in regards to adult tobacco use behavior. Dalton et al. (2002) noted that teenage film characters are rarely shown using tobacco users in films, and that tobacco use in the media was not related to normative beliefs concerning peer tobacco use behavior. The results of this research indicate that exposure to tobacco in the media forms attitudes toward tobacco use prior to the decision to smoke. The adolescent groups felt more strongly that seeing tobacco used in media was an influence on adolescent tobacco use than the community adults.

Community adults felt very strongly (71.4%) that the media did not in any way influence adolescent tobacco use. Social cognitive theory (Bandura, 1986), which explains how individuals acquire behavior and habits by learning from the contextual social interactions and relationships, was supported by the research findings in the responses of adolescents; 26% of adolescents stated that the media does influence adolescent tobacco use, and 36.8% responded that they see smoking in the media, at work, and around restaurants. In contrast, although nearly 29% of community adults commented that they saw tobacco used in the media and at their work, 71.4% of community adults adamantly stated that the media did not influence adolescent tobacco use.

Community Influence

When asked where adolescents see tobacco being used, their responses were at the convenience store, just off school grounds, outside their homes, at their homes, at their friends' homes, at their families' homes, outside of church, and outside of restaurants. Thirteen out of the 19 adolescents (68.4%) stated they see tobacco used everywhere, all the time.

I expected many respondents to discuss the issue of adolescent tobacco use being influenced by peers and even parents who use tobacco. None of the respondents felt that the observation of tobacco used significantly impacted the likelihood of adolescent tobacco use. In fact, my thoughts were that peers would have been noted as the larger influence than parents.

As noted by Bahr, Hoffman, & Yang (2005) it is important to better understand the social forces that may influence the development of adolescent substance because

many substance prevention programs are school-based and focus on the influence of peers. They also noted that the relationships of families and peers relationships are important for adolescent substance use because they are groups where attitudes and behaviors are learned

Attitudes Toward Tobacco use

When asked how they felt seeing tobacco used in their communities, six adolescents (31.6%) had a negative response such as *did not like it* or *gross* while one adolescent (5.3%) commented that kids thought smoking was cool. Five community adults (71.4%) had a negative response towards seeing tobacco used in their communities. Twelve adolescents (63.2%) were coded into the response category named normalized based on comments that it was their choice to use tobacco, *does not bother me*, *do not notice it*, or *I am used to it*. None of the community adults had any comments or opinions that were in the normalized category.

Normalization

I reviewed several studies on the normalization of recreational drug use, of which smoking can be included, to shed light on the concept. Sznitman et al. (2013) explored multiple social theories and the risk factors for adolescents for substance use, including tobacco. Normalization of substance use can be described as a behavior that is seen as general or common and that the activity is more socially acceptable than it is viewed to be deviant. Parker, Williams, & Aldrige (2002) presented a longitudinal study on normalization of recreational drug use. They noted that cigarette smoking grew to be normalized in the last century (Parker et al, 2002. Smoking was tolerated by nonsmokers,

as it was seen in all socioeconomic groups, and both men and women smoked. In present times, smoking is no longer being tolerated by society, which has now greatly restricted indoor smoking, begun to restrict outdoor smoking, and required proof of age for purchase on tobacco and related products. Smokers are even being characterized as antisocial.

In contrast, Bell et al. (2010) interviewed current and previous smokers on how they felt about the global campaigns related to the denormalization of tobacco. Generally, this study found that participants were not opposed to smoking restrictions but did comment on how the denormalization campaigns have further stigmatized smokers. Some of the respondents noted that they quit smoking because of the stigma. Interestingly, the participants felt that the increased regulation of outdoor spaces and nonsmoking further inhibited smokers who were accustomed to having nearly unlimited outdoor smoking spaces.

Conclusions

The influence of such factors as peers, media, and community tobacco use were discussed with both the community adult and adolescent groups. Peer pressure or peer influence to use tobacco was only perceived as an influence by one adolescent. Community adults did not feel that the influence of peers in any way caused adolescents to use tobacco.

The observation of tobacco used in the media, especially in movies, was perceived as an influence in a larger sample of the adolescents than in the community adults. Comments from the participants were related to seeing the hero (or positive role

model) smoking or a beloved actor smoking could act as a catalyst to adolescent tobacco use.

Community tobacco use was overwhelmingly normalized in the responses from the adolescents. Very minimal negative comments were elicited from the adolescents on the observation of tobacco use by their families and other community members.

Community adults had a much more negative opinion to the observation of tobacco use in their surroundings.

Limitations of Study

The major limitation of this study was its defined geography to one county in upstate New York, so validity of data collected cannot be compared with a larger representative sample. As stated previously, although the research population was small, the school districts themselves are designated rural. In a large study performed in Maryland with middle and high school students, the researchers found that these adolescents who smoked lived with a smoker and had exposure to second-hand smoke, observed advertisements for tobacco products, and had more smoking friends who offered them tobacco (Voorhees et al., 2011). Not only was this study conducted with a much larger population, the students were much more racially and ethnically diverse than in the research done within Fulton County, New York adolescents.

Another limitation in the research was that both the adolescents and community adults were from a fairly homogenous racial and ethnic backgrounds and socioeconomic status of the communities. As noted in Table 1, the overwhelming majority of students in these schools are White/Caucasian. According to the 2008-2012 American Community

Survey 5-Year Estimates published by the U.S. Census Bureau, the median household income was \$45,333 in Fulton County, \$57,683 in the state of New York, and \$53,046 nationally (U.S. Census, 2010). Tobacco use is more prevalent in lower socioeconomic groups and is associated with greater mortality (Adler & Newman, 2002). The link between lower socioeconomic status and poor health behaviors is not completely understood. Health behaviors seem to be carried through multiple generations, which manifest poor choices and poor outcomes. This cycle is most likely to continue unless someone (possibly with stronger positive beliefs or higher educational attainment) or something (behavior changes or attainment of a job with better pay and benefits) enters the family to derail the poor choices.

The structured interview guide was not able to be used in the adolescent groups as in the previously published qualitative research, and the research was not able to be carried out within the health education class time. I had hoped to see the interaction of the discussion questions in the adolescent groups and anticipated that the adolescents would not only feel more comfortable in a group setting than on a one-to-one basis with me, in addition to the comfort level of being within their normal classroom setting rather than after school. The individual adolescent interviews were difficult to schedule due to the extracurricular obligations, such as busing and pick up conflicts, sports, choir, theater, work, and homework. Although the adolescents were monitored by their health education teacher and it was suggested that the adolescents work on their homework assignments, the groups were most likely tired, and it was a burden to the teacher to keep them focused. Using the previously developed structured interview guide worked well to

stimulate conversation with the community adult groups. Using this protocol one on one with the adolescents did not have the same effect. It was very difficult to get some of the adolescents to answer the questions, and they were not as forthcoming with their opinions as the community adults were. This could have been because they felt tired after the end of the school day, or intimidation due to the one-on-one interviews. Generally, they were very clear that they witness tobacco used in their communities on a regular basis and that the tobacco rules at their schools were not enforced. Additionally, I was not as comfortable with the adolescents as with the community adults. I was very cognizant of the adolescents' time constraints since the interviews were done after school. Because of this, I may have unknowingly made the adolescents feel hurried or distracted. Furthermore, in review of the recordings, the structured interview guide protocol used with the adolescents did not seem to illicit much discussion, which could have introduced question bias to the individuals. Weinstein & Roediger (2012) studied how the ordering of questions on performance tests changed the outcomes of the tests. It is possible that the questions did not flow in such a way that the adolescents could respond to.

Selection bias occurs when participants are selected or volunteer themselves for a study in which they are not necessarily a good representation of the target population (El-Masri, 2013). In this research, selection bias may have also played a role because only those adolescents whose schedule allowed them to stay briefly after school were included in the research population. I do feel that if the adolescents could have participated in the focus group scenario, more conversation could have been accomplished.

Scheduling of the community adult groups was also a notable limitation. While the plan was to have a respective collection of community adults from various ages and backgrounds, the only recruitment determined by both the PTA/PTSA groups and me was within these committees. The participants were members of these committees and parents who received information by word of mouth from the committee members. The participation of the PTA/PTSA members was much appreciated; however, it may not have been a true representation of the school districts' community adults. In my experience, the community adults who volunteer to be on these such committees are very involved in the students' lives and have the time and means to volunteer. This is not to say that other community adults would not like to volunteer for such a group, but they may not be able to do so because of work shifts, transportation issues, childcare, or other family responsibilities. Another limitation in the community adults was that the meetings were held either directly after school, during dinner times, and early evening during the normally scheduled PTA/PTSA meetings to ensure consistency of attendance at their predetermined best meeting time. This could have introduced selection bias due to the lack of a broader representation of the communities. It is likely that parents who are more involved in school and with their children may exhibit healthier behaviors. A broader selection of the community may have yielded more indifferent or normalized results from the adults (because more would have been smokers themselves). A broader representation could have introduced a normalized perception of tobacco use responses. Winship and Mare (1992) discussed the problems with nonrandomized selection of participants and its

associated less than statistical conclusions. They also noted that this is a common finding in social sciences research (Winship et al, 1992).

Recommendations for Action

Action should be directed towards the indifference or normalized opinions expressed by the adolescents related to their observation of tobacco use. Even though the scope of this research was small, the percentage of adolescents who were answered in a normalized fashion about observing tobacco being used in their communities may not just be characteristic of this population. Realizing that the adolescents' frame of reference is determined by their environment and socioeconomic status, replication of this study in an urban population, in a more racially diverse population, or with an either greater or lesser socioeconomic area may yield different results. Lantz (2013) noted that statistical significance has been thought to be the same as practical significance. It is not as much the population size, as it is the degree of practical significance to the study. While this is not to imply that a larger population would add strength to the results, this research data can add to the educational efforts in the population studies.

