

**ADOLESCENTS' PERCEPTIONS OF THE ONSET OF THEIR CIGARETTE  
SMOKING BEHAVIOUR AND THE FACTORS THAT MAINTAIN THEIR  
HABIT**

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**Key Words:** adolescence, antismoking socialisation, environmental influence, parent-child communication, parental influence, peer influence, personality attributes, smoking initiation, social learning theory, stages of smoking.

## Abstract

Tobacco smoking remains the largest preventable behavioural cause of chronic disease and premature death. Many people continue to engage in this behaviour, despite the well-known negative health consequences. The most common form of smoking is cigarette smoking, which is a type of risk-taking behaviour that is becoming increasingly prevalent among adolescents. Cigarette consumption rates are increasing among adolescents in various parts of the world; each year nearly a million adolescents start to smoke. This behaviour, if continued into adulthood, may lead to a range of debilitating diseases of lifestyle. In an effort to contribute to the success of adolescent smoking cessation programmes in South Africa, this study looks at the factors that motivate and support adolescents' decision to start and continue with their cigarette smoking behaviour. Utilising a qualitative framework, individual interviews were carried out with six boys and six girls from an English-medium high school within Cape Town. The participants' ages ranged from 16-18 years. Through the use of thematic analysis, the results show that adolescents smoking are not determined by knowledge, beliefs and attitudes alone, but by social and environmental influences as well. Risk and protective factors for adolescent smoking was identified on a psychological, physical, social/environmental level cross-cuttingly on the different stages of the smoking cycle. Of importance was the adolescents' common misinterpretation of 'smoking out of habit' for 'addiction'. Essentially, this study focused on the importance of adolescent health and how it is affected by factors associated with tobacco use in South Africa. Therefore, a key recommendation of this study would be for these underlying risk and protective factors needs to be integrated to strengthen current smoking cessation programmes.

## Declaration

I declare that *Adolescents' Perceptions of the Onset of their Cigarette Smoking Behaviour and the Factors that Maintain their Habit* is my own work, that it has not been submitted before for any degree or examination in other university, and that all the sources I have used or quoted have been indicated and acknowledged as complete references.

Najuwa Arendse

September 2013

Signed: .....



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## Table of Contents

<b>Abstract.....</b>	<b>i</b>
<b>Declaration.....</b>	<b>ii</b>
<b>Acknowledgements.....</b>	<b>iii</b>
<b>Chapter1.....</b>	<b>1</b>
<b>Introduction.....</b>	<b>1</b>
1.1 Burden of Tobacco Use.....	1
1.1.1 Defining Adolescents.....	3
1.1.2 Types of Tobacco Products.....	3
1.2 Cigarette Smoking among Adolescents.....	3
1.3 Statement of the Research Problem.....	4
1.4 Rationale and Significance of the Study.....	5
1.5 Aims and Objectives.....	6
1.6 Chapter Summary.....	6
1.7 Conclusion.....	7
<b>Chapter 2.....</b>	<b>8</b>
<b>Literature Review.....</b>	<b>8</b>
2.1 Introduction.....	8
2.2 Parental Factors Influencing the Adolescents' Smoking Behaviour.....	8
2.2.1 Parent Modeling Tobacco Use.....	9
2.2.2 Parenting Styles.....	12
2.2.3 The Nature and Content of Parent-Child Communication.....	13
2.3 Peer Influence on Adolescent Smoking Behaviour.....	15
2.3.1 Social Crowds.....	16
2.3.2 Social Support.....	18
2.4 Adolescents Exposure to Media.....	18

2.4.1 The Adolescents Attention to Social Media.....	21
2.5 Individual Level Factors Influence on Adolescent Smoking Behaviour.....	22
2.5.1 Tobacco-prone Personalities, Attitudes, and Behaviours.....	22
2.5.2 Depression Symptomology as a Risk Factor for Smoking.....	25
2.5.3 Leisure Activities.....	26
2.5.4 Stress and Coping.....	27
2.6 Summary of the Literature Review.....	27
2.7 Social Learning Theory as a Framework.....	29
2.8 Conclusion.....	32
<b>Chapter 3.....</b>	<b>33</b>
<b>Methodology.....</b>	<b>33</b>
3.1 Introduction.....	33
3.2 Research Design.....	33
3.3 Participants.....	34
3.3.1 Selection of Participants.....	34
3.3.2 Description of Participants.....	35
3.4 Research Instrument.....	35
3.5 Procedure.....	36
3.6 Data Collection Method.....	36
3.7 Data Analysis.....	37
3.8 Reflexive Analysis.....	38
3.9 Rigour.....	39
3.10 Ethical Considerations.....	39
3.11 Conclusion.....	40
<b>Chapter 4.....</b>	<b>41</b>
<b>Findings and Discussion.....</b>	<b>41</b>
4.1 Introduction.....	41

4.2 Preparatory Stage.....	42
4.2.1 Precontemplative Stage.....	42
a Adolescents Attitude toward Cigarette Smoking.....	42
b Parenting and the Household Environment as Influence.....	43
c Peers Attitude towards Smoking.....	46
d Tobacco Advertising.....	46
4.2.2 Contemplative Stage.....	48
a Adolescents Attitude toward Cigarette Smoking.....	48
b Peer Influence.....	49
4.3 Initiation Stage.....	51
4.3.1 Experimenting with their First Cigarette.....	51
4.3.2 Household Environment Affording Opportunities to Smoke.....	52
4.3.3 Peer Influence.....	55
4.3.4 Adolescents' Perceptions of why the opposite sex starts smoking.....	57
4.4 Experimentation Stage.....	58
4.4.1 Individual Level Factors.....	59
a Sensation Seeking Tendencies and Feelings of Boredom.....	59
b Weight Concerns.....	60
c Stress and Coping.....	61
4.4.2 Peer Influence.....	62
4.4.3 Sibling Influence.....	64
4.5 Regular Smoking.....	65
4.5.1 Peer Influence on Adolescent Smoking Behaviour.....	65
4.5.2 Parental Influence.....	66
4.5.3 Societal Influence.....	70
4.5.4 The Perceived Health Effects of Smoking.....	71
4.5.5 School's Influence.....	74
4.6 Maintenance.....	75
4.6.1 Adolescents Dependence on Cigarettes.....	76

4.6.2 The Home Environment.....	77
4.6.3 Smoking Preferences and its Occurrences.....	79
4.6.4 Cigarette Smoking Influences in the School Environment.....	84
a Places to Smoke.....	84
b Adolescents' Perceptions of the School Teacher.....	85
c Effectiveness of School Policy.....	88
4.6.5 Tobacco Advertising.....	89
4.7 Quitting.....	90
4.8 Smoking Relapse.....	91
4.8.1 Personality Attributes and Repeated Attempts to Quit Smoking.....	91
4.8.2 Peer Influence.....	94
4.8.3 Tobacco Advertising.....	94
4.9 Summary of Findings .....	95
4.10 Conclusion .....	97
<b>Chapter 5.....</b>	<b>98</b>
Conclusion and Recommendations.....	98
5.1 Introduction.....	98
5.2 Limitations of the Study.....	99
5.3 Future Directions.....	100
<b>References.....</b>	<b>102</b>
<b>List of Appendices.....</b>	<b>126</b>
Appendix A: Participant Information Sheet.....	126
Appendix B: Letter of Informed Consent to the Parents.....	127
Appendix C: Participant's Assent Form.....	129
Appendix D: Demographic Details.....	130
Appendix E: Individual Interview Guide.....	131



## CHAPTER ONE

### Introduction

#### 1.1 Burden of Tobacco Use

Tobacco smoking remains the leading preventable behavioural cause of chronic disease and premature death (Sussman, Sun & Dent, 2006). The World Health Organisation (WHO) estimates that tobacco is the second most important risk factor for disease cause to the Global Burden of Disease (WHO, 2009). Internationally, tobacco-attributed deaths caused 5.1 million deaths in 2004 (Mathers & Loncar, 2006; WHO, 2009), killing one person every six seconds (Mathers & Loncar, 2006). Moreover, tobacco is a risk factor for six of the eight leading causes of death (Mathers & Loncar, 2006).

Many people continue to engage in tobacco smoking even though the harmful effects of tobacco use on health care are well established in the scientific literature (Menezes, Gonçalves, Anselmi, Hallal, & Araújo, 2006). The use of tobacco considerably increases the risk for death from heart disease, stroke, lung and other cancers, chronic respiratory disease, as well as other conditions and disorders (WHO, 2009). Globally, smoking-caused diseases are estimated to contribute to 71% of lung cancers, 42% of chronic respiratory disease and nearly 10% of cardiovascular disease (WHO, 2009). Additionally, a third to half of all people using tobacco die 15 years prematurely (Petro, Lopez, Boreham, Thun, Heath et al., 1996; U.S. Department of Health & Human Services, 2004).

Most tobacco-attributable diseases do not manifest until adulthood, and it is estimated that if existing trends continue then more than eight million smokers are projected to die annually of smoking-related deaths by 2030 (Mathers & Loncar, 2006; Murray & Lopez, 1997). This incline is attributed to the time lapse for the development of smoking-caused diseases and the steady population growth, coupled with the tobacco industry's targeting (WHO, 2009). Tobacco could cause a global mortality of up to one billion deaths during the twenty-first century (Petro & Lopez, 2001); unless current trends are impacted then 80% of these tobacco-related deaths will occur in

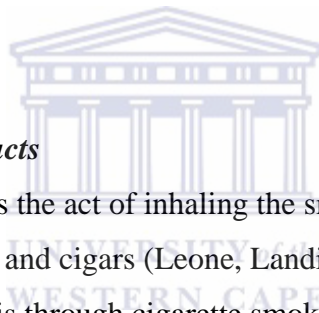
low- and middle-income countries by 2030 (Mathers & Loncar, 2006; WHO, 2009). Approximately 95 000 of these smoking related deaths will occur in sub-Saharan Africa (WHO, 1997). Guidon and Boisclair (2003) affirm that the per capita cigarette consumption increased by 46% from 1970 to 2000. Even though South Africa is recognised as a global leader in the enactment of tobacco control policies (Malan & Leaver, 2003), tobacco use remains an ever increasing health and economic problem.

Studies on tobacco consumption in South Africa report that it is responsible for a number of diseases and deaths, as well as substantive economic costs to taxpayers. Swart and Reddy (1998) report that there are 25,000 tobacco-related deaths annually recorded from 1990. Yach (1995) indicates that the economic cost of lost productivity due to premature deaths and hospitalisations attributed to tobacco use was more than R2, 5 billion in 1994. Smoking-related diseases cost a further R1, 5 billion in direct cost for outpatient treatment and hospitalizations (Yach, 1995). The per capita cigarette consumption decreased by nearly 40% between 1990 and 1999 (Statistics South Africa, 1999). The ascribed decrease owes mainly to the large excise-induced increases in the inflation-adjusted retail price of cigarettes, the public awareness of the health impact of smoking, and the passing of anti-smoking legislation (Van Walbeek, 2000, cited by Van Walbeek, 2001). Research among adult smokers shows that between 80 to 90% of them began to smoke before 18 years of age (Alexander, Piazza, Mekos & Valente, 2001).

Tobacco use is commonly referred to as a “pediatric epidemic” (Sorina, 2010). A significant aspect of the smoking epidemic is that cigarette consumption rates are increasing among adolescents in various parts of the world, with nearly a million adolescents starting to smoke each year (Whalen, Jamner, Henker & Delfino, 2001). Making this issue more pertinent is that 50% of South Africa’s populace are younger than 18 years (Reddy, 2003). Considering the projected increase of adolescent smoking against the current rate of onset of tobacco smoking, adolescence marks an important developmental period in which to study the acquisition of smoking (Colby, Tiffany, Shiffman & Niaura, 2000).

### ***1.1.1 Defining Adolescence***

Adolescence is the transitional period between dependent childhood to adult independence (Jessor, 1984; United Nations Population Fund, 2003) and it is often described as a phase in which individuals gradually acquire autonomy, develop stable identities, and expand social skills (Baillie, Lovato, Johnson & Kalaw, 2005). Along the establishment of these psychosocial attributes, the adolescent will also experience changes in the social environment that will impact health behaviours (Aufseeser, Jekielek & Brown, 2006; Jessor, 1984). For the development tasks to be successfully achieved, the adolescent requires group membership to provide them with the security of a provisional identity (Silbereisen, 1995). Early adolescence ranges from 10-14 years and late adolescence from 15-19 (United Nations Population Fund, 2003). The progression from child to adult is consequently seen as being a socially determined process, where the tolerance and acceptance of the group becomes the guiding factors in decision making.



### ***1.1.2 Types of Tobacco Products***

Tobacco smoking is defined as the act of inhaling the smoke of burned tobacco products, especially cigarettes and cigars (Leone, Landini & Leone, 2010). The most common form of tobacco use is through cigarette smoking (Sussman, Sun & Dent, 2006).

Manufactured cigarettes have become the predominant form of tobacco consumption across the world (WHO, 1997). It is also consumed in many other forms, such as the bidis, cigars and pipes; and in some regions these predominate. Filter-tipped cigarettes are usually more popular than the plain-end cigarettes and manufactured cigarettes are available in all countries. Hand-made or “roll-your-own” (RYO) cigarettes are also widely used in many countries, with variations that include the filtered and unfiltered RYOs and tobacco rolls.

## **1.2 Cigarette Smoking among Adolescents**

Smoking initiation often starts very early in life (Logan, Carlini-Marlatt, 2004, Centre for Disease Control and Prevention (CDC), 2003), with the majority of smokers starting to use tobacco during adolescence, before age 18 (US Department of Health

and Human Services, 1994, CDC, 2000; GYTS, 2002). The South Africa Demographic and Health Survey of 2003 reports that 30.5% of adolescents identified cigarettes as one of the most commonly used substances. Furthermore, among 15-19 year old adolescents 19.9% of males and 10.2% of females have ever used tobacco (Department of Health, Medical Research Council & OrcMacro, 2007). It is asserted that majority of those who first used alcohol or tobacco are at an increased risk to use illegal drugs (Flisher, Parry, Muller & Lombard, 2004).

On a national level, 24% of the South African youth population currently smokes tobacco. Swart and Reddy (1998) reports that 46.7% of school-aged youth are current users of cigarettes. At a provincial level, the Western Cape had the highest national average of ever smokers prevalence at 65.8%, exceeding South Africa's national average of 46.7%. The Northern Cape followed at 27.4%. Similarly, for the current use of cigarettes, the Western Cape (at 40.7%) exceeded the national average (of 23%), Northern Cape followed at 12.2%.



### **1.3 Statement of the Research Problem**

Despite decades of warnings, labels on cigarette packaging, and prevention programmes in schools, the adolescent years still produce millions of smokers each year (CDC, 2000). It is estimated that if current trends persist, an estimated 6.4 million of today's children are expected to die prematurely from a smoking-attributed disease (CDC, 2002). The earlier the initiation of tobacco use, the higher the level of daily smoking (Everett, Warren, Sharp, Kann, Husten et al., 1999; cited by Whalen, Jamner, Delfino & Henko, 2001), and the lower the probability of cessation (Khuder, Dayal & Mutgi, 1999).

Interest in tobacco as a public health and research issue has greatly increased across countries in terms of bans, legislation, policies, social norms, and other factors that contribute to its constant evolution of the problem and in turn, its solutions. As a result, the determinants of cigarette smoking over time will not necessarily be the same in different countries. Adding to this complexity is the attempt to understand youth smoking so that appropriate interventions can be designed according to the contextually-relevant risk factor research. It is suggested that if these trends continue,

then carefully designed studies are needed to provide insight into the determinants of tobacco-using behaviour that place these young people and school-aged children at risk. Identifying determinants will be crucial to inform age-appropriate tobacco-related intervention strategies within the South African context.

Adolescent cigarette smoking interventions are evaluated as being limited in bringing about a positive response as research shows that adolescents smoke well into adulthood (Sussman, Sun & Dent, 2006; Whalen, Jamner, Delfino & Henko, 2001). The prevention programmes of regular cigarette smoking have mainly been directed at the tobacco usage behaviour of adults.

#### **1.4 Rationale and Significance of the Study**

An exploration of the reasons why adolescents start and continue smoking will reveal the contextual relevant factors that why this trend continues to persist in our current day and age.

Although adolescents are generally aware of the long-term and health risks of smoking; it remains questionable whether they are aware of the addictive nature of cigarette smoking which could cause a debilitating disease or even death. Focussing on the influential role of environmental factors (such as the family, friends, peers, media, and so forth) on adolescents' beliefs could reveal how the adolescents' smoking behaviour is influenced. An exploration of the adolescents' beliefs (regarding their smoking behaviour) will reveal their awareness of susceptibility to nicotine addiction through cigarette smoking. On the basis of these observations above, this study seeks to gain more clarity on the reasons for which adolescents begin and continue to smoke in South Africa.

The social learning framework is a useful perspective for understanding the role of social and environmental influences on adolescents' smoking behaviour. The main contribution of this framework is to help expand and elaborate the framework as it applies in the South African setting.

## 1.5 Aims and Objectives

The aims of the study are:

1. To explore the factors that motivates adolescents' decision to smoke.
2. To explore factors that support adolescents' decision to continue to smoke.

The following objectives have been developed to guide the study:

1. To explore the risk factors that motivates the adolescents' decision to continue smoking.
2. To explore the protective factors that motivates adolescents' decision to continue smoking.
3. To explore the influence of role models in the socialisation practices of adolescent smoking behaviour.
4. To explore the influence of the environmental context on adolescents' cigarette smoking behaviour.

## 1.6 Chapter Summary

**Chapter One** provided the background and rationale for the current investigation. Its main purpose was to highlight the need for investigation in the adolescent smoking arena, as well as to clarify how this study will contribute to the identified gap in the literature that needs to be addressed.

**Chapter Two** provides a review of the literature. The key role of the literature review is to highlight what research has been embarked on in this field of study. The aim was to explore what others have learned about this topic, as well as how others have conceptualised the key issues, namely, the risk factors of adolescent smoking and the protective factors that support their decision to continue smoking. In addition, the social learning theory is explicated in this chapter and its relevance to framing the study is highlighted.

**Chapter Three** outlines the methodological approach used in this study. The chapter provides an overview of the epistemological underpinning of this study, as well as information related to the research design, the participants, ethical considerations,

self-reflexive issues, the methods of data collection and the analysis undertaken in this study.

**Chapter Four** provides the results of the study and an in-depth discussion regarding the findings. The chapter details themes that emerged from a thematic analysis of the data. These themes are explored in the context of the relevant and applicable literature and prior research.

Finally, **Chapter Six** provides recommendations aimed at enhancing the well-being of the participants. To conclude, limitations of the study are considered, conclusions are drawn and future research opportunities are discussed.

## **1.7 Conclusion**

This introductory chapter briefly outlined the context of the current investigation and has provisioned the rationale, as well as the motivation for the current research topic. Furthermore, both the theoretical framework and the aims and objectives have been identified. It has briefly placed this topic in its historical context and has ensuing to the central subject matter that will be explored in greater detail in the succeeding chapters. As outlined above, there exists a wide variety of risk and protective factors that place adolescents at risk for smoking which can be explored in our local context in the social learning framework. It is to these perspectives that the reader is now engaged.



## CHAPTER TWO

### Literature Review

#### 2.1 Introduction

This literature review aims to provide an overview of the range of individual-level factors to broad environmental and societal influences on adolescent's attitude and behaviour toward smoking. These influences can either act as a risk or protective factor in the development of smoking associated problem behaviours. Longitudinal investigations fashion adolescents smoking trajectories as characteristic to social, behavioural and psychological determinants (Audrian-McGovern, Rodriguez, Tercyak, Cuevas, Rodgers & Patterson, 2004). The key areas that emerged are: familial or parental environment (Niknami, Akbari, Ahmadi, Babaee-Rouchi & Heidarnia, 2008; Morojele, Parry & Brook, 2009), individual factors (Niknami, Akbari, Ahmadi, Babaee-Rouchi & Heidarnia, 2008; Morojele, Parry & Brook, 2009), peer/friend influences (Banerjee & Greene, 2009; Schultz, Nowatzki, Dunn, Griffith, 2010; Yanovitzky, 2005), media influences (Dalton et al., 2003), as well as the societal/community factors (Morojele, Parry & Brook, 2009; Niknami, Akbari, Ahmadi, Babaee-Rouchi & Heidarnia, 2008).

