

HOW THE TRUE COLORS[®] TYPOLOGY IS RELATED TO ADOLESCENTS
CHOOSING NOT TO SMOKE CIGARETTES: AN EXPLORATORY STUDY

by

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B.S., Pittsburg State University, 1973

M.S., Kansas State University, 1981

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

School of Family Studies and Human Services
College of Human Ecology

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2014

Abstract

This qualitative research study was conducted in order to understand more about the phenomenon of adolescent cigarette smoking and to contribute to the body of knowledge on youth substance abuse prevention. The exploratory study incorporated the personality types associated with True Colors, Inc. (2008), as a tool to use when gathering information from non-smoking adolescents and parents. Adolescent-parent dyads were interviewed about how personality characteristics influenced several factors regarding the adolescents' choice to not smoke cigarettes.

The participants indicated that they were comfortable with the True Colors model for identifying their personality types. Furthermore, the participants tended to provide information that reflected their personality. The "gold" personalities exhibited a strong sense of right and wrong, and it was important for them to be responsible, follow rules and respect authority. The adolescents identified as having "orange" personalities tended to put themselves at the center of conversations and reported that they made many of their own decisions. They were also spontaneous and witty. Personalities that were "blue" types demonstrated the most compassion and empathy. They valued relationships and they did not want to disappoint others when making decisions. The fourth color was the "green" personality. These individuals were visionaries, and were analytical and logical with their responses. They valued knowledge and were apt to get their information from books and television when making decisions.

Implications for research include that, rather than studying why adolescents do smoke cigarettes, it may be wise to also study why adolescents choose to not smoke cigarettes in order to more fully understand the phenomenon. The study also provided implications for practitioners regarding adolescent cigarette smoking prevention programs. Because the current study found differences in how the personality types of adolescents received information, youth prevention programs should utilize a variety of strategies to address the unique differences in adolescent personalities in order to be most effective.

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Approved by:

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Karen Myers-Bowman

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Acknowledgements

I would like to acknowledge and thank my major professor, Dr. Karen Myers-Bowman, for being a phenomenal instructor. She has provided me with valuable assistance and has been my endless source of encouragement.

I would also like to thank Dr. Charlotte Shoup Olsen, Dr. Elaine Johannes, and Dr. Tandalayo Kidd for their support and for serving on my committee. Additionally, I would like to acknowledge the Family Studies and Human Services faculty and staff that have helped guide me on this journey.

Dedication

This document is dedicated to:
my husband, Larry,
and children, Chelsea and Austin,
for their undying love and support.

“Families mean everything to me.”

Chapter 1 - Introduction

According to a report of the United States Surgeon General (U.S. Department of Health and Human Services, 2012), each day in the United States, 3,800 youth, age 18 and under, smoke their first cigarette, which is almost 1.5 million youth each year. While progress has been made in reducing youth cigarette smoking prevalence since the first Surgeon General's report in 1964, the current youth smoking rate still represents a major public health crisis. The crisis is caused, in part, because of the highly addictive qualities of tobacco. Once a youth begins to smoke cigarettes she/he can quickly become addicted to the nicotine in tobacco and find it difficult to quit, even when desiring to do so. The longer an individual smokes, the greater the chances she/he will suffer from serious health-related issues. In fact, researchers have determined that cigarette smoking is the most preventable cause of death (Morin, Rodrigues, Fallu, Maiano, & Janosz, 2011) and worldwide, one person dies from tobacco-related issues every six seconds (Leeuw, Scholte, Sargent, Vermulst, & Engels, 2010).

Adolescent cigarette smoking constitutes a serious concern because the vast majority of adult users begin to smoke cigarettes during adolescence (Dick et al., 2007; Dodge et al., 2009; Doest, Dijkstra, Gebherdt, & Vitale, 2009; Harakeh, Scholte, Vries, & Engels, 2006; Henry, Jammer, & Whalen, 2012; Kulbock et al., 2008; Morin, Rodrigues, Fallu, Maiano & Janosz, 2011; Tyas & Pederson, 1998). The U.S. Surgeon General (2012) explained that approximately nine out of ten smokers began smoking by age 18. Because of the addicting qualities of tobacco, three out of four high school smokers will continue to smoke as adults, and if they continue to smoke, will die approximately 13 years earlier than their non-smoking peers. According to the Surgeon General (2012), because young people are very sensitive to nicotine, they not only may become addicted to nicotine, but they may become more heavily addicted to smoking cigarettes than adults. Research also has indicated that cessation is inversely related to the age an individual begins to smoke (Tyas & Pederson, 1998). In other words, the younger an individual begins to smoke, the easier it is to become addicted, and the harder it is to quit smoking.

It is important to understand why adolescents begin to smoke cigarettes in order to create effective prevention programs that will lower the prevalence rates in youth as well as adult populations. Much of the difficulty with smoking prevention programs, however, is related to the short interval of time between when an adolescent begins to smoke and when she/he may

become addicted to nicotine. There is a narrow window of opportunity for intervention with adolescents between experimentation and possible addiction.

Since the 1964 Surgeon General's Report, which brought public attention to the hazards of smoking cigarettes, there have been several antismoking campaigns. Researchers have studied issues around youth smoking behavior and have utilized theories to develop prevention programs. Theory-driven prevention strategies have ranged from simple communication techniques that were mostly school-based, to comprehensive prevention programs that have attempted to create smoke-free environments. Because of prevention efforts, the United States has seen an overall decrease in youth cigarette smoking prevalence rates.

Trends in youth smoking prevalence

In 1964, the Surgeon General of the U.S. Department of Health and Human Services reported a link between cigarette smoking and negative health consequences. A year later, the first warning label appeared on all cigarette packs. Researchers immediately conducted studies to identify reasons for adolescent smoking initiation and suggested prevention program strategies based on their findings. Researchers determined that young people were likely to experiment with their first cigarette with their friends (Cleary et al., 1988). Prevention strategies that followed typically stressed simple communication techniques with well-structured messages to deter adolescent smoking initiation. Due to the heightened awareness of the hazards of cigarette smoking and prevention efforts, both youth and adult prevalence rates of cigarette smoking leveled off at about 25% between 1964 and 1988 (Levy, Nikolayev, Mumford, & Compton, 2005).

After showing little overall change in 30 years, smoking prevalence rates in the 1990s began to increase. The milestone 1994 Surgeon General's Report showed that the cigarette smoking rate for high school seniors had started to rise. In fact, the prevalence of current cigarette use (smoking at least one cigarette during the 30 days prior to the survey) increased from 27.5% in 1991 to 36.4% in 1997 (U.S. Department of Health and Human Services, 2012). The report was seen as a call to action and was instrumental in bringing about important tobacco control actions nationwide. As a result, the U.S. Food and Drug Administration began to regulate tobacco, and the 1993 Synar Amendment prohibited the sale of cigarettes to children under age 18. Of major importance was the 1998 Master Settlement Agreement between the Attorneys

General of 46 states and the tobacco industry that attempted to decrease the marketing of tobacco products to children. The settlement also provided significant funds for comprehensive educational programs to reduce underage smoking, and for treating smoking-related diseases. The agreement amounted to a \$206 billion burden for the tobacco industry over the next 25 years (Ross & Chaloupka, 2004). As a result, the price of cigarettes went up 48%, which was triggered by the financial liability of the tobacco companies (Ross & Chaloupka, 2004). A subsequent decrease in adolescent smoking trends toward the end of the 1990s led researchers to believe that the high cost of cigarettes was a strong deterrent for adolescent smoking initiation (Ross & Chaloupka, 2004). Because of regulatory efforts, economic approaches, and prevention education strategies, youth cigarette smoking rates declined every year from 36.4% in 1997 to 21.9% in 2003, when the rate of decrease began to stabilize (U.S. Department of Health and Human Services, 2012).

While progress has been made in reducing cigarette smoking, prevalence rates show that nearly 3800 youth under the age of 18 in the United States smoke their first cigarette each day, which translates into 1.5 million youth each year (U.S. Department of Health and Human Services, 2012). There is danger in thinking that the problem with tobacco use has been solved. Many successful comprehensive tobacco control programs have been cut, and an apathetic approach to the issue may direct limited public funds for public health resources in other directions (Nelson et al., 2008). The 2012 Report of the Surgeon General gave special attention to the fact that adolescent cigarette smoking is still a public crisis with serious health consequences. The report has drawn attention to new areas of concern by stating that young people are currently being targeted by tobacco companies as replacement smokers. This is intended to sustain the companies because there are fewer adults smoking, and because many long-term smokers die due to tobacco-related diseases. In addition, currently there is widespread access to information on tobacco use and promotion from tobacco companies through the growing use of technology, much of which is difficult for parents to monitor. While the use of media technology may warn of the hazards of tobacco use, it also may be a vehicle for tobacco companies to promote tobacco use to minors. The Surgeon General report once again served as a call to action and urged society to “no longer allow our young people’s health to go up in smoke,” (U.S. Department of Health and Human Services, 2012, p. 16), but to work together to help prevent adolescents from using tobacco.

Purpose of the Study

Much progress has been made in recent years to reduce adolescent cigarette smoking initiation. Yet, because youth tobacco use still represents a national health concern, it is important to study the phenomenon in order to identify effective prevention strategies. This exploratory research study examined how personality type may influence an adolescent's decision to not smoke cigarettes. The qualitative study included adolescents who do not smoke, in order to study personalities that may possibly represent risk or protective factors for smoking initiation. Personality types of parents also were included in the study because of the influence they have on an adolescent's choice whether to use tobacco. The True Colors, Inc. (2008) model of personality identification was used as the language to describe personality types of the individuals participating in the study.

Chapter 2 - Literature Review

It is commonly acknowledged that most cigarette smoking initiation occurs in adolescence. Researchers have conducted a plethora of studies to better understand this phenomenon and develop smoking prevention programs that target adolescents. Several different theories have guided research studies on why youth begin to smoke cigarettes, and what can be done to prevent adolescents from smoking. Three theories used by researchers that have influenced the development of prevention strategies are discussed in this chapter. Also, information is included on research studies regarding individual characteristics of smoking and non-smoking adolescents. Studies that have considered how parents, siblings, and friends may have influenced an adolescent's smoking behavior are highlighted as well. Because I seek to answer questions regarding individual personality type and adolescent smoking initiation, the chapter concludes with a review of research studies on personality traits and information on personality types.

Theories That Have Guided Prevention Strategies

Theories, common to the field of family studies, have provided researchers with lenses to view aspects of adolescent cigarette smoking initiation. These theories, which have provided insight on this phenomenon, are discussed in this section. Social Learning Theory, Symbolic Interactionism and the Bioecological Model have historically guided research studies on adolescent cigarette smoking to help practitioners develop more effective cigarette prevention programs for adolescents over time.

Social Learning Theory

Researchers have frequently used Social Learning Theory (SLT) to explain smoking initiation and use by youth. The main premise of SLT (Bandura, 1986) is that new behaviors can be acquired through the observation of others' behavior and experiences within the social environment. Rewards that may be favorable or unfavorable by definition can influence the maintenance or continuation of a behavior. Modeling behaviors of family members and friends are considered to be primary social factors, while secondary social factors may include various types of media, for example. Furthermore, modeling behavior that may occur early in life, or within relationships with which one has the most contact or intimacy, may have the most

influence on an individual. Consistent with the theory, researchers have determined that adolescents may indeed begin to smoke to emulate the behavior of peers, family members, and other role models. When they model smoking behavior, there is considerable influence on the adolescent to emulate the behavior. Researchers also have found that, in spite of the known possible health hazards, youth may begin to smoke cigarettes as part of the socialization process (Cleary, Hitchcock, Semmer, Flinchbaugh, & Pinney, 1988).

Guided by the SLT, early family-based prevention programs followed the logic that if parents could learn better parenting skills, they could become more effective parents. They would then raise children with positive developmental outcomes related to tobacco use, such as choosing not to smoke cigarettes (US Department of Health and Human Services, 2012). General strategies for parent education included teaching topics such as communication skills, positive discipline techniques, and building positive families. According to the 2012 Surgeon General's report, parent-based prevention programs that combine these elements in evidence-based curricula provided some success in preventing smoking among adolescents.

SLT may provide a useful framework to help understand why adolescents choose not to smoke cigarettes. The theory suggests that people learn from each other, including through modeling and observation. When adolescents observe the non-smoking behavior of their parents, siblings, and friends, they may choose to model or imitate that behavior themselves. Not only may the adolescent learn by observing another's non-smoking behavior, but s/he will also experience the outcomes of the non-smoking behavior, such as better health. Learning by observing the smoking behaviors and possible negative outcomes due to diseases caused by smoking cigarettes, also may reinforce non-smoking behavior for the adolescent. According to the 2012 Surgeon General's report, several different prevention programs that include parents and other family members may be effective in lowering tobacco use. Model programs are typically school-based and incorporate homework assignments for parents/families to complete with their youth.

Symbolic Interaction Theory

The work of George Herbert Mead has been recognized as the beginning of Symbolic Interactionism (SI; White & Klein, 2008). The premise of SI is that humans live and adapt in their environments by understanding the shared meanings of symbols, such as with an item,

behavior, language, or a situation. When others share the same meaning of the symbol, communication can take place. When others do not know the meaning of the symbol, communication can be difficult or even impossible. As a result, an action may or may not be accepted, depending on how another person may respond to the meaning of a symbol.

Researchers have used SI to surmise that youth smoke cigarettes because of the symbols or figures used by tobacco companies to promote their products. One study showed that the camel cartoon image on Camel cigarette cartons was as familiar to 6-year-olds as Mickey Mouse (Fischer, Schwartz, Richards, Goldstein, & Rojas, 1991). Because the familiar Camel advertisement was cartoon-like, it was felt that the symbol would generate a positive association with cigarettes, encouraging youth to begin smoking. As another example, the rise in youth smoking initiation likely came from the attraction of teenagers to symbols like those found in Marlboro advertisements. Experts felt that the symbol was attractive to youth by depicting both autonomy and freedom from authority (DeBon & Klesges, 1996). Thus, the shared meaning that youth had for the cigarette advertisement symbols would be positive, attractive, and fun, encouraging youth to emulate the cigarette smoking they witnessed in the advertisements. Researchers have found that tobacco companies depend on youth cigarette smoking for profits, and that tobacco advertisements have increased the prospect that adolescents will begin to smoke cigarettes (Moodie, MacKintosh, Brown, & Hastings, 2008).