The purpose of this research was to explore the perceptions of adolescents and community adults living in Fulton County, New York on the influences of television, movies, print advertising, friends, family, community members, and school policy on adolescents' perceptions of tobacco use. The research sought to inquire opinions from adolescents and community adults on what influences adolescent tobacco use. The results of the research focused on the similarities and differences in the adolescents' and

community adults' responses to assist in refining anti-tobacco educational-related activities.

According to the United States Department of Health and Human Services ([USDHHS], 2012), prevalence of adolescents who revealed past-month cigarette smoking was at an all-time low of 12.7%, which accounts for a 55% decrease in adolescent-reported smoking from the 1996 and 1997 highest rate of 28.3%. Despite the steady decrease in adolescent tobacco use, by the age of 18 years, about two-thirds of people below the age of 20 have still experimented with smoking with the highest amount of cigarette experimentation taking place between the ages of 13 and 16 years respectively (Warner, Sexton, Gillespie, Levy, & Chaloupka, 2014). While the adolescent population statistics of those who use tobacco are decreasing, those who still experiment with tobacco can become addicted smokers. Continuing focus needs to be placed on preventing adolescents from ever experimenting with tobacco. Certain people are more inclined to become addicted to substances due to both genetic and environmental factors.

The public health implications of this research and other related research can foster the efforts to maintain public health by enabling the public to make healthy choices by having the knowledge needed to make informed decisions. The adolescent brain is still developing therefore can tend to make impromptu decisions without carefully weighing the pros and the cons in their actions. Adolescents observe tobacco use in their families and communities, and they do not extrapolate that these tobacco users began their addiction during adolescence. Tobacco users often maintain their health while smoking

for many years. Diagnoses such as lung cancer can fester for decades before the symptoms overwhelm and are diagnosed.

The anti-tobacco movement does seem to be effective and may have accounted for the decrease in adult smoking (Warner, et al., 2014). Consumption of tobacco products began to decline in 1964, after the Surgeon General's first report on smoking and health. This movement is on a federal, state, county and city levels. The recommendations of this research is to work by school district to get each adolescent involved in grass-roots campaigns to end this pervasive addiction before it begins. Community-based coalitions work tirelessly to attempt to keep adolescents engaged in healthy choices. The community-based initiatives should focus on the adolescents' indifference in observing tobacco use in their families and communities. During the time I taught smoking cessation for the American Lung Association, I invited a guest speaker with emphysema who was oxygen dependent to speak to the group. He used to tell the group that the worst thing about living with emphysema was that it killed very slowly and painfully. He handed out drinking straws to the participants and asked them to breathe completely through the straws. After a very short time, the participants had to cease this activity because they became short of breath. That was a very moving experience for the participants. Not all the participants were successful in their quitting attempts; however the observation of the end result can be a profound reminder of one's own future. I will present this research to our communities' grass-roots coalitions with the recommendation that in addition to all their vital efforts, they incorporate current and former smokers into

their educational endeavors to help change the adolescents' attitude of indifference towards tobacco use.

Recommendations for Future Research

This study could be expanded in future research. Since school class time was not able to be used, possible venues which could be used are the local YMCA or summer camps for adolescents. While both of these could contain only those adolescents whose families have the means to sponsor the tuition, scholarships are generally available for those families that choose to inquire. This could also avail the parents or other family members who drop off and pick up these adolescents to participate in the community adult focus groups.

The structured interview guide did not ask the smoking status of either the adolescents or the community adults. Two of the community adults casually mentioned that they had previously smoked, but I did not probe as to what they felt influenced them to use tobacco. Again, not a research question but because it was specifically a point of discussion in the structured interview guide, I anticipated that the perception of friends as an influence would be thought of as a tobacco influence, particularly in the community adult groups.

I would not suggest using the exact protocol used in this research, as I think it is very important not only to ask the tobacco use status of the community adults, but to attempt to delve into what the scenario was that these folks decided to experiment with tobacco, and how their use manifested itself. Did they continue to use tobacco? Did they view tobacco used in their communities, families, etc? The importance is to investigate

the genetic factors behind tobacco use and addiction. I believe that this future research, regardless if the community adults are current tobacco users or not, could make them more aware of how their own experiences with tobacco began, or even how their addiction to tobacco began and then they might be better equipped to guide the adolescents in their lives to steer clear of these influences.

As stated previously, a large-scale project would be recommended to determine if the opinion of adolescents' indifference to the observation of tobacco use is universally recognized across census, ethnicities, and socioeconomic statuses. There could be large or small differences based on these factors. Several national surveys are available for analysis including the CDC's Youth Behavioral Risk Factor Surveillance System (YBRFSS) which is the world's largest adolescent telephonic survey (CDC.gov). The YBRFSS is a compilation of data from the Youth Risk Behavioral Survey (YRBS) and the School Health Policies and Programs Study (SHPPS). The YBRFSS solicits information on multiple health-related topics, including current and recent tobacco use. The findings of these surveys help to identify the percentage of adolescents who use tobacco and determine any variation of state and local health education, including partnerships between the communities and school environments (CDC.gov).

The literature reviewed pointed to the influences of adolescents, parents, and the media on adolescent tobacco use. This research did not have a strong correlation to the influence of peers. Several research participants did feel that the media, specifically movies, could influence adolescent tobacco use. Further study is required to fully

understand these issues, and other factors such as socioeconomics that may be implicated in the problem, because this research was not able to uncover the answers.

Implications for Social Change

A study done in small communities, however, can be used as a representation of its defined population. The results of such research can be used to define the educational materials and even the format of such in a define population. Cookie cutter and one size fits all educational materials may be effective for the masses, however grass-roots and community-based initiatives can be refined to fit the needs and demographics of the individual communities' audiences.

Initially, the social change implications were to better tailor educational materials to help inform adolescents about how they could abstain from tobacco use. Quitting tobacco once addicted is grueling and typically once someone decides to tobacco cessation, multiple attempts are needed to achieve complete success. In my career as a Registered Respiratory Therapist, certified American Lung Association Smoking Cessation Counselor, and an American Lung Association certified School-Based Asthma Educator, I have seen the effects of smoking on lives of smokers and their families. I have witnessed the regret of former tobacco users who suffer from chronic obstructive pulmonary disease (COPD) which includes emphysema and chronic bronchitis and who have inflicted secondary smoke-related illnesses to their loved ones. The off-set of living with a lifetime of regret is outweighed by the need to provide a plethora of information to ensure our population does not use tobacco use in the first place.

The results of this research did not correlate with the influences of friends, family, and media on tobacco, even though these were noted as strong influences throughout the literature. I would recommend that based on these research findings of indifference or normalization to the observation of tobacco use, further study be performed and health education materials be directed towards dealing with normalization of addictive behaviors. Adolescents felt that it was a smoker's choice or right to smoke and they did not have as negative a perception as adults at observing tobacco use in their communities. Despite the decline in tobacco use overall, the cycle of addiction to tobacco in families and communities need to be highlighted. If observing tobacco is so common, we need to develop and implement effective strategies to push forward and end the epidemic caused by tobacco use. We need to educate adolescents and community adults that the use of tobacco should be acknowledged as a devastating habit, likened to heroin, cocaine, and other illicit drugs. Tobacco should be placed in the same category as these illicit drugs. It is doubtful that adolescents would be as passive about seeing their peers shooting or snorting a substance as they are with them using tobacco. The use of tobacco is one of the most tenacious addictions and is driven by the nicotine in tobacco. Over the last few decades, researchers have sought to determine the basis for nicotine addiction. The research on tobacco addiction not only contains the addiction to nicotine but has also focused on the behaviors mediated by nicotine as a drug and how it affects the brain (Picciotto, 2014).

Social change in public health must focus on the needs of the population with careful attention placed on the population served. Public health policy must not

marginalize or stigmatize a potentially socioeconomically challenged population very different from the public health educators and policy makers (Hansen, Holmes, & Lindemann, 2013). Our society is democratic in nature. We should provide the populations served with information so they have the tools to make the best choices for themselves and their families.

There are also social change implications for leaders in government, public health, and education. The responsibilities of federal, state, county, and community leaders in the promotion of tobacco use prevention and cessation continues to be vital to the health and well-being of our population. To aid in the development of strategies and tactics to promote participation in tobacco use prevention by healthcare providers, healthcare systems including primary care, urgent care, emergency services, acute-care hospitals, rehabilitation hospitals, mental health inpatient and outpatient providers, educators, researchers, parents, and adolescents. The most significant finding of this study uncovered the neutral or indifferent attitudes held by the adolescent participants. These feelings could be due to a lack of life history that tobacco use has not been a part of their lives, or their immature knowledge of the morbidity and mortality related to tobacco use. Highlighting denormalization of tobacco is imperative, as directed by this research. The tobacco industry has worked diligently to get people to buy their products and become addicted. No matter the reason for their indifference it stresses the need for more public health campaigns directed towards adolescents, and the need for continual reinforcement of the need to make healthy, positive choices. Although multi-media campaigns have attempted to address the effects of the addiction to tobacco, stress needs

to be placed on the importance of the normalization tobacco. Tobacco is an addictive substance and adolescents need to understand that while the observation of tobacco use in their communities is common or even socially acceptable, the nicotine in tobacco products is highly addictive.

Conclusion

Despite the availability of years of tobacco educations, adolescents continue to become tobacco users. The current literature discussed the influences of peers, family and community tobacco use and tobacco use in the media. This research focused on a rural population to help find answers to the missing pieces of the puzzle as to why tobacco use is still an epidemic. The results of this research uncovered the communities' adolescents had an overwhelming normalization to the observance of tobacco use. Community adults were not normalized to tobacco use behaviors however did not cite peer influence or peer pressure, media containing tobacco use, or even the observation of tobacco used in their communities as influencing adolescent tobacco use. These research findings did not replicate past research.