#### 2.2 Parental Factors Influencing the Adolescents' Smoking Behaviour

The parent-child relationship can be viewed as and refers to those distinct psychological consequences which children and parents experience in their life together in the family (Arnold, Eysenck & Meili, 1979). Some of the important aspects in this field are family bonding (Garmienė, Žemaitienė & Zaborskis, 2006), parenting styles, support (Glendinning, Shucksmith, & Hendry, 1997; Olvera, Poston & Rodriguez, 2006), attitudes and habits (Herbert & Schiaffino, 2007). The role of parents in their child's smoking attitude and behaviour has been studied extensively (Agrawal, Madden, Heath, Lynskey, Bucholz & Martin, 2005; Henriksen & Jackson, 1998), but most studies on parenting and adolescents smoking have investigated the impact of general parenting practices (Foshee & Bauman, 1992; Garmienė, Žemaitienė & Zaborskis, 2006). There are four major groups of socialisation parenting factors that have been identified as either being predictive or protective of



the initiation of tobacco use by adolescents. These parenting factors are: parental modelling of tobacco use; parenting style of interaction; and the nature and content of parent – child communication (Garmienė, Žemaitienė & Zaborskis, 2006; Kosterman, Hawkins, Soth, Haggerty & Zhu, 1997; Mansfield, Nixon & Thomas, 2006; Sanders, Montgomery & Brechman-Toussaint, 2000). It is identified that the more general parenting behaviours can be both contextual factors in which smoking socialisation behaviours are expressed along with their respective determinants (Agrawal, Madden, Heath, Lynskey, Bucholz & Martin, 2005).

### ***2.2.1 Parent Modelling Tobacco Use***

Parental smoking is connected to the continuation of adolescent smoking (Flay, Hu & Richardson, 1998; Agrawal, Madden, Heath, Lynskey, Bucholz & Martin, 2005), as well as its related smoking trajectories as it is indicative of its early onset, long-term persistence and rapid escalation (Chassin, Presson, Pitts & Sherman, 2000).

Psychosocial research regularly conceptualizes the role of the smoking parents in terms of the social learning theory, where it hypothesizes that the modelling and access to cigarettes raise an adolescent's risk to smoke (Flay, Petraitis & Hu, 1999).

There is general agreement in the literature that adolescents usually perceive same-sex parents as the behavioural model. Subsequently, more time spent with the corresponding parents can increase smoking as a normative influence (Schultz, Nowatzki, Dunn & Griffith, 2010). The father's smoking status has a greater influence on male adolescents, while the mothers have a greater influence on the female (Wen et al., 2007). A Lithuanian investigation revealed that maternal smoking is statistically more significantly related to their son's smoking attempts, rendering them as the behavioural role model (Law, Struod, LaGarse, Niaura, Liu et al., 2003). Furthermore, the mother's smoking behaviour, poor relationship with the mother, and the absence of the biological father at home are noted as significant factors associated with the onset and maintenance of adolescent smoking (Menezes, Gonçalves, Anselmi, Hallal, & Araújo, 2006; Gau, Lai, Chiu, Liu, Lee et al., 2009; Wen et al., 2007). Garmienė, Žemaitienė and Zaborskis (2006) suggest that it may be due to the various methodological differences of these studies, along with the variations in cultural environments and the traditional females or male family roles that could

account for this difference. Furthermore, Garmienė, Žemaitienė and Zaborskis (2006) suggests that the higher onset of smoking rates among boys than girls might be due to the socialisation differences.

Smoking socialisation is broadly referred to as the transmission of smoking-specific knowledge, attitudes, and skills that increase or decrease the risk of smoking uptake (Henriksen & Jackson, 1998). The more specific parenting practices, referred to as the antismoking socialisation practices, may dissuade smoking initiation among their children (Chassin, Presson, Todd, Rose & Sherman, 1998). Antismoking socialisation practices can include: parenting behaviours such as parental expectations or rules about children not smoking (Turner, Mermelstein & Flay, 2004); setting rules not to smoke at home (Avenevoli & Merikangas, 2003), parental behaviours not specifically directed at children, such as maternal or paternal smoking status; warning children about the negative consequences of smoking, and discussing smoking-related topics (Engels & Willemsen, 2004). The few studies that have investigated parents' antismoking socialisation practices in relation to adolescents' smoking behaviour have shown that when parents institute rules not to smoke at home, warn their children about the risks of smoking and punish their children when they smoke, the children are less likely to start smoking (Jackson & Henriksen, 1997; Henriksen & Jackson, 1998). It becomes difficult for adolescents to engage in smoking behaviour when they believe that their parents strongly oppose it (Wiiium, Torsheim, & Wold, 2005). A Canadian study undertaken by the Canadian Youth Smoking Survey suggest that the complete ban of smoking in the home may provide strong denormalising smoking messages and this demonstrates a strong relation between smoking uptake and parental smoking (Schultz, Nowatzki, Dunn & Griffith, 2010).

Consistent findings in Taiwanese and Lithuanian investigations report nuclear families (i.e. comprising a mother and father, along with their children) as a protective factor against smoking (Gau et al., 2009; Garmienė, Žemaitienė & Zaborskis, 2006). It is noted that the child's future well-being, emotional disturbances, as well as problem behaviour are mediated by the quality of these primary social bonds the parents provision them with; which includes open communication (Garniefski & Diekstra, 1996; Garmienė, Žemaitienė & Zaborskis, 2006).

Additionally, a New Zealand study revealed parental anti-smoking expectations to be consistently associated with both the adolescent's current smoking (second-hand smoke exposure and lack of antismoking expectations) and their smoking susceptibility (Waa et al., 2011). Furthermore, a Netherlands-based investigation that cross-sectionally evaluated 428 Dutch two-parent families with children aged 13-17 years found that between smoking and non-smoking parents, there were robust differences in the antismoking socialisation for adolescents (Harakeh, Scholte, De Vries & Engels, 2005). In addition, mothers are reported as being more involved in antismoking socialisation (Harakeh, Scholte, De Vries & Engels, 2005). Perceived parental influence as well as the quality and frequency and communication about smoking were associated with adolescent smoking (Harakeh, Scholte, De Vries & Engels, 2005). It was also found that birth order, gender of the adolescent or parents' smoking did not moderate the association between antismoking socialisation practices and adolescent smoking (Harakeh, Scholte, De Vries & Engels, 2005). Antismoking socialisation practices generally do not differ between the older and younger sibling (except for the frequency of communication), and the associations between antismoking socialisation practices and adolescents' smoking are similar for younger and older children (Harakeh, Scholte, De Vries & Engels, 2005). These findings suggests that parents treat their older and younger child in the same way when it comes to smoking, and that the impact of their parenting is identical for all siblings (Harakeh, Scholte, De Vries & Engels, 2005).

Parents who smoke may also differ from non-smoking parents in the ways they try to prevent their children from smoking (Henriksen & Jackson, 1998). It is highlighted that non-smoking parents are engaged in antismoking socialisation practices more frequently and more constructively than smoking parents. Some smoking parents may even believe that smoking in the presence of their children is inevitable (Clark, Scarisbrick-Hauser, Gautam & Wirk, 1999) and therefore may make fewer efforts to prevent their children from doing similarly. Longitudinal studies indicate that when one or both parents smoke, their children will have a higher risk to start smoking or to stay a smoker, in comparison to children with parents who do not smoke (Bailey, Ennett & Ringwalt, 1993, Harakeh, Scholte, Vermulst, De Vries & Engels 2004). It is known that older and younger siblings within a family generally react differently to parental authority (Sulloway, 1995), For example, older siblings who often feel closer

to their parents are more susceptible to their parents' values, wishes and standards (Sulloway 1995) and are more likely to obey parental authority, whereas younger siblings tend to be more rebellious, feel less close to their parents and are more likely not to obey parental authority (Rohde et al., 2003).

Examples of general parenting behaviours that have been associated with smoking uptake include parenting style (O'Byrne, Haddock & Poston, 2002), degree of parental support (Avenevoli S, Merikangas, 2003), degree of involvement with children (Simons-Morton, Chen, Abroms & Haynie, 2004), and the provision of pocket money (Griesbach, Amos & Currie, 2003; Scragg, Laugesen & Robinson, 2002).

### **2.2.2 Parenting Styles**

Parenting style of interaction refers to the extent of leniency or authoritative control the parent demonstrates over the child's behaviour (Moschis 1985; Ward, 1974). In parenting styles, adolescents smoking behaviour is related to nonsupportive or neglectful parenting and inconsistent or harsh parenting, and it is inversely related to involved or nurturant parenting (Clark, Scarisbrick-Hauser, Gautam, & Wirk, 1999; Wen et al., 2007). An unsupportive home environment with less parental regulation (i.e. where parents are seen as neglectful) is associated with an increase in smoking prevalence (Herbert & Schiaffino, 2007; Wen et al., 2007).

Closely linked with parental regulation is parental control. The literature uses the terms parental regulation, parental control and parental supervision interchangeably. Parental control is considered to play an important role in adolescents smoking initiation (Den Exter Blokland, Hale, Meeus & Engels, 2007). Parental control is a continuum that ranges from permissiveness to restrictiveness and parental support is illustrated as the variation in the amount of parental responsiveness and warmth, such as responding to the child needs (Engels, Finkenauer, Kerr & Stattin, 2005). A study conducted in Perth, Western Australia notes that high parental control is positively bracketed with child competencies (Den Exter Blokland, Hale, Meeus & Engels, 2007). Subsequently, these competencies have a preventive effect on children's smoking (Den Exter Blokland, Hale, Meeus & Engels, 2007).

Parental supervision is a potential protective factor on out-of-school settings (such as leisure activities) for adolescents (Guo, Reeder, McGee & Darling, 2011). It is noted that it is developmentally beneficial for adolescents to participate in leisure activities, though some activities may be considered to increase health compromising behaviours, such as tobacco smoking. In a New Zealand study it was found that parental supervision exhibits a consistent protective dose-response effect (Guo, Reeder, McGee & Darling, 2011). Also, going to the movies and attending a place of worship serve as a protective factor for both male and females; whilst playing a team sport was a protective for females, and spending time on a play park was a risk factor for them (Guo, Reeder, McGee & Darling, 2011). Guo, Reeder, McGee and Darling (2011) assert that this reinforces the need to be alert of and respond to gender differences in patterns of risk and protective factors.

### ***2.2.3 The Nature and Content of Parent-Child Communication***

Effective communication is generally regarded as a key trait for optimum family functioning (Jackson, Bijstra, Oostra & Bosma, 1998) and central to understanding the parental influence on children's decisions about tobacco use (Kosterman, Hawkins, Soth, Haggerty & Zhu, 1997; Sanders, Montgomery & Brechman-Toussaint, 2000). The effect of parent – child communication emerges to be multi-dimensional. Of importance is the frequency (how regularly parents talk about smoking), content, timing and quality (the manner in which parents talk about smoking) of parent – child tobacco communication.

Findings on the frequency of anti-smoking communication seem to be ambiguous with some studies reporting that the frequency of anti-smoking communication is not related to adolescents' smoking (Den Exter Blokland, Hale, Meeus, & Engels, 2006); while others suggest it to predict an increase in smoking among adolescents who have already experimented with cigarettes (Andrews, Hops, Ary, Tildesley & Harris, 1993; Ennett, Bauman, Foshee, Pemberton & Hicks, 2001). Ennett, Bauman, Foshee, Pemberton and Hicks (2001) report parent-child communication as a risk factor for adolescents' smoking; whereas Engels and Willemsen (2004) report that the frequency of parent-child communication is associated negatively with self-efficacy. Thus, parents who communicate often with their children were more likely to have children

who were less confident to resist or refrain from smoking, and subsequently are more likely to experiment or engage with smoking practices.

Another noteworthy definition is parental monitoring which concerns the knowledge and involvement parents have about their adolescent's activities and plans (Dick, Viken, Purcell, Kaprio, Pulkkinen & Rose, 2007). Content-specific parental monitoring efforts are commonly considered key factors in explaining and discouraging adolescent smoking behaviour and include parent-child communication about substance use and substance-specific rules (Chilcoat & Anthony, 1996). Reduced availability could also reduce positive attitudes and improve self-efficacy to refrain from smoking. Beatty, Cross and Shaw (2008) state that even though parental smoking status is strongly associated with the availability of cigarettes at home, parents can be smokers without granting their children access to cigarettes (Avenevoli & Merikangas, 2003). An American-based investigation notes a healthy family function is marked by parental monitoring (Dillon, Pantin, Robbins & Szapocznik, 2008).

Ennett, Bauman, Foshee, Pemberton and Hicks (2001) suggest that when adolescents experiment with smoking, parents communicate more often with their children in an attempt to prevent them from continuing to smoke. Thus, the timing of smoking-specific communication seems to be important. It is suggested that parents should initiate smoking-specific communication before the child has experimented with smoking, as waiting might be counterproductive (Ennett, Bauman, Foshee, Pemberton & Hicks, 2001). It is also evident that the better the quality of parent-child communication, the less likely are adolescents to smoke (Ennett, Bauman, Foshee, Pemberton & Hicks, 2001). This indicates that merely talking frequently to the child about smoking is less important than whether or not these discussions take place in a constructive and respectful manner, and that the child appreciates it.

During adolescence, there is a change in focus from parental standards to peer acceptance and perceived peer norms (Halpern-Felsher, Biehl, Kropp, & Rubinstein, 2004). This developmental process differs for every adolescent depending on their socialisation process within and outside the family context.



### **2.3 Peer Influence on Adolescent Smoking Behaviour**

An adolescent's peer relationship is recognised by a body of scholarship as a key factor concerned in adolescent cigarette smoking (Banerjee & Greene, 2009; Kobus, 2003). Findings are broadly reviewed with the intent to inform the existing tide of knowledge regarding peer influences on adolescent smoking and specifically how it interacts with the social learning theory.

The commonplace colloquial term 'peer pressure' when considered with regard to cigarette smoking invokes images of teenagers bullying, encouraging, taunting and even teasing one another to 'take a puff'. Nonetheless, when looking at social influence related research, this representation emerges as a misnomer. This suggests that the peer pressure to start smoking cigarettes is mainly normative, and not coercive in nature (Michell & West 1996; Nichter, Vuckovic, Quintero & Ritenbaugh, 1997). Nichter, Vuckovic, Quintero and Ritenbaugh (1997) explain that adolescents report that instead of undergoing direct pressures to smoke, they tend to practice internal self-pressures to smoke should others around them do so. In this way, adolescents endeavour to facilitate social interactions and to achieve social approval; and to prevent exclusion by peers which is related to adolescents' decision to experiment with cigarettes (Kimberly, 2003). Reid, Manske and Leatherdale (2008) conceptualize peer smoking as the actual or perceived prevalence of peer smoking; thereby signifying to the frequency of friends who smoke in an adolescent's peer group.

Even though explorations of initial smoking experiences situate the occurrence of the onset of the smoking in the context of peers (Lucas & Lloyd 1999), adolescents report that peer pressure is not an influence in their decision-making concerning tobacco use (Friedman, Lichtenstein & Biglan, 1985; Michell & West, 1996). Instead, adolescents report that their decision to experiment preludes to their genuine first time cigarette use and that these initial experiences with cigarettes were actively pursued (Friedman, Lichtenstein & Biglan, 1985; Michell & West, 1996). Conversely, adolescents who have not experimented cigarettes are found to intentionally avoid smoking settings (Michell & West, 1996; Lucas & Lloyd, 1999).

Even though the pressures to participate in smoking are covert and subtle in nature, certain researchers advocate that overt pressures transpire during the decision-making process pertaining to tobacco use (Friedman, Lichtenstein & Biglan, 1985; Urberg, Shuy & Liang, 1990; Stanton, Lowe & Gillespie, 1996). For instance, it is argued that in most of the smoking situations the pressure to smoke are implicit, and the youths report of verbal teasing and encouragement, and cigarette offers serve to demonstrate these pressures (Friedman, Lichtenstein & Biglan, 1985). Other findings infer direct pressures as evident when it comes to encouraging friends *not* to smoke, and with current smokers dissuading tobacco use (Stanton, Lowe & Gillespie, 1996; Urberg, Shuy & Liang, 1990).

A key consideration in understanding the influence of peers on adolescents tobacco use is the reference point used for investigating peer relationships. Potential vantage points include research in the area of social crowds and social support. Following is a literature review of findings from each of the aforementioned areas.

### **2.3.1 Social Crowds**

Adolescents' engagement in health-risk behaviours has also been associated with the social reputation-based crowds (Brown, Dolcini & Leventhal, 1997). The crowd's stereotype provides adolescents with a social marker that communicates which youth are similar to one another in their abilities, attitudes, behaviours, and/or interests (Brown, 1989). These stereotypes also operate as a guideline of suitable behaviour for those identifying with the crowd, and this may include the influence of peers with whom they associate.

Numerous studies specifically examined the relationship between tobacco use and social crowd affiliations (Michell & Amos 1997; Sussman, Dent, McAdams, Stacey, Burton & Flay, 1994). Findings from these studies stress the significance of crowd affiliation in adolescents' smoking behaviours with individuals belonging to certain crowds considered as more probable to smoke than those occupying other crowds. The adolescents' characteristics which are associated with numerous smoking crowds are dissimilar, as well are their motivations for smoking. It is strongly evident that stereotypes and social crowds influence decisions about tobacco use or non-use



(Michell & Amos, 1997). Crowd affiliation seemingly provides adolescents with a sense of social identity, which may include cigarette smoking. Tobacco use can be emblematic of many things to some youth, such as popularity and status (Michell & Amos, 1997).

Crowds seemingly hold the greatest influence during early and middle adolescence, with adolescents decreasingly ensuing the pressures and norms of crowds as they age (Brown, Dolcini & Leventhal, 1997). The role of close friends becomes increasingly important with age, and as sources of influence on behaviours, and attitudes including those considered as being health-related (Brown, Dolcini & Leventhal, 1997). It is thus possible that the social crowd might have a greater impact on smoking uptake for young adolescents. It is noted that peer selection and influence are complementary processes functioning jointly in constructing the adolescent's social context (Caspi, 1993). Adolescents are observed as acquiring friends similar to them as well as those appearing similar to their old friends. This homophilic selection process is reasoned as yield continuing in the social context.

Furthermore, adolescent smoking behaviour is also predicted through the forming of relationships with significant individuals (e.g. romantic partners), peers, or both who smoke (Jackson, 1997; Panday, Reddy & Bergstrom, 2003). Panday, Reddy and Bergstrom (2003) note that smoking peers and significant others who smoke are related to adolescents obtaining unconventional personality attributes, which is subsequently related to their smoking behaviour. Several investigations conducted among South African adolescents confirm that adolescents whose peers and siblings smoke are more prone to be smokers than are those engaging predominantly with non-smoking family members and peers (King et al., 2003; Peltzer, 2003).

Although adolescent smoking is expected to be directly associated with significant others and peers through modelling, the relationship between smoking by significant others and peers is also expected to be indirectly influenced to smoking, along with the mediating influences of the adolescent's personality vulnerabilities (Unger & Chen, 1999).

Similarly, in the case for South Africa, there is a reciprocal relationship between tobacco use by peers and adolescents tobacco-prone personality traits (Panday, Reddy & Bergstrom, 2003). Adolescents with tobacco-prone personality traits were more likely to associate with deviant peers and tobacco-using behaviours. Furthermore, having peers who smoke is linked with the adolescent having tobacco-prone personality traits (Panday, Reddy & Bergstrom, 2003). Furthermore, South African and United States based findings report that five personality dimensions are of significance in this respect is: delinquent behaviour, difficulty in self-regulation (impulsivity), distress, tolerance of delinquent behaviour, and intrapersonal rebelliousness (Brook, Rubenstone, Zhang, Morojele & Brook, 2011; Jessor, 1991).

### ***2.3.2 Social Support***

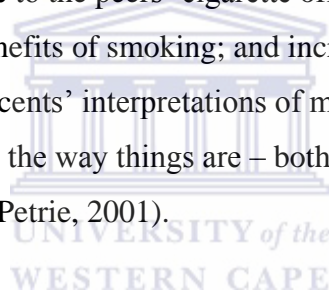
Social support from peers is generally agreed to be a positive factor in a person's life. It is indicated that social support may disrupt the links between maladaptive behaviours, stressful events, and illness in two ways (Cohen & Wills, 1985): firstly, by preventing the adoption of maladaptive coping responses to the stressor, and secondly, by causing the individual to perceive the event as less stressful. It is posited that social support will preclude an adolescent from perceiving events as stressful, thereby preventing him or her from taking up smoking to adapt. Social support will also assist the adolescent to opt for positive coping behaviours instead of negative ones, such as smoking, when dealing with a problem. As expected, ever smokers report less social support than never smokers (Pederson, Koval & O'Conner, 1997). However, Chassin, Montello and McGrew (1986) found that adolescents who described their friends as more supportive are more likely to smoke. The relationship between social support and smoking may be related to the smoking status of friends, as Wills and Vaughan (1989) found that smoking was positively associated with support when peers smoked.