Early prevention strategies included enacting legislation that banned cigarette advertising in certain locations such as on radio and television. The Synar Amendment required states to enact laws prohibiting the sale of cigarettes to children under age 18. Mass media campaigns were developed to counteract the media advertising efforts of the tobacco companies. The campaigns were developed to target youth with anti-smoking messages. Early reports, however, showed that mass media campaigns were inadequate when compared to the well-coordinated and highly funded advertisement efforts produced by the tobacco industry (US Department of Health and Human Services, 2012). More recently, however, there is evidence that anti-smoking advertisements that produce strong emotional responses through personal testimony and visceral imagery of negative health effects of smoking increase attention and reduce the appeal of cigarette smoking. Advertisers have focused on anti-smoking message characteristics as well as level of exposure over time when developing advertisements that are most effective for smoking prevention. According to the 2012 Surgeon General's report, there is evidence to infer a causal

relationship between anti-smoking media campaigns that are well funded and their ability to reduce youth smoking prevalence rates.

Bioecological Theory

Bioecological Theory (BT; Bronfenbrenner, 1986) gained widespread acceptance in explaining youth smoking through describing a complex system of influencing factors on adolescents. The major assumption of the theory is that individuals and groups are biological as well as social in nature. Simply put, individuals depend on their environment for their survival, such as when breathing air or growing food, and depend on their social environment when they communicate and interact within each other.

A visual representation of BT is an individual surrounded by concentric circles representing environmental ecosystems. (See Figure 2.1 Bronfenbrenner's Bioecological Theory Model.) Each ecosystem contains certain norms and rules that shape psychological development of the individual and explain the mutual dependencies among ecosystem levels in the environment. An individual's life is thus influenced by a complex system of relationships on several levels of his or her environment. The microsystem is represented by the first circle surrounding the individual. It encompasses the immediate environment in which the individual lives. It includes family members, peers, school, and the neighborhood. The most direct interaction between the individual and others takes place in the microsystem, such as communication with parents, close friends, and classroom teachers. The mesosystem comprises connections and interactions between the immediate environments of the microsystem, which would include an individual's home, school, or church setting. Examples of interaction might include communication between parents and teachers or exchanges between the school and the church. The next ring, the exosystem, involves social settings in which the individual does not necessarily have an active or direct role; however, the individual, nevertheless, is affected by the experiences that take place in the exosystem. An example would be parent's employment. When a parent gets a job promotion requiring a greater time commitment, it may result in not being able to spend as much time with his/her child. This occurs in the child's exosystem. The macrosystem represents the larger cultural context such as the national economy, political culture, and subcultures. Additionally, it would encompass laws, values, and resources of a particular culture. A fifth scheme, which Bronfenbrenner (1986) added later, is the

chronosystem. This system recognizes the contribution that time has on development. The addition of this level encourages researchers to study issues and events that change over the life span.

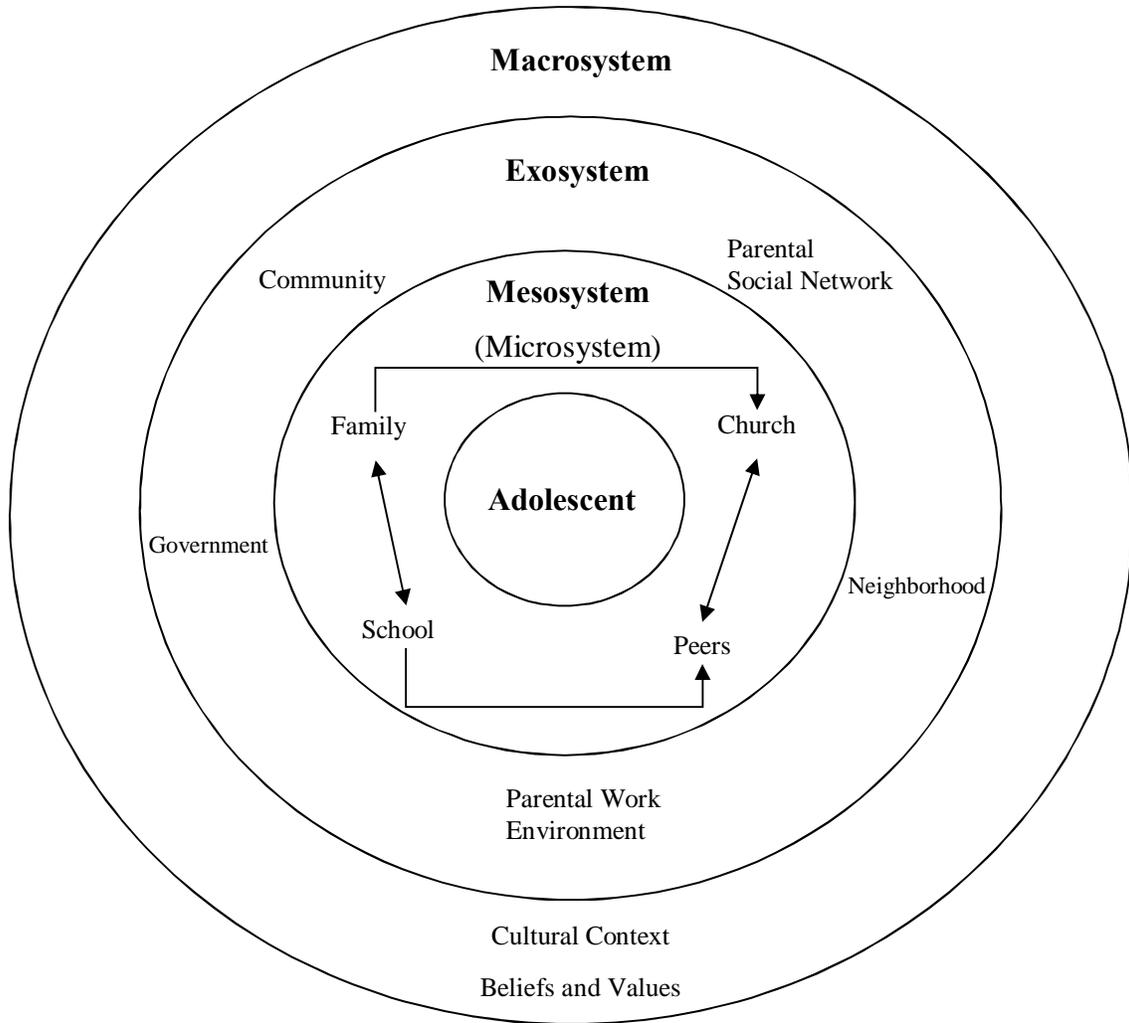
A complex system of relationships exists within and between the system levels described within the Bioecological Theory. Researchers have identified relationships that may be linked with negative or positive outcomes for families as they adapt to their environments. Bogenschneider (1996) explained that families, peers, schools, and communities have great influence on children. Risk factors are seen as environmental hazards that make an individual vulnerable to negative developmental outcomes. The reverse is true when defining positive factors, in that they represent safeguards that promote positive adaption, and may even mitigate or help individuals resist stressful life events or risk factors. Grounded firmly in BT, Bogenschneider (1996) proposed an ecological risk/protective theoretical framework which has had much application for researchers studying adolescent smoking behavior.

Disturbed by the increasing prevalence rate of youth cigarette smoking in the 1990s, public officials began to implement programs and policies targeted at reducing youth tobacco usage. Heeding lessons learned from previous youth smoking prevention efforts, researchers pursued a more comprehensive approach to prevention. Bioecological Theory is grounded in the idea that youth are shaped not only by their personal attributes, but also by the environments in which they grow. It was adopted to provide a design basis for prevention and intervention programs. The 2012 Surgeon General's Report acknowledged the use of theory-driven research in showing that when more risk and protective strategies are incorporated into youth prevention programs they become increasingly more successful. The current supposition about adolescent youth prevention programming is to provide comprehensive multicomponent approaches rather than to provide single strategies.

The three theories discussed in this section have provided frameworks for explaining and understanding adolescent cigarette smoking. These theories also have been used in combination as they address different aspects of the phenomenon. SLT reminds us that parents and other family members influence adolescents by modeling behaviors which may include cigarette smoking, or choosing to not smoke cigarettes. The SI helps researchers understand that cigarettes may represent symbols that communicate a message to adolescents. When adolescents understand the meaning of the symbol, they may affect their smoking behavior, both pro and

con. Finally BT provides a framework for researchers by explaining that adolescents are influenced by the complex ecosystems that surround them. Some of the ecosystems may have more direct influence on the adolescent to engage in cigarette smoking than others. Furthermore, the influencing factors may be viewed as positive or negative.

Figure 2:1 Bronfenbrenner’s Bioecological Theory Model



Factors That Influence Adolescent Tobacco Use

The Social Learning Theory (Bandura, 1986) was used to guide the literature review of factors that may influence adolescents to smoke or choose to not smoke cigarettes. The theory focuses on learning that occurs within a social context. The premise is that people learn from

each other through modeling, imitation, and observation. This theory provides a framework for the current study regarding adolescents within the context of their family and their behaviors regarding cigarette smoking. In the literature review the influence of individual-level factors, social factors of family and peers, and media were examined.

Individual-Level Factors

The developmental young age of the adolescent may pose the initial risk for cigarette smoking initiation. Adolescence is a period of development during which one transitions from childhood to adulthood. According to the Centers for Disease Control and Prevention, adolescence is defined by the ages of 12 to 17 when they record youth smoking prevalence rates. An adolescent's brain is developing rapidly, but is not yet fully developed. Consequently, there is immaturity in the brain systems that represent consequential thinking and decision-making (Steinberg, 2007). In fact, researchers have discovered that the prefrontal cortex, responsible for higher level cognitive functioning, is one of the last areas of the brain to develop, usually not until the mid-twenties (Giedd, 2008). Recognizing the developing stage of the adolescent brain, The US Department of Health and Human Services (2012) reported that cognitive differences between adolescents and adults implies that tobacco prevention programs must be designed to expressly reflect the differences in brain development.

While intelligence may not be a predictive factor of cigarette smoking initiation, researchers have looked at influencing factors related to schooling and tobacco use. Adolescents with low academic achievement or who do poorly in school are at risk of smoking initiation (Durmaz & Ustun, 2006). Conversely, adolescents were less apt to smoke if they do well academically, or are committed to school (Moodie et al., 2008; Morin et al., 2011; Tyas & Pederson, 1998; Welch & Poulton, 2009).

Personality Factors

Because of this particular stage of development, it may be appealing or functional for adolescents to experiment with new behaviors. This may include using tobacco. This unique time of vulnerability presents a risk factor for adolescents with regard to cigarette smoking initiation. In fact, researchers have consistently found that the personality traits of extroversion (Leeuw et al., 2010; Welch & Poulton, 2009), sensation seeking (Dakwar, Popii, & Coccaro, 2011; Green & Banerjee, 2008; Malmberg et al., 2010; Malmberg et al, 2012; Welch & Poulton, 2009),

rebelliousness (Brook, Whitman, Czeisler, Shapiro, & Cohen, 1997; Kirby, 2002; Leeuw et al., 2010), and risk-taking (Brook, Whiteman, Czeisler, Shapiro, & Cohen, 1997; Hooten et al., 2005) have been linked to tobacco use for adolescents. Because of the vast number of research studies revealing the same results, it is commonly understood that adolescents with these personality characteristics may be at risk of smoking cigarettes (Brook, Whiteman, Czeisler, Shapiro, & Cohen, 1997; Dakwar, Popil, & Coccaro, 2011; Malmberg et al., 2012).

Personality traits identified as possible protective factors for smoking initiation include conscientiousness (Chassin et al., 2008; Flynn & Smith, 2007; Harakeh, Scholte, Vries, & Engels, 2006; Welch & Poulton, 2009), agreeableness (Chassin, et al., 2008; Harakeh, Scholte, Vries, & Engels, 2006), and emotional stability (Harakeh, Scholte, Vries, & Engels, 2006). Other researchers have found that some youth did not smoke because they believed smoking was bad for their health and caused negative consequences (U.S. Department of Health and Human Services, 2012). In still other studies with adolescents, researchers have found that motivating factors for youth who choose not to smoke included a concern for personal health as well as appearance and participating in sports and physical activity (Kulbok et al. 2008; Tyas & Pederson, 1998). Clearly, there are multiple traits with which to examine the relationship between adolescent personality and smoking.

Webster's dictionary defines personality as the totality of an individual's behavioral and emotional characteristics (Merriam-Webster's, 1993). Roberts and Mroczek (2009) reported that personality traits may be defined as "patterns of thoughts, feelings, and behaviors that distinguish individuals from one another" (p. 31). Shiner (2009) noted that personality traits "may reflect individual differences in biological systems that have been selected through evolution and are shaped by individual life experiences" (p. 721). Because personality traits are considered to be enduring dispositions (Harakeh, Scholete, Vries, & Engels, 2005), differences in personality type may describe influencing factors for adolescent smoking behavior. Personality type is important to consider when establishing whether certain traits increase the risk for cigarette smoking among adolescents.

One area of discussion among scholars is the clear determination of when personality becomes stable in an individual. There is some evidence that a child's personality traits may be stable as early as preschool and only continue to increase in stability as the individual matures (Shiner, 2009). Research studies have been done to determine if personality plays a role in

smoking initiation by adolescents, and the results may aid in the development of prevention and intervention programs regarding adolescent tobacco use. Specifically, several personality traits have been associated with adolescent smoking (Harakeh, Scholte, Vries, & Engels, 2006; Martel et al, 2009). For example, such traits as rebelliousness and sensation seeking have been shown to contribute to an adolescent's use of tobacco. Researchers who have studied the relationship between personality traits and adolescent smoking initiation, have determined that it might be productive to target personality types with interventions of tobacco use (Leeuw et al., 2010); however, more research is needed.