It is imperative that public health professionals act to improve awareness of just how normalized a behavior tobacco use is in our communities and point this out to our youth with candid discussions on how they can break the cycle in their own families to make the best informed health choices. The purpose of this study was to illicit the perceptions of adolescents and community adults on their perceptions of what influences adolescent tobacco use. This process highlighted the conclusion that in adolescents there is a normalized opinion on the use of tobacco. It is an everyday observed occurrence in

their communities, in their families, and in the peers. Community adults did not have a normalized perception of tobacco use, but did not have a consensus that any of these factors played an influential role in adolescent tobacco use. Of particular importance is the idea that both the majority of community adults and the adolescents felt that quitting smoking was hard, some of the participants felt that adolescents did not want to quit smoking and there were no comments related to the addictive factors of tobacco use in adolescence. The evidence of this research concludes that young people do not proceed through a thought process between the decision to use tobacco and the addiction of tobacco.

References

- Abrams, D., & Hogg, M. A. (1990). Social identification, self categorization and social influence. *European Review of Social Psychology, 1*, 195-228.
- Adler, N. E., & Newman, K. (2002). Socioeconomic disparities in health: Pathways and policies. *Health Affairs, 21*(2), 60-76. doi: 10.1377/hlthaff.21.2.60
- Adolescent. (2011). In Merriam-Webster.com. Retrieved from <http://www.merriam-webster.com/dictionary/teenage>
- Akers, R. L. (1973). *Deviant behavior—A social learning approach*. Belmont, CA: Wadsworth Publishing Co.
- Avenevoli, S., & Merikangas, K. R. (2003). Familial influences on adolescent smoking. *Addiction, 98*(Suppl. 1), 1–20.
- Bahr, S. J., Hoffman, J. P., & Yang, X. (2005). Parental and peer influences on the risk of adolescent drug use. *Journal of Primary Prevention, 26*(6), 529-551. doi: 10.1007/s10935-005-0014-8
- Bandura, A. (1986). *Social foundation of thought and action. A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1988). Organizational application of social cognitive theory. *Australian Journal of Management, 13*(2), 275-302.
- Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist, 44*, 1175-1184.

- Bauman, K. E., Carver, K., & Gleiter, K. (2001). Trends in parent and friend influence during adolescence: The case of adolescent cigarette smoking. *Addictive Behaviors, 26*(3), 349-361.
- Bauman, K. E., & Ennett, S. T. (1994). Tobacco use by black and white adolescents: The validity of self-reports. *American Journal of Public Health, 84*(3), 394-398.
- Bauman, K. E., & Ennett, S. T. (1996). On the importance of peer influence for adolescent drug use: Commonly neglected considerations. *Addiction, 91*(2), 185-198.
- Baxter, P., & Jack, S. (2008). Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. *The Qualitative Report, 13*(4), 544-559.
- Bell, K., McCullough, L., Salmon, A., & Bell, J. (2010). 'Every space is claimed': Smokers' experiences of tobacco denormalization. *Sociology of Health & Illness, 32*(6), 914-929. doi: 10.1111/j.1467-9566.2010.01251.x
- Belle, J. (2005). *Doing your research project: A guide for first-time researchers in education. Health and Social Science* (4th ed.). New York, NY: McGraw-Hill.
- Biernacki, P., & Waldorf, D. (1981). Snowball sampling. Problems and techniques of chain referral sampling. *Sociological Methods & Research, 10*(2), 141-163.
- Botvin, G. J., Griffin, K. W., Diaz, T., Miller, N., & Ifill-Williams, M. (1999). Smoking initiation and escalation in early adolescent girls: One-year follow-up of a school-based prevention intervention for minority youth. *Journal of the American Medical Women's Association, 54*, 129-143.

- Brandon, T. H., Herzog, T. A., Irvin, J., E., & Gwaltney, C. J. (2004). Cognitive and social learning models of drug dependence: Implications for the assessment of tobacco dependence in adolescents. *Addiction, 99* (Suppl. 1), 51-77.
- Breslau, N., & Peterson, E. I. (1996). Smoking cessation in young adults: Age at initiation of cigarette smoking and other suspected influences. *American Journal of Public Health, 86*(2), 214-219.
- Bricker, J. B., Peterson, A. V., Jr., Anderson, M. R., Leroux, B. G., Rajan, K. B., & Sarason, I. G. (2006a). Close friends', parents', and older siblings' smoking: Reevaluating their influence on children's smoking. *Nicotine and Tobacco Research, 8*(2), 217-226.
- Bricker, J. B., Peterson, A. V., Jr., Leroux, B. G., Anderson, M. R., Rajan, K. B., & Sarason, I. G. (2006b). Prospective prediction of children's smoking transitions: Role of parents' and older siblings' smoking. *Addiction, 101*, 128-136.
- Brown, B. B., Dolcini, M. M., & Leventhal, A. (1997). Transformations in peer relationships at adolescence: implications for health-related behavior. In J. Schulenberg, J. L. Maggs, & K. Hurrelmann (eds.). *Health risks and developmental transitions during adolescence* (pp. 161-189). New York, NY: Cambridge University Press.
- Burt, R.D., Dinh, K.T., Peterson, A.V. Jr., & Sarason, I.G. (2000). Predicting adolescent smoking: A prospective study of personality variables. *Preventive Medicine, 30*(2), 115-125.

- Burt, S. A., & Mikolajewski, A. J. (2008). Preliminary evidence that specific candidate genes are associated with adolescent-onset antisocial behavior. *Aggressive Behavior, 34*(4), 437-45.
- Cairns, R. B., Leung, M. C., Gest, S. O., & Cairns, B. D. (1995). Friendships and social networks in childhood and adolescence: Fluidity, reliability, and interrelations. *Child Development, 66*, 1330-1345.
- Campbell, R., Starkey, F., Holliday, J., Audrey, S., Bloor, M., Parry-Langdon, N., & Moore, L. (2008). An informal school-based peer-led intervention for smoking prevention in adolescence (ASSIST): A cluster randomized trial. *Lancet, 371*(10), 1595–1602.
- Carnagey, M. L., Anderson, C. A., & Bushman, B. J. (2007). The effect of video game violence on physiological desensitization to real-life violence. *Journal of Experimental Social Psychology, 43*(30), 489-496.
- CDC (2008). *Smoking-attributable mortality, years of potential life lost, and productivity losses – United States, 2000-2004*. Retrieved from www.cdc.gov/mmwr/preview/mmwrhtml/mm5745a3.htm
- CDC (2011). *Smoking and tobacco use: trends in current cigarette smoking among high school students and adults, United States, 1965--2010*. Retrieved from http://www.cdc.gov/tobacco/data_statistics/tables/trends/cig_smoking/index.htm.
- Chassin, L., Presson, C., Seo, D. C., Sherman, S. J., Macy, J., Wirth, R. J., & Curran (2008). Multiple trajectories of cigarette smoking and the intergenerational

transmission of smoking: A multigenerational, longitudinal study of a midwestern community sample. *Health Psychology, 27*(6), 819-828.

Choi, W. S., Gilpin, E. A., Farkas, A. J., & Pierce, J. P. (2001). Determining the probability of future smoking among adolescents. *Addiction, 96*(2), 313-323. doi: 10.1046/j.1360-0443.2001.96231315.x.

Cohen, J. M. (1977). Sources of peer group homogeneity. *Sociology of Education, 50*(4), 227-241.

Collins, R. L., Elliott, M. N., Berry, S. H., Kanouse, D. E., Kunkel, D., Hunter, S. B. & Miu (2004). Watching sex on television predicts adolescent initiation of sexual behavior. *Pediatrics, 114*(3), e280-e289.

Creswell, J. W. (2008). *Research Design* (3rd ed.). Thousand Oakes, CA: Sage.

Crone, M. R., Reijneveld, S. A., Willemsen, M. C., van Leerdam, F. J. M., Spruijt, R. D., & Hira-Sing, R. A. (2003). Prevention of smoking in adolescents with lower education: A school based intervention study. *Journal of Epidemiology and Community Health, 57*, 675-680.

Cuang, Y-C., Ennett, S. T., Bauman, K. E., & Foshee, V. A. (2009). Relationships of Adolescents' Perceptions of Parental and Peer Behaviors with Cigarette and Alcohol Use in Different Neighborhood Contexts. *Journal of Youth and Adolescence, 38*, 1388-1398. doi: 10.1007/s10964-009-9424-x.

Dalton, M. A., Sargent, J. D., Beach, M. L., Bernhardt, A. M., & Stevens, M. (1999). Positive and Negative Outcome Expectations of Smoking: Implications for Prevention. *Preventive Medicine, 29*, 460-465.

- Dalton, M. A., Tickle, J. J., Sargent, J. D., Beach, M. L., Ahrens, M. B., & Heatherton, T. F. (2002). The Incidence and Context of Tobacco Use in Popular Movies from 1988 to 1997. *Preventive Medicine, 34*(5), 516–523.
- Dalton, M. A., Sargent, J. D., Beach, M. L., Titus-Ernstoff, L., Gibson, J. S., Ahrens, M. B., ... Heatherton, T. F. (2003). Effect of viewing smoking in movies on adolescent smoking initiation: a cohort study. *Lancet, 362*, 281-285.
- Darling, N. & Cumsille, P. (2003). Theory, measurement, and methods in the study of family influences on adolescent smoking. *Addiction, 8*(1), 21–36,
- Denzin, N. K. & Lincoln, Y. S. (2011). *Handbook of qualitative research* (2nd ed.). Thousand Oaks, California: Sage Publications.
- De Vries, H., Backbier, E., Kok, G., & Dijkstra, M. (1995). The impact of social influences in the context of attitude, self-efficacy, intention, and previous behavior as predictors of smoking onset. *Journal of Applied Social Psychology, 25*(3), 237–257.
- De Vries, H., Engels, R., Kremers, S., Wetzels, J., & Mudde, A. (2003). Parents' and friends' smoking status as predictors of smoking onset: Findings from six European countries. *Health Education Research, 18*(5), 627–636.
- DiFranza, J. R., Rigotti, N.A., McNeill, A.D., Ockene, J. K., Savageau, J. A., St Cyr, D., & Coleman, M. (2000). Initial symptoms of nicotine dependence in adolescents. *Tobacco Control, 3*, 313 –319.
- DiFranza, J. R., Savageau, J. A., Fletcher, K., Ockene, J. K., Rigotti, N. A., McNeill, A. D., ... Wood, C. (2002a). Measuring the loss of autonomy over nicotine use in

adolescents: the DANDY (Development and Assessment of Nicotine Dependence in Youths) study. *Archives of Pediatric and Adolescent Medicine*, 156(4), 397–403.