### **2.4 Adolescents Exposure to Media**

Media influences are often conceptualised "as being primarily mediated by attitude changes that take place in audience members who experience the attempts." Attitude is defined as "a tendency to regard a particular entity with some degree of favour or disfavour" (Eagly & Chaiken, 1993, p. 1). Media presentations often promote the use

of unsafe behaviours as acceptable and normative, immunising adolescents against health promotion messages that attempt to solicit these reverse behaviours (Johnson, 2010).

The body of scholarships collective report that movie smoking influences an adolescent's smoking behaviour (Dalton et al., 2003). Movies are a powerful socializing force for contemporary adolescents in promoting all the things that adolescents try to be. They shape views of what is attractive, 'cool', grown-up (Sargent et al., 2002), and being in control (Albers & Biener, 2003); and convey messages through advertising images of what is risk-taking, adventurous, popular, and independent (Albers & Biener, 2003). There is a strong link between viewing tobacco use in movies and more positive attitudes toward smoking among adolescents who never smoked (Sargent et al., 2002). Viewing tobacco representations in movies softens adolescents' resistance to the peers' cigarette offers; it enhances their perceptions of the positive benefits of smoking; and increases their likelihood to try smoking in the future. Adolescents' interpretations of media images originate from "lay theories" or beliefs about the way things are – both in the cinematic and real world (McCool, Cameron, & Petrie, 2001).



Exposure to actors modelling the positive benefits of smoking behaviour in the movies or on television is an important factor in the up-take of cigarette smoking among adolescents (Thompson & Gunther, 2006). This type of marketing may specifically be persuasive for adolescents who display psychological vulnerabilities and seek the kind of identity that the smoking images are warily designed to offer (Albers & Biener, 2003).

Although there appears to be a strong relationship between having friends who smoke and cigarette use, the genesis of that connection remains uncertain. The ways in which features in terms of the attitudes and behaviour regarding the decisions made around smoking are also less than clear (West & Mitchell, 1999).

Tobacco marketing is commonly linked with an increased risk for adolescent smoking uptake (Choi, Ahluwalia, Harris & Okuyemi, 2002; Sargent, Dalton, Beach, Bernhardt, Heatherton & Stevens, 2000). For example, the ability to recall cigarette

advertisements as well as the ownership of tobacco promotional items can double the risk that an adolescent will become an established smoker (Biener & Siegel, 2000). In popular, contemporary movies, smoking is often associated with characteristics adolescents deem attractive – such as sexiness, toughness and rebelliousness (Dalton, Tickle, Sargent, Beach, Ahrens & Heatherton, 2002). The endorsement of cigarette brands by the movie actors has substantially increased over the past decade (Sargent, Tickle, Beach, Dalton, Ahrens & Heatherton, 2001). Viewing smoking is a strong determinant of whether adolescents initiate smoking, with the exposure effect being greatly linked to the level of effect (Dalton et al., 2003). Adolescents viewing smoking in movies are at a threefold risk than their least exposed counterpart in the initiation of smoking. This result is consistent with cross-sectional investigations and studies linking actor smoking with adolescent smoking (Sargent et al., 2001; Tickle, Sargent, Dalton, Beach & Heatherton, 2001), and visual media exposure with high risk behaviour in adolescents (Klein, Brown, Childers, Oliveri, Porter & Dykers, 1993).

It is suggested that children with parents who smoke might be less influenced by the glamorous portrayal of smoking in movies as they have a more realistic view of smoking (Dalton et al., 2003). And children with non-smoking parents are more susceptible to the effect of movie smoking exposure. It is also possible that children with parents who smoke are already at heightened risk for smoking initiation, so their risk by other social influences is less likely to be raised. It is suggested that further research be undertaken to fully understand this area (Dalton et al., 2003).

Numerous studies describe how smoking is depicted in movies (Dalton, Tickle, Sargent, Beach, Ahrens & Heatherton, 2002; Escamilla, Craddock & Kawachi, 2000; Hazan, Lipton, Glantz, 1994; McIntosh, Bazzini, Smith & Wayne, 1998), but only a specific few assessed whether viewing smoking in movies affects adolescent smoking behaviour. Experimental studies report that adolescents hold more positive attitudes toward smoking after seeing smoking portrayed in movies (Pechmann & Shih, 1999). Cross-sectional investigations reveal that adolescents are more prone to have experimented with smoking if their favourite movie star smoked on screen (Distefan, Gilpin, Sargent & Pierce, 2000; Tickle, Sargent, Dalton, Beach & Heatherton, 2001). Even when controlling for social influences, such as personality characteristics of the

child and parent, it is found that among adolescents in New England and the US that the smoking experimentation is linked to the exposure of smoking in movies (Sargent et al., 2001).

Exposure to movie smoking is found as positively associated with rebelliousness, sensation seeking, and inversely related to school performance and authoritative parenting. In addition to this, that which increases an adolescents likelihood of smoking initiation is their exposure to movies in which their admirable stars are portrayed as sexy, smart, attractive, rich, and courageous (Tickle, Sargent, Dalton, Beach & Heatherton, 2001; Sargent, Dalton, Beach, Tickle, Ahrens & Heatherton, 2003; Distefan, Gilpin, Sargent & Pierce, 1999). A recent cohort study of 1-14 year olds supports this finding that 52.2% of smoking initiation is attributed to seeing smoking in movies (Dalton et al., 2003). The tobacco industry is aware of this dose-response relationship and that the prevalence of smoking situations in movies is higher than what is found in the real world (Mekemonson & Glantz, 2002). An analysis of a random sample of major pictures from 1950-2002 found that movies in 2002 had as many smoking incidents as they used to have in the 1950s – when smoking prevalence was almost twice what it is now. Aside from an adolescent actual exposure to tobacco marketing, it is essential to pay tribute to their attention, predispositions and attitudes to smoking.

#### ***2.4.1 The Adolescents Attention to Social Media***

Fourty years of research show that R-Rated (i.e. restricted movies that require guardian supervision for children under 17 years) (Motion Picture Association of America, 2011) movies influence smoking initiation as observers imitate specific behaviours they see modelled (Bandura, 1965; Bushman & Anderson, 2001). Thus, it is commonly proposed that adolescents imitate smoking behaviour in movies.

The smoking in movies serve to increase the uptake of smoking among children (Lindblom, 2002). Smoking is more prevalent in movies than in real life and is presented in a much more positive way. In the US, a review of 601 films for the 1988-1999 period found only 10% of PG or PG-13 films to contain smoking (Sargent, Tickle, Beach, Dalton, Ahrens et al., 2001). A review of top-grossing movies for the

1985-1995 period found that a mere 38% had negative references regarding tobacco use (Everett, Schnuth & Tribble, 2004). It was also found that 98% had references that supported tobacco use, with at least one main character using tobacco in 46% of the films (Everett, Schnuth & Tribble, 2004). Follow-up investigations focussed on the top 500 movies during the 1991-2001 period and found that 43% had pro-tobacco messages and a mere 27% of anti-tobacco messages across all movies (American Lung Association of Sacramento-Emigrant Trails, 2002).

A 2001 investigation examining the use of tobacco brand visibility on the top 25 US films each year during the 1988-1997 period found more than 85% of films involving tobacco use, with tobacco-brands emerging in 28% (Sargent, Tickle, Beach, Dalton, Ahrens & Heatherton, 2001). These brands were nearly as popular in adolescent films as they are in adult films (32% vs 35%) (Sargent, Tickle, Beach, Dalton, Ahrens & Heatherton, 2001).

Longitudinal investigations consistently find that exposure to tobacco advertising and promotion is linked prospect that adolescents who report “not considering to smoke” will progress to “considering to smoke,” and those who say they are “considering to smoke” will actually start smoking (Lovato, Linn, Stead & Best, 2003).

## **2.5 Individual Level Factors Influence on Adolescent Smoking Behaviour**

### ***2.5.1 Tobacco-prone Personalities, Attitudes, and Behaviours***

Irrespective of the adolescents level or type of smoking (i.e., habitual use or dependence), they are consistently described as extraverted (Gau, Lai, Chiu, Liu, Lee & Hwu, 2009; Grekin, Sher & Wood, 2006) and tend to display risk-taking behaviour (Geist & Herman, 1990; Burt, Dinh, Peterson & Sarason, 2000), impulsivity and hostility (Gau, Lai, Chiu, Liu, Lee & Hwu, 2009; Geist & Herman, 1990; Burt, Dinh, Peterson & Sarason, 2000), disobedience (Geist & Herman, 1990; Burt, Dinh, Peterson & Sarason, 2000), less conscientiousness (Grekin, Sher & Wood, 2006), and novelty seeking behaviour (Gau, Lai, Chiu, Liu, Lee & Hwu, 2009; Grekin, Sher & Wood, 2006).



Novelty seeking predominates as a durable personality characteristic, suggestive that the effects of other personality features were promoted by these novel seeking tendencies (Gau, Lai, Chiu, Liu, Lee & Hwu, 2009).

Self-perceived quality of life, broadly defined as a fusion of both external factors (e.g., neighbourhood influences) and internal factors (e.g., self-esteem) is also bracketed with adolescent health risk behaviour (Topolski, Patrick, Edwards, Huebner, Connell & Mount, 2001). It is stressed that adolescents who perceive their lives to be of lower value (comparative to societal expectations) are more prepared to take risks with their health. A South African based investigation found adolescents attitudes, behaviours, personality to have a direct influence on their smoking behaviour, mediation by the sibling, peer and significant others smoking behaviour domains (Brook, Morojele, Brook & Rosen, 2005). Adolescents who are dissatisfied with themselves and their environment will likely act to show discontent and dissatisfaction in their siblings, potentially leading them toward increased smoking behaviour.

Accordingly, an individual's sense of well-being is also associated with their smoking behaviour (Brook, Morojele, Brook & Rosen, 2005). Adolescent's not maintaining a sense of well-being, that includes satisfaction with the self and aspects of the environment (i.e., material possessions, the school environment, social support), are associated with tobacco-prone behaviours, attitudes, personality, and with sibling, peer, and significant other smoking behaviour, which are subsequently both related to adolescent smoking behaviour (Brook, Morojele, Brook & Rosen, 2005). An example would be unconventional adolescents who are (e.g., rebellious, tolerant of deviant behaviour, or who engage in deviant behaviours) more likely to smoke (Andrews & Duncan, 1997), as are those who have difficulty controlling their impulses (Mitchell, 1999), and those who experience symptoms of depression (Breslau, 1995; McCaffery, Niaura, Swan, & Carmelli, 2002).

Although tobacco-prone personality, attitudes, and behaviours are expected to have a direct association with smoking behaviour, they are also expected to have indirect effects through the peer, sibling, and significant other smoking domains. Rose, Chassin, Presson, Clark, and Sherman (1999) demonstrated that adolescents with

tobacco-prone personality attributes were more likely to select peers who smoke, which is in turn related to the adolescents' own smoking behaviour. In addition, adolescents who lack a sense of well-being are more likely to select peers and significant others who are also disgruntled and thus are more likely to be smokers (potentially mediated by their own personality traits).

A personality trait of significance known as regulating the propensity to seek novel, varied and intense sensations and experiences is the sensation seeking (Zuckerman, 1994; cited by Banerjee & Greene, 2009). Sensation seeking investigations have mainly been conducted in the United States context (Hoyle, Stephenson, Palmgreen, Lorch & Donohew, 2002; Yanovitzky, 2005). Various factors account for the reasons adolescents engage in risk taking behaviours. Sensation seeking promotes behavioural engagement that are of high risk and that excites them (Zuckerman, 1994; cited by Banerjee & Greene, 2009). Hoyle, Stephenson, Palmgreen, Lorch and Donohew (2002) found among a cross sectional sample of United States high school students that high sensation seekers underestimate the health associated behavioural risks like cigarette smoking, alcohol consumption and drug use; and thereby exhibit an increasing engagement than their low sensation seeking counterparts. Furthermore, Yanovitzky (2005) found United States high school learners classified as sensation seekers are more connected to friends who engage in similar risk behaviours.

Conversely, it is hypothesised that a strong sense of well-being is associated with choosing more conventional and positive peers and significant others who will likely refrain from smoking. Thus, the individual's sense of well-being is expected to be inversely related to deviance-prone personality, attitudes, and behaviours (such as rebelliousness) and positively associated with conventional attributes (such as being accepting of conventional roles).

Adolescents are particularly likely to experience stress if they do not have a strong sense of well-being (Shek, 2003). The occurrence of life changes and stressors during adolescence may have a considerable negative impact on the adolescent's emotional well-being and result in the adoption of unhealthy or maladaptive behaviours (Koval, Pederson, Mills, McGrady, & Carvajal, 2000). Psychological distress results in unsuccessful adjustment to these life changes. Stress and associated distress or



depression are significant factors in the onset of smoking. There are consistent links between smoking and stress.

Due to the consequences that parenting may have for the adolescents' self-esteem, and psychological functioning at an earlier stage of development, i.e. poorer relationships and conflict with parents is linked to poorer health assessments, and associations between family life and health status are mediated by perceptions of self-esteem (Glendinning, Shucksmith, & Hendry, 1997).

### ***2.5.2 Depression Symptomology as a Risk Factor for Smoking***

It is indicated that adolescents who start smoking early and those who progress quickly, have higher levels of depressive symptoms and novelty-seeking and are more receptive to tobacco advertising (Audrain-McGovern, Rodriguez, Tercyak, Cuevas, Rodgers & Patterson, 2004). They also tend to hold peers who smoke, to have used marijuana and alcohol, and to perform academically less well (Audrain-McGovern, Rodriguez, Tercyak, Cuevas, Rodgers & Patterson, 2004). Adolescents who never smoked are considered as a stable and low risk smoking subgroup of adolescents; they are found to perform generally academically well; they tended to not use marijuana or consume alcohol; and they tend to socialise with non-smoking peers. Their risk profile reflected to be conservative and within the normal limits, with an absence of novelty-seeking and thrill-seeking behaviour, and relative absence of depressive symptoms (Audrain-McGovern, Rodriguez, Tercyak, Cuevas, Rodgers & Patterson, 2004).

In South Africa, quantitative reports reveal mild and severe depression as a significant predictor of ever smoking status among a non-clinical sample of adolescent girls (Fernander et al., 2006). Depressive symptomology is found to range between 8.6% and 54%.

Adolescent females suffering from mild, moderate and severe types of depression are potentially current smokers; and are at a two to three-fold increased risk of depressive symptomology than adolescent boys (Fernander et al., 2006).

### ***2.5.3 Leisure Activities***

The body of scholarship is limited in its evaluation of the range of leisure activities that influence tobacco use, with moderately little research on out-of-school settings (Guo, Reeder, McGee & Darling, 2011). There is however documented evidence on the protective effects of other problem behaviours such as marijuana use (Fredricks & Eccles, 2006). An adolescent's involvement in leisure activities can assist in the exertion of personal control over their environments and this fosters the development of a positive sense of identity through their actions (Silbereisen & Eyferth, 1986; cited by Guo, Reeder, McGee & Darling, 2011). Physical activity programmes assist in the development of social skills, improved mental health, and the reduction of risk-taking behaviours (Taras, 2005). Adolescent's participation in organised activities, such as team sport, is often connected with reduced involvement in antisocial behaviours and substance use (Eccles, Barber, Stone & Hunt, 2003), which includes tobacco smoking (Mahoney & Stattin, 2000). Specifically, team sports are associated with lower levels of cigarette smoking and may be protective by facilitating pro-social group membership (Eccles, Barber, Stone & Hunt, 2003). Mahoney and Stattin (2000) reason that the protective effect may be attributed to displacement, whereby the time available to spend in unstructured activities with antisocial peers is reduced. A New Zealand study found that moderate or high levels of involvement in physical activity, but not team sports at age 15 years, were associated with antisocial behaviours for both sexes at age 18 years (Begg, Langley, Moffitt & Marshall, 1996).

A longitudinal investigation found that the smoking pathways differed by sex and activity type. For boys it is found that participation in team sports was linked to tobacco smoking through on-going team sports participation, but for girls involvement in school clubs and activities lay through reduced association with 'problem peers' (Metzger, Dawes, Wakschlag & Mermelstein, 2011). Overall, it is likely that less structured leisure activities could leave participants at increased risk for experimentation with health comprising behaviours (like tobacco smoking), whereas other settings and activities, such as club membership and team sport may yield a more protective physical and social environment (Mahoney & Stattin, 2000).

#### ***2.5.4 Stress and Coping***

Adolescence is a time when many events occur: examinations, obtaining a driver's license, and dating are examples of activities that occupy a teenager's thoughts and time. If the adolescent perceives these events as stressful, then he or she may initiate behavioural adaptations to cope with these events (Cohen & Wills, 1985). Cigarette smoking can be seen as one of the coping adaptations an adolescent may choose. Pederson, Koval & O'Conner (1997) reported a difference between coping mechanisms by smoking status never smokers used problem solving techniques to deal with stress, while ever smokers used distraction, substance use, and vented their feelings. However, Castro, Maddahian, Newcomb and Bentler (1987) found that low levels of stress led to association with friends who smoked cigarettes, which in turn led to higher levels of smoking in a sample of white high school students. It is reasoned that these adolescents may have less stress because they have less structure in their lives, participate in fewer extracurricular activities, and spend unstructured time with friends, thereby increasing their risk of smoking (Castro, Maddahian, Newcomb & Bentler, 1987). It is interesting to note that this relationship was not found for the total sample, where there was a significant association between stress and cigarette smoking without the relationship between stress and having friends that smoke. There may however be an optimal level of stress that prevents smoking from boredom or as a coping mechanism (Castro, Maddahian, Newcomb & Bentler, 1987).

#### **2.6 Summary of the Literature Review**

On both a national and international level, a plethora of investigations concentrate on the descriptive socio-demographic correlates of adolescents' tobacco smoking behaviours, where some research includes a supplemented extent on the risk factors predisposing adolescents to these health risk behaviours (Rocha-Silva, De Miranda & Erasmus, 1996). South African investigations have focussed with limitation on areas outside of the socio-demographic realm, looking more closely at correlates between cigarette smoking and socioeconomic status, participation in other risk behaviours (Flisher, Parry, Muller & Lombard, 2004), and use of other substances (Flisher, Parry, Muller & Lombard, 2004). Here few studies concentrate on the parent-child relation with a near absence on the multitudinal social and environmental contextual influences that promote adolescent smoking behaviour at different levels of the

smoking cycle. Other African continents (such as Zambia) largely hub their investigations on socio-demographic correlates (Siziya, Rudatsikira, Muula, & Ntata, 2007).

Population-based investigations that are geared towards establishing risk factors in the child-parent relationships, as well as the influence of parenting styles in the child or adolescents psychological status or well-being predominates in Australia, Canada (Schultz, Nowatzki, Dunn & Griffith, 2010), and the United States. Furthermore, their research evidence made general attempts to establish context-specific risk or protective factors predisposing adolescent's tobacco smoking behaviour. Other population-based longitudinal investigations in China, including several other empirical investigations in Australia, Canada, Tanzania, United Kingdom, and the United States popularly focus on genetic (Maes, Neale, Kendler, Martin, Heath & Eaves, 2006), psychiatric (Chapman & Rubinstein, 1987; Chapman, Wong, & Smith, 1993; Hansen & Malotte, 1986) and psychosocial predictors (Kapito-Tembo, Muula, Rudatsikira & Siziya, 2011) for the usage of nicotine among adolescents (Gau, Chong, Chen & Cheng, 2005). Furthermore, they also focus on areas such as adolescents perceived smoking norms, socio-environmental factors, and personal attitudes (Chen et al., 2006). Moreover, several Lithuanian investigations similarly studied the child-parent communication and the parent behaviour as a model related to smoking initiation, though most of these articles are not accessible due to language barriers (Garmienė, Žemaitienė and Zaborskis, 2006). Further research is needed to establish the importance of other factors, such as family influences in the South African context. To the best of the researcher's knowledge, limited investigations have focussed on the relation between the individual's sense of well-being and smoking behaviour among adolescents in South Africa.