Social Factors: Family and Peers

Adolescents are vulnerable to social influences and researchers have studied a number of the proximal influencing factors. Specifically, numerous studies have examined the influences of parents, siblings, and peers on adolescent cigarette smoking initiation. Family smoking behavior has consistently shown to be a strong predictor of smoking initiation in youth (Ali & Dwyer, 2009; Durmaz & Ustun, 2006; Ennett et al. 2010; Kelly et al. 2011; Mayberry, Espelage, & Koenig, 2009 ; Tucker, Martinez, Ellickson, & Edelen, 2008; Wen et al., 2009), and a parent's smoking behavior has particular influence on youth tobacco use because parents show approval for an adolescent's smoking behavior through their actions (Emory, Saquib, Gilpin, & Pierce, 2010; Leonardi-Bee, Jere, & Britton, 2011; U.S. Department of Health and Human Services, 2012). Conversely, higher parental monitoring is associated with reduced risk of smoking in adolescents (Dick et al., 2007).

During adolescence, the influence of peers may have a stronger influence than family members with regard to smoking (Henry, Knight, & Thornberry, 2012). This is logical because youth have more exposure to friends as many of their activities are focused outside the home. Many researchers have indicated that a reliable predictor of cigarette smoking in adolescent youth includes the smoking behaviors of their peers (Brook, Whiteman, Czeisler, Shapiro, & Cohen, 1997; Etcheverry & Agnew, 2009; Greene & Banerjee, 2008; Henry, Jamner, & Whalen, 2012; Kirby, 2003; Leeuw et al., 2010; Tucker, Martine, Ellickson, & Edelen, 2008; Tyas & Pederson, 1998). When smoking is portrayed as an expression of having fun, adolescents often try to copy the behavior themselves. In fact, some adolescents also feel pressured to smoke by others around them who are smoking (Henry, Jamner, & Whalen, 2012). Social Learning Theory

suggests that adolescents emulate the behavior of peers and friends that they admire. Adolescents value their friends and want to fit into peer groups. Therefore, they often go along with peer groups to fit in. Young people are more likely to smoke if their friends smoke.

Media and Advertisements

According to the U.S. Department of Health and Human Services (2012), there is evidence that cigarette smoking initiation is directly influenced by advertisement and promotion by cigarette companies. The imagery displayed in the smoking advertisements is designed to appeal to an adolescent's aspirations. As an example, pictures in advertisements are intended to fulfill aspirations of independence, attractiveness and social acceptability for adolescents, while little truthful information about the product is conveyed (U.S. Department of Health and Human Services, 2012).

This is consistent with SI, in that adolescents are sensitive to what they see and hear in the environment around them. They adapt in their environments by identifying with the shared meaning of symbols such as a behavior or situation. When a picture contained in a cigarette smoking advertisement symbolizes an appealing behavior, the adolescent may associate the behavior with the product, and be more inclined to accept the product. In other words, the meaning of a symbol may be conveyed by the way another individual uses the symbol. It may be communicated to that adolescent that cigarette smoking is acceptable by the use of the imagery in the advertisement.

Therefore, because adolescents are susceptible to media advertisements, laws have been created to remove some tobacco advertisements from adolescents' view. Even though tobacco images in media such as TV, billboards, and some magazines have diminished, young people are still exposed to these powerful images in many ways. Currently, websites are used by companies to promote their products. Tobacco products are seen in video games, social media, and YouTube videos. In 2010, tobacco images were used in almost one third of the highest earning movies for youth, those with G, PG, or PG-13 ratings (U.S. Department of Health and Human Services, 2012). Tobacco advertisements also are very visible in convenience and retail stores that adolescents frequently inhabit. Often the products are strategically placed for impulse buying, at eye-level near the checkout counter. The 2012 Surgeon General's report acknowledged that when cigarettes and other tobacco products are sold near schools, there is a

higher rate of tobacco use in youth than in communities where there are tobacco-free zones around school buildings.

Laws and Legislation

Effective prevention programs and policies brought about in part by the 1998 Master Settlement agreement (U.S. Department of Health and Human Services, 2012) and other legislation have helped prevent adolescents from using tobacco by restricting tobacco images in the media and by enforcing bans on selling cigarettes through vending machines so youth could not gain access. These efforts have been effective in helping to change the environment from one in which tobacco use was seen as a norm, to one where a tobacco-free lifestyle is seen as positive. Comprehensive smoke-free laws have prohibited smoking in restaurants and work places in approximately half of the states in the United States (U.S. Department of Health and Human Services, 2012). However, many policies do not include having smoke-free grounds outside establishments. The Surgeon General (U.S. Department of Health and Human Services, 2012) reported that the most effective cigarette smoking prevention efforts for youth have been to combine several environmental strategies. Policymakers, working with others that surround youth, such as parents, teachers, health care providers and communities, have been effective approaches.

True ColorsTM Model of Personality

Although some researchers have examined the relationships between personality characteristics and youth smoking behavior, my review of the literature indicated that researchers have used a variety of instruments to investigate personality characteristics and types. Because these measure different personality characteristics, it was difficult to find common ground to compare the approaches. Because there is no centrally accepted measure of personality, it was necessary for me to choose an indicator from among the many available. I will use the True Colors, Inc. program as a uniform tool to label personality types, because I have been trained in its use and applicability.

History

According to the True ColorsTM Personal Success Facilitator Guide (2010), the True Colors model is built on temperament theory. This theory's origins can be traced to when

Hippocrates classified four types of human beings. More recent history includes the work of personality researchers, including Katherine C. Briggs and Isabel Briggs-Myers who developed the Myers-Briggs Type Inventory, and with David Keirsey and Marilyn Bates (1984) in their book *Please Understand Me*. Finally, Don Lowry is credited with developing the True Colors model in 1978, by incorporating principles from the work of these earlier researchers who contributed to building the temperament theory.

Description

The True Colors model uses color as a metaphor for describing four distinct personality types for people of all ages. Using the colors of orange, green, blue, and gold to differentiate personality types, True Colors becomes a tool to convey complex ideas in a very simple way. See Table 2.1 for Descriptions of True Color, Inc. types.

Table 2:1 Descriptions of True Color, Inc. Types.

Personality Color	Description of Personality Type
Blue	Value harmonious relationships, are compassionate, loyal, and dependable, prepared, empathetic, sensitive, peacemakers, and prefer to cooperate rather than compete.
Orange	Are active, energetic, rebellious, daring, fun, witty, spontaneous, opportunistic, impulsive, like freedom and adventure, and hands-on learning
Gold	Are organized, conventional, orderly, stable, practical, responsible, faithful, traditional, loyal, dutiful, value structure, follows rules, and have a strong work ethic.
Green	Value knowledge and intellect, are curious, logical and visionary, theoretical, complex, philosophical, rational, have a need for independence, and often ask "why."

Blue personalities are individuals who focus on harmonious relationships, are compassionate, empathetic, and prefer to cooperate rather than compete. They also are warm and communicative. Orange personalities are active, rebellious, realistic, daring, spontaneous, and opportunistic. Gold personalities are organized, conventional, orderly, stable, practical, responsible, faithful, traditional, and loyal. Green personalities value knowledge and intellect, are curious, inventive, theoretical, complex, philosophical, principled, and rational. While every individual is said to have a primary color distinction, s/he is represented by a color spectrum, or a

certain percentage of each of the four colors in his or her personality identification (True Colors, Inc., 2008).

Reliability and Validity

According to the True Colors™ International Executive Summary (2006), exploratory reliability and validity research has been conducted on the True Colors model. The studies involved 416 participants of True Colors workshops over 4 years. The participants represented a variety of occupations and educational backgrounds. Using a test-retest format, results of the word cluster component of the True Colors assessment demonstrated high reliability (.94). Other results demonstrated that, when compared to the Myers-Briggs Type Indicator (MBTI), True Colors demonstrated significant content validity. When compared with major temperament theory models, True Colors also demonstrated significant construct validity.

Relationships between Personality and Smoking Initiation

Using the personality type descriptions found in the True Colors, Inc. program as a uniform language, I began to look at relationships between these personalities and the information in the research findings in the literature.

Researchers have discovered that adolescents are more likely to smoke if they are extroverts (Leeuw et al, 2010; Welch & Poulton, 2009), rebellious (Brook, Whitman, Czeisler, Shapiro, & Cohen, 1997; Kirby, 2002; Leeuw et al, 2010), sensation seeking (Dakwar, Popii, & Coccaro, 2011; Green & Banerjee, 2008; Malmberg et al., 2010; Malmberg et al, 2012; Welch & Poulton, 2009), and risk-taking (Brook, Whiteman, Czeisler, Shapiro, & Cohen, 1997; Hooten et al., 2005). Because the True Colors, Inc. program has defined the Orange Personality type as being active, realistic, rebellious, daring, spontaneous and opportunistic, it leads me to hypothesize that adolescents represented as Orange Personality types would be at risk for smoking initiation.

Predictors of cigarette smoking behavior in adolescent youth include the smoking behavior of their peers (Brook, Whiteman, Czeisler, Shapiro, & Cohen, 1997; Etcheverry & Agnew, 2009; Greene & Banerjee, 2008; Henry, Jamner, & Whalen, 2012; Kirby, 2003; Leeuw et al., 2010; Tucker, Martine, Ellickson & Edelen 2008; Tyas & Pederson, 1998). Peer and social networks have been found to be reliable predictors of smoking behavior as youth may feel pressured to smoke by others around them (Henry, Jamner, & Whalen, 2012). The True Colors,

Inc. program has defined the Blue Personality Type as individuals who focus on harmonious relationships, are compassionate, empathetic, and vulnerable when friends are concerned. Some of the descriptors of the Blue Personality Type lead me to question if these personalities may be drawn to smoking in order to fit in with peer groups. However, because Blue Personality Types are sensitive and value relationships, their personality types also may serve as protective factors by seeking to make a positive difference in their peer groups.

Researchers have found that adolescent youth are less likely to smoke if they exhibit conscientiousness (Chassin, et al., 2008; Flynn & Smith, 2007; Harakeh, Scholte, Vries & Engels, 2006; Welch & Poulton, 2009), agreeableness (Chassin, et al, 2008; Harakeh, Scholte, Vries, & Engels, 2006), and emotional stability (Harakeh, Scholte, Vries, & Egels, 2006). The True Colors, Inc. program has defined the Gold Personality Type as individuals who are organized, conventional, orderly, stable, practical, responsible, faithful, traditional, and loyal. Because Gold Personalities are orderly, responsible, and follow rules, it leads me to wonder if they would be less likely to use tobacco because it would mean breaking many rules.

Adolescent youth are less likely to smoke if they are concerned about their personal health and appearance, and if they participate in sports and physical activity (Kulbok et al, 2008; Tyas & Pederson, 1998), as well as if they do well academically or are committed to school (Moodie et al., 2008; Morin, Rodriguez, Fallu, Maiano & Janosz, 2011; Tyas & Pederson, 1998; Welch & Poulton, 2009). The True Colors, Inc. program has defined a Green Personality Type as an individual who values knowledge and intellect, and is curious, inventive, theoretical, complex, philosophical, principled, and rational. Because the Green Personality Type describes an individual who values knowledge and may do well academically, it leads me to question if the Green Personality may choose not to experiment with tobacco use. Also, because a Green Personality values knowledge and intellect, she or he may be inclined to question the health consequences of cigarette smoking and logically decide not to begin smoking cigarettes.

Chapter Summary

In this chapter, three theories that have guided research on adolescent cigarette smoking prevention were discussed. The literature review included factors that have influenced adolescent smoking, such as individual and personality characteristics, social factors of family and peers, media and advertisements, as well as laws and legislation. The True Colors, Inc.

(2008), model of personality types was introduced as language for discussing personality characteristics found in research studies that have been found to influence adolescent cigarette smoking. Use of the True Colors model in helping to understand why adolescents choose to not smoke cigarettes will be discussed in Chapter 3.

Chapter 3 - Method

This chapter is devoted to outlining the structure of the current research study. The research questions, approach, focus, unit of analysis, and data collection are identified and explained. A detailed discussion of the True Colors personality model and how it will be incorporated into the research is clarified. Finally, detailed information about the research participants and data management are explained.

Research Questions

1. How well do the participants believe the True Colors™ model describes their personality type?
2. How do True Colors™ personality types influence adolescent's decisions?
3. What factors do adolescents consider when deciding to not smoke cigarettes?
4. How are positive and negative media messages about smoking perceived by non-smoking adolescents who represent different True Colors™ personality types?

Approach

In the Literature Review, three theories common to the field of family studies were discussed as they related to the history of adolescent cigarette smoking initiation. The theories have been used to guide various changes in prevention strategies over the 50 years since the Surgeon General of the U. S. Department of Health and Human Services reported the negative health consequences of cigarette smoking. For the current exploratory study in the field of family studies, aimed at contributing to the body of knowledge on prevention strategies, I offered a new perspective to guide my research.

Systems Theory

Systems Theory for families emerged in the 1960s and has been influenced by other disciplines including anthropology, sociology, and biology (White & Klein, 2008). The general aspects of the theory allow for its applicability to these different disciplines. A basic assumption of the theory, according to White and Klein (2008), is the concept that all parts of the system are interconnected. When one part of the system is affected, the other parts of the system are also affected to some degree. When trying to understand the system, it must be viewed as a whole

system, rather than by merely looking at its individual parts (White & Klein, 2008). When applying this concept to families, for example, examining each family member separately would provide different results than examining the family as a whole system. It is said that the whole family system is greater than the sum of its parts.

Along with the concept of holism in the systems theory, is the significance of context. Just as it is important to view the whole family, it is important to view the family members within the context of the whole family system rather than to view them outside the context of the whole family (Jurich & Myers-Bowman, 1998). To explain, an adolescent may speak or behave much differently with her friends than when with her family unit. As family members are parts of families, families are thought to be parts of larger systems, like neighborhoods, cultures, etc. Jurich and Myers-Bowman (1998), explained that "the broader system provides the context within which the meaning of the components may be understood" (p. 75).