DiFranza, J. R., Savageau, J. A., Rigotti, N. A., Ockene, J. K., McNeill, A. D., Coleman, M., & Wood, C. (2002b). Development of symptoms of tobacco dependence in youths: 30 month follow up data from the DANDY study. *Tobacco Control*, 11(3), 228–235.

Dishion, T. J., McCord, J., & Poulin, F. (1999). When interventions harm. *American Psychologist*, 54(9), 755-764. doi: 10.1037/0003-066x.54.9.755.

Dishion, T. J., & Owen, L. D. (2002). A longitudinal analysis of friendship and substance use: Bidirectional influence from adolescence to adulthood. *Developmental Psychology*, 38(4), 480–491.

Distefan, J. M., Pierce, J. P., & Gilpin, E. A. (2004). Do favorite movie stars influence adolescent smoking initiation? *American Journal of Public Health*, 94(7), 1239–1244.

Donaldson, S. I. (1995). Peer influence on adolescent drug use: a perspective from the trenches of experimental evaluation research. *American Psychologist*, 50, 801-802.

Duncan, T. E., Tildesley, E., Duncan, S. C., & Hops, H. (1995). The consistency of family and peer influences on the development of substance use. *Addiction*, 90(12), 1647-1660.

- El-Masri, M. M. (2013). Selection bias: A systematic error that is made in the selection of study participants. *The Canadian Nurse, 109*(8), 10.
- Ellickson, P. L., Bird, C. E., Orlando, M., Klein, D. J., & McCaffrey, D. F. (2003). Social Context and Adolescent Health Behavior: Does School-level Smoking Prevalence Affect Students' Subsequent Smoking Behavior? *Journal of Health and Social Behavior, 44*(4), 525-535.
- Engels, R. C. M. E., Knibble, R. A., Drop, M. J., & de Haan, Y. T. (1997). Homogeneity of Cigarette Smoking Within Peer Groups: Influence or Selection? *Health Education & Behavior, 24*(6), 801-811.
- Ennett, S. T. & Bauman, K. E. (1994). The contribution of influence and selection to adolescent peer group homogeneity: The case of adolescent cigarette smoking. *Journal of Personality and Social Psychology, 67*(4), 653-663.
- Ennett, S. T., Faris, R., Hipp, J., Foshee, V. A. Bauman, K. E. Hussong, A. & Cai, L. (2008). Peer Smoking, Other Peer Attribute, and Adolescent Cigarette Smoking: A Social network Analysis. *Prevention Science, 9*, 88-98. doi: 10.1007/s11121-008-0087-8
- Epstein, J. A., Williams, C., Botvin, G. J., Diaz, T., & Ifill-Williams (1999). Psychosocial predictors of cigarette smoking among adolescents living in public housing developments. *Tobacco Control, 8*, 45-52. doi: 10.1136/tc.8.1.45.
- Falomir, J. M., & Invernizzi, F. (1999). The role of social influence and smoker identity in resistance to smoking cessation. *Swiss Journal of Psychology, 58*, 73-84.

- Fergusson, D. M., & Horwood, L. J. (1995). Transitions to cigarette smoking during adolescence. *Addictive Behaviors, 20*(5), 627-642.
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations, 7*, 117-140.
- Fisher, L. A & Bauman, K. E. (2006). Influence and selection In the Friend-adolescent Relationship: Findings from Studies of Adolescent Smoking and Drinking 1. *Journal of Applied Social Psychology, 18*(4), 289-314.
- Flay, B. R., Hu, F. B., Siddiqui, O., Day, L. E., Hedeker, D., Petraitis, J., Richardson, J., & Sussman, S. (1994) Differential influence of parental smoking and friends' smoking on adolescent initiation and escalation of smoking. *Journal of Health and Social Behavior, 35*(3), 248–265.
- Flay, B. R., Hu, F. B., & Richardson, J. (1998). Psychosocial Predictors of Different Stages of Cigarette Smoking among High School Students. *Preventive Medicine, 27*, A9–18.
- Flyvbjerg, B. (2006). Five Misunderstandings About Case-Study Research. *Qualitative Inquiry, 12*(2), 219-245.
- Fowler, F. J. (2009). *Research Methods* (4th ed). Thousand Oaks, CA: Sage.
- Freedman, K. S., Nelson, N. M., & Feldman, L. L. (2012). Smoking Initiation Among Young Adults in the United States and Canada, 1998-2010: A Systematic Review. *Preventing Chronic Disease, 9*, 110037. Retrieved 7/1/2012 from <http://dx.doi.org/10.5888/pcd9.110037>

- Frick, P.J. & Morris, A. S. (2004). Temperament and developmental pathways to conduct problems. *Journal of Clinical Child & Adolescent Psychology*, 33(1), 54-68.
- Frohlich, K. L., Potvin, L., & Gauvin, L. (2002). Youth smoking initiation. Disentangling context from composition. *Health Place*, 8, 155-166.
- Gibbons, F. X., & Buunk, B. P. (1999). Individual differences in social comparison: development of a scale of social comparison orientation. *Journal of Personality and Social Psychology*, 76(1), 129– 142.
- Gibson, B., & Maurer, J. (2000). Cigarette Smoking in the Movies: The Influence of Product Placement in Attitudes Toward Smoking and Smokers. *Journal of Applied Social Psychology*, 30(7), 1457–1473. doi: 10.1111.j.1559-1816.2000.tb02530.x
- Gilman, S. E., Rende, R., Boergers, J., Buka, S. L., Clark, M. A., Colby, S. M., ... Niaura, R. S. (2009). Parental Smoking and Adolescent Smoking Initiation: An Intergenerational Perspective on Tobacco Control. *Pediatrics*, 123, e274-e281. doi: 10.1542/peds.2008-2251.
- Giovino, G. A. (2002). Epidemiology of tobacco use in the United States. *Nicotine & Tobacco Research*, 1, S31-S40.
- Goldstein, A. O., Sobel, R. A., & Newman, G. R. (1999). Tobacco and alcohol use in Graded children's animated films. *Journal of the American Medical Association*, 281(12), 1131–1136.
- Goodman, L. A. (1961). Snowball Sampling. *Annals of Mathematical Statistics*, 32(1), 148-170.

- Granovetter, M. S. (1973). The Strength of Weak Ties. *American Journal of Sociology*, 78(6), 1360-1380.
- Green, M. C., & Clark, J. L. (2013). Transportation into narrative worlds: implications for entertainment media influences on tobacco use. *Addiction*, 108, 477-484. doi: 10.1111/j.1360-0443.2012.04088.x
- Hansen, H., Holmes, S., & Lindemann, D. (2013). Ethnography of Health for Social Change: Impact on public perception and policy. *Social Science & Medicine*, 99, 116-118.
- Hansen, W. B. (1992). School-based substance abuse prevention: a review of the state of the art in curriculum, 1980-1990. *Health Education Research*, 7(3), 403-430. doi: 10.1093/her/7.3.403.
- Hirschi, T. (1969). *Causes of Delinquency*. Berkley: University of California Press.
- Herman-Stahl, M. & Petersen, A. C. (1996). The protective role of coping and social resources for depressive symptoms among young adolescents. *Journal of Youth and Adolescence*, 25(6), 733-753. doi: 10.1007/BF01537451.
- Holland, P. W., & Leinhardt, S. (1978). An Omnibus Test for Social Structure Using Triads. *Sociological Methods Research*, 7(2), 227-256. doi: 10.1177/004912417800700207.
- Hoving, C., Reubsaet, A., & de Vries, H. (2007). Predictors of smoking stage transitions for adolescent boys and girls. *Preventive Medicine*, 44, 485-489.

- Jackson, C. & Dickinson, D. (2003). Can parents who smoke socialize their children against smoking? Results from the Smoke-free Kids Intervention Trial. *Tobacco Control, 12*(1), 52–59.
- Johnson, J. L., Kalaw, C., Lovato, C. Y., Baillie, L., & Chambers, N. A. (2004). Crossing the line: adolescents' experiences of controlling their tobacco use. *Qualitative Health Research, 14*(9), 1276-1291.
- Kaestle, C. E., & Wiles, B. B. (2010). Targeting High-Risk Neighborhoods for Tobacco Prevention Education in Schools. *American Journal of Public Health, 100*(9), 1708-1713.
- Knoke, O., & Kuklinski, J. H. (1982). *Network Analysis (Qualitative Applications in the Social Sciences)*. Newbury Park, CA: Sage.
- Kobus, K. (2003). Peers and adolescent smoking. *Addiction, 98*(Suppl. 1), 37–55.
- Kremers, S., Mudde, A., & de Vries, H. (2001). Subtypes within the precontemplation stage of adolescent smoking acquisition. *Addictive Behaviors, 26*(2), 237–251.
- Krueger, R. F., Markon, K. E, Patrick, C. J., Benning, S. D., & Kramer, M. D. (2007). Linking Antisocial Behavior, Substance Use, and Personality: An Integrative Quantitative Model of the Adult Externalizing Spectrum. *Journal of Abnormal Psychology, 116*(4), 545-666.
- Krohn, M. D., Skinner, W. F., Massey, J. L., & Akers, R. L. (1985). Social Learning Theory and Adolescent Cigarette Smoking: A Longitudinal Study. *Social Problems, 32*(5), 455-471.