Controversy exists around United States-based investigations of peer selection and their influential effects in promoting cigarette smoking among adolescents (Urberg, Luo, Pilgrim & Degimencioglu, 2003), with the former considered as more influential. It is suggestive that not all adolescents are susceptible to peers smoking influence. In comparison to the United States and other Western nations, relatively little research has been published on the importance of peer associations during adolescence in South Africa.

Areas that need scientific development in South Africa and other African countries are the role of norms and values, community institutions, identity, socialisation and social bonding. Evidence is documented on the association between adolescent cigarette smoking and attitudes about their community (King, Rothman & Jeffrey, 2002). Further investigation is needed on whether a relationship exists between community institutions, social relations, and organisations to risk and health behaviour (WHO, 1997).

The adolescents' cigarette smoking behaviour cannot be understood without the context in which it exists. And this includes an understanding of their relationships with a contextual sensitivity of the relevant social systems and they interact. Although an overabundance of inquiries have been conducted on the identification of risk and protective factors on adolescent smoking behaviour, few have assessed how they interact to protect or place adolescents at risk of cigarette smoking.

The social learning theory operates as the theoretical framework for understanding the social-contextual influences on these health-risk behaviours. The social learning theory posits that the interplay between individual and environment is critical in developing intentions, expectations and ultimately behaviour (Bandura, 1986). The proliferation of adolescent smoking research is an exceptional illustration of this theory.

## **2.7 Social Learning Theory as a Framework**

Numerous theoretical frameworks have been used to explain the process by which social relationships affect individuals' health-risk behaviours, such as drug, alcohol and tobacco use, such as the social learning theory (Akers, 1998; Bandura, 1977), a general theory of deviance (Gottfredson & Hirschi 1990), the theory of reasoned action (Fishbein & Ajzen 1975), the theory of planned behaviour (Ajzen, 1991), peer cluster theory (Oetting & Beauvais 1986) and social development theory (Catalano & Hawkins 1996; Hawkins & Weis 1985). For the purpose of exploring this study's aims only the social learning theory is addressed. The decision to focus on social learning theory reflects the emphasis on social processes, such as friend selection, interpersonal influence and behavioural imitation, and the unique insight that it

provides in understanding cigarette use in the context of these processes. In addition, this theory also offers a multifaceted perspective on this phenomenon, spanning from a close look at the individual and their cognitions, to the larger social system.

Social learning theory (Akers, 1998; Bandura, 1977) considers both social processes and cognitive mediation as important in the acquisition and maintenance of behaviour, such as smoking. According to this perspective, behaviours are learned through the observation of others engaged in a behaviour and subsequent modelling of this behaviour, as well as the rewards/punishments and favourable/unfavourable definitions associated with the behaviour. While social learning theory emphasizes social contacts with others, it does not place equal emphasis on all associations. The direct influences of parents and peers are considered primary social factors, and indirect reference groups, such as the media, are considered secondary (Bandura, 1977). Youth are viewed as being most likely to imitate the smoking or non-smoking behaviour of those with whom they have the greatest amount of contact, both in frequency and duration (Bandura, 1977).

It is further highlighted that relationships that are more intimate and that occur earlier in youths' experiences are considered to be more important in the social learning process than those that are less intense and come later (Bandura, 1977). For example, once a teenager has experiments with cigarettes in the presence of friends, their experiences with tobacco serve to modify their definition of cigarette smoking; with positive experiences fostering more favourable attitudes. Experiences with smoking also provide youth with first-hand information about rewards and punishments associated with tobacco use, including those that are social in nature and those that are internal to the person: for example, cognitive self-reinforcement and physiological reactions (Akers, 1977). Social learning theory predicts that tobacco use will progress to more frequent or sustained patterns, to the extent that reinforcement, exposure to smoking models and favourable definitions are not offset by negative sanctions and unfavourable definitions of tobacco (Akers, 1977).

Social learning theory also proposes that behaviour, perceptions of behaviour, and the environment interact to influence one another (Bandura, 1977). According to the social learning theory, adolescents decide to smoke because they view smoking



models in their environment and view smoking favourably. By watching smoking models, adolescents assess the consequences of smoking and the perceived punishments and rewards reinforce the decision to engage in or refrain from smoking (Krohn, Massey, Skinner & Lauer, 1983).

Environmental factors may contribute to the availability of smoking models. A study of 48 Danish schools found that the majority of students had seen other students smoking outdoors on the school premises as well as teachers smoking inside the schools (Poulsen, Olser, Roberts, Due et al. 2002). Exposure to either student or teacher smoking on school premises was associated with daily smoking, indicating that the smoking models impacted the adolescents' smoking behaviours (Poulsen, Olser, Roberts, Due et al. 2002). The authors postulated that the presence of smoking models in the environment promotes an atmosphere of tolerance toward smoking, which increases rates of smoking among adolescents.

Social learning theory may better explain the development of smoking maintenance rather than smoking initiation. A study of social learning theory in smoking initiation and maintenance found different variables predicted each stage of smoking (Krohn, Massey, Skinner & Lauer, 1983). Friends' smoking and friends' approval of smoking predicted the adolescent's perceived reaction to the subject smoking, which in turn predicted smoking initiation. However, the associations were weak, and the model was not considered to be a good predictor of smoking, explaining only 3% of the variance in smoking initiation. The path for smoking maintenance was less direct, as friends' approval of smoking predicted the perceived reaction to adolescent smoking, which predicted perceived physical and short-term effects of smoking. This finally led to smoking maintenance. This model explained 41% of continued smoking maintenance.

Social learning theory emphasizes the value of normative (i.e., environmental) influences over direct pressures (i.e., offers of cigarettes). Urberg, Shyu, and Liang (1990) measured both normative and direct pressure to smoke or not to smoke and found that normative pressures were more strongly associated with smoking than direct pressures. This indicates that the prevalence and salience of models in the environment may be more important than offers or coercions from friends to smoke

cigarettes. In addition, an adolescent's perception of their friends' smoking is more closely associated with adolescent smoking than friends' actual smoking is with adolescent smoking, providing further support for normative as opposed to direct pressures (Bauman and Fisher, 1986). However, Sussman, Dent, Burton, Stacey and Flay (1995) suggest that the relative impact of normative versus informational influences may depend on factors of the individual and the environment. For example, normative influence may impact adolescents who want to be accepted by a group, but understand the negative consequences of smoking. Informational influence may be stronger among adolescents who are aware of a high prevalence of smoking in the environment and do not perceive alternatives to smoking as likely.

## **2.8 Conclusion**

This study is theoretically driven by the social learning theory. The social learning theory highlights the significance of learning through observation and imitation of the behaviours of others; such as parents, peers or role models (Bukatko & Daehler, 1995; Rimal & Real, 2003, cited by Wium, Torsheim & Wold, 2005). To place the themes into context, it is noted that through observational learning the adolescent's socialisation process will set out to determine the risk of the onset and maintenance of smoking.



## CHAPTER THREE

### Methodology

#### 3.1 Introduction

This chapter describes and explores the methodological perspective underpinning this study. A qualitative approach to research is principally adopted in order to explore the experiences of the participants of the study. Subsequent reasons for adopting this methodological framework are further highlighted. The chapter presents an overview of the methodological framework that informs this study. This is followed by a description of the key aims and objectives, as well as a description of the participants in the study. The method of data collection and analysis will thereafter be defined, as well as the procedural aspects of the study. Prior to concluding the chapter, an overview of researcher self-reflexive issues, as well as ethical issues, will be considered.



#### 3.2 Research Design

This study is located within a qualitative framework, which argues that reality is of a social nature with multiple truths (Denzin & Lincoln, 1994). Qualitative research is subjective, interpretative and grounded in the experience of the participants (Marshall & Rossman, 1999). The current study is supported by interpretative assumptions with the aim of understanding the respondent's perceptions, beliefs and motivations. Thereby, the qualitative design is considered as appropriate for this study in order to gain greater depth of information (Leedy, 1997; Parker, 1999) about adolescents' perception of their cigarette smoking behaviour and the factors that maintain their habit. By uncovering the nature of the adolescents' cigarette smoking experiences (Strauss & Corbin, 1998), this will enable the researcher to develop a comprehensive illustration of how South African adolescents conceptualise cigarette smoking in the context of their lives.

### **3.3 Participants**

#### ***3.3.1 Selection of Participants***

Participants were recruited by means of purposeful sampling from a secondary school situated in the urbanised area of the northern suburbs of Cape Town, South Africa. The select purpose of the research was to understand each individual's unique experience of smoking and thus the aim was not generalization to the broader population. This sampling method was fitting as it allowed for the selection of participants that matched the goals of the research (Patton, 2002).

Upon consultation with the school principal, information sheets describing the study were distributed to the school guidance counsellor, and subsequently to prospective participants at the school. Participants who expressed interest were screened for eligibility through a brief interview where the objectives of the research were presented by the researcher to participants, as well as the selection criteria. The main selection criteria were that participants were daily smokers (had smoked more than 100 cigarettes in their lifetime and smoked every day over the past 30 days). In addition, the participants needed to communicate in English, be between 16-18 years in age and have a smoking history of minimum two years. Adolescents, rather than younger children or adolescents still at the experimental phase, were selected as we required a retrospective smoking account in order to delineate the appropriate risk and protective factors as it exists within this respective age category. This age group is appropriate because the literature identified it as a risky age cohort, where high-risk taking behaviours are highly prevalent (Steinberg, 2007).

In addition, participants under 18 years agreed to the researcher obtaining informed parental consent. It was made clear to those under 18 that their parents will have to be aware of their smoking status. Participation in the study required parental consent, which spoke to the intent of the investigation and their child's role in its participation. Participant assent followed only once parents gave permission to their children's participation.

The researcher then contacted participants and made the logistical arrangements regarding the individual interviews. All interviews were conducted in the high school's staff meeting room.

### ***3.3.2 Description of Participants***

The study involved 12 participants, comprising of six boys and six girls. The sample reflected general demographic variation in ethnicity and gender. The ethnic breakdown was predominantly White and Coloured<sup>1</sup> participants. All the participants resided in the Cape Town Metropolitan area, specifically the Northern suburbs. The participants' ages ranged from 16-18 years. The home language of all the participants was English. All of the participants had a smoking history of over 3 years. Six were in grade 10 and the others in grade 11.

### **3.4 Research Instrument**

Interviewing was the primary mechanism for collecting data. A brief questionnaire was administered at the beginning of each interview in order to capture the biographical details of the participants (see Appendix A). Following the questionnaire, in-depth semi-structured interviews were conducted (Appendix E); the questions were of an open-ended nature. The interview method is most appropriate because the information needed will be based on sensitive issues, inside experiences, privileged insights and experiences (Wisker, 2001). The sequence of questions asked and allowed space for deviation, with the interviewer being able to return to the prepared interview questions (Fontana & Frey, 2000; Wisker, 2001). Each of the interviews were face-to-face and one-on-one. The interview schedule tapped the following areas: attempts of first smoking experience, as well as who was most influential during their childhood and adolescents. In each of these questions, information was gathered on parents and adolescents linked lives in local community contexts that changed over time. The semi-structured interview held a series of open-

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<sup>1</sup> The terms 'Coloured' and 'White' were employed as racial categories within the Apartheid era as a means to reinforce a segregated society (along with the other racial category, namely Asian, Black, Indian), to refer to those who were not afforded the same benefits as the Whites during this period. These racial terms in use are merely for descriptive purposes, and does not imply acknowledgement of these terms by the author.

ended questions designed to elicit the risk and protective factors of adolescents' engagement in cigarette smoking.

### **3.5 Procedure**

Once ethical clearance was obtained from the Senate Higher Degrees Committee and the Faculty Higher Degrees Committee at the University of Western Cape, contact was made with the principal and school guidance counsellor for prospective participants. Once permission was secured, the names and numbers were then forwarded to the researcher. The researcher arranged meetings with potential participants for the study. The aims and nature of the research, as well as the requirements from the participants were explained to prospective participants who then agreed to participate, following consent from the parents or caregivers. They were given an opportunity to withdraw their child from the study (waiver of informed consent) or the participants themselves could elect not to participate. The interviews were set up at convenient times and dates for the respondents.

### **3.6 Data Collection Method**

All interviews were conducted on-site at the high school's staff meeting room. Before the interview occurred, participants had to provide the researcher with all relevant documents that included parental consent, as well as their assent forms which detailed their agreement to participate in the study. The forms assured participants of their anonymity and confidentiality, as well as their right to withdraw from the study at any point in time (see Appendix C). Also, the participants were assured that their responses will not be disclosed to any school authority and privacy would be respected (Informed verbal and written consent). Before the start of each interview the researcher read aloud a set of instructions, emphasising confidentiality to promote honest responding, and encouraging questions at any point. Following the informed consent, the participants completed the biographical questionnaire.

At this stage the semi-structured interviews took place. Participants were then invited to talk about their smoking history and encouraged to reflect upon the factors that may have contributed to their becoming smokers or non-smokers. In order to allow contextually relevant responses to emerge, interviews were semi-structured, using

prompts. In addition to audiotaping the interviews, the researcher took notes at the end of each interview regarding the non-verbal communication and behaviour of the participants during the interviews. Dependent on each interviewee, interviews varied in length. The shortest interview was approximately 45 minutes in length and the longest interview was 90 minutes.

Owing to the sensitive nature of the research it was required to receive input from the participants regarding their experiences of having been interviewed. Therefore, after each interview, each participant gave feedback on the interview process and debriefing sessions were offered from the school guidance counsellor. The researcher made it known that referrals to health professionals were available if the additional need for counselling was deemed necessary. Subsequent to the interviews being conducted, each respondent was thanked their time and contribution. Participants were remunerated for their contribution to the research.

### **3.7 Data Analysis**

Following the interviews, the audio recordings were transcribed verbatim for the purpose of data analysis. Following transcriptions, thematic analysis was conducted in order to identify salient issues. This process involved reading and rereading transcripts in an attempt to identify emerging patterns, themes and categories (Strauss & Corbin, 1990). Along with the interviews, field notes were coded using Atlas ti software. Using the first stage of thematic analysis, the data was first open coded to identify a diversity of distinct categories along with their properties. This stage involved the naming and classifying the adolescence reasons for smoking through close examination of the data. Axial coding followed with an exploration of the compared patterns of coding within individual cases. In the final phase, selective coding, specific patterns were combined into a core category of smoking narratives and systematically linked related patterns with this core category (Strauss & Corbin, 1990). Codes were then grouped under several themes.

The codes and subsequent themes are in line with the aims and objectives of the study. Sentences and phrases from the interview transcripts relating to the same theme were then grouped together. In addition, distinctive experiences were highlighted in

order to portray all aspects of the participants' experiences. Quotations from the transcripts are presented in the study in order to illustrate these themes. A transcription notation was utilised throughout the discussion of results for the participant's responses. It is noted as follows:

... Indication that material was omitted

P1 Participant 1

P2 Participant 2

### **3.8 Reflexive Analysis**

Reflexivity required the researcher to be critically and constructively aware of themselves as part of the research process and thereby reflect on the impact on the research process. This owing to the motive that the researcher becomes a part of the study he/she conducts (Steier, 1991). The researcher could enter a research situation with perceptions, understandings, interests and areas of bias that may affect their perceptions and this in turn might influence explanations (Burman, 1994). In spite of these negative implications that may be termed a lack of objectivity; the researcher sought to become as close as possible to an objective account of the individual situation. Reflexivity may act as a control, offering the possibility of other realities and this encouraged the researcher to question her assumptions, and to consider alternatives. Reflexivity will thus be regarded as a useful tool in research.

Denzin and Lincoln (1994) notes that the notion of value-free inquiry does not exist. As a result, the researcher of this study is obligated to reflect on both social and personal investments and motives for conducting the research, as well as on the impact of his/her role on the participants.

Breakwell (1995) highlights that respondents are usually willing to engage more honestly with people they perceive as similar to themselves. The characteristics of this researcher would in some ways have an impact on the interviewees, resulting in findings based in ways upon which it is only possible to speculate. In the same way, the researcher was influenced by the participant's unique characteristics and also by the theoretical inclinations (Patton, 1980). Research is always value laden as it is

always carried out from a particular standpoint. The reflexive nature of this study is therefore outlined.

It is important to acknowledge that the interviews took place within a school setting. This might have led participants to view the researcher as an important part of the institution, despite clear indications of the researcher's commitment to the university body that instructed the research process. If allegiance was assumed, the participants could have felt unable to disclose any negative experiences of their smoking experiences.

### **3.9 Rigour**

Rigour in qualitative research designs can be measured by their confirmability, credibility, dependability, auditability and transferability (Streubert & Carpenter, 2003). In this investigation, credibility was established by means of participants' review of transcripts, extended engagement with participants and peer checked (Streubert & Carpenter, 2003). Following analysis, the participants were contacted and provided with a full manuscript of coded interviews along with a summary of emergent themes to determine if the codes and themes were a true reflection of their understandings. Auditability was established by means of a second review. Furthermore, the researcher also documented the precise steps in the research for other researchers to confirm. In-depth, extended engagement with participants in the research environment allowed for the researcher to gain the participants trust and improved understanding of their situation.

### **3.10 Ethical considerations**

There were four ethical considerations that were undertaken in this study is the protection of participants from harm (physical and psychological), prevention of deception, confidentiality, and informed consent. An informed consent form (Appendix C) was provided in written format to inform the participants about the overall purpose of the research and its main features, as well as risk and benefits of participation. The responsibility of the interviewer to the participants was to ensure that confidentiality, avoidance of harm, reciprocity and dissemination of results. The potential participants who conveyed interest in participating in the study, but who are



regarded as minors according to the South African constitution were included if they accept the fact that their parents will be required to also sign an informed consent form. This means that the parents were made aware that their child is smoking. One of the safest ways to ensure their confidentiality was to provide a consent letter that asks for informed signed consent under their pseudonym. The participants were informed that participation will be fully voluntarily; it would not disrupt the normal functioning of their lives in any way; and that they had the right to withdraw at any time should they wish to discontinue. The collected data was kept in a secure location to which only the researcher (conducting the research) had access to. Upon completion of the study and once the report is written up, the participant can choose to claim their interviewed data or the researcher can preserve the information.

### **3.11 Conclusion**

In conclusion, this chapter described the methodological perspective that underpins the current study. In addition, the chapter located the study within a framework that is driven by the goal to uncover the intent of minimising power disparities between the researcher and the researched. Furthermore, the chapter provided a description of the study aims, as well as an outline of the method of data collection and data analysis of the current study. The researcher focused on reflexivity issues and ethical issues in order to respect the rights of the participants at all times throughout the research process.

The following chapter, **chapter four**, discusses the results that emerged from the process of thematic analysis.

## CHAPTER FOUR

### Findings and Discussion

#### 4.1 Introduction

This chapter presents and discusses the findings of the processes of data analysis. The data analysis process, namely thematic analysis, allows for the participants' experiences and perceptions regarding their smoking behaviour to be thoroughly explored. The discussion will primarily focus on the participants' experiences and is considered in the context of the social learning theory framework, as well as in relation to prior research and germane literature.

Through the analysis of data, themes emerged in relation to the topics that were discussed during the interview process. The themes pertain to the following topics: the influence of individual, environmental and societal level factors that motivate adolescents smoking behaviour, reasons why they continue to smoke, unsuccessful attempts to stop smoking, and the impact of smoking on their psychological well-being. The themes narrate to topics; which is guided by Mayhew and colleagues (2000) conceptualization of the progression of adolescent smoking proceeding through a series of six stages. First, the non-smoking stage (known as the preparatory stage) is comprised of two substages: the precontemplation stage, where the adolescents express no desire to smoke; followed by the contemplation/preparation stage, where they consider smoking. Most adolescents move beyond the first stage in their attempt to experiment with smoking and subsequently progress to the following stages: *initiation*, *experimentation*, *regular smoking*, *maintenance* and *quitting*. In addition, participants' motivations and decisions in relation to effects of smoking on their psychological status were discussed. This includes stage associated risk factors as well as antecedents, such as parental and environmental influences, and smoking prevention and cessation issues (such as industry manipulation, second hand smoke, addiction, youth access, short term effects, long-term health effects, as well as other strategies).