The idea of "feedback" is a circular loop or the path of communication in a system. The communication loop "brings some of the system's output back to the system as input" (White & Klein, 2008, p. 158). Feedback can be either positive or negative with regard to its effect on the system, and is used to adjust the behavior of a particular system. For example, a non-smoking adolescent learns in a class at school that cigarette smoking has negative health effects. This information is reported back to the family system at the dinner table that evening. The family discusses the issue of cigarette smoking among all family members. The positive feedback or communication may then be used to change or regulate the family system based on the information discussed.

All systems, including families, have forms of boundaries. Boundaries affect the exchange of information between the system and the environment around the system (White & Klein, 2008). Boundaries establish limits to differentiate between the parts in a system, and to distinguish between different systems. Boundaries around families are in varying degrees of openness. Open boundaries allow for easy exchange of information and interaction between the family members and help shape the way a system functions (Jurich & Myers-Bowman (1998). The openness of boundaries also may change as a family evolves and interacts within its environment. Closed boundaries maintain current situations and do not allow input from outside the system that would bring about change within the system.

Systems Approach

The systems approach guides this research study by taking into consideration that a family system exists within other systems in the environment and is not independent of them. In an individual family system, all of the family members are interconnected, and attitudes, behaviors and changes that occur in one family member influence the other family members. Studies with adolescents have shown that connections exist between members in a family system with regard to an adolescent's smoking initiation behavior. For example, an adolescent may be introduced to smoking by another family member (Leeuw et al., 2010; Tucker et al., 2008). Therefore, a family member's beliefs about cigarette smoking may be the basis on which the adolescent may begin to smoke. In the family system, the family is seen as being greater than merely the additive combination of the individual members within the family. It is important to consider adolescents within the context of their own families when trying to understand why they may choose whether to smoke cigarettes.

The systems approach also incorporates the concept that a system affects and is affected by its environment. A product of a system may actually, in turn, make a contribution to that system through feedback. When considering the phenomenon of adolescent smoking initiation, research studies have shown that there are other systems in the environment that may influence an adolescent. These entities may include schools, community organizations, companies, advertisement agencies, and governmental organizations (Morin et al., 2011; U.S. Department of Health and Human Services, 2012). While some systems may serve to protect adolescents from beginning to smoke cigarettes, other systems may be seen as risk factors for adolescent smoking initiation. While a systems approach is seen as exploratory in nature, it does provide a conceptual way of looking at the phenomenon of adolescent smoking behavior that would be beneficial in this research study.

Focus

The focus of a qualitative study identifies what the researcher wants to understand (Daly, 2007). Because, 3800 young people in the United States under the age of 18 begin to smoke cigarettes each day (U.S. Department of Health and Human Services, 2012), it is critical to understand why adolescents begin to smoke and choose not to smoke. Having a better understanding of this phenomenon will help control smoking behavior in both youth and adults,

and build a full understanding of the smoking initiation process and how to create effective prevention programming.

Researchers have studied the relationship between personality traits and smoking behavior; however, most studies have included adults and adolescents who have already started to use tobacco products. This exploratory research study will contribute to the body of information in this area by looking at the personality types of non-smoking adolescents and their parents regarding the adolescent's decision to not use tobacco.

The research study incorporated the True Colors, Inc. (2008) model for personality identification for all ages, as a tool to help identify personality types and subsequent decision-making attributes

Unit of Analysis

Patton (2002) explained that qualitative research should stipulate the unit to be analyzed. The unit of analysis in this qualitative study is the adolescent within the context of the family. The overall research study examines the influences of personality within the context of the family system on adolescent smoking initiation. Therefore, it is important to study non-smoking adolescents with different personality types. For the study, an adolescent is defined as a person between 12 and 17 years of age, which corresponds with the age category used by the Centers for Disease Control and Prevention to record youth smoking prevalence rates.

Because parents have been shown to influence an adolescent's decision to begin smoking, it also is important to include a parent in the adolescent's immediate family system. In the study, one parent was recruited and interviewed with each adolescent. Because researchers have found little difference in the smoking behavior of males and females (Holden, Wasyllkiw, Starzyk, Book & Edwards, 2006), either a father or a mother was allowed to participate.

Data Collection

Sampling Technique

Purposeful sampling and stratified sampling were used in my research study. Purposeful sampling was used to select information-rich cases logically applicable to the study, with participants meeting the following important pre-determined criteria related to the research questions (Patton, 2002). The related parent/adolescent interview dyads were required to be

living in the same household. They may have been blood relatives, adopted, or members of step-families. The adolescents must be between 12 and 17 years of age. The goal was to recruit 10 to 16 parent-adolescent family dyads, in which the teens were non-smoking. I also employed stratified sampling techniques, or sampling within sampling, to capture important variations within the participants. I wanted to make sure that the participant group included both mothers and fathers, and male and female adolescents representing a range of ages. Furthermore, I wanted to make sure that I interviewed adolescents that represented all of the four True Colors personality color groups.

Participant Recruitment

Family participants were recruited from existing age-related activities located in the North Central Kansas area. Youth organizations contacted included 4-H and youth community clubs, church youth groups, and public school classes. While some bias may exist, the area characterized a typical mid-west community and produced information-rich data representative of the criteria outlined in the research study.

Participants chose their interview site based on their comfort and convenience. Interviews were mostly held in the participants' homes sitting around a table. A few of the interviews were held in the business offices of the parent participant or the researcher. In the office locations, the participants and researcher gathered around an office desk or table. All interview sites provided privacy to conduct the interviews.

True Colors™ Personality Typology

At the beginning of the interview process, each research participant was asked to complete a True Colors personality self-assessment, with specific standardized directions given by the researcher, to determine his or her personality type. Each assessment took about 30 minutes to complete. The parent and adolescent assessments were given simultaneously, in the same location and space as the chosen spot for the interview. Through the assessment, participants self-identified a dominant personality color and a personalized color spectrum. Each color in the spectrum was characteristic of a defined set of personality characteristics. Following the interviews, research participants received a True Colors informational booklet as a thank-you for their participation in the research study.

During the dyadic interviews, the personality assessments were utilized as a tool for participants to use in answering selected questions. The communication tool also helped the participants understand more about themselves as well as their interview partner. Furthermore, the common language described in the personality assessment program helped facilitate understanding during the subsequent discussions on adolescent cigarette smoking.

Interview

Following the personality assessment, I used a standardized open-ended interview approach that consisted of a sequence of predetermined questions, so each participant would be asked the same questions (Patton, 2002). Some flexibility was allowed through the addition of probe questions. During the interviews, the participants were shown two media messages about cigarette smoking, and asked to discuss the messages. One media message was an sales advertisement from a cigarette company, while the other message was a public service announcement warning about the negative health effects of cigarette smoking.(See Appendix A-Adolescent/Parent Interview.)

Dyadic interviews were used to gather critical knowledge, perspectives and stories from non-smoking adolescents and their parents. Through their shared experience, I wanted to better understand what it meant for the adolescents to remain smoke-free. I felt that this was best accomplished by gathering information from individuals intrinsically involved in the phenomenon, rather than to merely observe the behavior of non-smoking adolescents. I also wanted to determine how an adolescent's specific personality type might influence her or his decisions. Specifically, I wondered if a personality type may represent risk or protective factors for non-smoking behavior. The interview questions were worded to encourage answers to specific aspects of my research study. The ultimate goal of the study was to gain information to help structure successful research-based prevention programs to help curb adolescent smoking initiation.

Data from the interviews were audio recorded, carefully transcribed, and documented with participant ID numbers and dates of interviews. Two hard copies of all of the data were made and stored in two separate locations.

Description of Participants

In the research study, 16 parent-adolescent dyads were interviewed. Of the total, eight interviews were mother-daughter sets, five interviews were mother-son sets, and three interviews were father-son sets. No father-daughter sets were interviewed. Of the 16 adolescents interviewed, eight were male, and eight were female, with the ages of the adolescents ranging from 12 to 17 years of age. All of the 32 participants, both adolescents and adults, who participated in the research study were non-smoking.

Appendix B, Description of Participants, shows the complete color spectrum of both the adolescents and parents in the research study, ranging from their brightest personality color to their palest personality color. Each color of the individual's spectrum also displays a number value which corresponds with the number of points given to that specific color during the individual's True Colors self-assessment. The higher the number, the "brighter" or more dominant the personality color is. For example, in the True Colors assessment, a score of 24 is the highest possible number a personality color can receive. The higher the number, the more characteristics an individual would exhibit as described by that particular color. The least possible number value that a color can receive in the True Colors assessment is 6.

According to the True Colors, Inc. (2008) program, all individuals are comprised of a color spectrum, meaning that every individual represents some portion of each of the four personality types described in the program. An individual's brightest color type is seen as being shaded or influenced by the other personality color types. An individual's color spectrum represents how he or she has chosen to distribute his or her 60 total points possible into the four personality color types. "We all have a blend of different variations of the four colors, whether we use them or not. The colors other than our dominant color can and *do* influence our behaviors" (Miscisin, 2010, p. 104).

The point values of the participant's personality colors provide insight into the entire personality type of an individual. As an example, individuals with gold as their brightest color type had different point values for their gold color. Individual #115, had 24 points for her gold color, which means that she would exhibit a very high number of personality characteristics as described by the gold personality types in the True Colors program. The other gold individuals in the study with fewer gold points would be expected to exhibit fewer of the gold personality characteristics.

As explained above, the second personality color helps “shade” the brightest personality color, through an individual’s actions. Notice that Individual #110 has the very same number of color points in both her first and second colors. While the True Colors program accounts for a method to “break the tie,” it is important to realize that the value of the two personality color points is the same. Miscisin (2010) explained, “For some individuals, their second color influences their first in a strong way. For others, their second color may have only a slight impact. Other people are somewhere in between” (p. 105).

Appendix B, Description of Participants, shows the adolescents’ age and gender, adults’ gender, and the complete color spectrum of both the adolescents and parents who participated in the interviews. Total points that the participants assigned to each of the colors in their color spectrum are shown.

Six of the adolescents self-identified as having orange as their brightest color, or the color representing personality traits most like them. Five adolescents self-identified as having gold as their brightest color. Three adolescents identified themselves as having blue as their primary color, and two adolescents considered themselves as having green as their brightest color. Following the self-assessment, further explanation was given to the participants regarding the meaning and significance of their color spectrum including their brightest color, second brightest color, third brightest color and palest color based on their self-assessment.

Analyses

According to Daly (2007), “analysis is about what we do with data once collected: it is concerned with how we bring conceptual order to observed experience” (p. 209). However, the process of qualitative analysis also should be considered throughout the design of the research study (Daly, 2007). In designing a study, researchers consider how the data will be collected which in turn affects how the data may be analyzed. The choice of sampling methods also affect decisions regarding analysis. In the current research study, I chose to conduct in-depth interviews for which the participants were recruited by purposeful and stratified sampling. During the data collection process I continued to invite participants to be interviewed until I had located adolescents representing all of the True Colors personality types. This was done so I could compare the responses of the personality types during analyses.

Daly (2007) explained that analysis is important to find order and understanding to the everyday experience. Without analysis, we would largely have undifferentiated descriptions of lived experience (Daly, 2007, p. 211). It is the researcher's job to see the phenomenon through the eyes of the participants. Transcripts are coded to help locate the broader themes in the data. Daly (2007) acknowledged that the process of examining experiential data into manageable pieces is one of the most difficult parts of qualitative research.

Regarding the current research, I used the research questions as an overall guide for looking at concepts and general themes. Specifically, I began by looking at how the different True Colors personality types responded to the interview questions, but I was also sensitive to other emerging concepts from the data.

After transcribing the audiotaped parent-adolescent interview discussions, I printed off the interviews, each on a different colored sheet of paper. The papers were then cut apart so I could place the answers to each question on separate large sheets of paper. In other words, all of the participant responses (or dyadic dialogue conversations) from a single interview question were placed on large papers labeled with the interview questions. This resulted in me being able to view all of the answers to a specific question at one glance. Because the dialogue from each interview was printed in a different color, I could easily follow how the participants responded to the different questions. I also arranged the responses on the large sheets of paper by personality color type of the adolescents. This allowed me to more easily see if the answers from different personality types followed a pattern. It was helpful to create tables that organized the information and description of the color types, in order to analyze the data.

While it was helpful to look at the answers to each interview question collectively, in order to more clearly understand the behavior of a particular personality color type, I found that I needed to take a more holistic approach. I then reviewed full copies of each interview and looked for themes of how an adolescent may respond to all of the interview questions. I began by sorting the interview transcripts into piles by the brightest personality color of each adolescent. Comments were highlighted with the actual color that corresponded with the personality color types. This step allowed me to more clearly see overall trends and behavior patterns of the different personalities. Then, I was able to more clearly see the overall themes in the data, and identify how the adolescents representing the different color types responded

differently to the interview questions. The overall patterns and themes found will be discussed in the results chapter.

Credibility of Researcher

I became interested in the research topic while working as the director of a community coalition on youth substance abuse prevention. The coalition has been the recipient of several grants with strategies involving underage cigarette smoking prevention. I am also a certified facilitator for True Colors™ Personal Success Seminars. Deeply rooted in temperament typology, the program is about helping individuals understand themselves and others, thereby enhancing relationships. My personal interest in the two areas sparked my desire to combine them into a research study on adolescent smoking initiation and personality types.

A personal strength is that I have considerable experience working with adolescents and substance abuse prevention programs in rural Kansas. I acknowledge that because of my experience, I bring a strong bias against cigarette smoking behavior, particularly for youth. I have seen first-hand, the negative ramifications of long-term smoking and second-hand smoking exposure. In order to mitigate my bias against cigarette smoking, I utilized the critical oversight from my major professor as a verifier.