- Lakon, C. M., Hipp, J. R., & Timberlake, D. S. (2010). The Social Context of Adolescent Smoking: A Systems Perspective. *American Journal of Public Health, 100*, 1218-1228. doi: 10.2105/AJPH.2009.167973.
- Langlois, M. A., Petasa, R., & Hallam, J. S. (1999). Why do Effective Smoking Prevention Programs Work? Student Changes in Social Cognitive Theory Constructs. *Journal of School Health, 69*(8), 326-331.
- Lantz, B. (2013). The large sample size fallacy. *Scandinavian Journal of Caring Sciences, 27*, 487-492.
- Lantz, P. M., Jacobson, P. D., Warner, K. E., Wasserman, J., Pollock, H. A., Berson, J., & Ahlstrom, A. (2000). Investing in youth tobacco control: a review of smoking prevention and control strategies. *Tobacco Control, 9*, 47-63.
- Latendresse, S. J., Rose, R. J., Viken, R. J., Pulkkinen, L., Kaprio, J., & Dick, D. M. (2008). Parenting mechanisms in links between parents' and adolescents' alcohol use behaviors. *Alcoholism: Clinical and Experimental Research, 32*(2), 322-330. doi: 10.1111/j.1530-0277.2007.00583.x.
- Lindlof, T. R. & Taylor, B. C. (2011). *Qualitative Communication Research Methods* (3rd ed.). Thousand Oaks, CA: Sage.
- Lloyd, B., Lucas, K., & Fernbach, M. (1997). Adolescent girls' construction of smoking identities: implication for health promotion. *Journal of Adolescence, 20*(1), 43-56.
- Lucas, K. & Lloyd, B. (1999). Starting smoking: girls' experience of the influence of peers. *Journal of Adolescence, 20*(5), 647-655.

- Lynch, B. S., & Bonnie, R. J. (1994). *Growing Up Tobacco Free: Preventing Nicotine Addiction in Children and Youths*. Institute of Medicine. Washington, DC: National Academies Press.
- Mason, M. (2010). Sample Size and Saturation in PhD Studies Using Qualitative Interviews. *Forum Qualitative Social Research*, 11(3), Art 8.
- Maykut, P. & Morehouse, R. (1994). *Beginning Qualitative Research*. London: Falmer Press.
- McAlister, A. L., Perry, C. L., & Parcel, G. S. (2008). How Individuals, Environments, and Health Behaviors Interact: Social Cognitive Theory. In: *Health Behavior and Health Education: Theory, Research, and Practice 4th Edition*. San Francisco, CA: John Wiley & Sons, Inc., 169-188.
- McMillan, B., Higgins, A. R., & Conner, M. (2005). Using an extended theory of planned behavior to understand smoking amongst schoolchildren. *Addiction Research and Theory*, 13(3), 293–306.
- Mekemson, C. & Glantz, S. A. (2002) How the tobacco industry built its relationship with Hollywood. *Tobacco Control*, 11(Suppl 1), I81– 91.
- Mercken, L., Candel, M., Willems, P., & de Vries, H. (2007). Disentangling social selection and social influence effects on adolescent smoking: The importance of reciprocity in friendships. *Addiction*, 102, 1483–1492.
- Mercken, L., Snyders, T. A. B., Steglich, C, & de Vries, H (2009). Dynamics of adolescent friendship networks and smoking behavior: Social network analyses in

- six European countries. *Social Science & Medicine*, 1-9. doi: 10.1026/j.socscimed.2009.08.003.
- Mercken, L., Candel, M., Van Osch, L., & de Vries, H. (2011). No smoke without fire: The impact of future friends on adolescent smoking behavior. *British Journal of Health Psychology*, 16(1), 170–188.
- Mermelstein, R. (1999) Explanations of ethnic and gender differences in youth smoking: A multi-site, qualitative investigation. *Nicotine Tobacco Research*, 1(Suppl 1), S91-S98.
- Michel, L., & Amos, A. (1997). Girls, Pecking Order and Smoking. *Social Science and Medicine*, 44(12), 1861-1869.
- Miles, M. B. & Huberman, A. M. (1994). *Qualitative Data Analysis*. Thousand Oaks, California: Sage.
- Miller, N. E., & Dollard, J. (1941). *Social Learning and Imitation*. New Haven: Yale University Press.
- Mischel, W. (1973). Toward a Cognitive Social Learning Reconceptualization of Personality. *Psychological Review*, 80(4), 252-283.
- Murray, D. M., & Perry, C. L. (1987) The measurement of substance use among adolescents: when is the bogus pipeline' method needed? *Addictive Behaviour*; 12(3), 225–233.
- National Health Interview Survey, 1965-2010. CDC. Smoking and tobacco use: trends in current cigarette smoking among high school students and adults, United States, 1965--2010. Atlanta, GA: US Department of Health and Human Services, CDC;

2011. Retrieved 11/23/11 from

http://www.cdc.gov/tobacco/data_statistics/tables/trends/cig_smoking/index.htm

New York State Department of Health (2014). Lung and bronchus cancer mortality rate per 100,000. Cancer Registry Data.

<http://www.health.ny.gov/statistics/chac/general/g8.htm>

Oetting, E. R., & Beauvais, F. (1986). Peer cluster theory: Drugs and the adolescent.

Journal of Counseling and Development, 65, 17-22.

Oetting, E. R., & Donnermeyer, J. F. (1998). Primary socialization theory: the drug use and deviance. I. *Substance Use & Misuse, 33*(4), 995-1026.

Oetting, E. R., Donnermeyer, J. F., Trimble, J. E., and Beauvais, F. (1998). Primary socialization theory: culture, ethnicity, and cultural identification. The links between culture & substance use. IV. *Substance Use & Misuse, 33*(10), 2075-2107.

O'Loughlin, J, Paradis, G, Renaud, L., & Gomez, L. S. (1998). One-year predictors of smoking initiation among elementary schoolchildren in multiethnic, low-income, inner-city neighborhoods. *Tobacco Control, 7*, 268-275.

Parker, H., Williams, L., & Aldrige, J. (2002). The Normalization of 'Sensible' Recreational Drug Use: further Evidence from the North West England Longitudinal Study. *Sociology, 36*(4), 941-964.

Peskin, A. (1993). The Goodness of Qualitative Research. *Educational Researcher, 22*(2), 23-29.

- Peterson, A. V., Kealey, K. A., Mann, S. L., Marek, P. M., & Sarason, I. G. (2000). Hutchinson Smoking Prevention Project: Long-Term Randomized Trial in School-Based Tobacco Use Prevention – Results on Smoking. *Journal of the National Cancer Institute*, 92(24), 1979-1991. doi: 10.1093/jnci/92.24.1979.
- Picciotto, M. L. (2014). Molecules and circuits involved in nicotine addiction: The many faces of smoking. *Neuropharmacology*, 76 (Pt B), 545-553.
- Pierce, J. P., Choi, W. S., Gilpin, E. A., Farkas, A. J., & Merritt, R. K. (1996). Validation of susceptibility as a predictor of which adolescents take up smoking in the United States. *Health Psychology*, 15(5), 355–361.
- Pierce, J. P., Distefan, J. M., Kaplan, R. M., & Gilpin, E. A. (2005). The role of curiosity in smoking initiation. *Addictive Behaviors*, 30(4), 685-696.
- Pierce, J. P., Distefan, J. M., & Hill, D. (2010). Adolescent smoking. *Tobacco*, 11, 313-323.
- Plano-Clark, V., Miller, D. L., Creswell, J. W., McVea, K., McEntarffer, R., Harter, L. M., & Mickelson, W. T. (2002). In conversation: high school students talk to students about tobacco use and prevention strategies. *Qualitative Health Research*, 12(9), 1264-1283.
- Poland, B., Stockton, L., Ashley, M. J., Pederson, L., Cohen, J., Ferrence, R., & Buli, S. (1999). Interactions between smokers and non-smokers in public places: a qualitative study. *Canadian Journal of Public Health*, 29, 330-333.
- Rodriguez, D., Tscherne, J. & Audrain-McGovern, J. (2007). Contextual Consistency and Adolescent Smoking: Testing the Indirect Effect of Home Indoor Smoking

- Restrictions on Adolescent Smoking Through Peer Smoking. *Nicotine Tobacco Research*, 9(11), 1155-1161.
- Roberts, D., Henriksen L., & Christenson P. (1999). Substance use in popular movies and music. Office of National Drug Control Policy. Rockville, MD.
- Rosen, I. M., & Mauer, D. M. (2008). Reducing tobacco use in adolescents. *American Family Physician*, 4, 483-490.
- Rudatsikira, E., Muula, A. S., & Siziya (2009). Current cigarette smoking among in-school American youth: results from the 2004 national youth Tobacco Survey. *International Journal for Equity in Health*, 8(10), 1-9. doi: 10.1186/1475-9276-8-10.
- Sakuma, K. L. K., Sun, P, Unger, J. B., & Johnson, C. A. (2010). Evaluating Depressive Symptom Interactions on Adolescent Smoking Prevention Program Mediators: A Mediated Moderation Analysis. *Society for Research on Nicotine and Tobacco*, 12(11), 1099-1107. doi: 10.1093.ntr/ntq156.
- Santrock, J. W. (2008). A Topical Approach to Lifespan Development (M. Ryan, Ed., 4th ed.). New York, NY: McGraw-Hill Companies, Inc.
- Sargent, J. D., Mott, L. A., & Stevens, M. (1998). Predictors of Smoking Cessation in Adolescents. *Archives of Pediatric & Adolescent Medicine*, 152, 388-393.
- Sargent, J. D., Tickle, J. J., Beach, M. L., Dalton, M. A., Ahrens, M. B. & Heatherton, T.F. (2001a). Brand appearances in contemporary cinema films and contribution to global marketing of cigarettes. *Lancet*, 357(9249), 29–32.