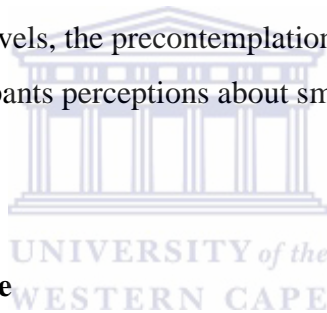
The thematic categories, along with the subthemes, will be examined in context of the established stages of smoking and illustrated by means of examples from interviews.

The six main stages are:

1. Preparatory Stage
2. Initiation attempts to start smoking
3. Experimentation
4. Regular Smoking
5. Maintenance
6. Quitting

## **4.2 Preparatory Stage**

The preparatory stage speaks to the formation of the participants' beliefs and attitudes about smoking prior to ever trying a cigarette (Mayhew, Flay & Mott, 2000). This stage exists at two different levels, the precontemplation and contemplation phase; each characterised the participants perceptions about smoking before their transition to the initiation phase.



### **4.2.1 Precontemplation Stage**

At this stage all the participants reported, in varying degrees, that they received messages about smoking, but were still not thinking about it. During this period, parental smoking, films, advertising, role models and television may have exerted an influence on adolescents' motivation to smoke. The extent to which the participants were aware of their own smoking interest is exemplified by the following emerging thematic categories: adolescents' attitude toward cigarette smoking; parenting and the household environment as influence; the peers' attitude towards smoking; and tobacco advertising.

#### ***a. Adolescents Attitude toward Cigarette Smoking***

Some of the participants were able to articulate their thoughts about their attitude toward cigarette smoking at this stage. Their opinions are represented in the following extract:

**P1: ... I thought of it nothing at the time...**

**P3: ... I didn't think it was bad for people to smoke...you smoke because you want to, no one is forcing you to.**

**P5: ... I didn't look at it as a bad thing.**

**P7: ...I didn't really care. I feel that if you want to smoke you smoke alone.**

**P9: ...I thought it was cool and stuff because your friends done it...**

Whilst some participants expressed indifference to the use of cigarette smoking, others identified it as a means to uplift their personal need for social prestige or social acceptability – this is considered as a key risk factor for cigarette smoking. This is also accepting of Andrews and Duncan's (1997) assertion that adolescents' tolerance of deviant behaviour places them at risk for smoking. Only one participant (P 11) saw it as onerous to their physical health. They noted that they *"thought smoking was bad; it messes up your lungs; it's not good for you; it's unhealthy"* and they further expressed that *"other people who smoked are stupid, as in 'why they smoking, what's so nice about that' "*.

#### ***b. Parenting and the Household Environment as Influence***

The parent-participant relation holds reflection of the socialised smoking behaviour; and subsequently the conditions of the home environment the participants are exposed to. This may include parental role modelling, parenting styles and parent-participant communication. Just over half of the participants recounted these events:

**P1: ...at home I spend a lot of time with my parents... When something is bothering me then I usually just talk to them. Both my parents smoke.**

**P2: ...My father didn't stay with us since I can remember. I never had much contact with him. He used to smoke in front of us.**

**P3: ...I always bought cigarettes for my father.**

**P8: ... Both of my parents smoke. I think my mother started smoking when she was probably 22, and I think my father started smoking when he was 18 or 17.**

**P9: ...my father smoked for his whole life and then he stopped smoking 8 years ago. My mom never smoked...**

**P11: ... My mother has been smoking since she was 16, and she is now turning 51. My daddy started since he was 18 and he is now 56. Smoking is an everyday thing for them. My daddy smokes two packets of cigarettes a day and my mommy one and a half.**

**P12: ...My father smoked since his teenage years.**

Most of the participants were able to reflect on their parents smoking history and their modelling of cigarette use that is believed to silently promote smoking socialisation messages to the adolescent. This finding is in line with a Canadian investigation (Schultz, Nowatzki, Dunn & Griffith, 2010) that indicate the provision of parents normalisation of smoking messages to be strongly related to adolescents susceptibility to take up smoking. Furthermore, this finding is consistent with longitudinal investigations in the literature review that show that if one or both parents smoke then these adolescents stand a higher risk to start smoking (Harakeh, Scholte, De Vries & Engels, 2004). This type of parenting style can be placed on the bench of neglectful parenting that is located within an unsupportive home environment that further promotes the adolescents smoking uptake (Herbert & Schiaffino, 2007) as some of the participants reveal that their parents' consent to them purchasing cigarettes on their behalf.

More than half of the participants also reflected on their parents' antismoking socialisation messages and the type of influence it had on them taking up smoking. They indicated the following:

**P1: ... they kept on telling me that they don't want to see me smoke, don't want to hear me smoking, and don't want to catch me smoking...**

**P3: ... My mother didn't worry about smoking because my father was like a chain smoker, so she had nothing to say about it.**

**P4: ... My father and mommy don't agree with it; my father feels it's a waste of money...**

**P6: ... That time she was strict; scolding me out every day that I must never smoke, but when I sat in the room with her then she smokes.**

**P7: ... my father is totally against smoking because he is an ex-smoker. He knows how it is smoking so he will like tell 'just please don't smoke, you might regret it.'**

**P9: ...He doesn't like it because his mommy passed away from lung cancer. And he said that that is a lesson to me if I want to smoke.**

**P10: ...My parents don't smoke. They never smoked before, they think it's disgusting. My daddy will go mad if he sees me smoking.**

Despite literature evidence disclosing anti-smoking communication as not related to adolescent smoking at the precontemplative stage (Den Exter Blokland, Hale, Meeus, & Engels, 2006), preceding literary accounts continually echo parent-child communication as a risk factor for adolescent smoking (Ennett, Bauman, Foshee, Pemberton & Hicks, 2001). Engels and Willemsen (2004) further cites that parents who exercise regular anti-smoking communication with their children were more likely to have children who were less confident to resist from smoking, increasing their likeliness to experiment with smoking practices. This learning extends our attention to the perceived parental influence and the quality of parent-child communication, which are both determined risk factors to adolescent smoking (Ennett, Bauman, Foshee, Pemberton & Hicks, 2001; Harakeh, Scholte, De Vries & Engels, 2005). The aforementioned excerpts are descriptive of this scholarship as the parents delivered their anti-smoking messages with varying intensities that does not appear to be conveyed in a constructive manner. Varying scholarships note the content and quality of these antismoking messages (in terms of the manner in which the parents talk about smoking) to be of influence (Kosterman, Hawkins, Soth, Haggerty & Zhu, 1997; Sanders, Montgomery & Brechman-Toussaint, 2000).

Contrary to evidence in Netherlands demonstrating mothers as being more involved in antismoking socialisation (Harakeh, Scholte, De Vries & Engels, 2005), our findings reveal that the participants consider the voice of the fathers (in this investigation) to more prominently convey anti-smoking messages.

Expanding on the quality of anti-smoking messages, one of the above mentioned participants further stressed that their parents knew that they were in the presence of smoking friends before they started smoking:

**P1: ...Yes. They knew all my friends. They always knew if all my friends were smokers or not.**

This finding reflects on the importance of parental monitoring and how it may indirectly support the adolescent's smoking behaviour by influencing the type of peers they associate with (Rodgers-Farmer, 2001). A New Zealand investigation highlighted the pivotal role parental attitude and discipline contributes towards the curbing of smoking exposure (Guo, Reeder, McGee & Darling, 2011). Furthermore, research shows that parental supervision or monitoring may function as a protective factor (Yanovitzky, 2005) from peers who engage in smoking behaviours. It can further be noted that adolescents who disregard time spent with parents are more inclined than others to select friends who smoked cigarettes (Urberg, Luo, Pilgrim & Degimencioglu, 2003).

### *c. Peers Attitude towards Smoking*

Two of the participants articulated unfamiliarity with their peers' attitude toward smoking.

**P1: ...I was the only non-smoker at the time. I don't know at the time what their attitude toward smoking was because they were already smokers.**

**P11: ...My friends were smoking before I started, and this includes both the friends from home and from school.**

This evidence simulates evidence in Tanzania that confirms that having a friend that smokes places adolescents at risk for cigarette smoking (Kapito-Tembo, Muula, Rudatsikira & Siziya, 2011).

### *d. Tobacco Advertising*

Whether it is local or international, the music bands are mirrored as promoting cigarette smoking. Even though most of the participants perceived these tobacco images or advertisements as not affecting them, they do believe it may be more of a risk to younger children. They indicated the following:

**P1: ...I do know of a lot of local celebrities that smoke, like the South African bands. We had a band and I was playing drums, and at every session we used to see our base player smoke.**



**P2: ...I think they are posers sometimes, you should see them on the music videos, and then you'll maybe see a rapper with maybe a cigar or so. I don't find that interesting.**

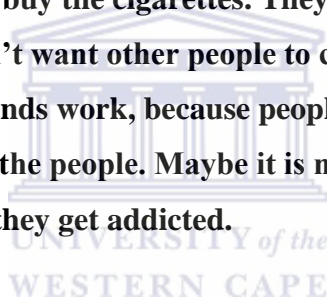
**P3: ...I just see these female cigarettes on TV and it doesn't affect me as much, and most of the advertising I see is on this cigarette box and it really don't affect me. I don't think that people from my age and up really mind the smoking ads; they will just see it as another person smoking.**

**P4: ...I think it's not such a bad influence, maybe weed is...because now you see a rich guy smoking weed and you want to smoke weed but you are not rich so if you can't smoke weed and you want to feel how he feels...**

**P7: ...some people take them as role models and some people admire them as a person.**

**P8: ...they just put that there on the box to show the people the dangers, but they also want you to buy the cigarettes. They just want you to see the dangers because they don't want other people to complain. I don't think that the South African bands work, because people are still carrying on.**

**P12: ...it does encourage the people. Maybe it is nice and we try it and then they try it and then they get addicted.**



Studies both abroad (i.e. United States) and in Africa (i.e. Zambia) established pro-tobacco advertisements to encourage the uptake and maintenance of smoking among adolescents (Gritz et al., 2003; Siziya, Rudatsikira, Muula, & Ntata, 2007). Pro-tobacco media exposure is frequently found to be a great risk factor for adolescent smoking (Gilpin, Lee & Pierce, 2004). In this study the participants highlight the influence to take greater effect in those of a younger age. The attainment of a pro-smoking attitude, considered as perceived positive psychological social values, physical consequences and values) placed adolescents at increased risk for smoking. Consistent with other research findings (Sarason, Mankowski, Peterson & Jr Dinh, 1992), psychological rewards and perceived social attitudes more likely predict tobacco use than physical consequence. Due to the physical consequence of smoking as neither being immediate nor evident, this effect may explain the immediacy of psychosocial outcomes from smoking.

It is interesting to note that the participants felt that exposure to multiple mass media anti-tobacco advertisements did not influence adolescents (Kapito-Tembo, Muula, Rudatsikira & Siziya, 2011). This may suggest that the tobacco firms' initiatives have limited effect on adolescents in South Africa, because other settings (such as America, Jamaica, Zambia, etc.) exposure to mass media and possessing a tobacco logo was associated with being a current smoker (Muula, Siziya & Rudatsikira, 2008; Zulu, Siziya, Muula & Rudatsikira, 2009).

#### **4.2.2 Contemplation Stage**

Following precontemplation is the contemplation stage, where the participants received images or peer influence built up to a point where their curiosity took over and they considered their attempt to smoke a cigarette. During this phase the friends' behaviour may be of prominent influence to the precontemplation stage. The two themes that predominate in this substage is the adolescents attitude toward cigarette smoking and peer influence.

##### *a. Adolescents Attitude toward Cigarette Smoking*

During adolescence, individuals experiment with a wide range of behaviours. The participants marked their curiosity as an important reason for experimentation with smoking. Their desire is reflected in the following quotations:

**P1: ...What I experienced is that if you've been hanging a lot with smokers then after a while you begin to wonder why they smoke; and then you are going to want to try smoking.**

**P2: ...when I was small it was curiosity, kidding around, getting up to mischief and you must try out a cigarette and see how it is and that was how it started.**

**P4: ...there are different influences, my friends and my cousin. One night they had a party and a lot of people were smoking and I'm sitting there and I'm watching the people. And so I decided I am going to try it.**

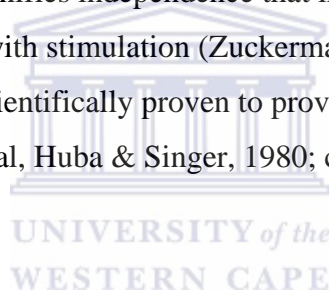
**P5: ...If you smoke okkah pyp and then it starts getting boring. Then one day I walked to the shop and bought a cigarette.**

**P6: ...It started when I was smoking okkah pyp with friends where I was living, and then I moved from the area. In the new area I moved to they just smoked cigarettes.**

**P11: ...I was smoking okkah for a year and a half and I started smoking cigarettes is because they introduced me to weed. They said that the cigarette will make my chest get used to the smell of the weed...**

**P12: ...it was because of the family. My cousins used to smoke there and maybe I want to try it and so I tried it and that is how I started.**

The participants' voices reflect that there may be an association between their sensation seeking behaviour and their motivation to engage in smoking as a risk behaviour. This finding is supported by literary evidence that indicate increasing levels of sensation seeking accompanied a higher gravitation towards smoking because cigarette smoking signifies independence that involves taking risk – this subsequently provides them with stimulation (Zuckerman, 1994; cited by Banerjee & Greene, 2009). Smoking is scientifically proven to provide adolescents with neurological stimulation (Segal, Huba & Singer, 1980; cited by Banerjee & Greene, 2009).



For some of the participants, their risk behaviours are supplemented by the gravitation of other risky behaviours as delinquency, alcohol consumption or drug use. Several United States based investigations affirmed sensation seeking adolescents' tendencies as influencing the participants' subsequent smoking initiation, experimentation and subsequently behaviour (Crawford, Pentz, Chou & Dwyer, 2003; Frankenberger, 2004; Skara, Sussman & Dent, 2001).

### ***b. Peer Influence***

The participants' depictions suggest that their friends smoking behaviour, their attempts at smoking and having more close friends who smoke can lead to cigarette smoking. Close to half of the number of participants echoed their friends motivating them to smoke. Their accounts captured it as follows:

**P1: ...It just started to happen after school with friends when we were finished with June exams; so it was just like wanting it at the time.**

**P5: ... The first cigarette I smoked was at school. It was with my friends on the way back to my house.**

**P9: ...we used to live in this complex and it was this older girl who always used to smoke and so I started smoking.**

**P10: ... It's just, you sit there and then it's like 'ok my friend is smoking, why can't I smoke?' A friend always used to steal her mommy's cigarettes and always used to make me steal it, that's how we started smoking.**

**P11: ...first it was the okkah. We smoked it for long and then one of them said that they have weed on them and then everybody wanted to try it out.**

**P12: ... My friends were like 'I would not smoke and I'm never going to smoke'; and now you see them with cigarettes in their hands.**

Echoing these research findings, a Canadian study supports these extracts that assert that adolescents' exposure to individuals who smoke appeared to be of influence in their decision to smoke (Schultz, Nowatzki, Dunn & Griffith, 2010).

Most of the above mentioned participants place their first thoughts of smoking in the context of the crowd. The literature notes strong evidence of the social crowds influence on the decision to start smoking cigarettes (Michell & Amos, 1997), especially since they are seen to hold great influence during early and middle adolescence; thus they might have a greater impact on smoking uptake for young adolescents (Brown, Dolcini & Leventhal, 1997). Cigarette use can be emblematic of many things to some adolescents, such as popularity and status (Michell & Amos, 1997) and here the crowd affiliation seemingly provided the adolescent with a sense of social identity.

Furthermore, what is clear is that adolescents who associate with friends engaging in substance use behaviours (i.e. in this case weed or okkah) may be furnished with ease of access to these substances which serve to encourage their attitudes that promote their decision to smoke. It is noteworthy that the friends smoking behaviour may mediate the bond between sensation seeking and adolescent smoking.

### 4.3 Initiation Stage

At the initiation stage, most of the participants have experimented with their first few cigarettes, though most of them do not become regular smokers during this phase. At this point, friends may be considered as the strongest influence.

The participants identified their smoking as occurring in a web of social relations that nurtured many of their experimentation factors and that may further reinforce their problem behaviours. Due to this social context, adolescent smoking may stem from family, society, school, and peer influences, which are all considered as important to their initiation of smoking. The emerging themes for this stage resides on the adolescents' experimenting with their first cigarette; the household environment affording opportunities to smoke; the peer influence; and the adolescents' perceptions of why the opposite sex starts smoking.

#### 4.3.1 Experimenting with their First Cigarette

Participants vividly communicated the unfolding of their first cigarette smoking experimentation. In varying degrees most of them noted the side effects accompanying their first cigarette puff, whereas others may have felt oblivious to it. They commented the following:

**P1: ...That I was going to die! I started coughing the whole time...**

**P2: ...it was not enjoyable...I kind of coughed a lot and I could feel that it wasn't good for me at that time as it was hard on the lungs...**

**P3: ...My first experience wasn't that bad, because I smoked okkah about a year before that. Unlike others, I didn't cough when I started to smoke.**

**P4: ...I took my first *skyf* at home; it was 11 o' clock on a Saturday night. I smoked and I coughed for about an hour or something.**

**P5: I thought it wouldn't affect me, but I was wrong.**

**P7: ...my friends taught me... I asked them 'how do you do it', so they explained to me, 'you just pull in, and then you exhale again'. It was okay.**

**P8: ...I started in Grade 7, but just for fun and then I stopped. Then in grade 9 I started again.**

**P9: ... I coughed a lot, but it was alright. My friend laughed, she said everyone coughs on their first time because you don't know how to inhale.**

**P11: ... my chest pulled closed as I am asthmatic, but after that I got used to it. My head also started spinning and every time...**

**P12: ... My first puff was when I was 4 years old. A *bergie* was by my house so I just picked up his bud by the door and took a puff. I coughed. Yoh! It was like my lungs were going to come out.**

The participants' accounts ran align with the literature reports on specific consequences following experimentation with cigarettes (Brady, Song & Halpern-Felsher, 2008) and it compliments studies investigating the perceptions and motivations related to cigarette use. Most of the participants reported negative consequences that ensued experimentation, such as catching one's breath, a bad cough, and their chest pulling close. Contrary to popular research findings in countries such as the United States; none of the participants of the current study reported to experiencing positive consequences such as feeling relaxed, looking cool, looking grown up or becoming popular (Brady, Song & Halpern-Felsher, 2008). Only two participants reported having no side effects. Most of the participants reported to merely puffing a cigarette, and those reported smoking a cigarette were more prone to express feelings of indifference. These positive physiological and social consequences are generally translated to be critical in understanding the reasons why adolescents increase their level of experimentation (Brady, Song & Halpern-Felsher, 2008).

#### **4.3.2 Household Environment Affording Opportunities to Smoke**

Participants emphasised parents as playing an eminent role in the development of their smoking behaviour through the effects of role modelling and parenting style. They reported:

**P1: ...When I got home, I asked my parents for money to buy me cigarettes...**

**P4: ...My father smokes two packs a day, but I steal like half of his packet.**

**P5: ... every day I used to smell like smoke and they used to scold me out, but now it's like the usual thing. I buy the cigarettes from the shop and my parents give me an allowance every month.**

**P6: ... they found tobacco in my school shirt pocket, but they never caught me smoking, it was just suspicion. My mother didn't still worry. I receive an allowance so I buy my own cigarettes.**

**P7: ...they never knew that I would start smoking. They found out last year. They didn't see me, or catch me or anything. People told them and when they asked me if I do then I said yes.**

**P8: ...They just had this parent vision or something like that that I smoked, because they made jokes on me now and then. I think they want to see me smoke, because they sometimes leave their cigarettes lying around and they think that I'm going to take it.**

**P11: ...They were not really surprised. They suspected me because I always used to smell like smoke when I came home from school.**

**P12: ...if I get an allowance, then I will go buy. My mommy is like you can't even buy cigarettes why you smoking it.**

Regardless of parental suspicion that their children might be using cigarettes, the participants report that their parents' ignorance may provide them with continued support to continue their cigarette using behaviour. The participants generally perceived their parents as not practicing much enforcement over their smoking behaviour. The literature review summarised poor parental monitoring as related to a higher involvement in drinking, smoking and other deviant risky behaviours (Barnes, Hoffman, Welte, Farrell & Dintcheff, 2006). Furthermore, the findings of the current study are in agreement with other reports that participants' smoking initiation may be influenced by the parents' socialisation strategies (O'Byrne, Haddock & Poston, 2002; Olvera, Poston & Rodriguez, 2006). A Texas study found maternal support to protect adolescents from smoking (Olvera, Poston & Rodriguez, 2006). The results indicate that mothers do not demonstrate much authoritative control over their adolescent's behaviour which is associated with an increase in smoking prevalence. The study also found an absence of high parental control, which is positively linked with child competencies (Den Exter Blokland, Hale, Meeus & Engels, 2007). These competencies have a preventive effect on children's smoking (Den Exter Blokland, Hale, Meeus & Engels, 2007). A Memphis investigation further notes that the parents were one of the main sources from which adolescents obtain their cigarettes (Robinson, Dalton & Nicholson, 2006). Other reports supportively highlight that parents are unintentionally the first source of cigarette supply for adolescents (DiFranza & Coleman, 2001). It is further noted that with increasing independence a



child has in their purchases of tobacco products from ages 9 and up the more inclined they are to state an intention to smoke (Mansfield, Nixon & Thomas, 2006).