Chapter 4 - Results

This chapter will be organized by the overall research questions guiding the study. The research revealed that the adolescent-parent dyads reported the True Colors model of personality types described their personalities well. Throughout the interviews, the participants tended to respond to questions based on their identified personality colors. Discussion of each research question includes a description of the overall themes found and then categorizes information by personality color type. Exemplar quotes are provided to help gain an understanding of each personality color type as well as their personal perspective. Age and gender of adolescents are noted after each quote. Parent quotes include the gender of the parent.

Research Question #1: How well do the participants believe the True Colors™ model describes their personality type?

The adolescents represented all four of the personality color types defined in the True Colors model. However, the parents of the adolescents represented only three of the four personality color types. Fifty percent of the parents identified themselves as gold, which was the most dominant personality color of the parents in the study. None of the parents identified orange as their brightest personality color. In fact, 10 of the 16 parents, or 62.5%, identified orange as the fourth or last color in their personality color spectrum (See Appendix A ó Description of Participants).

Every adolescent and parent participant, regardless of personality color spectrum, indicated that their spectrum was well described by the True Colors model. Descriptors ranged from *“pretty close”* and *“pretty accurate,”* to *“greatly,”* *“very accurate,”* and *“spot on.”* Examples of participant responses included:

“I feel that orange is very close to what my personality is. I’m pretty competitive and I like to take risk.” (17, male)

“I think the top two are nailed right on. The gold with the responsibility, and the blue with the emotions and ‘touchy-feely,’ and, so, yes, I think it was very accurate.” (parent, female)

“I’m definitely blue, um; I’m a very sympathetic and spiritual, and compassionate person. I’m really, I’m in to my family and my kids, and I like to cultivate really deep and meaningful relationships. I don’t just make temporary friends. I’m a long-term-friend kind of person.” (parent, female)

“Gold, I am very detail-oriented. I like lists and structure. Um, I like to know things are getting completed on time and everything is followed to protocol.” (parent, female)

“I don’t know that I could have written that down myself, but when I read it, I say, ‘Yep, that’s who I am.’” (parent, female)

The research participants also identified in what ways the color spectrum was not like them. None of the respondents wanted to change his or her first or dominant personality color type that was identified in the True Colors assessment. They did have some thoughts on how well some of the other colors in their spectrum described their personality type-

“I was thinking there are some things in my green and orange that I wish I was more of, but in reality, I know that is not the case.” (parent, female)

“On the blue one it says ‘poetic,’ I think or something. [That] I’m a natural romantic, poet, and nurturer. And, I don’t do poetry.” (15, female)

“The only thing I would say is maybe I would switch the blue to second (not third).” (15, male)

Next, the participants were asked how they were surprised or not surprised by the other person’s color spectrum. Thirteen of the 16 adolescents were not surprised by the color spectrum of their parents, while three adolescents expressed being surprised by the personality color spectrum of their parents. Nine of the 16 adults were not surprised by how their adolescents self-identified their own color spectrum while seven adult respondents were surprised by their adolescents’ personality color spectrum.

Comments from adolescents who were surprised by their parents’ self-identified color spectrum included:

“Well, you’re pretty green, I knew that, but I thought the orange would be lower. Your gold and orange, I think are switched. You like to fix things; you always have to find the answer.” (16, male)

“I’m surprised orange was second. You are more of a gold person. You like routine. You are not much of a slacker.” (13, female)

“Hum, the blue really surprised me because she is not really one to show emotions very often.” (15, male)

Comments from parents who were surprised by their adolescent’s self-identified color spectrum included:

“I figured she would be more of the nurturing one.” (parent, female)

“I’d put her more gold. I mean, she is very loyal and dependable.” (parent, female)

“I think the orange surprised me on him because he isn’t adventurous and a risk-taker as one of our other kids.” (parent, female)

“I think I was surprised that blue wasn’t his second because it said something about caregiver. Cause, he’s crazy over little babies, you know. He always has to take care of little kids and stuff like that.” (parent, male)

In general, the participants indicated that their parent’s or child’s personality assessment well described by the True Colors assessment. This was indicated by comments like:

“I was not very surprised at all. It fits him perfectly. He believes work comes before play, even if overtime to complete the job. Serious, wanting to follow the rules and regulations, and he understands and respects authority.” (17, male)

“Blue is very unsurprising.” (13, female)

“I’m not surprised. She is very organized. I can see her being gold.” (15, male)

“I’m not surprised by [the adolescent’s] either because he’s very like me on his structure and his routine. He likes his room to be clean and neat.” (parent, female)

Research Question #2: How do True Colors™ personality types influence adolescents' decisions?

After it was determined that the True Colors model showed accuracy for identifying personality types, it was important to understand if the personality types influenced decision-making. Results of the research study showed that 10 out of the 16 adolescents reported that their parents influenced their most important decisions. This was the most frequent response (See Appendix C ó Most Influence on the Adolescent's Decisions). However, the way in which their parents influenced them was reflective of their personality types. Adolescents also reported that their important decisions were influenced by other sources that were related to their personalities.

Decision-making by Color

When the adolescents were asked who had the most influence on the important decisions that the adolescent makes, the adolescents' responses reflected their identified personality color type.

Gold Personalities

All five of the adolescents who represented gold as their brightest personality color type reported that their parents had the most influence on their important decisions. The overall theme for these adolescents' responses suggested a sense of duty and respect for their parents. They acknowledged their parents' authority and seemed to follow rules without question. Gold adolescents desired input from their parents on important decisions.

“Parents, probably the most, well, just because friends, they can have different views, or different outlooks on things, but parents are more responsible and know what's best.” (17, female)

“Influence-wise, I'd probably have to say parents. They are the ones that basically tell me what to do. And, then I'm one of those that if they tell me to do something, I'll do it. So, I don't really argue.” (15, male)

Orange Personalities

Four of the adolescents, who had self-identified orange as their brightest or second personality color, indicated that they make their own decisions. They felt that they should have input into their own decisions because they know themselves the best.

“I’d say that I would have the most influence...I mean, I know myself the best, and I just don’t think anybody outside of me could change my mind at this point in my life. I’m pretty set in what I want to do.” (17, male)

“A lot of it was just me.” (16, female)

“I come up with most of the ideas, and then you [parent] go along with it.” (13, female)

Blue Personalities

All of the blue personality types replied that their decisions were most influenced by their friends. The overall message was that they really enjoyed the relationships with their friends. Two blue adolescents acknowledged that they were influenced by parents as well as their friends. Adolescent #108 was the only blue individual that reported that she was influenced by only her friends. An example of a harmonious relationship among friends included:

“My friends, we all just do everything together. If not, it’s all, if we don’t do everything together, somehow something gets messed up that we don’t see until afterwards.” (13, female)

Green Personalities

One of the adolescents representing green personality characteristics was the only individual in the study to identify a different basis for making important decisions rather than parents, friends, or siblings. Demonstrating her conceptual and independent thought process, the discussion between a 13-year-old female adolescent and her mother regarding the influences on her important decisions is captured below:

Parent: “Who influences you the most, do you think?”

Adolescent: “People from books I read, TV shows that I watch, and games I play.”

Parent: “So what about in a real life situation? If you had an opportunity to go do something, who would you ask their opinion of first?”

Adolescent: “You, ‘cause you’re my Mom, so I have to know whether I’m allowed to do it or not.”

Parent: “Okay, even before...”

Adolescent: “I’m my own person. I don’t care what anybody else thinks. If I want to do it, I’m going to do it.”

Parent: “I would agree with that.”

Research Question #3: What factors do adolescents consider when deciding to not smoke cigarettes?

Similar patterns of influence respective to personality color type were found when adolescents were asked about their thoughts regarding smoking cigarettes. The adolescent-parent dyads were first asked what they thought were reasons adolescents, in general, choose to smoke cigarettes. An overall theme expressed by the adolescents was that adolescents were emulating the behavior of others when they smoked. Parents were most frequently mentioned as role models, followed by friends, other kids at school, and other role models not specifically defined. Another common reason given was peer pressure, because *“the popular kids at school were doing it,”* and having a desire to *“fit in,”* and wanting *“to impress others.”* *“Rebellion,”* *“being defiant,”* and wanting to *“be cool,”* were other reasons given for others to smoke cigarettes. Some adolescents suggested that their home life, having a lack of direction, *“not having someone to tell them what to do,”* and *“what they grew up with”* also had influence on an adolescent’s decision to smoke cigarettes.

Research Question 3a: How were the True Colors personalities reflected in their descriptions of why teens smoke?

General themes were found for adolescents representing the four True Colors personality types.

Gold Personalities

Adolescents with gold as their brightest personality color listed reasons that indicated misbehaving or going against the rules. *“Rebellion,” “acting out to get attention,”* and *“kids smoking in order to feel like to fit in”* were described.

Orange Personalities

Adolescents with orange personalities commonly phrased their responses in the first person, using *“I”* to signify other adolescents. They cited that reasons for smoking were due to *“peer pressure,” “wanting to fit in,”* and because the *“popular kids at school are doing it,”* Other reasons indicated an adolescent’s impulsiveness, such as, *“because they are looking for something to do,”* and *“just because.”* Two orange personalities recognized that some adolescents may recognize an opportunity to take their parent’s cigarettes, and listed *“easy access”* to cigarettes for adolescents whose parents smoked. In responding to the question, one 12-year-old male adolescent described his feelings on the stage of adolescence:

“This is the age where everybody’s kind of, they, I mean, they have colors here, then this blue starts to come out, these changes, and they’re trying to figure out, I mean, ‘What do I want to be? Who do I want to show myself as? I’m living here, so I want a fit in. I want to feel, I want to feel special. I want to feel like this.’ Whether they have a good home base or not. I mean, some kids are taught with the gold, with right values and everything, but they want to be in so bad with different friends and stuff that they lose all that sense of gold and go straight to the orange. ‘They’re doing it so why shouldn’t I?’ I mean, they lose that base of what’s right. I mean, they don’t have that good support system for friends, especially those decisions, because they usually in those decisions, parents aren’t around. So it’s the friend base you have that helps control some of those decisions.”

Blue Personalities

The blue personalities discussed relationships when replying to the question about why they thought other adolescents smoked cigarettes. They felt that *“peer pressure,” “hanging out with the wrong crowd,” “what their parents did,”* and *“what they see their friends and other*

people doingö influenced otherø decisions to smoke. One 15-year-old female adolescent whose brightest personality color was blue explained:

öI think a lot of it is like the stereotype that people put themselves into. Like their style, for instance. If they like a certain kind of style, then they think they have to hang out with a certain crowd. And, they are that stereotype and part of that stereotype is that they do things like smoke, and so they feel like they have to do it to be, to be seen as that person that they are.ö

Green Personalities

The adolescents with green personalities said that other adolescents choose to smoke cigarettes because they lack information and *ödidn't have anyone in their life to tell them not to do that.ö* Expressing a need to be recognized, one adolescent stated she felt that others smoked to *öimpress others.ö* Another 12-year-old female adolescent stated that others may smoke because they were looking for something to do *öbecause they don't do extra-curricular activities and things.ö*

Research Question 3b: How were the True Colors personalities reflected in their descriptions of why teens do not smoke?

Regarding the reasons adolescents, in general, choose to not smoke cigarettes, adolescents emphasized that others did not smoke cigarettes because it was bad for their health. Some referenced classes in school that told them about how smoking affected their health and listed several outcomes of smoking, from, *öyellow teethö* and *ösmelling bad,"* to *“ruining your life”* and *“lung cancer.ö* Another key theme for the adolescents across personality types centered on parenting. Adolescents stated that parents helped adolescents in *öunderstanding what's right and wrong.ö* Others suggested that adolescents, in general, donø smoke cigarettes because they imitated the non-smoking behavior modeled by their parents and friends. Again, adolescentsø True Colors personality types were evident in their responses.

Gold Personalities

A key theme for the gold adolescents was how cigarette smoking affected health. Each listed concerns about health as a reason other adolescents do not smoke cigarettes. One 15-year-

old male adolescent cited that *it's bad for your health, shortens your life.* It was explained that information about the harmful effects of smoking were taught in school:

In sixth grade, when we had our talks, that they showed us what we'd look like if we did smoke, and nobody really wants to have black lungs.

Other gold teens demonstrated a respect for authority when stating that underage smoking was *illegal.* Others reported the importance of family and a desire *just to keep out of trouble.* When asked about reasons for not smoking, gold adolescents explained:

It's kind of like their values. They don't believe in that, I guess. They were raised, you know, they had good parents and stuff. (15, male)

"It's more like, you spend more time smoking than you spend with family." (15, male)

Orange Personalities

Commonly putting themselves in the center of the discussions, orange personality types discussed how not smoking might affect their friendships. One 12-year-old male adolescent suggested that it would be *very embarrassing,* if he smoked and went on to explain:

And, I know a lot of girls at my school. Uh, if I was smoking a cigarette they wouldn't find that very cool. They would be like, oh, I wouldn't want a kiss that guy or even be around him because he smells like smoke.

Another adolescent discussed the importance of being oneself in the context of friendships:

They're not afraid to be like, okay, if you have a problem with that, that's your problem, it's not mine. And, they find people who are like that and more strength, like they always teach us, strength is in numbers, and so when you find a group that feels that same way and that they support you and that they're good friends, it helps. I mean, it just makes it so much easier to say that you have that support group; you know that it's the right thing to do. You're not going to

make these bad decisions. You're okay with who you are, I mean, you have that strong in you, so do these people, and you can just build that with each other. (12, male)

Blue Personalities

Adolescents with blue personality types referred to importance of relationships and pleasing others when discussing why adolescents choose to not smoke cigarettes. In other words, they discussed how smoking could negatively affect important friendships. Comments from blue personalities were:

“No one will talk to you anymore ‘cause you’re the person who was nice and then you’re...evil, I guess. That’s the way I see it. It changes their attitudes. And, you change from something really nice, to something really, really, meaner. Someone that’s always stressed about something or another.” (13, female)

“Hum, being made fun of. I’ve heard people at school go, ‘I know who’s smoking’ and then other people saying, ‘Oh, he or she is doing that.’” (15, female)

“I think the biggest reason is morals and morals that they learned from their parents and the group of friends and the people that they do hang out with. And, I think a lot of the times, it is how they want people to see them, and I think the very involved people don’t smoke because they know, for one, they will probably be found out, and for two, that all the people they are involved with will see them as a lesser person because they’re doing what they are not supposed to be doing, and so they don’t want to disappoint all of the people that are around them.” (15, female)

Green Personalities

Knowledge was a theme expressed with adolescents whose brightest personality color was green. One 13-year-old female adolescent credited a teacher and the knowledge she gained in classes at school as reasons she *“never really wanted to [smoke].”* Another 12-year-old female adolescent representing green personality traits admitted that being more likely to secure scholarships for college was a reason she surmised that adolescents did not smoke cigarettes.