- Sargent, J. D., Beach, M. L., Dalton, M. A., Mott, L. A., Tickle, J. J., Ahrens, M. B., & Heatherton, T. F. (2001b). Effect of seeing tobacco use in films on trying smoking among adolescents: cross sectional study. *British Medical Journal*, *323*(7326), 1-6.
- Sargent, J. D. (2005). The Heuristic model for the effect of media exposure on smoking initiation. Adapted from *Smoking in Movies: Impact on Adolescent Smoking. Adolescent Medicine Clinics*, *16*, 345-370.
- Sherman, S. J., Chassin, L., Presson, C., Seo, D. & Macy, J.T. (2009). The intergenerational transmission of implicit and explicit attitudes toward smoking initiation: Predicting adolescent smoking initiation. *Journal of Experimental Social Psychology*, *45*(20), 313-319.
- Shi, L. (1997). *Health Services Research Methods*. Albany, NY: Delmar Publishing.
- Simons-Morton, B., & Chen, R. S. (2006). Over time relationships between early adolescent and peer substance use. *Addictive Behaviors*, *31*(7), 1211-1223.
- Siqueira, L.M., Rolnitzky, L. M., & Rickert, V. I. (2001). Smoking Cessation in Adolescents. *Archives of Pediatric & Adolescent Medicine*, *155*, 489-495.
- Solberg, L., Mosser, G., & McDonald, S. (1997). Why are you measuring? *Journal on Quality Improvement*, *23*(3), 135-147.
- Stebbins, R. A. (2001). *Exploratory Research in the Social Sciences*. Thousand Oaks, California: Sage.
- Stockwell, T. F. & Glantz, S. A. (1997) Tobacco use is increasing in popular films. *Tobacco Control*, *6*(4), 282– 284.

- Sussman, S., Dent, C. W., & McAdams, L. A. (1994). Group self-identification and adolescent cigarette smoking: a 1-year prospective study. *Journal of Abnormal Psychology, 103*(3), 576–580.
- Sznitman, S. R., Kolobov, T., ter Bogt, T., Kuntsche, E., Walsh, S. D., Boniel-Nissim, M., & Harel-Fisch, Y. (2013). Exploring substance use normalization among adolescents: A multilevel study in 35 countries. *Social Science & Medicine, 97*, 143-151. doi: 10.1016/j.socscimed.2013.08.038.
- Teenage, 2011. In Merriam-Webster.com. Retrieved 11/1/11 from <http://www.merriam-webster.com/dictionary/teenage>.
- Tickle, J. J., Sargent, J. D., Dalton, M. A., Beach, M. L., & Heatherton, T. F. (2001). Favorite movie stars, their tobacco use in contemporary movies, and its association with adolescent smoking. *Tobacco Control, 10*, 16–22.
- Tobler, N. S., & Stratton, H. H. (1997). Effectiveness of School-Based Drug Prevention Programs: A Meta-Analysis of the Research. *The Journal of Primary Prevention, 18*(1), 71-128. doi:10.1023/A:1024630205999.
- Unger, J. B., Johnson, C. A., Stoddard, J. L., Nezami, E., & Chih-Ping, C. (1997). Identification of adolescents at risk for smoking initiation: Validation of a measure of susceptibility. *Addictive Behaviors, 22*(1), 81–91.
- Unger, J. B., Cruz, T. B., Schuster, D., Flora, J.A., & Johnson, C.A. (2001). Measuring exposure to pro- and anti-tobacco marketing among adolescents: intercorrelations among measures and associations with smoking status. *Journal of Health Communication, 6*(1), 11–29.

- United States Department of Health and Human Services (2012). Preventing Tobacco Use Among Youth and Young Adults. The Epidemiology of Tobacco Use Among Young People in the United States and Worldwide. Retrieved 6/29/12 from www.surgeongeneral.gov/library/reports/preventing-youth-tobacco-use/sgr_2012_chapt3.pdf - 65k - 2012-05-11
- Urberg, K.A., Degirmencioglu, S. M., & Pilgrim (1997). Close friend and group influence of adolescent cigarette smoking and alcohol use. *Developmental Psychology*, 33, 834-844.
- Urberg, K. A., Luo, Q., Pilgram, C., & Degirmencioglu, S. M. (2003). A two-stage model of peer influence in adolescent substance use: individual and relationship-specific differences in susceptibility to influence. *Addictive Behaviors*, 28, 1243-1256.
- Valente, T. W. (2010). *Social Networks and Health. Models, Methods, and Applications*. New York: Oxford University Press.
- Van de ven, M. O., Greenwood, P. A., Engels, R. C, Olsson, C. A. & Patton, G.C. (2010). Patterns of adolescent smoking and later nicotine dependence in young adults: A10-year prospective study. *Public Health*, 124(2), 65-70.
- Veal, A. J. (2006). *Research Methods for Leisure & Tourism: A Practical Guide*. Upper Saddle River, NJ: Prentice Hall/Financial Times.
- Voorhees, C. C., Ye, C., Carter-Pokras, O., MacPherson, L, Kanamori, M., Zhang, G.,...Fiedler, R. (2011). Peers, Tobacco Advertising, and Secondhand Smoke Exposure Influences Smoking Initiation in Diverse Adolescents. *American Journal of Public Health*, 25(3), e1-e10. doi: 10.4278/ajhp.090604-QUAN-180.

- Wakefield, M., Flay, B., Nichter, M., & Giovino, G. (2003). Role of the media in influencing trajectories of youth smoking. *Addiction, 98*, Suppl 1, 79-103.
- Warner, K. E., Sexton, D. W., Gillespie, B. W., Levy, D. T., & Chaloupka, F. J. (2014). Impact of Tobacco Control on Adult per Capita Cigarette Consumption in the United States. *American Journal of Public Health, 104*(1), 83-89.
- Wasserman, S. & Faust, K. (1994). *Social Network Analysis: Methods and Applications (Structural Analysis in the Social Sciences)*. Cambridge: Cambridge University Press.
- Weinstein, Y., & Roediger, H. L. (2012). The effect of question order on evaluations of test performance: how does the bias evolve? *Memory & Cognition, 40*, 727-735.
- Wilcox, D. (2003). An ecological approach to understanding youth smoking trajectories: problems and prospects. *Addiction, 98* (Suppl 1), 57-77.
- Wills, T. A., Cleary, S., Filer, M., Shinar, O., Mariani, J., & Spenc, K. (2001). Temperament related to early-onset substance use: test of a developmental model. *Prevention Science, 2*(3), 145-163.
- Winship, C., Mare, R. D. (1992). Models for Sample Selection Bias. *Annual Review of Sociology, 18*, 327-350.
- Youth, 2011. In Merriam-Webster.com. Retrieved 11/1/11 from <http://www.merriam-webster.com/dictionary/teenage>
- Yoen Loke, A., & Mak, Y. (2013). Family Process and Peer Influences on Substance Use. *International Journal of Environmental Research and Public Health, 10*, 3868-3885. doi:10.3390/ijerph10093868.

Appendix A: Correspondance with Primary Author for Permission of Structured
Interview Guide use

Date : Wed, Nov 17, 2010 09:56 AM CST
From : "**Vicki L. Plano Clark**"
To : Susan Franko <>

Hi Susan,
Well as I figured, everyone involved is delighted to have you use the questions so please feel free to do so. We simply ask that you provide a citation to the article at some point in your work.
Best wishes for your research!

Vicki L. Plano Clark, Ph.D.
Director, Office of Qualitative and Mixed Methods Research
Research Assistant Professor, Educational Psychology
Associate Editor, *Journal of Mixed Methods Research*

On Nov 16, 2010, at 7:30 PM, Susan Franko wrote:
I appreciate your consideration.

Original E-mail
From: "Vicki L. Plano Clark" <>
Date: 11/15/2010 05:11 PM
To: Susan Franko <>
Subject: Re: focus study

Susan,

Thank you for your interest in our work! I am running this request by the project

PI and as soon as I get her reply, I'll send you a formal response!
Best regards,

Vicki L. Plano Clark, Ph.D.
Director, Office of Qualitative and Mixed Methods Research
Research Assistant Professor, Educational Psychology
Associate Editor, *Journal of Mixed Methods Research*
University of Nebraska-Lincoln

On Nov 13, 2010, at 10:56 AM, Susan Franko wrote:

Good Morning Ms Plano-Clark,

I am currently working on my dissertation on Adolescent Tobacco Use in which I plan to do a qualitative study. The focus group script you and your colleagues developed in the research article "In Conversation: High School Students Talk to Students about Tobacco Use and Prevention Strategies" would fit perfectly in my proposed study. I would like to request your permission for use.

I appreciate your consideration.

Sincerely,
Susan M Franko, MPH, RRT

Appendix B: Correspondance with Primary Author for Permission of Figure use

Susan Franko <susan.franko@waldenu.edu>

Nov 16, 2014 to James.Sargent, cindy.patch

Hello Dr Sargent,

I am a public health doctoral candidate at Walden University and have written my dissertation on adolescent tobacco use. I respectfully requesting to use your illustration "The Heuristic model for the effect of media exposure on smoking initiation" published in Adolescent Medicine Clinics (2005).

I appreciate your consideration.

Susan M Franko, MPH, RRT

James D. Sargent <James.D.Sargent@dartmouth.edu>

Nov 17, 2014 to me

sure

Appendix C: Modified Adolescent Individual Interview/Community Adult Focus Group
Protocol

1. Think back over the course of the past month. Describe for me times when you have seen people using tobacco. Where were you? What was going on? Who was using it? How did you react? Can you give me some examples?
2. Tell me what students at this school think about tobacco. Can you give me an example? Could you tell me more? What do you mean by that?
3. How would you describe the rules for tobacco used at this school? What do students think about the rules? How are they enforced?
4. We've mostly been talking about tobacco use at school. Now I would like for you to tell me what happens outside of school. Other experiences the past month with tobacco? What about the role of advertising, films, television? What about experiences at home, with friends, at work?
5. Could you tell me what you think quitting is like for smokers? How do you think it is different for people who are younger compared to people who are older?

Appendix D: Raw Transcripts of Adolescent Individual Interviews/Community Adult
Focus Groups

Adolescents

A.1.1: Everyday. Like everyone in family does it. I can't remember the last time I haven't seen someone smoking. It doesn't bother me.