Most of the adolescents indicated that they openly communicated to one of their parents about their smoking status. Amongst most of the participants the other parent accidentally came across them smoking, despite their suspicion that their child might be smoking. They narrate as follows:

**P1: ...I started telling my father that I smoke because he is the calmer one, and then my mother found out. They caught me coming home from school, but they didn't really say anything, they were both just looking at me.**

**P2: ...She was like...Oh you smoking a cigarette hey and I was like ok ja. You try and hide it away but it does not really work and then she basically left the situation.**

**P3: ...My cousin told my mother I smoke, but she just said it is my own choice. Now my father didn't actually know about me smoking as my mother didn't want to tell my father, because he didn't want me to smoke...**

**P7: ...I was standing with the cigarette in my hand and I just looked at her. It's like a reaction, every time I do something bad then I just smile.**

**P11: ...I told my mommy I am smoking, but my daddy caught me smoking by my grandma's house. He was disappointed and didn't speak to me for four days. He then got used to me smoking and my mommy spoke to him.**

The study demonstrates a relation between household smoking restrictions and smoking susceptibility, with lack of restrictions being associated with increased smoking susceptibility. This finding is supported by a Canadian study (Schultz, Nowatzki, Dunn & Griffith, 2010). For example, living in a home in absence of a full smoking ban or only certain smoking certain restrictions implies non-smoking adolescents are more susceptible to future smoking and non-smokers are to follow into experimenters or smokers. These findings concur with prior findings of associations between smoking bans in the homes and the probability of adolescents smoking uptake (Schultz, Nowatzki, Dunn & Griffith, 2010).

The literature continually depicts parental influence as significant in curbing adolescent smoking initiation and progression, and this can be most influential at the beginning of the initiation phase (Sargent & Dalton, 2001). These findings further demonstrate that the parents are tolerant of their children's attempts at smoking by neither enforcing parental regulation nor parental control. The participants are indirectly reporting that their parents contribute to their smoking behaviour as acting as role models for cigarette use and giving permission to use cigarettes; this finding is aligned with a number of studies (Lotrean, Sánchez-Zamorano, Valdés-Salgado, Arillo-Santillán et al., 2005).

The social learning theory (Bandura, 1989) suggests that knowledge and the ability to enact one's behaviour is a necessary condition for the behaviour to become manifest. With smoking, adolescents growing up with families where they observe smoking offers an opportunity for children to acquire the smoking essentials, such as how to light a cigarette, how to inhale, how to dispose of ashes, etc. Furthermore, this also provides the knowledge that marks where and when it is fitting to smoke (i.e., like talking after a meal, driving, etc.) (Darling & Cumsille, 2003). The family is not the only context in which smoking behaviour knowledge can be acquired; the peers and media serve as added resources. There are numerous influencing factors that determine whether the adolescent will act on acquired knowledge (Darling & Cumsille, 2003). And this is dependent on whether they perceive smoking as having positive consequences (Darling & Cumsille, 2003).

Furthermore, weak parental monitoring is also found to further the progression of adolescent smoking as the adolescent is afforded greater socialisation with peers who engage in smoking (Simons-Morton, Chen, Hand & Haynie, 2008; Urberg, Luo, Pilgrim & Degirmencioglu, 2003; Yanovitzky, 2005).

### **4.3.3 Peer influence**

Most of the participants indicated the role their peers play in their attempt to engage in cigarette smoking. While noting this, they also reflect on the environment that marked their first smoking experience with their friends:

**P1: ...My friends were surprised when I came and we met on the corner of the school that I had my own cigarettes. After school we would normally go sit on the corner and have a cigarette before we get home.**

**P2: ...Me and a domestic worker's son used to get up to a lot of trouble. We have this shop across the house and there was this guy whose small stompies<sup>2</sup> we would pick up that he threw down. We would pull that and cough a bit.**

**P3: ...It was on a train going home straight after school, we started together myself and Chase.**

**P5: ...It was me and one friend afterschool, just normal - like catching on nonsense.**

**P6: ... To catch on nonsense, just to like see, just to experiment and so.**

**P7: ...It happened at home with friends on the park in the afternoon. We just sit there or go to one another's house, and if the parent's aren't there then we just pick up an *entjie*<sup>3</sup> at the back.**

**P8: ...My friend showed me how. She used to buy cigarettes and then we used to then smoke.**

**P11: ...it is not peer pressure to smoke, it was my choice. I still wanted to try everything out and see what happened.**

Most of the participants note that their first cigarette puff took place in the presence of friends; the literature resonates that the peers smoking behaviour may provide a platform for the adolescents smoking through multiple routes, such as modelling the smoking behaviour or the provision of social reinforcement for smoking (Hoffman, Sussman, Unger & Valente, 2006). A Netherlands investigation found that smoking peers may also serve as encouragement to adolescent smoking by providing ease of access to cigarettes (Engels, Vitaro, Den Exter Blokland, de Kemp & Scholte, 2004). These results also demonstrate with other research evidence that during the earlier stages of tobacco consumption that the friendship group is most influential at the initiation and experimentation stage of smoking (Urberg, Shyu & Liang, 1990; Morgan & Grube, 1991).

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<sup>2</sup> An Afrikaans colloquial term for cigarette buds

<sup>3</sup> An Afrikaans colloquial term for cigarette

The findings above further substantiate the literary findings that suggest that peer pressures to smoke cigarettes are not coercive in nature (Michell & West 1996; Nichter, Vuckovic, Quintero & Ritenbaugh, 1997). The current study's findings concur with Nichter, Vuckovic, Quintero and Ritenbaugh's (1997) report that instead of undergoing direct pressures to smoke, the adolescents tend to practice internal self-pressures to smoke should others around them do so. In this way, the participants endeavour to facilitate social interactions and to achieve social approval; and to prevent exclusion by peers is tied to the adolescents' decision to try cigarettes (Kimberly, 2003).

#### **4.3.4 Adolescents perceptions of why the opposite sex starts smoking: Boys versus Girls**

The male and female participants provided differing views as to why the opposite sex starts smoking. They discussed the following:

**P1: ...Girls probably start smoking because of stress and problems at home. That does not usually play a part in boys choosing to smoke or not.**

**P3: ...it is very disgusting for girls to smoke. Most guys think that it is a turnoff.**

**P7: ...some guys think it is impolite and just wrong for a woman to smoke. They say their mouth is no one's ash tray.**

**P11: ... At first, it was an embarrassment for me as a girl to see a girl smoking. But then when I started smoking, I couldn't even believe myself.**

Regardless of the views expressed above, one male participant surprisingly occupies different views of females smoking:

**P4: ...it is nice if a girl smokes, because if I walk around school smelling like smoke, then there a lot of girls that say, 'Chase don't talk to me'. So, I need to spray and come back. With a girl that smokes you can talk to her with a cigarette in your mouth.**

The participants conveyed their parents' voices expressing their view of boys and girls smoking.

**P3: ...my mother thinks that it is the worst thing since adultery, but it differs for guys. My mother is for that olden kind of thing, where the guy is on top of the household.**

**P7: ...They just feel that you shouldn't smoke at all. They do feel that smoking is out for both girls and boys.**

What stands in contrast to this is that some of the participants acknowledge that their parents do not apply the same views when it concerns family members.

**P3: ...if it's my own family then my mother doesn't really mind because she knows the people.**

The boys and girls offered differing reasons as to why the opposite sex starts smoking. The boys mainly attributed female's decision as due to stress or media influences, but it was generally felt that it is undesirable for female's to smoke. In South Africa, it is generally believed that it is socially unacceptable for females to smoke, though research findings revealed that these social taboos are waning (King et al., 2003). King et al. (2003) postulates that it is these contextual influences which may influence the adolescent's perception of what is considered acceptable behaviours within society, and the broader margin. It is suggested that the diminishing of cultural, family, and community ties may enhance the experimental use of cigarette smoking among adolescents.

#### **4.4 Experimentation**

Experimentation is characterised by the irregular use of cigarettes, with a gradual increase in the frequency of smoking in various situations (Mayhew, Flay & Mott, 2000). This stage essentially involves the adolescents repeated attempts to smoke. Some of the adolescents may become addicted to nicotine after smoking very few cigarettes, this may lead to them become regular smokers. At this stage, peer bonding is still viewed as the strongest influence. Prominent themes include individual level factors; peer influence; as well as sibling influence.

#### **4.4.1 Individual Level Factors**

Both national and international literature evidently acknowledged that adolescents who disregard their sense of well-being, such as satisfaction with the self and aspects of the environments are at risk for tobacco-prone behaviours and significant other smoking behaviours (Brook, Morojele, Book & Rosen, 2005; McCaffery, Niaura, Swan & Carmelli, 2002). The study sample was fitting to this description as they displayed smoking propensities along their sensation seeking tendencies, their weight concerns, their ability to cope with stress, and their attempts at smoking weed. The three subthemes accordingly established are: sensation seeking tendencies and feelings of boredom; weight concerns; and stress and coping.

##### ***a. Sensation Seeking Tendencies and Feelings of Boredom***

Participants cited positive attitudes, and the perceived positive benefits and norms of smoking as risk factors for smoking. Some participants believed smoking to hold many perceived advantages (i.e. relieves boredom, social anxiety, stress, etc.). Two of the participants reflect that their cigarette use may parallel their fluctuating emotions, as well as their increasing exposure to peers. They indicated as follows:

**P2: ... nothing really motivates me to smoke. I would decide I have some time on my hands now; I'm feeling bored or even a bit lonely so I'll go sit outside and smoke a cigarette.**

**P3: ...We can't stop. This grade 8 boy that is with us also started to smoke. We tell him he must stop or else his not going to be able to stop.**

**P4: ...I have so much time on my hands, I'm bored. Sitting bored watching TV. Light a cigarette, its 5 minutes of thinking by yourself...**

**P7: ...the Tuesday I smoked...there were a lot of people; we all smoked us in our chops so I couldn't walk...**

Some of the participants conveyed feelings of loneliness, whereas others spoke of the smoking as a means of seeking sensation. Various factors account for the reasons adolescents engage in risk taking behaviours. Sensation seeking promotes behavioural engagement that are of high risk and that excites them (Zuckerman, 1994; cited by Banerjee & Greene, 2009). The adolescent's social well-being can be evaluated by the

self-esteem which serves as a sociometer of the individual's loneliness, social anxiety, and susceptibility to friends influence (Leary 1999; cited by Yang & Schaninger, 2010). It is cited that high sensation seekers underestimate the health associated behavioural risks such as cigarette smoking, and thereby exhibit an increasing engagement than their low sensation seeking counterparts (Hoyle, Stephenson, Palmgreen, Lorch & Donohew, 2002); in this study it is identified as the friends who occupy in similar risk behaviours such as their smoking.

Sensation seeking promotes an increase in the number of friends who smoke and engage in risky behaviours, which puts them further at risk for smoking. Previous scholarships supports this study's evidence which asserts that high sensation seekers' friends who are smoke and delinquent inclined further predicts adolescent smoking behaviour (Banerjee & Greene, 2009; Yanovitzky, 2005). This reflects on adolescents socialising tendencies in their process of engaging with peers who provide them with this outlet to concern in this type of behaviour. This furthers their progression from delinquent to increased smoking behaviour.



*b. Weight Concerns*

Some of the participants reported that smoking was used either as a means to maintain females current weight or to lose weight. This seems to be an underlying incentive regarding the decision to smoke. This is apparent in the following quotations:

**P3: ...my ex-girlfriend did that and that's why we broke up. I told her I can't be with a girl that smokes to keep her weight or to lose weight. If you smoke you get full and sometimes smoking will take your appetite away.**

**P7: ...I really want to stop but it is difficult. This old lady told me that if I stop smoking then I will get fat.**

**P10: ...smoking before eating takes my appetite away. So it affects your body a lot before you eat. Most of the time I do smoke before I eat.**

The participants voiced their weight concerns as an important risk factor contributing to their smoking. The literature popularly cites concern about body weight as an important smoking initiating risk factor (Potter, Pederson, Chan, Aubutt & Koval, 2004). However, this study demonstrated it as a reason for adolescents to continue



with their smoking behaviour. Most smokers learn that nicotine suppresses weight and appetite (French & Jeffrey, 1995). Research evidence popularly states that women are more inclined to smoke than men in order to control weight and to refrain from quitting for fear of post cessation weight gain (Potter, Pederson, Chan, Aubutt & Koval, 2004).

In providing support for our evidence, some scholarships have also noted that woman's preoccupation with weight control (Chapman & Walsh 1995; cited by Dedobbeleer, Béland, Contandriopoulos & Adrian, 2004), as well as anxiety and stress (Waldron, 1991) promotes their decision to smoke. Thus smoking functions as more of a necessity than a luxury (Dedobbeleer, Béland, Contandriopoulos & Adrian, 2004).

### *c. Stress and Coping*

It was mainly the female participants who reflected on experiences of stress. They might have reasoned stress to serve as an underlying incentive to smoke. They commented as follows:

**P2: ...before I walk into an exam I think of smoking just a cigarette, then I write the exam and then afterwards I would smoke another cigarette and then I would chill.**

**P4: ...if I have exams in the morning; then I would smoke five cigarettes after each other. I actually feel calmer when I smoke and I look nice.**

**P7: ...When I am stressed then I smoke the most, then I will smoke three cigarettes just so.**

**P8: ...It feels like a relief, like when I'm stressed and then I smoke because it helps me. It does work for me because after our accounting paper of two or three hours, then I like have to have a *trek*<sup>4</sup>.**

**P11: ...I smoke the most before, during and after the exams, and when we get our marks. It is because of the stress.**

Cigarette smoking can be seen as one of the ways the participants learned to adapt to a stressful situation such as the stressors brought about during the school examination

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<sup>4</sup> An Afrikaans colloquial term for taking a smoke

period. This finding resonates with Koval, Pederson, Mills, McGrady and Carvajal (2000) reports that the occurrence of life changes and stressors during adolescence may have a considerable negative impact on the emotional well-being and result in the adoption of unhealthy or maladaptive behaviours. They further state that this psychological distress results in unsuccessful adjustment to these life changes. Contrastingly, whilst they evidenced stress and associated distress or depression as significant factors in the onset of smoking, our case proved smoking to serve more of a motivating factor to continue smoking cigarettes. A number of research studies display consistent links between smoking and stress (Koval, Pederson, Mills, McGrady & Carvajal, 2000; Pederson, Koval & O'Conner, 1997).

#### **4.4.2 Peer Influence**

Following their initial attempts at smoking, most of the participants indicated irregular, but increased use of cigarette smoking thereafter. This stage also marked the friends' supportive role in the participants continued smoking attempts. The participants indicated the following:

**P2: ...but that also didn't happen every day and maybe happen once a week where it just developed until I got till about grade seven...**

**P4: ...they told me not to worry, you won't cough if you get used to it. So the next day, I did it again and again. And then finally within a week I got used to it and I was a smoker.**

**P7: ...They only smoke, but they didn't smoke at school like now.**

The participants experiences of their decision to continue with experimenting with cigarettes smoking is supported by reports that their decision to experiment preludes to their genuine first time cigarette use and that these initial experiences with cigarettes were actively pursued (Friedman, Lichtenstein & Biglan, 1985; Michell & West, 1996). This may be explained by the reason that they have no intentional efforts to avoid smoking settings. Research highlights that adolescent non-smokers who have not attempted cigarettes are found to intentionally avoid smoking settings (Michell & West, 1996; Lucas & Lloyd, 1999).

Furthermore, nearly half of the participants note that with increased exposure to their friends, especially at events, they would increase their dose of cigarette use, along with other substances. It is felt that this would further promote the continuation of cigarette use. They reported it as follows:

**P1: ... after a while I started smoking at school, at parties, and then it just built up from there.**

**P2: ...it was grade seven holidays and I started partying and drinking and that was when I started smoking a new cigarette every day. That was a long phase I went through before I actually started smoking every day.**

**P6: ...it's at parties we will meet each other and smoke.**

**P7: ...I got two cigars for my birthday, and there was a party at my house so everybody smoked.**

**P8: ... most of my friends at school smoke, more than what the people at home smoke; but it's almost the same amount that they smoke.**

Furthermore, a common finding in the literature indicates that adolescents who smoke tend to match themselves to groups with other smokers (Ennett & Bauman, 1994; Urberg, Degirmencioglu & Pilgrim, 1997), which was also found in the current study. Kobus (2003) found interclique heterogeneity and intraclique homogeneity in tobacco use. This finding highlights the significance of social crowd affiliation in adolescents' smoking behaviours with individuals belonging to certain crowds considered as more probable to smoke than those occupying other crowds, increasing evidence that stereotypes and their social crowds influence decisions about tobacco use or non-use (Michell & Amos, 1997). Crowd affiliations seemingly provide adolescents with a sense of social identity, which may include cigarette smoking. This may account for the participants' decision to engage in cigarette smoking at parties. Tobacco use can be emblematic of many things to some youth, such as popularity and status (Michell & Amos, 1997). Subsequently, there is an increased likelihood that the greater sensation seeking the adolescent the more likely they are to have delinquent behaviour and this further supplements their smoking behaviour. It is also evident that adolescents in close proximity to their friends who use substance themselves, the more of an increased risk they are to use cigarettes (Ennett et al., 2006).

#### 4.4.3 Sibling Influence

Irrespective of age, half of the participants acknowledged that their siblings' behaviour (whether it be smoking or non-smoking) may have promoted their smoking interest with their continued indifference and mixed anti-socialising smoking messages. The participants depicted the following:

**P2: ...My stepsister smokes and she is cool with me smoking. My older sister tried smoking twice because all of her friends at university smoke and she can't take the smoke. She bought a packet of cigarettes and I actually ended up smoking it.**

**P3: ...My sister only smokes okkah. She smokes cigarettes when she is drunk, on weekends sometimes...**

**P6: ... My brother found a cigarette in my pocket while doing the laundry. He asked me if I smoke and I told him I do. He burst out, "why do you smoke". So he gave me a long lecture that I mustn't smoke and that I'm not gonna stop one day. He hates smoking, but he smokes.**

**P7: ...He's only 8 years old and already making cigarettes there with the papers.**

**P8: ...I have a younger brother but he doesn't smoke because his asthma is worse than mine now. I saw him try it after once and then he coughed and he had to fix his breadth.**

**P12: ...I have a brother older than me and he used to smoke. I was smoking for about four years and he was smoking during that time yes, but I never got cigarettes from him.**

In this study it was found that sibling smoking was linked with the participants' expectations about smoking and current smoking behaviours. The literature notes that a smoking sibling's pro-smoking influence carries a twofold preventative risk of a non-smoking sibling (Harris & López-Valcárcel, 2008). What remains clear is that the pro-smoking effect of a sibling smoker is significantly larger than the preventive effect of a non-smoking sibling.

## **4.5 Regular Smoking**

Regular use refers to the regular, but still infrequent use of smoking, as it would occur weekdays before or after school or every weekend (Mayhew, Flay & Mott, 2000).

This phase may also involve a new set of influences. Addiction and adaptation, personal factors such as beliefs about the benefits of smoking, self-efficacy, self-perception and coping join earlier influences. Societal factors, including the price and availability, and interpersonal factors such as school policy came into play. The themes which emerged include: peer influence on adolescent cigarette smoking behaviour; parental influence; societal influence; the perceived health effects of smoking; as well as the school's influence.