Research Question 3c: How were the True Colors personalities reflected in their descriptions of why the adolescents personally do not smoke?

The adolescents were asked why they personally choose to be non-smoking. A major theme found in the responses was that smoking cigarettes was bad for their health, and that smoking could cause a number of negative health effects. Also significant, was the frequent response that parents influenced the adolescent's decision by their parenting style and by modeling non-smoking behavior. In turn, adolescents discussed not wanting to disappoint their parents by smoking cigarettes. Adolescents also discussed the influence of their friends as well as relationships when making their decision to not smoke. In general, an overall theme was simply that the adolescent thought cigarette smoking was *not cool, dumb, not appealing, gross,* and *it's something I don't want to do.*

Gold Personalities

Specifically, gold adolescents cited family influence and adhering to rules as the main reasons for choosing to not smoke, saying that *I have been raised not to, the rights from the wrongs, and I guess I just know my beliefs* (15, male). Another adolescent reported: *If I did [smoke], I'd be in a lot of trouble* (15, male). Still another 13-year-old gold female adolescent stated, *It would probably make them [parents] upset just because now it's not permitted and I do not want my parents to be upset with me.* Having a desire to be healthy, others listed the possibility of having negative health effects as reasons not to smoke.

Orange Personalities

Adolescents with orange personalities had a tendency to put themselves at the center of the responses they gave for choosing not to smoke cigarettes. The responses commonly included sensory, descriptive words, and involved people:

I've seen, like, what it can do to people. (12, male)

It just smells bad and doesn't sound very good to do. (13, female)

I don't want to hang out with people that do stuff like that. (16, female)

I would like to live for a long time. (16, male)

“Like I said, being an athlete, smoking would not be at all good for me with my swimming, football, and weight-lifting.” (12, male)

“I’ve seen first-hand what smoking can do to a person, and how they talk and laugh and breathe, and I just, I don’t know, and I don’t want to see that. I don’t want to be that.” (17, male)

Blue Personalities

A response generated by an adolescent with blue as her brightest personality type, demonstrated the common blue response that relationships were considered when she made the decision to not smoke cigarettes:

“I hold very high standards for myself. I guess I’m kind of a perfectionist when it comes to what I do and how I am perceived. And, I don’t want to let my parents down or my friends down. And, I am very involved with a lot of things so, if I did get caught doing something like that, then a lot of people would be disappointed in me. And I don’t like people being disappointed in me. I don’t like that feeling.” (15, female)

Green Personalities

The green personalities took a philosophical approach when making their decisions. One adolescent referenced *“seeing the commercials of what happens when you smoke and stuff.”* She went on to explain that smoking was *“not appealing,”* and that it was *“kind of annoying when people smoke.”* Another 13-year-old female adolescent with a green personality type stated that smoking *“doesn’t make you look cool, and you don’t need to be showing it to the world. Just seeing it happen just makes me grossed out.”*

Research Question #4: How are positive and negative media messages about smoking perceived by non-smoking adolescents who represent different True Colors™ personality types?

Once again, the adolescents demonstrated that their personality color types were influential when they viewed media messages about smoking. During the interviews, participants were shown two visual messages on cigarette smoking and were asked to talk together to share their reactions. The first was a Camel advertisement with colorful pictures of

people appearing to have fun while smoking cigarettes. The words "passionate," "inspired," and "original," as well as the phrase "taste it all," was shown. At the bottom of the advertisement, a warning message from the Surgeon General was displayed. The second image was a public service announcement (PSA) that simply pictured a diseased mouth showing negative health effects of cigarette smoking. The caption on the colored picture was "Warning: Cigarettes cause cancer."

Camel advertisement

When asked about the message of the Camel advertisement, the parents and adolescents used a variety of phrases to describe that the message was to glorify cigarette smoking and make it look attractive in order to sell cigarettes. Responses typifying general answers to the research question include:

"And you can feel, you can be passionate like them, and you can be inspired and you can be your own person because of this. But, you can also look at the bottom of this and the small little corner, and it also tells you the side effects they are trying to hide. And they are trying to show that, 'Hey, we know this is bad, but, hey, you should really do this. I mean, we need to make money off of you.'" (12, male)

"I think they use all these key words and these pictures because they know that even people that have no interest in smoking have interests in the things that are shown, and [their] subconscious would draw them to it." (15, female)

Additional probe questions were asked to encourage the dyads to explore the advertisement further. The research participants were asked to discuss the emotions they experienced as a result of the advertisement and if they were swayed in any way by it. Additionally, the participants were asked how the advertisement might impact their smoking behavior. Responses reflected the True Colors personality types.

Gold Personalities

All of the gold personality types replied that the advertisement did not represent their understanding of cigarette smoking. One adolescent explained that it was actually "all opposite" to his beliefs. Emotional responses suggested that the gold adolescents exhibited a sense of right and wrong by answering "I thought it was dumb." "I thought it was stupid, because they are

lying to you,” and “Why would people even want to smoke?” The advertisement was not successful in convincing any of the adolescents to smoke, as explained by one gold personality:

“You know, the warning down here says it causes lung cancer, heart disease, emphysema. You know, the warning label, itself, is enough to turn you off.” (15, male)

Orange Personalities

Like the gold personality types, the adolescents with orange personalities answered that the advertisement did not represent the truth about cigarette smoking. In fact, three adolescents expressed that they felt the advertisement represented an untruth and explained:

“I don’t see any good things out of it. I mean, there is nothing that inspires bad habits. It’s passionate about dying, and it’s original, it’s original to, I don’t know what.” (12, male)

“And there’s a warning label on it too. But, it’s really small. I feel lied to.” (17, male)

“They try to glorify such a bad thing.” (12, male)

The orange personalities felt a range of emotions regarding the advertisement. Again, some felt *“lied to”* and felt that the advertisement was about trying to *“hide”* the negative effects of cigarette smoking. Another orange demonstrated confidence by responding, *“It’s just trying to say, ‘Be yourself and don’t look back.” (13, female)*.

Three other orange adolescents showed their empathy for other adolescents by answering that they felt bad for those that did smoke cigarettes as a result of the advertisement.

“I feel like this advertisement is like getting a lot more kids to smoke pretty much, and that’s obviously not good.” (12, male)

“I feel sad for all the people that can’t afford it and now can’t get off it because it’s so addicting. Angry and sad.” (16, male)

“I felt, like, bad for people that, like, bought it and used their product, cause they’re warning them, but they probably didn’t listen to the warning.” (13, female)

Again, when asked if they were convinced or swayed by the advertisement, the orange personalities responded that they were not. Some were attracted by the excitement of the pictures in the advertisement, but, overall, the impact of the advertisement just reinforced their commitment to not smoke cigarettes.

õNo. I mean, I think that the pictures look pretty cool, but I know that smoking does not give me that, at all.õ (16, female)

õAnd, taste it all. If the taste is anything like the smell, I really don't want to taste it.õ (17, male)

õNo. I mean, they flounce around like it's a good thing. I mean, you see some people who do it, but some people just were never taught the right values.õ (12, male)

õI am swayed the other way, against it.õ (16, male)

Blue Personalities

The advertisement that depicted idealistic words and people having fun together had some appeal for the adolescents with blue personalities. However, because the advertisement was about cigarette smoking, they did not approve. One adolescent responded: *õSmoking disinspires me. It doesn't inspire me.õ* Another adolescent further explained:

õI think they use all these key words and these pictures because they know that even people that have no interest in smoking, that have interests in the things that are shown, and subconsciously it would draw them to it. Like, I'm not going to lie. I find some of those pictures appealing. It's like, oh, that looks cool, but then, yeah, I still have no interest in smoking.õ (15, female)

In general, the adolescents with blue personality types felt that the advertisements were not consistent with what they knew to be true about cigarette smoking. One responded that *“it's the opposite”* of what she thought of smoking. Another adolescent referenced what she had learned in school about cigarette smoking when giving her response. The blue personalities felt strong emotions when viewing the advertisement. One individual said that *õit made my stomach hurt,õ* while two adolescents reporting being somewhat excited when looking at the pictures. Both noted, however, that when the pictures were tied to smoking, the advertisements were no

longer attractive to them. While, there was a tendency for the pictures to sway blue personalities, all of the adolescents reported that they were not convinced to smoke cigarettes because of the advertisement.

“The pictures, the actual pictures, they make me excited to, like, to go out, ‘cause, I still have a lot of life ahead of me. So, it makes me want to go out and experience things like that, but, I don’t want to experience smoking with that. I just want to experience those things.” (15, female)

Green Personalities

When asked to respond to the advertisement, the adolescents with green personalities were analytical, visionary, and global with their responses, rather than considering family and friends when they answered the questions. When describing the advertisement, green adolescents reported:

“It looks like the exact kind of person I would not like to be... ‘cause from some of the TV shows I’ve seen, those are the girls who dance for people. That’s not good.” (13, female)

“I think it’s like saying that cigarettes make you passionate, and inspires you, and you’re going to succeed in life, if you do Camel cigarette, and you can taste how amazing they are.” (12, female)

This overall analytical theme prevailed as the adolescents answered the subsequent questions. In explaining how the pro-smoking advertisement compared to what the adolescents knew to be true about cigarette smoking, the comments included:

“Well, I mean, just because somebody works at a bar or dances for people doesn’t necessarily mean that they’re gonna smoke. So this is very false, in my opinion. ‘Cause it’s showing that people like this do that and that’s why they’re cool...Not everybody that makes good decisions smokes. Not everybody smokes, and that’s kind of what they are trying to say is that, smoke.” (13, female)

Regarding emotions experienced, again, the green adolescents' comments were logical and visionary:

“It’s horrible how they take something like smoking which is not like this and they turn it into something that’s great.” (12, female)

“Disappointment. They use those kinds of words. I don’t think it’s original because it’s been around for a long, long, long, long, time. Inspired. Inspired by what? What are you going to be inspired by when you smoke a cigarette? That unicorn in that tree over there? Does that count? No, that doesn’t count.” (13, female)

Like the other adolescents in the research study, those with green personalities were not swayed by the pro-smoking advertisements. The impact on their behavior was that the advertisement reinforced their non-smoking behavior. An example of an analytical and logical response given by one green adolescent was:

“When you’re not somebody who’s into that, it’s annoying more than anything.” (13, female)

Anti-Cigarette Smoking Public Service Announcement

During the dyadic interviews, the research participants were shown an anti-cigarette smoking PSA. It depicted a close-up color picture of a diseased mouth with poor teeth and damaged lips. The caption was a warning that cigarettes caused cancer, and the PSA also listed a phone number to call for help with smoking cessation.

The same sequence of questions that was asked with the Camel advertisement was asked for the anti-smoking PSA. The participants readily acknowledged that the overall message was to not smoke cigarettes. In discussing the PSA further, the adolescents' responses reflected their personality types.

Gold Personalities

When looking at the anti-cigarette smoking PSA, the adolescents with gold personalities recognized that the PSA was about getting individuals to stop smoking, because *“smoking is bad for you.”* It will negatively affect one's teeth and can cause cancer. Recognizing a need to follow

the rules and do the right thing, one 15-year-old male with a gold personality observed that the PSA was *“kinda like a scare factor.”*

The gold adolescents accepted the accuracy and truth of the PSA, and reported that they agreed with the picture. The PSA fit what they knew to be true about cigarette smoking. Responses included that *“smoking is bad for you,” “smoking ruins your mouth and your life,”* and it *“causes teeth to fall out.”* As a result of viewing the PSA, all of the gold personalities expressed strong negative emotions, reporting that the picture was *“sickening,” “gross,”* and *“disgusting.”* All of the gold adolescents said they were convinced by the PSA, *“not to smoke,”* because of the ill-effects caused by smoking cigarettes.