A.1.2: Not everyone in my family smokes, but I see it every day somewhere. I feel nothing, I mean I see my family doing it.

A.1.3: My mom smokes. It's like an 'ewe' sort of reaction. I yell at my mom.

A.2.1: Everyday. I'm used to it.

A.2.2: Everyday, just walking around. I don't even think about it. I just put my head down and keep walking.

A.2.3: I see kids smoking at the convenience store near the school. That's a big smoking spot for mostly kids but there are some older people there sometimes. It doesn't bother me.

A.3.1: Anytime I'm outside, I see somebody smoking... lots of people smoking. It doesn't affect me at all. It's their choice.

A.3.2: Not everyone I see is smoking, but I see it every day somewhere. I don't like it, but it really doesn't bother me.

A.3.3: My parents are smokers, but only smoke outside. I'm used to it. I tell them to quit.

A.4.1: I actually saw a guy smoking outside our church yesterday. First time ever I saw that. I didn't think it looked good. People were trying to leave church.

A.4.2: I see it a lot. It's their life.

A.4.3: You see it all the time, wherever you are. I don't even think about it.

A.5.1: At my grandmother's house. They all smoke there. I'm used to it by now.

A.5.2: My mom smokes. I really don't care. She's always smoked.

A.5.3: I see people smoking in their cars all the time. It's OK if that's what they want to do.

A.6.1: At my house. I'm used to it by now.

A.6.2: At friends' houses. I don't care.

A.6.3: Right outside the school grounds. They've always done that. It's disgusting.

A.6.4: At the trailer park. The bus goes through there to pick up some kids. I see kids smoking and parents smoking. What can I do? It's their decision. It's just the norm apparently.

2. Tell me what students at this school think about tobacco. Can you give me an example? Could you tell me more? What do you mean by that?

A.1.1: I don't really know.

A.1.2: Nobody talks about it or says anything when they see it.

A.1.3: They see it but they don't say anything.

A.2.1: They think it's cool.

A.2.2: Some think it's cool, but I think the majority of people think it's gross.

A.2.3: It's peer pressure. That's why they do it.

A.3.1: I'm not sure. I guess some don't like it and some are OK with it.

A.3.2: They probably don't care.

A.3.3: Maybe they see it all the time so it doesn't bother them.

A.4.1: I don't know.

A.4.2: Probably some are OK and some think it's stupid.

A.4.3: Some kids probably think they're better than the kids that don't smoke.

A.5.1: They think it's OK.

A.5.2: They think it's cool.

A.5.3: I don't think anyone really cares.

A.6.1: It depends on who you ask. Some think it's cool.

A.6.2: Some think it's a cool thing. Some people think 'oh I'd never do that'.

A.6.3: People pretty much mind their own business and don't say anything about it.

A.6.4: We don't really talk about it. Me and my friends don't anyway.

3. How would you describe the rules for tobacco use at this school? What do students think about the rules? How are they enforced?

A.1.1: Everybody knows the rules. They're not. Well, I have seen it in class when a kid was playing with a cigarette. The teacher just took it away. The kid said he didn't have any more.

A.1.2: They can't smoke on school grounds.

A.1.3: Yeah, they know. They're not enforced.

A.2.1: Everybody knows the rules. They're not enforced.

A.2.2: They can't smoke on school grounds. Not that I've seen [the rules enforced].

A.2.3: They know they're not supposed to do it. Yeah, they know. They stand right on the line of the school property and smoke. They think it's funny. They're not enforced. The school has to see them...and they don't do anything about it.

A.3.1: The rules are posted everywhere. The rules aren't enforced. There's no one out there checking.

A.3.2: Everybody knows they can't smoke on school property.

A.3.3: Everyone has to know. The signs are all over the place

A.4.1: They all know what's not allowed. I guess if a teacher saw somebody smoking, they would call them on it.

A.4.2: You can't smoke on any school property. Nope...not enforced.

A.4.3: You can see the signs everywhere. It's always been like that. The rules are not enforced by anybody.

A.5.1: If they get caught, they like get suspended. The people who work out by the buses can see it but they don't do anything.

A.5.2: They know the rules but they don't care. I see them going down the hill and they think nobody can see them. The school doesn't do anything and they know the kids are smoking there.

A.5.3: I've seen six graders smoking. They don't do anything even though they know it's going on.

A.6.1: There are rules but they don't really follow them. There're not [enforced]. I've never seen anybody smoking on school grounds...just off it though.

A.6.2: They'll go down and smoke at the bridge. It's right off of school property so no one can do anything about it. The teacher could be right outside in front of them and they couldn't do anything about it because they technically are not on the school property. They all smoke off campus...but you can see them from the school.

A.6.3.: It's ridiculous. You can see cigarettes on the ground, you smell it on their clothes and there's nothing the school can do to them. Yes and no...Actually, they are usually smoking just next to school grounds so there's really nothing the school can do.

A.6.4: It's just general knowledge that you shouldn't pull out a cigarette on school property. If you do get caught with cigarettes, they'll just take them away from you...or with a lighter, they'll take that too. If you do get caught smoking on the school's

property, they like suspend you but you can come back after a couple days, but maybe they don't get suspended after the first time.

4. We've mostly been talking about tobacco use at school. Now I would like for you to tell me what happens outside of school. Other experiences the past month with tobacco? What about the role of advertising, films, television? What about experiences at home, with friends, at work?

A.1.1: I don't see anybody smoking on TV.

A.1.2: Sometimes they smoke in the movies.

A.1.3: I see a lot of smoking in older movies. I guess it does go with the character... You see the old rich guys smoking a lot.

A.2.1: That's all you see when you drive by a store is the advertisements... especially for alcohol and cigarettes.

A.2.2: For advertising, I see the anti-tobacco ads on TV all the time. Some people think they're gross but they're saying the truth.

A.2.3: I've seen smoking in the older movies.

A.3.1: I always see people smoking outside of restaurants. Adults who are eating there and the staff are smoking at the back door.

A.3.2: I don't see many ads for cigarettes. I've seen some for the E cigarettes though.

A.3.3: Movies still have a lot of smoking, drinking, and drugs too.

A.4.1: I work at a restaurant on the weekends and a lot of people working in the kitchen smoke. The owner set up a picnic table for people to smoke at.

A.4.2: They've gotten rid of the ads for cigarettes.

A.4.3: The movies on TV don't show smokers, I don't think.

A.5.1: Yeah, I think seeing grownups smoking on TV and in the movies encourages kids to do it too.

A.5.2: In the movies, they smoke because they think it looks cool...cigarettes and cigars. In the old movies, like in the '60s everybody smoked.

A.5.3: If they like that person in the movies that could encourage them to smoke...make them want to be like them.

A.6.1: They don't really advertise smoking. I see anti-smoking ads on the TV.

A.6.2: I've seen ads for the water vapor cigarettes.

A.6.3: I don't watch TV or go to the movies.

A.6.4: In the old movies, you'd see them smoking a pipe or cigar. Usually the heroes do that. Actually, we just rented *Ted*, the movie about the teddy bear and he smoked.

5. Could you tell me what you think quitting is like for smokers? How do you think it is different for people who are younger compared to people who are older?

A.1.1: Hard

A.1.2: I think it depends on the person. They just shouldn't have started to begin with.

A.1.3: It depends on how long you've smoked. I think it depends on how much they smoke, like two packs or one pack.

A.2.1: It's gotta be hard.

A.2.2: It depends, but it's probably pretty hard.

A.2.3: Hard if you have smoked for a long time.

A.3.1: Hard...like for senior citizens.

A.3.2: It depends on how long they've been smoking. If you've been doing it a long time, it might be impossible.

A.3.3: If someone's been smoking since they were 16 and now they're 60, it's gotta be hard.

A.4.1: It must be really hard because they are so used to doing it.

A.4.2: I think it's hard for kids and adults.

A.4.3: I think if they use the gum, it's easy. My parents used the gum and they quit.

Actually, my dad still sneaks a smoke, and my mom yells at him.

A.5.1: Really hard. I think it's hard for adults and younger people.

A.5.2: I heard a lot of people say it's hard, and that they've tried for a long time to quit.

A.5.3: I think it's really hard to quit.

A.6.1: Hard, really hard.

A.6.2: It's extremely difficult...coughing and hacking.

A.6.3: I think if they have money and have access to cigarettes, it makes it harder to quit.

I think it's harder for adults because they've done it for so long.

A.6.4: Adults have a greater tolerance for nicotine so it's harder for them. Older people have a lot more stress than kids. They have to deal with their kids, bills, and stuff. With kids, it's recreational...like they are experimenting with it. It's easier for kids to get off it, because they haven't been smoking for 20 or 30 years. I don't think your rate of addiction matters, usually you're going to try it, and try it, and then you're addicted...unless you're repulsed by it at some point.

Community Adult Focus Groups

Think back over the course of the past month. Describe for me times when you have seen people using tobacco. Where were you? What was going on? Who was using it? How did you react? Can you give me some examples?

CA.1.1: This morning as I was taking a walk, a man was smoking a cigarette and you can't breathe. I crossed the street but I could still smell it.

CA.1.2: My parents smoked. I went to an event my sister had at the casino. I'd never been before, but they allowed smoking throughout the building. I was strange smelling

smoke inside the building. It's on an Indian Reservation so they have different rules about smoking. It really doesn't bother me because my family are smokers. People smoke right outside my entrance to work. Every morning, and every time I go to lunch, every time I leave for the day. There used to be a smoking room in the basement, and people were having to eat their lunch so people complained so they designated the smokers to go to the outside of the building so they can't smoke inside the building. At school, you can't smoke on the premises so the kids are leaving the school building, crossing the street and smoking on the corner. I saw around the corner kids smoking around the corner at the church when I dropped off my kids at school earlier in the week. It made me feel disgusted.

CA.1.3: My husband and I just stayed in a hotel. We had asked for a non-smoking room, but the room they gave us was a smoking room. It was disgusting. This hotel was in Massachusetts. This reminded us why many hotels went smoke-free.