### **4.5.1 Peer Influence on Adolescent Cigarette Smoking Behaviour**

Furthermore, the adolescents recalled their peers as influencing the number of cigarettes they smoked per day as they enticed them by making cigarettes available which may have turned smoking into an activity that eased the boredom they experienced. The participants described the following:

**P2: ...I smoked anything from between three to ten cigarettes a day; it depends on the social factor involved. When all of us are together and one person picks up a cigarette then it would just go around and then you just end up smoking more when you all together.**

**P3: ...Most of the times then friends are the reason for me smoking. When the guys are around then we when we drink then we smoke twice as more cigarettes than normal.**

**P4: ...All of my friends smoke. Their belief about it is that it is a nice pass time for them. It is a bad habit, but its good in its respects. My friends, I smoke, you smoke, and we all smoke.**

**P5: ...they just smoke to catch on nonsense. I don't smoke at school; I only smoke in the mornings before I come to school.**

**P6: ... I don't even understand why they smoke at school. I think they like getting in trouble or maybe that feeling that you never get caught.**

**P7: ...You will see that most of the smokers are friends. We are all a big group of friends. Everyone knows everyone.**

**P9: ...if you want to stop then they will like bring the cigarettes and then they will like smoke and it will be like keep a *skyf*<sup>5</sup> or something like that. It is difficult to stop.**

**P10: ...All of my friends smoke. There is only one that don't. She never used to like it, but now she jumps up when we say we are going to smoke. The other day she said she has nothing to lose so she might as well smoke.**

**P12: ... Some of my friends smoke because they like to do it. I don't think badly of my friends that don't smoke, but they are clever not to smoke**

The research scholarships holds contrasting notes to our research findings that social support from peers is generally agreed to be a positive factor in a person's life by means of preventing the adoption of maladaptive coping responses to the stressor, and secondly, by causing the individuals to perceive the event as less stressful (Cohen & Wills, 1985). However, Chassin, Montello and McGrew (1986) found that adolescents who described their friends as more supportive are more likely to smoke. Wills and Vaughan (1989) reported that the relationship between social support and smoking was positively related to the smoking status of friends.

Further, the literature also provides support for the peers influence on the participants' motivation to continue smoking as smokers have more friends the longer they smoked, suggesting that smokers imbed themselves in a tobacco-friendly network which enables them to bond with other smokers (Robinson, Dalton & Nicholson, 2006). A United States-based investigation reasoned that the adolescents' structure their social support to smoking habit, and this reinforced their support for social smoking (Robinson, Dalton & Nicholson, 2006).

#### **4.5.2 Parental Influence**

The adolescents perceived their parents to have growing tolerance to their smoking behaviour, even though most of the participants' parents seemed to initially meet the participants with resistance once they uncovered their child's smoking behaviour. This tolerance they illustrated by means of their parents behaviour towards them. The parents were depicted as conveying anti-socialising smoking messages. In this way,

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<sup>5</sup> An Afrikaans colloquial term for puff

some of the participants also seemed to have found a means to support their children's smoking habit. In subtle ways the parents may be seen as more supportive of their children's smoking habit. The participants indicated the following:

**P1: ...I was like should I ask, shouldn't I ask and then my mother asked if I need anything from the shop, so I said a packet of cigarettes and then she said no problem. After that I just ask.**

**P2: ...my mother do not approve but she doesn't come into my room and take my cigarettes away. Even though she refuses to buy me cigarettes, she does give me the money to buy.**

**P3: ...since my father passed away my mother always tells me it is one of the causes of my father's death and that I shouldn't follow the crowd. My mother didn't worry about smoking before that.**

**P4: ...Once as I killed the cigarette my mother came in and saw that last little "shoooh" as I killed it. We had a long life lesson talk. They want me to stop as soon as possible. She said I'm going to regret it when I'm 30.**

**P5: ... My mother smokes and my father doesn't, because he hates it. My mother used to scold me out that I mustn't smoke; and now they like it's alright, you are old enough to smoke.**

**P6: ...my mother asked me if i smoke and I told her I do. She then gave me a packet of patches, it's like it never happened. My father is totally against smoking because he is an ex-smoker. He knows how it is to smoke, so he will just tell any smoker to please don't smoke as you might regret it.**

**P8: ... my mother caught me smoking on holiday, but they don't want me to smoke because they both smoke. She said she is disappointed in me when she thought I would not do it.**

**P9: ...Weekends I tend to smoke the most because I am not with my dad that much.**

**P10: ...My mommy knows that I smoke, but she's waiting for me to tell her because everybody else told her. She said that she will be disappointed if I must tell her.**

**P11: ... All that they want is just for us to be open and honest to them. They don't want to find out another way. They just want us to tell them fine I am smoking now.**



**P12: ...I used to have this packet of cigarettes that I put in my draw and they would take it and say you must stop smoking. They would also steal all my lighters and that is how they found out.**

Even though parental smoking is popularly linked with high smoking rates during the experimental phase (Schultz, Nowatzki, Dunn, Griffith, 2010), this study found parental smoking to be more strongly highlighted during the regular smoking phase. It appears that the participants concealed their smoking behaviour from their parents until it became more of a regular habit. Moreover, parental smoking status during adolescence may not be a complete reflection of the influence of parental smoking has on children as it is supported by Canadian study which found parental smoking status at younger ages influence smoking behaviour during adolescence (Schultz, Nowatzki, Dunn & Griffith, 2010). Here the influence from parental smoking may be exerted through parental smoking cessation efforts.

This finding is consistent with research evidence that indicates that the social learning theory to posit that the home environment with adult smoking models will produce a higher risk for adolescent cigarette smoking (Chassin, Presson, Rose, Sherman & Prost, 2002). This owes to the fact that the parents may reproduce smoking socialisation messages to their children, and thus they might be more likely to tolerate smoking by their children. Chassin, Presson, Rose, Sherman & Prost (2002) argue that parents might be more accepting of their child's smoking behaviour, given their own struggles to quit smoking (Chassin, Presson, Rose, Sherman & Prost, 2002).

Subsequently, the findings are consistent with notions citing adolescent child who views their parents as more tolerant to smoking are more likely to further their engagement in smoking (Flay, Petraitis & Hu, 1999) as they perceive their parents as not having acceptable authority to regulate their smoking (Grusec & Goodnow, 1994). The literature further supports our claim in noting that in the parents' struggle to quit smoking they may have developed negative attitudes toward smoking, and they might communicate these negative attitudes toward their children (Chassin, Presson, Rose, Sherman & Prost, 2002).

While some of the participants' parents opposed smoking, the other parent continued to communicate a different anti-socialisation smoking message:

**P4: ...In our car there's not a lot of space, so if he smokes and the window is closed then you can't see through the smoke, and then my mother stresses, 'Jy bly roek! Jy bly roek! Wat dink die ander mense van die stuff.'**<sup>6</sup> My father just lies back...

**P5: ... my father used to smoke, that is why he is so against it. He hates any smoker if he sees them smoke, but in our house it is different.**

**P6: ... My mother smokes in the house and the kombi when she drives. Then my daddy will start scolding because he doesn't like smoking, but my mother will win. And that's why they don't talk about these things.**

**P9: ...my daddy doesn't know and he won't agree with it. But my mommy is fine with it.**

The literature supports our findings that a lack of consistency between parents' behaviours and their anti-smoking messages may create mixed signals for these adolescents that undermines the benefits of parental cessation (Chassin, Presson, Rose, Sherman & Prost, 2002). These findings are also consistent with the principles of the social learning theory in that consistent models (such as one smoking parent and one ex-smoking parent) should be less effective in transmitting parental messages. This owes to the reason that ex-smoking parents might not perceive themselves as having legitimate authority to regulate their child's smoking behaviour as they do not feel comfortable to demand that their children behave in ways that they did not (Grusec & Goodnow, 1994). In turn, their children might also perceive them as not having acceptable authority to regulate their smoking. Scholarly research on parenting suggests that such perceived lack of legitimacy reduces parents' efforts to engage in socialisation practices and in turn this undermines the success of their efforts (Grusec & Goodnow, 1994).

The literature further notes that exposure to smoking in the motor vehicle is believed to increase the risk of smoking uptake; suggesting that this exposure increases adolescents consideration and receptiveness to experiment with smoking. Schultz, Nowatzki, Dunn and Griffith (2010) concur with this finding. Generally, the literature consistently notes that the banning of smoking in motor vehicles is considered an anti-

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<sup>6</sup> Afrikaans expressions for 'You keep smoking! You keep smoking! What aren't the other people thinking of this stuff.'

smoking measure as to how parents can influence children's decision regarding smoking attitudes. Furthermore, the banning of smoking in cars may also serve to protect children from exposure to second hand smoking; indicative of smoking as neither acceptable nor appropriate (Kegler, Escoffery & Butler, 2008). This finding is premised of legislative efforts undertaken both abroad and within South Africa.

#### **4.5.3 Societal Influence**

Irrespective of the participants' age, it appears that local community shops were promoting their use of cigarettes due to the ease of access to the cigarettes, as well as it being priced cheaper with no legislative tobacco control attached. In addition, minors were also involved in the distribution of cigarettes, ensuring the continued availability of cigarettes. All these measures allows for the cigarette to be more accessible to the participants. Nearly half of the participants reported:

**P1: ...And she asked me the following day 'does your parents know that you smoke' and then I said no. She was like 20...22...**

**P2: ...I got in contact with the shop owner across the road, like we good friends. So I can come over and he would like give me a cigarette and then I will bring him the rand later.**

**P3: ...Here is someone that sells cigarettes on the school grounds, I have a Seven Eleven shop that is about a five minute walk away, and there's a house shop around the corner where I live that I can buy cigarettes.**

**P7: ...The one left now and now the other one is making all the business selling cigarettes at school, he evens has two brands: Rothmans and Stuyvesant. Yesterday I asked him for a cigarette and he asked R1.50.**

**P8: ...I go buy them at the shop, or I ask someone to go buy for me.**

Irrespective of the onset or continuation of smoking, the finding remains consistent with the literature that the means through which adolescents obtained their cigarettes remained similar (Robinson, Dalton & Nicholson, 2006). It is firmly attached within the scientific literature that both the practiced and more established smokers are more likely to obtain cigarettes from both their friends and the shops. Consistent with this, this study found that adolescents grew into more established smokers and they heightened the number of used sources and relied on both their friends and the stores

(Robinson, Dalton & Nicholson, 2006). Once they escalate into established smokers, they breed a social network of companion smokers who support their habit, making quitting more difficult. In Mexico, there are investigations calling for the prohibition of cigarette selling to children under 18 years of age; which includes the purchasing of individual cigarettes that are feasible for adolescents (GYTSCG, 2002).

During earlier accounts, some of the participants reportedly utilised pocket money obtained from their parents to purchase cigarettes. This is indicative to promote enforcement measures in the prohibition of cigarettes to minors (Lotrean, Sánchez-Zamorano, Valdés-Salgado, Arillo-Santillán et al., 2005). The literature supportively notes that irrespective of whether or not one or both parents are smokers, amongst the risk factors for pro-smoking socialisation behaviours are the receipt of pocket money (Scragg & Laugesen, 2007) and the absence of parental monitoring of pocket money expenditure (Waa et al., 2011).

Essentially, the community context interacts with the peer and parental factors related to smoking, and it also appears to influence the adolescents substance use (Mayberry, Espelage & Koenig, 2009). It is suggested that communities can serve as a buffer against peer influence and the use of cigarettes (Mayberry, Espelage & Koenig, 2009).

#### **4.5.4 The Perceived Health Effects of Smoking**

Generally, some of the participants seemingly had a good awareness of the health effects of tobacco and its impact on their own bodies, with some performing active research on the noted health effects. Subsequently, they also demonstrated their perceived ways as to how they can control for these health effects.

Nearly half of the participants received exposure to the health effects of smoking. They noted the following:

**P1: ...I went to research it on the internet, because I thought that the other people were talking nonsense. I found that after a period of 3 to 9 years it actually starts deteriorating the sperm cells.**

**P3: ...a friend of mine showed me a picture of lungs before and after you smoke and he told that smoking takes ten years of your life.**

**P5: ...I researched smoking when I tried to make my mother stop, but your life just changes as it breaks through.**

**P7: ...they say that the nicotine in the cigarette makes your hand yellow. I don't know because my hands aren't yellow.**

**P9: ...I used to read it. You can get lung cancer, and your heart is at risk. It says if I was to get pregnant I will have to stop smoking.**

Although some of the smokers displayed awareness about the adverse consequences of cigarette smoking, they continued to smoke. This agrees with another study (Ahmadi, Khalili, Jooybar, Namazi & Mohammadagaei, 2001; Niknami, Akbari, Ahmadi, Babae-Rouchi & Heidarnia, 2008). These findings are consistent with other studies investigations that explain the individuals' perceptions, rather than knowledge to hold greater influence over tobacco use (Corbett, 2001; Sarafino, 2002). It is also noted that the manner in which information about cigarette smoking is delivered has been shown to increase knowledge, but does not necessarily change behaviour (Hoyt, 2002; Niknami, Akbari, Ahmadi, Babae-Rouchi & Heidarnia, 2008). Therefore, it is believed that the content as well as the delivery of information about cigarettes is essential and must develop appropriate norms and beliefs about cigarette smoking in order for cessation measures to be effective. It can also be argued that even though some of the participants were able to depict some of the health effects of smoking, their depth of knowledge seemed to be limited.

Furthermore, nearly all of the participants noted varying effects of cigarette smoking on their health. They reported as follows:

**P2: ...I lightly experienced some lung problems but it was fine since I used to do long distance running. I tried to keep myself healthy while still smoking by balancing between my unhealthy habits and unhealthy habits.**

**P3: ...I do short distance sprints so it does not affect me that much. I also used to play first team hockey, but I dropped out because I couldn't manage the smoking on my chest anymore.**

**P4: ... Your breath does not smell nice, even if you didn't smoke, and that's why I always have Halls. You spit a lot too. Hiccups occur a lot when I smoke, because the smoke goes down the wrong pipe.**

**P6: ...Anything that has got to do with breathing gets messed up and your voice get thicker. My breathing is heavy and when I run I get tired quick.**

**P7: ....smoking pulls my chest close and then I use my friend's pompie<sup>7</sup> every time. ...my chest starts pulling close and then I struggle to breathe.**

**P8: ... I already smoked on an empty stomach and I got very sick. I'm asthmatic. I went to the doctor already because one night I couldn't breathe...**

**P9: ... If I walk far then I would feel my chest pulling close and sometimes I can't breathe and then I think it's because I'm smoking.**

**P10: ...It's affecting my voice box. I have a husky voice and it is becoming worse because of smoking. I can't scream high of my voice cause then because then my voice faint.**

**P11: ...it is really affecting my chest. At night I can't breathe properly anymore. I have asthma too.**

**P12: ...I have a husky voice and it is so deep. When I exercise then I quickly get tired and my chest starts to pain and I cough a lot. I can't do sports because I can't run far.**

Despite these negative effects, one participant continued to smoke as they perceived cigarette smoking as producing gratifying effects. They noted:

**P3: ...Tobacco helps me a lot with my nose. I had bad sinus problems and if I sneeze a lot and my nose starts running then smoking stops it. I know that a lot of people, especially myself, they have flu and if your throat is sore then you smoke a menthol cigarette - it has a soothing effect.**

Furthermore, a number of studies supports the finding of this study by affirming that smokers support numerous self-exempting beliefs that dissolve the cognitive dissonance that occur between their smoking habit and their general agreement (Festinger, 1957). Also, their risk denial prevents them from quitting cigarette

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<sup>7</sup> An Afrikaans colloquial term for asthma pump.

smoking (Paretti-Watel, Halfen & Grémy, 2007). These self-exempting are established as fairly widespread and few display significant predictors to quit, which is consistent with the literature (Paretti-Watel, Halfen & Grémy, 2007). These significant predictors include a low readiness to quit due to the participants' consideration that their cigarette consumption is too low to be viewed as harmful; and the belief that their engagement in sporting activities can lower their risk of smoking attributed diseases, as well as regular visitations to the doctor or health care practitioner. This may be representative of adolescents' lack of motivation to quit (Paretti-Watel, Halfen & Grémy, 2007).

Some of the participants' accounts were contradictory. While noting that smoking caused health effects, they also interpret their suffered smoking-attributed illness differently through their descriptions of how it served to soothe their sufferings. This finding is consistent with literature that shows that adolescents' smoking perceived risk can also be viewed as a negative expectancy that could promote their tobacco use if they do not acknowledge the harmful consequences this behaviour holds (Carvajal, Hanson, Downing, Coyle & Pederson, 2004). Even though some of them noted no physical health effects from smoking, they reflected on their knowledge (that they have accumulated in their readings) on the health effects of smoking.

#### **4.5.5 School's Influence**

The school environment was reported as providing the participants with the opportunity to smoke, especially with their friends. The participants' understandings reveal that they challenged the school environment; they are aware of pending punishments of getting caught smoking at school, but yet they continue to take the risk. There are other influences on the school ground motivating adolescent smoking behaviour. Four of the participants indicated the following:

**P2: ...it was only to get caught at school, getting caught by someone or like walking and catching me red handed with the smoking.**

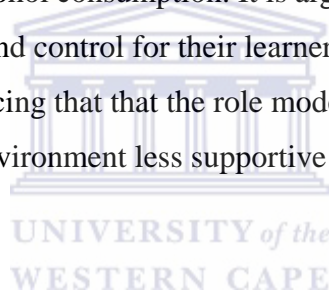
**P5: ...I think that high school is also an influence, like most of the people around here at school smokes. It's a cool think to do at school.**

**P8: ...I would say that most of them at school smoke, more than what the people at home smoke.**



**P12: ...There are cigarettes everywhere; we even have someone selling cigarettes at school. There are lots of shops around here that you can just go and buy you. So, it's not like they can keep it away. There is this shop here at the back where even if you in school uniform they will give you an *entjie*.**

A few of the participants identified the personal need for social prestige, socially acceptable, to be cool as key risk factors for cigarette smoking. The literature popularly notes the school culture to represent a set of attitudes, values and behavioural characteristics of a school (Scheerens, 2000; cited by Bisset, Markham & Aveyard, 2007) and this subsequently influence the learner's health behaviour (Sellström & Bremberg, 2006). Bisset, Markham and Aveyard (2007) assert that schools offering value-added education had a lower prevalence of initiation into regular illegal drug use or alcohol consumption. It is argued that the schools need to provide appropriate support and control for their learners. The social learning theory supports this claim by evidencing that that the role model influence in the educational setting will create a school environment less supportive of smoking (Jessor, Turbin & Costa, 1998).



#### **4.6 Maintenance**

At this stage the addictive use of cigarettes is driven by regular daily smoking, cravings of withdrawal symptoms, and the experience of withdrawal symptoms (Colby, Tiffany, Shiffman, & Niaura, 2000). Subsequently, addictive use refers to adolescent smoking that occurs on a regular basis. The continuation of regular smoking involves all the set of influences, but addiction is seen as the main force. These factors are discussed along the thematic categories, which are namely adolescents dependence on cigarettes; the home environment; smoking preferences and its occurrences; cigarette smoking in the school environment; and tobacco advertising.

#### **4.6.1 Adolescents Dependence on Cigarettes**

More than half of the participants demonstrated the need to smoke every day as they believed to have developed a dependency on cigarettes. The participants articulated the following:

**P1: ...I need to start smoking every second... After a while it just starts becoming a habit and you start telling yourself you need a cigarette and then you'd light one up. Sometimes I would light one up and I don't even notice what I am doing. It's like such a habit.**

**P2: ...I just smoke. It's like an addiction, it's like a habit that I have grown into that even now I couldn't get rid of even after trying so long.**

**P3: ...At school I get that cravings quite a lot and then after sports I have a craving too.**

**P4: ...if I talk about smoking now, it's more like a routine.**

**P7: ... it is the craving that is so bad. The food makes you feel full and the cigarette takes everything down. I think it is also just a habit man, cause after you eat then you go and take a smoke.**

**P11: ...I think that I am addicted to it now. It became an everyday thing. It is still part of my daily routine. It's like a snack that I must get...**

**P12: ... it is the craving. You are used to that nicotine in your body and now you crave it and then you must go and buy your cigarette to smoke.**

One participant seemingly differed in account by indicating that his addiction differed in nature from the other participants, in that his cigarettes use may not be mood dependent. He noted the following:

**P1: ...I can stay without a cigarette for two or three days and it doesn't bother me.**

The above mentioned excerpts hold evidence of the adolescents' perceived risk of cigarette smoking and their addiction to nicotine. While cigarette smoking is popularly acknowledged in the literacy as being maintained through the users dependence on nicotine (Fagerstrom, Heatherton & Kozlowski, 1990); more participants in this study referred to their cigarette use as merely a habit. Our evidence

is consistent with the reports well established in the literature that attempts to quit smoking results in an array of withdrawal symptoms (Fagerstrom, Heatherton & Kozlowski, 1990). Cigarette smoking is known to provide a characteristic set of sensory cues which may have pivotal conditioned reinforcing stimuli that is linked to the actions of nicotine (Rose & Levin, 2006). It is noted that continuous and repetitive smoking may lead to a strong conditioned association between the sensory aspects of smoking and the pharmacological effects of nicotine (Rose & Levin, 2006). This finding is supported by literature which states that the severity of the withdrawal symptoms upon giving up cigarettes is linked to the smoker's degree of nicotine dependence (Fagerstrom, Heatherton & Kozlowski, 1990).