Orange Personalities

Like the gold personalities, the adolescents with orange personality types agreed that the message of the anti-cigarette smoking PSA was to not smoke cigarettes. However, the orange personalities gave more personal responses when saying that the PSA was *“showing what cancer can do to you,”* and *“this will happen to you.”* One 12-year-old male adolescent demonstrated his entertaining personality by responding that *“smoking can totally not get you a date to a dance.”*

The orange personality types all agreed that the PSA supported their own ideas of what they knew to be true about cigarette smoking. The adolescents also tended to speak from their own personal experiences and added personal comments to their explanations:

“I think that this one (PSA) isn't that far off because I know some smokers have some pretty bad teeth.” (16, female)

“I knew that tobacco and smoking could ruin your teeth and just your whole mouth inside.” (12, male)

Personal statements were commonly used when the orange adolescents discussed the emotions they experienced after viewing the PSA. Responses included: *“I feel disgusted at cigarettes,” “I know I'm right. That, that's going to happen if you were to smoke.”* Another theme found in the responses was an overall feeling of *“sadness.”* Adolescents explained:

“I kinda feel bad for a lot of people that have teeth like that because of smoking. And, that they obviously, I feel like they should stop because, I kind of, if I was in their position, I would obviously just stop as much as I can.” (12, male)

“This needs to be shown to more people that it’s not as glorified as it is. It’s not that good, I mean...to be easily pulled into something and to be that be-fuddled on something, that this is truly what truly causes it. That is not glorified. This is the truth.” (12, male)

Like the other adolescents in the research study, the anti-smoking PSA helped to convince the orange personalities that *“smoking cigarette is not good at all.”* However, the adolescents with orange personalities gave more personal explanations than the other colors:

“I already kind of had my mind set on that I don’t like smoking or anything. So, that it just kind of proves what I’m going for.” (16, female)

“It reinforced my belief that smoking is not good.” (16, male)

“I can, like, see what happens to other people and I just don’t want to put myself in that position.” (13, female)

Blue Personalities

Adolescents with blue personalities agreed that the message of the PSA was simply *“to not smoke.”* Without offering extensive explanation, they agreed that the PSA compared with what they knew to be true about cigarette smoking, and that the PSA was *“the truth.”* Overall, the emotions experienced after viewing the PSA were *“grossed out,”* and *“it disturbs me.”* One 13-year-old female adolescent was concerned about the visual appearance of the teeth depicted in the PSA, commenting that the individual *“should get some braces.”* The blue teens also expressed sincere empathy for those who smoke and may experience what was shown in the PSA. Exemplars of empathy expressed by blue personalities include:

“It’s satisfying to me to know that there are things like that out there, that have the opposite message of the cigarette advertisements to not do it. But, it’s also disappointing to know that we have to have those...I feel like it is such an obvious thing that we shouldn’t have to live with things like those, but we do.” (15, female)

“I’m convinced not to smoke because of the picture and the way it looks.” (15, female)

“The first thing that comes to mind is that it shouldn’t have happened anyway, and you shouldn’t be doing that.” (13, female)

Green Personalities

When the adolescents with green personalities responded to the PSA questions, they generally discussed their ideas in a logical manner, and were abstract in their thinking, rather than sharing personal comments. In identifying the message of the anti-smoking PSA, one 12-year-old female adolescent responded: *“You shouldn’t smoke. Look what it causes.”* Another 13-year-old female said that *“It’s telling you not to [smoke].”* The adolescent went on to analyze the picture in the message:

“It looks like somebody who chews and decides not to brush their teeth. You see how swelled it all is and that’s what tobacco does. It swells it all up, which is gross.”

When asked how the PSA compared to what they knew about cigarette smoking, a 13-year-old female adolescent conceptualized that *“this is a little bit of an exaggeration, but it’s not too far off the mark. It’s gross.”*

Like many of the adolescents in the study, the green personalities experienced emotion as a result of the PSA, and spoke in general terms saying *“it’s kinda sad that they chose to do that to their body.”* Reportedly, the PSA impacted the green adolescents by reinforcing their decision to not smoke cigarettes. One adolescent logically explained:

“It sways me more than the other photo, I mean, it shows like the truth and like actual reality of what happens when you smoke. So, yeah, I think it sways me more than the other photo.” (12, female)

Summary of Results

The overall results of the research study showed that the True Colors model for self-identifying personality types was a good indicator of the participants’ characteristics and tendencies. Furthermore, the participants tended to provide information that reflected their personality color type when responding to interview questions. The gold personalities exhibited a strong sense of right and wrong in their responses, and it was important for them to

be responsible, follow rules and respect authority. The adolescents identified as having "orange" personalities tended to put themselves at the center of conversations and reported that they made many of their own decisions. They also were spontaneous and witty. Personalities that were "blue" types demonstrated the most compassion and empathy. They valued relationships and it was important for them not to disappoint others when making decisions. The fourth color in the model was the "green" personalities. These individuals were the visionaries, and were analytical and logical with their responses. They seemed to value knowledge and were more apt to get their information from books and television when making decisions.

Chapter 5 - Discussion

Rather than studying why adolescents smoke cigarettes, this research study included an emphasis on why adolescents choose to not smoke cigarettes. The overall purpose of the exploratory study was to look at the phenomenon through the eyes of non-smoking adolescents and their parents in order to help identify effective prevention strategies to curb adolescent smoking. To provide a uniform language to label and discuss personality types, which seemed to be missing in the literature, the True Colors, Inc. (2008) model was utilized. Research questions included how well the True Colors model described personality types. Other questions asked how an adolescent's personality type related to his or her decision-making as well as why she or he chose to not smoke cigarettes. The study also looked at how the different personality color types were influenced by cigarette smoking advertisements and PSAs.

To guide the study, a systems approach was incorporated. Recognizing that all family members are interconnected, the study looked at how an adolescent may be introduced to smoking by another family member. Because family systems are also affected by their environment, the study looked at the influence of cigarette smoking advertisements on an adolescent cigarette smoking. Purposeful stratified sampling was used to locate adolescent-parent participants for dyadic interviews.

Social Learning Theory

According to Social Learning Theory, new behaviors can be acquired through the observation of others' behavior within one's social environment. The modeling behaviors of family members and friends are considered to be primary factors for adolescent learned behavior. Regarding cigarette smoking, researchers have determined that adolescents may begin smoking to emulate the behavior of these role models as part of their socialization process.

In the current research study, all of the parent and the adolescent participants were non-smoking, indicating to some degree that the adolescents may choose to follow their parent's example when making the decision not to smoke cigarettes. Ten out of the 16 adolescents confirmed that their parents had the most influence over the important decisions that the adolescent made, which would likely include decisions not to smoke. When asked why they had actually made the decision not to smoke cigarettes, the adolescent's responses strongly expressed

the influence of their parents and friends. Such responses indicate the maintenance or continuation of a non-smoking behavior in accordance with principles found in Social Learning Theory.

Symbolic Interaction Theory

When individuals share the same meaning of a symbol, such as smoking behavior, communication takes place. People witnessing the smoking behavior may approve of the behavior, disapprove of the behavior, or seem unaffected. Tobacco companies depend on symbols or pictures of individuals enjoying cigarettes to evoke pleasurable feelings in order to sell their product. It also is the case that individuals and organizations wanting to prevent or stop cigarette smoking behavior use pictures, or symbols, as well. Graphic pictures displaying the negative effects of cigarette smoking are used to persuade people to stop smoking by arousing undesirable feelings in response to the symbol.

In the current study, the research participants were asked to respond to two cigarette smoking advertisements. One was a pro-smoking advertisement that depicted cigarette smoking as pleasurable, while the PSA pictured the negative aspects of cigarette smoking with a diseased mouth. All of the respondents agreed that the pro-smoking advertisement did not fit what they knew to be true about the symbol of cigarette smoking. Many explained that the pictures represented false advertisement, and some experienced anger and sadness about being lied to. However, when asked about the negative cigarette smoking advertisement, the research respondents overwhelmingly replied that the graphic diseased mouth picture did fit what they knew to be true about cigarette smoking. While the picture in the advertisement induced feelings of disgust, and was perhaps seen as extreme, it was felt that the picture symbolized accuracy. They commented that people who smoke may end up with the negative effects that the picture portrayed.

When asked if they would be swayed by the pictures in the visual messages, in keeping with the Symbolic Interaction Theory, the interview respondents said "yes." The pictures, or symbols, represented a particular meaning for the research participants that smoking cigarettes was negative. They agreed with the negative cigarette advertisement because the picture fit what they collectively knew to be true. The pro-smoking advertisement, while it portrayed smoking to

be pleasurable, was inconsistent with what their known meaning, and seemed to further reinforce the negative aspects of smoking for the non-smoking participants.

Bioecological Theory

Each environmental ecosystem represented in the Bioecological Theory Model (see Figure 2:1) contains certain norms and rules which shape the psychological development of adolescents. In the microsystem, parents and peers help influence adolescents by a complex system of relationships that exist in an adolescent's environment. As the immediate environment for the adolescent, the microsystem is seen as the ecosystem having the most direct influence on the adolescent. This influence may be viewed as positive or negative as proposed by Bogenschneider (1996) in her ecological risk/protective theoretical framework.

In the current study, dyadic interviews were conducted to study parent-adolescent exchanges that took place in the microsystem. Representing the immediate environment for the adolescent, the microsystem was where there would be the most direct interaction between the adolescents and their parents and friends. Results of the study revealed that quite a bit of influence on the adolescent's decisions to not smoke cigarettes came from their immediate environment. The adolescents reported that their parents, friends and siblings provided the most influence on the important decisions that the adolescents made.

The study also revealed that some adolescents, more so than others, saw themselves as being very much in the center of their microsystem. Those adolescents preferred to make their own decisions and then ask for advice or approval from others. It was furthermore shown that different personality types as identified by the True Colors program, behaved differently within the microsystem. For example, the different personality color types reported different reasons for not smoking, various influences on personal decision making, and diverse reactions to cigarette smoking advertisements, that were peculiar to their color type. The four personality color types may be looked at as including both risk and protective factors for adolescents choosing to not smoke cigarettes.

True Colors Model of Personality

During my literature review, I encountered different personality instruments used by researchers to describe personality characteristics of adolescents. Because there was no uniform personality tool used by researchers, it was somewhat confusing to compare the approaches used

in the research studies. To offer a uniform language regarding personality types and their characteristics, I utilized the True Colors, Inc. (2008) model in my research study.

In the current study, the True Colors model of personality assessment showed accuracy. First, all of the adolescents and parents in the study responded that the assessment portrayed a high degree of accuracy in their own results. When asked how the assessment was not like them, none of the participants wanted to change their brightest personality color identification. When asked if the participants were surprised with the color spectrums self-identified by the other individual in the interview set, only three of the 16 adolescents expressed being surprised by something in the assessment. Seven of the 16 adult participants were surprised in some way by the self-assessment of their adolescents. When asked to discuss what color types the adolescents' friends represented, the parent-adolescent dyads were able to quickly work together to agree on what they thought the brightest color of the friends represented. These results attest not only to the accuracy of the True Colors model in personality identification, but also to the ease in which the participants were able to understand the model and apply it to themselves as well as others. The True Colors model may have application as a language for researchers to use when studying personality types.

The influence of Personality Types on Smoking Decisions

Results of the study revealed an adolescent's decision to not smoke cigarettes may be influenced by several factors, namely their parents, friends, and their own personality characteristics. Once it was determined that the True Color inventory was a good indicator of the participant's characteristics and tendencies, I began to assess how these related to the teen's decision to not smoke cigarettes. An important overall finding of the research study was that it was clear that "colors" (i.e., personality characteristics) matter. Data revealed that the adolescents tended to provide information that reflected their brightest color in their personality color spectrum when responding to interview questions.

Gold Personalities

By True Colors, Inc. (2008) definition, the adolescents that self-identified as having gold personalities exhibited a strong sense of what is right and wrong. Therefore, they were inclined to follow rules, be responsible, and respect authority. This behavior pattern was frequently detected during the interviews. When asked who had the most influence on the important

decisions that the adolescent made, 100% the gold personalities responded that their parents had the most influence. After viewing pro-smoking advertisement, the adolescents said they felt lied to because the advertisement did not compare to what they knew to be true about smoking. The anti-smoking PSA, however was viewed as accurate, even suggesting that the PSA could be a scare tactic to encourage people to do the right thing and not smoke. When asked why they personally did not smoke cigarettes, the gold personalities talked about the influence of their families and declared that they had been raised right. Furthermore, they felt that they would be in a lot of trouble if they smoked and they did not want to upset their parents.

Orange Personalities

By definition, orange personalities are described being active, spontaneous and impulsive. They need freedom, fun, adventure, and hands-on/physical involvement (True Colors, Inc., 2008). Of all the personality color groups, the orange personalities preferred to make the discussions of the interview questions about them. They reported they made their own important decisions, rather than being influenced by parents or friends. Similar to the gold personalities, after looking at the pro-smoking advertisement, the orange personalities also felt that the advertisement was a fabrication. However, the orange personalities responded that they felt lied to, indicating a sense of self and independence. After viewing the anti-smoking PSA showing a diseased mouth, one orange adolescent responded in a characteristic witty and fun-loving way by saying that he would not be able to get a date to the dance with a mouth like that. When explaining why they chose to not smoke cigarettes, the orange personality color types again responded in first person with I-phrases that were often sensory descriptors, such as "I've seen," "It smells," and "I know."

Blue Personalities

The True Colors, Inc. (2008) blue personality types are described as being, harmonious, compassionate, empathetic, sensitive, peacemakers, and those that value relationships. In keeping with this theme, when asked who had the most influence on their important decisions, 100% of the blue personalities responded that their friends had the most influence. The blue personality types were the adolescents who expressed some interest in the pro-cigarette smoking advertisement. However, they clarified that while the pictures of people had appeal to them, they still had no interest at all in smoking cigarettes. Regarding the anti-smoking PSA, adolescents

responded that the picture “grossed me out,” but that it depicted the truth. One blue adolescent expressed her sense of empathy and harmony, replied that the individual shown in the PSA needed to get braces for the teeth. Reasons that the blue adolescents gave for personally choosing not to smoke cigarettes centered on their fundamental value of relationships. They did not want to let their parents or friends down or disappoint them. Showing their compassionate side, the adolescents did not like people being disappointed in them.

Green Personalities

Green personality types are defined as individuals that value knowledge and intellect, are theoretical, complex, logical, and visionary (True Colors, Inc, 2008). These characteristics were demonstrated by the adolescents with green personalities in the research study. When asked who influenced their important decisions, a green adolescent demonstrated her ability to be a conceptual and independent thinker, by crediting books, television shows, and games as having influence on her important decisions. After viewing the pro-cigarette smoking advertisement, one visionary adolescent analyzed the advertisement in detail and reported that just by doing the things in the pictures really did not mean that people would necessarily smoke, which made the advertisement false, in their opinion. She then went on to relate the message on smoking to people in general. After looking at the anti-smoking PSA, a teen with a green personality analyzed the details of the diseased mouth and surmised that it looked like the person did not brush his or her teeth. Taking a philosophical approach, one green personality declared that messages showing the negative effects of smoking had influence on her decision to not smoke cigarettes.

Implications for Practitioners

In his explanation of phenomenological methods, Patton (2002) discussed how researchers must strive to understand a phenomenon by getting at the meaning and structure as seen through the shared experience of individuals involved. This means that in order to study adolescents who choose not to smoke, it is important to interview adolescents who do not smoke cigarettes. The ultimate goal is to gain information to structure successful research-based prevention programs that would help curb adolescent smoking initiation.