CA.1.4: My husband has just decided to start smoking again. He started chewing tobacco to quit smoking, and now he's smoking to quit chewing tobacco. I see people smoking all the time and it drives me nuts.

CA.2.1: I see it everywhere. I try to move away from the smokers if I can. Even in the winter, driving around you can smell the smoke coming through the vents of the cars.

CA.2.2: My husband and I hate smoking because he's lost five members of his family to smoking related issues. He went to a hypnotist to quit when he was younger. He said his stomach couldn't handle the smoking, so it helped him keep off of it.

CA.2.3: I was at the grocery store the other day and I saw a group of people smoking outside, off to the side of the entrance. My uncle smokes, but he always goes out of the house to smoke. He never smokes inside the house. He lives with my parents, so when we go over there, he always goes outside before he smokes.

2. Tell me what students at this school think about tobacco. Can you give me an example? Could you tell me more? What do you mean by that?

CA.1.1: It's very disappointing and it makes me worry. Do their parents know? It makes me worry that they are setting a bad example for my kids. We have a smoker in our family...their grandmother smokes and she's on full-time oxygen, and I'm trying to drill into my children that you are to never touch tobacco. So when you see other kids doing it, you think... is that going to have a negative effect on my kids? You can see the evidence of it of smoking right outside the school.

CA.1.2: My kids are disgusted by it because they both have asthma. They know they are not to smoke. Not just the smoking so much, but the crewing. I think a lot of our boys are chewing tobacco... the high school boys.

CA.1.3: I think for some kids it is OK, but most kids still think it's gross.

CA.1.4: I don't think it's looked on as bad anymore. When I was in school the kids thought it was gross, but not now.

CA.2.1: I think that depends on if they smoke or not!

CA.2.2: I think some kids think it's gross, but some just deal with it.

CA.2.3: I don't think the kids even notice it.

3. How would you describe the rules for tobacco use at this school? What do students think about the rules? How are they enforced?

CA.1.1: They know there's a smoking ban on school grounds. The kids know by where they're smoking that they know the school grounds are smoke-free. They know where they're supposed to be and where they're not, and they are just outside that line of the school premises. Yes... When they're caught smoking, it's been dealt with. A few kids have been caught.

CA.1.2: It's posted all over the school grounds that it's smoke free. Yeah, I know they are.

There are signs posted that say 'No smoking on school premises' but if there's a basketball game, this parking lot does not belong to the school, it belongs to the church and the school uses it, so it really is not considered school property so people are smoking. I know a lot of the teachers smoke. They have to get into their cars and park across the street and smoke in their cars. Yeah, they smoke on their breaks, but I don't think I know any of the staff that smoke anymore...I mean the employees. Yeah, I know some kids have been caught chewing tobacco on the bus. I know one kid was suspended for that.

CA.1.3: I know the little kids know about the non-smoking rules because they tell me all the time. I don't know if the older kids know it, but I don't see anyone smoking around

the school. I think they know where the boundaries are, but I haven't thought much about it. I don't really ever see anyone smoking outside the school, but also, there's no one out there policing the area, so I don't see how it would be enforced. I smell the smoke coming off the kids when they walk into school. It's coming from the houses or their smoke filled cars. I've never seen a kid smoking on school grounds, or even fingering a cigarette. I work at the school and we have to pay attention to what the kids are doing with their hands, like if they're texting on their cell phones.

CA.1.4: I know the kids know the rules.

CA.2.1: They know about the rules. It's posted all over the school.

CA.2.2: I think they had to sign a pledge. Anyway, it's also on the school's website.

CA.2.3: The kids have to know the rules because the signs are all over the place.

4. We've mostly been talking about tobacco use at school. Now I would like for you to tell me what happens outside of school. Other experiences the past month with tobacco? What about the role of advertising, films, television? What about experiences at home, with friends, at work?

CA.1.1: I don't think it influences the kids. I think when it's on old movie on TV, you can address or give an explanation that that was the time and we know so much more now. What's really horrible is when you see it in a new movie and the characters are smoking then it's upsetting. It doesn't add to the character in my mind. It just is like 'yuk'!

CA.1.2: I honestly don't. I think it should be banned in Hollywood. I don't think there's a reason a character has to smoke. Just like using profanity in movies. I don't feel it adds to anything. CA.1.2: I also think it depends on what the person is smoking. When they see or hear about their favorite actor or sports person has smoked pot or used cocaine, or another drug... that they know is wrong.

CA.1.3: I think the kids know that it's wrong, even in the movies and television. I think it all depends on the character. As long as it's not in kids movies, it doesn't bother me. If it's in a grown-up movie and it's relevant to the character, it doesn't bother me. I've seen it in the videos on MTV and VH1. Singers are smoking cigarettes and cigars.

CA.1.4: I think it probably influences adolescents if they see a major actor smoking. In the old movies, smoking was looked at as fashionable. This is what you did back then. Even now, I think when the kids see celebrities smoking, and using other substances, that's a sign that they've made it.

CA.2.1: I think because there's so much negative advertising, it doesn't influence the kids.

CA.2.2: I think if the kids decide they wanna smoke, they smoke.

CA.2.3: Maybe advertising used to influence kids, but I don't think so anymore.

5. Could you tell me what you think quitting is like for smokers? How do you think it is different for people who are younger compared to people who are older?

CA.1.1: Hard. My in-laws have not been that lucky. To be honest with you, they still smoke even though she's on the oxygen, probably dying from smoking. She turns off the oxygen, obviously, and still smokes. It's been a struggle. It's been the kind of thing that when you go down there for holidays, you have to leave your coat in the car, I can't go in there before work, because I'll come out smelling like smoke. They come out of there reeking of smoke. You don't want to alienate your family but my in-laws have struggled the entire time I've known my husband. So for 20 years, I've watched them struggle. They had maybe two or three years of being smoke-free, then they'd be right back at it. I know they've done the patch, and the pill. My mother-in-law had a number of coma episodes, so it's discouraging, but it definitely highlights how destructive and how addictive smoking is. I think to call it a habit is not enough. This really has a grip on them, it is an addiction. Addiction is a more proper word than habit. They have a smoking addiction. My in-laws are either both smoking or both quitting. For kids I'm not sure I know, but in one sense they haven't been smoking as long but they also don't have the benefit of having all the reasons to not smoke. When you're faced with a life or death health situation, you would think 'I'm gonna master this'. I don't think they realize the consequences, and I think they like that nicotine buzz.

CA.1.2: Hard. Since my kids have been born, my in-laws have been trying to quit for 11 years, because we said we were not coming over because this house is filled with smoke. We are not doing it, and plus with them having asthma...It has taken them 11 years until they totally got rid of it. They did use a patch that was prescribed by the doctor, and their insurance company told them that if you smoke we are not going to have you as our

client anymore, so you need to stop smoking. I was really impressed that an insurance company would say that. My mother-in-law fell and broke her hip and her bones were very, very porous, and they said it's from 40 years of smoking. So finally she got the picture and we didn't go over, and they would have to come to our house to see the kids. Now, we're back and forth because they don't smoke and there's no smoke in their house. It's been a year or so, and the smoke smell is out of their house now. It took a long time. I don't want the kids around it, not with their asthma issues. This first thing we would do when we went to my in-laws is strip our clothes off on the porch, throw them all in the wash. When I was younger, going to a bar the smell would make you physically ill. Twenty years ago when we were all hanging around in the bars, before we were married and had children, it was so disgusting having all the smoke around, but you wanted to be there so you didn't care. Now, I'm so happy that there are no restaurants that allow smoking. You would come home and take a shower, wash your hair and the smell wouldn't come out in one washing. Anyone around smoke, you can smell it coming off of them. I think it depends on how long they've smoked. I've never smoked, so I don't know.

CA.1.3: It was extremely easy for me, but I think for some there are major problems doing it.

CA.1.4: If they're a teenage, I don't think they want to quit. They're doing it to be cool. If they're just teenagers, they're just starting and not looking to quit. They're looking to enhance their habit.

CA.2.1: My father was a college professor who was deathly allergic to smoke. He had this one grad student who was so nervous and she was a big time smoker. After a while, he had to start giving her breaks in the class so she could go out and smoke. He was afraid she would fall apart if she didn't smoke...sad. I know people with certain jobs like construction or waitressing, they smoke when they go on their breaks together. It must be really hard for them to quit because it's always around them. The only way to get a break is to smoke. How do they get away with that?

CA.2.2: Quitting was easy for me. I quit when I found out I was pregnant. I don't think the kids think that much about quitting. They don't think they're addicted.

CA.2.3: Kids can't smoke in most of their environments, so it's not as hard for them to go without cigarettes. I don't think it's hard for kids to quit. They are only social smokers in groups. My husband was in the military right out of high school and the only way you could get a break in your duties was to go for a cigarette break. He wasn't a smoker, but after a while pretended he was...he had a pipe and pretending he was relaxing while smoking his pipe!

Curriculum Vitae

SUSAN M FRANKO**EDUCATION**

Walden University Doctor of Philosophy Dissertation: Adolescent and Community Adult Perceptions of Adolescent Tobacco Use	Pending
California College for Health Sciences Master's in Public Health Thesis: Adult Immunizations in Hospital Inpatients	2005
Portland State University Bachelor of Science in Community Health Education	2000
Hudson-Valley Community College Associate of Applied Science in Respiratory Therapy	1989

WORK EXPERIENCE

Director of Public Health Hamilton County Public Health Nursing Service Indian Lake, NY 12842	December 2013 – present
Compliance Reviewer Island Peer Review Organization Albany, NY 12223	October 2013-December 2013
Regulatory/Risk Manager Ellis Medicine Schenectady, NY 12308	April 2009 – June 2013

PUBLIC HEALTH TEACHING EXPERIENCE

American Lung Association Certified Freedom From Smoking educator 1990
American Lung Association Certified Open Airways for Schools educator 1991

MEMBERSHIPS

New York State Public Health Association