The True Colors, Inc. (2008) model used in the current study was an effective tool to identify and discuss personality types, because the participants affirmed that the model described

their dominant personalities well. The participants appeared to easily understand the model and quickly apply the model's concepts. The True Colors model and language may be applicable for practitioners in future research studies.

Findings from the current research study have genuine implications for use in designing comprehensive cigarette smoking prevention programs for adolescents. Having a greater awareness and understanding of the personality types of adolescents can lead to more effective communication than assuming that all adolescents respond to similar methods. Understanding how different personality types tend to behave, what motivates them, what influences their behavior, can certainly provide direction in designing effective prevention programs that address all adolescents.

As demonstrated by the current research study, in order to be broad-reaching and effective, adolescent cigarette prevention programs would benefit from a variety of strategies to reach all of the personality color types. Strategies for gold personalities should appeal to their sense of right and wrong in life and respect for authority. Blue adolescents would respond to strategies that appealed to their desire for harmonious relationships and concern for others. On the other hand, the orange adolescents would need to be motivated by fun, hands-on activities, and opportunities to be spontaneous. Strategies to impact green adolescents would need to appeal to their need for knowledge, logical thinking, and independence. Recognizing any risk and protective factors for smoking initiation that may be associated with certain personality characteristics may also prove invaluable when creating prevention strategies. Overall, recognizing and valuing the unique differences in personalities would ultimately enhance how practitioners and adolescents work with each other.

Implications for Future Research

The current exploratory study demonstrated a need for more research on why adolescents choose not to smoke in order to continue to add to the body of research in this area and create effective prevention programs. While this qualitative study did find that all personality types include both risk and protective factors for decision making, more qualitative research in this area is needed to continue to understand the phenomenon of adolescent smoking in order to lower the prevalence rates in youth and adults. It may be helpful to have research involving

interviews with parents, siblings, and friends to create case studies when studying adolescent cigarette smoking.

More research also is needed on utilizing the True Colors, Inc. (2008) program as a language for describing personality types. Studies involving larger sample sizes and greater representation of the four personality color types would be needed to assess the model's usefulness in filling a void within current research.

Strengths and Limitations of the Research

One strength of my research study was the dyadic qualitative interviews. I interviewed people directly involved in the research topic on how personality types are related to adolescent cigarette smoking. Rather than just observing individuals or asking for self-report information on closed-ended surveys, in-depth interviews were carried out with non-smoking adolescents and their parents. This helped gather credible data by listening to the voices of those involved at the heart of the phenomenon. Data were captured on how adolescents directly experienced what it is like to be non-smoking, both individually as well as through a shared experience. Therefore, my qualitative study focused on depth, as I looked at the experiences of a small number of non-smoking adolescents. The open-ended questions used in my interview questions helped stimulate responses that captured rich data.

Because the interviews were vital to learning about the adolescent-parent dyads, the data collected in this study were subjective. The individuals experiencing the phenomenon are the only ones that know their own experience. However, because the data were collected by interview and were analyzed qualitatively, researcher bias was an issue with which I had to address. As a novice researcher, I was careful to minimize my bias by employing the help of my major professor as a verifier to assure that the study was done with fidelity. Also, since the researcher relied on the responses of others to collect data, results are dependent on the interest and willingness of the respondent to participate, as well as their ability to articulate their thoughts. As a researcher, it is my opinion that the participants were engaged in the interviews and were honest and forthcoming. However, it is important to state that having the parents present as part of the dyadic interviews may have encouraged the teens to emphasize the importance of their parents when responding to the questions.

In the study, the True Colors personality assessment was given just before the interviews were conducted with the parents and adolescents. The fact that the assessment was given first may have influenced the answers generated by the participants. In the future, researchers may want to give some assessments before the interviews and some assessments after other interviews. The responses could then be compared to see if knowing more about the personality color types influenced the answers, or if the responses to the interview questions would still reflect the personality types of the participants.

A weakness of my research study was that it lacked triangulation. Patton (2002) said that "multiple methods of data collection and analysis provide more grist for the research mill" (pp.555-556). My data collection method was limited to in-depth interviews. Therefore, the study could be strengthened by incorporating multiple methods of collection, which would not only provide different types of data, but also would provide a means for consistency checking, and help eliminate some bias that may stem from single-methods of collections.

Conclusion

The 2014 Surgeon General's report indicated that cigarette smoking remains as the leading cause of early disease and death in the United States, and furthermore lists the epidemic of smoking as among the worst health disasters of the century. Furthermore, after 50 years since the first report in 1964, the latest report further expands the list of diseases and negative effects caused by smoking and exposure to second-hand smoke. As a result, currently nearly one-half million adults die prematurely each year in the United States because of smoking, and the annual economic costs related to tobacco are over \$289 billion (U.S. Department of Health and Human Services, 2014).

It is important to continue providing comprehensive tobacco control programs that target prevention for adolescent smoking initiation, with the goal of eliminating adolescent tobacco smoking altogether. Based on the results of current research study, it also is essential to recognize the importance of meeting the needs of a variety of personality types when providing effective prevention programs.

Even with the best, most effective prevention programming, we must also recognize that smoking, as all human behavior, occurs in a social environment. This was recognized and emphasized by adolescent (#107) from the current research study who said, "I think that teenage

smoking is never going to disappear completely, unless cigarettes completely disappear.ö In order to make that challenge become a reality for adolescents, it will require the collective commitment and action that we all must share.

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Appendix A - Adolescent/Parent Interview

Facilitator:

Thank you both again for being willing to participate in this research study on personality and adolescent smoking behavior. We are trying to learn about why adolescents choose not to smoke cigarettes. We feel that the best way to get information to understand this issue is to talk to adolescents and their parents about this issue. We appreciate your willingness to participate and answer a few questions on this topic.

First, there are no right or wrong answers. It is expected that there may be differing opinions. We want each individual to feel free to share their thoughts and point of view. We want you to have a conversation with each other regarding the questions. If one person is talking a lot, I may just ask that you give the other person an opportunity to share their point of view.

We also want you to be aware that the session is being audio recorded, so we can remember everything you say today, but that your comments will be kept confidential and no names will ever be included in any reports. You do not have to respond to every question that is asked.

I would also ask that you put your cell phones on silent.

Let's begin with the first question.

Opening Questions:

1. Earlier you both took the True Colors personality assessment. Based on the assessment that you just participated in please tell each other your personality spectrum, beginning with the most dominant color?

Probes:

How accurate do you think the personality spectrum describes you?

In what ways is it not like you?

Explain anything about the assessment that you disagree with.

Introductory Questions:

2. Based on the True Colors assessment that you just participated in, discuss how you were surprised about what color type the other person was, or how you were not surprised by the other person's color spectrum.

Probe:

Please provide some examples that explain why you were surprised or not surprised.

3. For the next two questions I will ask the adolescent to respond, and later I will ask the parent to respond. Who are two or three of your closest friends (just first names are fine)?

4. What word would you use to describe their personalities?

5. This question is for the parent. How well do you know these friends and what words would you use to describe their personalities?

6. Please discuss together what color types you think would represent these friends.

Probe:

Can you think of some examples of why you feel these friends would represent these color types?

Transition Questions:

7. Please discuss together some of the important decisions that the adolescent has recently faced.

8. Please discuss your opinions on who you think has the most influence on the decisions that the adolescent makes?

Probes:

Who would you say has the most influence, parents or closest friends? Please explain your answer.

How do older siblings or friends influence your important decisions? Please explain your answer.

Key Questions:

9. If you had to guess, what would you say are reasons that adolescents, in general, choose to smoke cigarettes?

10. What would you say are the reasons that adolescents, in general, choose not to smoke cigarettes?

11. This question is for the adolescent. Other youth may make decisions for many reasons, why do you think you have made the decision not to smoke cigarettes?

12. This question is for the parent. Do you currently smoke cigarettes regularly?

13. For the next question, I would like for you both to discuss what you think are the advantages and disadvantages of smoking?

14. Please discuss what you think are the advantages and disadvantages of not smoking cigarettes?

15. Who are the people that would support or approve of adolescent cigarette smoking?
Probe:
Please explain your answer.

16. Please describe any discussions that you both have had with each other about the topic of adolescent smoking?

17. Next, I am going to show you two media messages regarding cigarette smoking. After you have had a chance to look at the advertisements, I ask that you talk to together and share your reactions and emotions about the advertisements.
Probes for smoking advertisement
What is the message of the advertisement?
Do you both get the same message? Please explain.

How does this compare to what you know? Does it fit what you know?

What thoughts or emotions do you experience when you see the picture?

Advertisers spend money to influence the consumer to use or not use a product. Are you convinced or swayed by the picture, and why?

Would this advertisement impact your smoking behavior?

Probes for public service announcement

What is the message of the advertisement?

Do you both get the same message? Please explain.

How does this compare to what you know. Does it fit what you know?

What thoughts or emotions do you experience when you see the picture?

Advertisers spend money to influence the consumer to use or not use a product. Are you convinced or swayed by the picture, and why?

Would this advertisement impact your smoking behavior?

Ending Questions:

18. Is there anything that you want to say about teenaged smoking that we have not yet talked about?

Appendix B - Description of Participants

Ado. ID	Ado. Age	Ado. Brightest Color	Ado. Highest Second Color	Ado. Third Highest Color	Ado. Palest Color	Ado. Gender	Parent ID	Parent Brightest Color	Parent Second Highest Color	Parent Third Highest Color	Parent Palest Color	Parent Gender
101	16	Orange 24	Blue 18	Green 12	Gold 6	Male	101A	Green 24	Orange 16	Gold 12	Blue 8	Male
102	16	Orange 20	Blue 17	Gold 12	Green 11	Female	102A	Blue 22	Orange 16	Gold 13	Green 9	Female
103	12	Orange 20	Gold 18	Green 13	Blue 9	Male	103A	Gold 22	Blue 18	Green 11	Orange 9	Female
104	17	Orange 22	Green 16	Gold 11	Blue 11	Male	104A	Gold 22	Green 18	Orange 11	Blue 9	Male
105	13	Orange 18	Gold 16	Green 13	Blue 13	Female	105A	Blue 22	Gold 20	Green 12	Orange 6	Female
106	12	Orange 23	Gold 14	Green 13	Blue 10	Male	106A	Gold 21	Blue 18	Green 11	Orange 10	Female
107	15	Blue 19	Green 18	Gold 15	Orange 8	Female	107A	Blue 23	Gold 14	Green 13	Orange 10	Female
108	13	Blue 19	Green 15	Gold 14	Orange 12	Female	108A	Blue 23	Orange 13	Gold 13	Green 11	Female
109	15	Blue 22	Gold 20	Green 10	Orange 8	Female	109A	Gold 22	Green 18	Blue 11	Orange 9	Female
110	13	Green 20	Orange 20	Blue 13	Gold 7	Female	110A	Blue 18	Orange 18	Green 13	Gold 11	Female
111	12	Green 22	Gold 17	Orange 15	Blue 6	Female	111A	Green 22	Gold 17	Blue 11	Orange 10	Female
112	12	Gold 21	Orange 17	Blue 11	Green 11	Male	112A	Gold 24	Blue 17	Green 13	Orange 6	Female
113	13	Gold 19	Orange 15	Blue 13	Green 13	Male	113A	Gold 22	Blue 13	Green 13	Orange 12	Male
114	15	Gold 21	Orange 16	Green 12	Blue 11	Male	114A	Gold 24	Green 14	Blue 11	Orange 11	Female
115	13	Gold 24	Blue 15	Green 11	Orange 10	Female	115A	Blue 23	Gold 19	Green 10	Orange 8	Female
116	15	Gold 21	Orange 18	Blue 11	Green 10	Male	116A	Gold 22	Blue 15	Orange 14	Green 9	Female

Appendix C - Most Influence on the Adolescent's Decisions

Ado. ID	Ado. Brightest Color	Ado. Second Brightest Color	Ado. Third Brightest Color	Ado. Palest Color	Me	Parent Figure	Sibling	Friend	Other	Parent Brightest Color	Parent Second Brightest Color	Parent Third Brightest Color	Parent Palest Color
101	Orange 24	Blue 18	Green 12	Gold 6		X	X			Green 24	Orange 16	Gold 12	Blue 8
102	Orange 20	Blue 17	Gold 12	Green 11	X					Blue 22	Orange 16	Gold 13	Green 9
103	Orange 20	Gold 18	Green 13	Blue 9		X				Gold 22	Blue 18	Green 11	Orange 9
104	Orange 22	Green 16	Gold 11	Blue 11	X					Gold 22	Green 18	Orange 11	Blue 9
105	Orange 18	Gold 16	Green 13	Blue 13	X					Blue 22	Gold 20	Green 12	Orange 6
106	Orange 23	Gold 14	Green 13	Blue 10				X		Gold 21	Blue 18	Green 11	Orange 10
107	Blue 19	Green 18	Gold 15	Orange 8		X		X		Blue 23	Gold 14	Green 13	Orange 10
108	Blue 19	Green 15	Gold 14	Orange 12				X		Blue 23	Orange 13	Gold 13	Green 11
109	Blue 22	Gold 20	Green 10	Orange 8		X		X		Gold 22	Green 18	Blue 11	Orange 9
110	Green 20	Orange 20	Blue 13	Gold 7					X	Blue 18	Orange 18	Green 13	Gold 11
111	Green 22	Gold 17	Orange 15	Blue 6		X				Green 22	Gold 17	Blue 11	Orange 10
112	Gold 21	Orange 17	Blue 11	Green 11		X				Gold 22	Blue 17	Green 13	Orange 6
113	Gold 19	Orange 15	Blue 13	Green 13	X	X				Gold 22	Blue 13	Green 13	Orange 12
114	Gold 21	Orange 16	Green 12	Blue 11		X				Gold 24	Green 14	Blue 11	Orange 11
115	Gold 24	Blue 15	Green 11	Orange 10		X				Blue 23	Gold 19	Green 10	Orange 8
116	Gold 21	Orange 18	Blue 11	Green 10		X	X			Gold 22	Blue 15	Orange 14	Green 9