#### **4.6.2 The Home Environment**

Despite the participants' efforts to reduce or quit smoking, they continuously mentioned their parent's position during their smoking activities. Most of the participants' descriptions seemingly indicate that their parents do not engage in strong enforcement measures to prohibit them from smoking cigarettes or support their cessation efforts. They indicated the following:

**P1: ...just before I go to bed I'll look on my table if there are cigarettes and if my packet is there then I'll light one up.**

**P2: ... she does allow me to tell her that I'm going to the shop quickly to go and buy a smoke. That's like no problem really.**

**P4: ... From my father, I will take from the cigarettes that they have already bought.**

**P7: ...I'll come drunk in the house or just lekker gerook<sup>8</sup>.**

**P6: ...My mother tells me you can smoke but just don't smoke weed. People will phone me and take it you smoking tik<sup>9</sup>...**

**P9: ...my stepmother found a cigarette box in my drawer so she told my father that I'm setting a bad example for her son. My dad just said, "Jade, what are you getting yourself into."**

**P12: ...I smoke in my room and then the whole house will stink and then she will shout 'that you must stop that smoking or else you going to die'.**

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<sup>8</sup> An Afrikaans colloquial term for nicely smoked.

<sup>9</sup> A drug named crystal methane.

**My father is more lenient towards me. When I didn't have money then I would just take two drags from his cigarette that is already lit...**

In a particular instance, the participants may have perceived the parents as not having much influence over their behaviour. Their comments revealed the following:

**P1: ... I can't really blame my parents for the reason why I smoke because they really don't smoke around us.**

**P2: ...When I went to my father's funeral last week, I saw everyone from his side smoke. So I have my doubt that my elder sister's children are also going to smoke one day.**

**P4: .....this once I was smoking in my room and I killed a toppatijie<sup>10</sup> by the window in the ashtray. She grounded me for the whole day and it was bad, but it was worse for her, because then I smoked in the house.**

The literature supports this study's research findings by showing that parental allowance of their children's in-home smoking is linked to the escalation of adolescents' tobacco consumption and their increased dependence levels (Luther et al., 2008). The research also supports our findings by noting that the employed parenting style which is poor parental monitoring is further linked to the adolescent's problem behaviours (Simons-Morton, Chen, Hand & Haynie, 2008).

Although a number of studies indicate that parents as monitoring agents serve to protective against adolescents acquired cigarette smoking behaviour, the participants of this study may displace their parents function in the context of their life (Garmienė, Žemaitienė & Zaborskis, 2006). They may perceive that whilst their parents seemingly display an absence of strong anti-socialisation smoking messages, they may be the sole factor responsible for their own smoking behaviour. It is argued that environmental influences are unaccountable as it was the adolescent's choice. A Lithuanian investigation noted that the quality of child-parental relationship, along with the collective time spent with the family, is strongly linked with parental smoking habits (Garmienė, Žemaitienė & Zaborskis, 2006). This owing to the finding

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<sup>10</sup> An Afrikaans colloquial term for cigarette.

that the family provides the child with a background for attitudes and values as they introduce the social environment (Garmienė, Žemaitienė & Zaborskis, 2006).

#### **4.6.3 Smoking Preferences and its Occurrences**

All of the participants reflected on the time of day they preferred smoking. They reported as follows:

**P1: ...Before school starts, one cigarette, and during school. It used to be like once during every break or once every between the two breaks and then maybe now and again during class...**

**P2: ...I usually go stand outside and have a smoke in the morning before I get dressed or, before I start eating breakfast or before I take a shower. I would say that the morning is like the best time for me.**

**P3: ...if i get a first cigarette in the morning that's the best feeling you will get off all the times you smoke in the day. In the summer when you smoke then the sun hits your head and it spins. I prefer in the morning and the evening because it is cool.**

**P4: ...At night, because it's not that warm, or in shady area. If I smoke a cigarette in the heat then here by me I get a migraine and then I have to sit down again.**

**P5: ...any time after I eat. At night I don't, but sometimes before I go sleep. And in the mornings before I come to school after I eat.**

**P4: ...three in the morning, three in the afternoon and three at night. ...it got more as I smoked longer. I used to smoke like once a week or something, once a day, and then it became twice a week, thrice a week, every day and every hour.**

**P6: ... Any time after I eat...**

**P7: ...It's a normal routine actually. I smoke two cigarettes in the morning and during both breaks. On the way home I smoke a cigarette. It's not a lot; maybe 10 cigarettes a day after meals.**

**P8: ... The late afternoons and night, after eating. It's just nice, it's relaxing. And I don't eat while smoking, always afterwards. I smoked already on an empty stomach and I got very sick.**

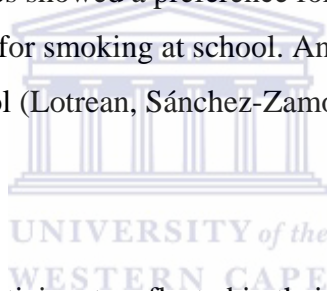
**P9: ...I prefer to eat first and then smoke, it just feels better, because you're full.**

**P10: ...I prefer smoking in the morning, because when you wake up then it's like I'm going to get done now and then sitting when I have the urge to smoke now.**

**P11: ... the morning, first break, second break and after school. And when i come home I smoke a cigarette after I eat and before I go sleep at night.**

**P12: ...in the afternoon when I get up and after I eat then I smoke and at night, but not in the morning.**

For times of smoking, most of the participants showed a preference for smoking outdoors than in other place and during the morning period. Outdoor places include the home backyard, school yard, etc. the female participants were more likely to smoke indoors whilst the males showed a preference for the outdoors. Most of the students showed a preference for smoking at school. And all the students reported as smoking at home and at school (Lotrean, Sánchez-Zamorano, Valdés-Salgado, Arillo-Santillán et al., 2005).



Furthermore, nearly all the participants reflected in their report whether they preferred to smoke before or after meals. Most of them showed a preference for smoking after meals. They reported the following:

**P1: ...The feeling or taste isn't that nice while you are busy eating, I don't prefer to smoke after food, but probably during or after something that I have been drinking like a coke.**

**P2: ...Before**

**P3: ...After my meals, cause it's just when you full and then you smoke and it's a <sup>11</sup>lekker feeling. If you smoke then you get like a dry taste of tobacco on your tongue and when you eat then it doesn't taste the same.**

**P6: ...My cravings are worst when I wake up, worse at exam times...**

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<sup>11</sup> An Afrikaans colloquial term for nice.

**P7: ...I smoke every morning and it just makes me dizzy if I don't eat. I can't have breakfast early. I feel nauseous sometimes, but you do get dizzy cause the first cigarette of the day makes you dizzy.**

**P9: ...I wake I smoke, and then the whole day I smoke. Before I go to sleep I smoke.**

**P11: ... I prefer smoking before eating, because it is like the after effect you feeling. I always smoke before I eat.**

**P12: ...it makes you lose your appetite. I rather first eat and then I smoke, but not on an empty stomach.**

Many of the participants report beverages and food to alter the taste of cigarettes. This claim is supported by American literature that notes beverages and food to change the cigarette's taste when consumed concurrently or simultaneously (McClernon, Westman, Rose & Lutz, 2007). Furthermore, alcohol is noted as the only taste enhancer (McClernon, Westman, Rose & Lutz, 2007).

Nearly all participants reflected on their individual preferences for smoking alone or with their group of friends. They reported the following:

**P1: ... I'd rather smoke with friends, because it actually gets boring and you think about other stuff when you smoke alone or you do anything.**

**P2: ...I can't say, it kind of evens out.**

**P3: ...I prefer smoking on my own. I don't like a crowd around me because when you smoke in a crowd then the people go smoking, you blow the smoke out and you don't smell it that much.**

**P4: ...It doesn't matter. It doesn't make the cigarette feel any different or the feeling that it is.**

**P6: ... Alone; there's no difference, but when I'm alone then no one can tell me that I am influencing someone else.**

**P7: ...I don't really mind. It's just that sometimes that I *smaak*<sup>12</sup> to smoke a cigarette alone, then don't bother me. I don't mind sharing.**

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<sup>12</sup> An Afrikaans colloquial term for crave.



**P8: ...It doesn't matter really. I'll smoke by myself or I smoke with my friends.**

**P10: ...sometimes on my own.**

**P11: ...on my own, because if you crave a cigarette and then you want to smoke that whole cigarette and every time people are with then they ask 'keep me a *skyf* or so'. And it frustrates a person**

**P12: ... I smoke with a friend; I can't actually smoke a whole cigarette. When I'm with friends and you smell the air and then you smoke a lot, so it's better if you alone.**

Of relevance at this point is the influence of some of the participant's best friends in reinforcing the maintenance of smoking. Despite most of them reflecting their decision to smoke alone; they subsequently expressed their desire to smoke within the company of smokers as well. Some showed a preference to smoke in smaller and closer groups of friends.

Furthermore, four of the participants reported a preference to either smoke during weekdays or on weekends. They indicated the following:

**P6: ... The weekend, I'm the whole day at home or with friends. At school it's different, you cannot smoke there.**

**P9: ...I smoke from Monday's through to Sundays, but on a Friday, Saturday, and Sunday, it's the most ever.**

**P11: ... I smoke the most on weekends, where I finished a packet each day. On Friday I buy the packet and then it's finished the Friday night.**

**P12: ... During holidays you don't' have school and then you have all the time to smoke. I prefer the weekends.**

All of the participants appeared to show preference for a place to smoke. They reported as follow:

**P1: ...Inside my bedroom, I don't smoke inside the house.**

**P2: ...At home, when I'm outside.**

**P3: ...Here at school or at home. At school when they catch you they take you to the teacher for Saturday detention, but at home there are no worries. I prefer at home.**

**P4: ... If you're in the toilet, there's no one else with you in the toilet. The toilet is like your place of calmness, like it's your space for that moment in time. At school, I prefer the toilet too.**

**P5: ... In my room; it's disrespectful to smoke in front of my parents,**

**P6: ... in my room, but I never smoke with my mother because I think it is disrespectful.**

**P7: ...I smoked in my room and I opened all my windows and then I closed my door. After 15 minutes the smell goes.**

**P8: ...I have smoked a couple of times inside the house, but not always. I prefer smoking at home, and then at parties.**

**P9: ...She used to allow me to smoke inside the house, but then she started complaining that the curtain is stinking and so I must go outside.**

**P10: ...When they sleep, and then I smoke in the bathroom because nobody's going to come wake up now. I also like smoking on the stoep<sup>13</sup>.**

**P11: ...I prefer smoking in the backyard. I do, however smoke inside the bathroom and in my room.**

**P12: ...Inside the house, in my bedroom.**

In addition to the abovementioned, three of the participants also commented on parents' attitude towards them smoking inside the house:

**P1: ...No, they don't mind. It's just that I have that respect towards them and I like to smoke on my own or when I go to the shop or I stand outside.**

**P2: ...I have to go stand outside. I mean if it like late at night and I wake up like one or clock or two o' clock then I'll hang by window or stand by the front door or something.**

**P3: ... When she found out she said that she's not going to stop me...but I must smoke outside and inside the bathroom.**

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<sup>13</sup> An Afrikaans colloquial term for porch.

Research scholarships support this study's evidence in its reports that smokers actively select the circumstance under which they smoke cigarettes, because it produces pleasurable and relaxing effects, and the cigarettes better taste (Piasecki, McCarthy, Fiore & Baker, 2008). It is popularly held that taste satisfaction is acknowledged as a major reason for smoking and is positively associated with other enforcement measures (Piper et al., 2004). An important notion named rush/buzz, which is described as the experience of a buzz or a rush on consuming cigarettes under a certain circumstance may be descriptive of its pleasurable effects (Piasecki, McCarthy, Fiore & Baker, 2008). This rush/buzz is known to be related to the time of day, with adolescents showing increased prevalence in the morning hours (Piasecki, McCarthy, Fiore & Baker, 2008). The literature further supports this phenomenon and describes this diurnal movement as related to the individuals need for replenishment after waking up or following their morning caffeine consumption (Piasecki, McCarthy, Fiore & Baker, 2008).

#### **4.6.4 Cigarette Smoking Influences in the School Environment**

Participants stressed the effects of the school's social structures on individual risk behaviours. At a school that is unable to realise their students' common values or unravel their commonly experienced problems, lack of social bonds, unhealthy role models, unhealthy academic environment and feelings of frustration and injustice may lead to increased use of smoking. The subthemes that emerged are: places to smoke; adolescents' perceptions of the school teacher; and effectiveness of the school policy.

##### ***a. Places to Smoke***

The findings marked the school as playing an eminent role in the adolescents smoking behaviour. Nearly half of the participants reflected on their search for secure places to smoke on the school grounds, considering the stringent measures that curb their smoking. They mentioned the following:

**P1: ...everyone is looking for a place to smoke at school. I think the only place to smoke after school is on your way home and you have to walk like certain routes because teachers drive around.**

**P2: ...we had this spot here on the field where all the seniors used to sit, that field was the only place where anyone could smoke.**

**P3: ...you can't go to the back to out of bounce areas of the school; you can't go down the bottom to go sit on those fields. You must only go to the field and the mixed quad or the quads.**

**P10: ...there is a girls' toilet near the teacher smoking area. And that smoke that comes over actually covers the toilet coming out of the toilet where they smoke. It actually benefits the smokers.**

**P11: ... we have nowhere else to smoke. We can't smoke in the field, because there are cameras there.**

Most of the participants had to learn to restrain from smoking during school hours. The literature notes that these adolescent's generally smoked more cigarettes per day than those prohibited from smoking at home (Luther et al., 2008). It seems that at this point the participants have reached a comfortable position where they made the cigarette smoking part of their daily habits. This served to promote the continuation of smoking behaviour.

One of the participants also indicated that even though there are not more limited places to smoke, the school ground still created opportunities to smoke; they still have their ways where they are able to out manoeuvre the prefects and teachers. They reported the following:

**P2: ...if we really desperate, we have our ways to smoke a cigarette maybe in the school building, maybe we will slip outside, maybe in the middle of the corridor even. We have our ways in whatever, but the teachers shouldn't hear this because they don't really know what goes on in this school or maybe they think they do, but I don't think they do, but actually they don't know how severe smoking is in our school.**

### ***b. Adolescents Perceptions of the School Teachers***

More than half of the participants expressed acknowledgement of teachers at the school who smoke. It somewhat seems that it has become the norm amongst learners to identify teachers who smoke. They indicated the following:

**P1: ...We know a good couple of teachers that smoke. But the strange thing is to see teachers outside of school busy smoking, where you work or where you ate out, that is funny. Out of the seven teachers that teach me this year, three teachers smoke.**

**P2: ...my class teacher smokes, my art teacher smokes, my geography teacher smokes.**

**P3: ... A few of my teachers smoke, such as my class teacher. Everyone knows that all our teachers at school smokes because everyone goes to the smoking room. There is a room for the teachers that smoke. That whole passage is like always misty there like the way the smoke is coming out of the room.**

**P5: ... I think they are a bad influence for the young children that come here in grade eight. When you walk pass that room, you just smell cigarettes every time.**

**P7: ...No they smoke in the smoking room here. They stink like smoke.**

**P10: ...if they are smoking and then why can't we. And then they punish us, but when you come out from somewhere and you just walk and then they smell like smoke and then they will accuse you of smoking.**

**P11: ...My English teacher smells like smoke every 5<sup>th</sup> period.**

**P12: ...In the mornings we must walk through that passage and smell the smoke and now you now crave, so they not actually helping us, they not a good example. They are supposed to be qualified and now they are doing the things that they are telling us not to do.**

Furthermore, nearly all of the participants thought the teachers as critics. The participants depicted it as follows:

**P3: ...Most teachers said that when they were also young they couldn't stop and it was like a bad habit.**

**P4: ... I think that is very hypocritical because they tell you not to smoke but then they smoke.**

**P6: ...They must practice what they preach, because they want to tell us not to smoke but then they smoke. The teacher's smoking room must be eliminated, and there must be a smoking room for us too, then I will smoke at school.**

**P7: ...Some teachers' lecture us but then they smoke themselves. They must not come speak, because if you smoke then you must not come tell me about smoking.**

**P10: ...Teachers treat you differently once they find out you are a smoker. Now they look at the children that do smoke at school as disrespectful or delinquent. They lose their minds if they don't get that cigarette.**

**P11: ...I don't have face for people like that. They say something but they don't do it.**

**P12: ...they like hypocrites because they tell us don't smoke but they themselves smoke. So they are not being the example to us. If they want us to stop then they must also stop - it's like a two way thing.**

Some of the teachers openly communicated to the school learners about their smoking experiences and those participants held knowledge of the cigarette preference of these teachers. While they were promoting anti-smoking messages, they lacked reinforcing these messages.

In support of the social learning theory, bonding in the educational setting with a conventional role model influences smoking outcome by creating social environments that hold less favourable perceptions of smoking (Jessor, Turbin & Costa, 1998). It is indicated that adolescents increasing commitment to academics and school-related activities may reduce the potential opportunities to smoke (Carvajal, Hanson, Downing, Coyle & Pederson, 2004). Research suggests school connectedness, and increased academic commitment could serve as a protective to adolescents (Carvajal, Hanson, Downing, Coyle & Pederson, 2004).

The school equally plays a pivotal role in shaping adolescents behaviour (Bond, Butler & Thomas, 2007). The school's climate constitutes the majority of students beliefs and attitudes, as well as students level of feeling as to whether they are receiving respect. Positive school climate is related to lower use of alcohol/marijuana use; but it however did not buffer against negative parenting neither practices nor the effects of peer influence on adolescent use (Mayberry, Espelage & Koenig, 2009).

*c. Effectiveness of School Policy*

They acknowledged that since the implementation of the school's non-smoking enforcement, they all have been smoking less at school. Their accounts are reported as follows:

**P1: ...At this high school you learn to control yourself like a lot because here at school you won't probably get a chance to smoke. The punishment that you get for smoking a cigarette at school is not worth it. Who wants to come on a Saturday and sit for three hours Saturday detention?**

**P3: ...This school is overboard with everything. You can't go to the out of bounce areas at school... You must only go to the field and the mixed quad and the quads. It's because of the smokers**

**P5: ... Since that Saturday detention that they caught us, my mother told me, you can smoke, but you smoke in my house and you don't smoke anywhere else and let people come to me and tell me that your son is smoking dagga and so.**

**P8: ...it keeps some people in place and then that video thing made a lot of people scared but most of the people still smoke at school.**

**P9: ...There are a lot of smokers at school and lot of smokers at home, but we don't smoke at school anymore, because we can't.**

**P11: ... I think they are unfair because they waste their time by giving Saturday detention.**

**P12: ... They are quite heavy on the smoking at this school. They will like go overboard on smoking at this school.**

Smoking on school premises is legally prohibited, but all participants admit to smoking at school and this behaviour is suggested to be associated with an increased use of smoking. This underlies the need for smoke free schools. These findings are supported by a Mexican-based investigation where students felt no inconvenience and little disapproval from others when they smoked outdoors (Lotrean, Sánchez-Zamorano, Valdés-Salgado, Arillo-Santillán, Allen, Hernández-Avila et al., 2005). This might indicate that stronger enforcement around restrictive policies is needed pertaining to smoking in public places in order to decrease smoking among youth



(Lotrean, Sánchez-Zamorano, Valdés-Salgado, Arillo-Santillán, Allen, Hernández-Avila et al., 2005).

The social norms may have contributed to the promotion of the adolescents smoking behaviour. At school, all of the adolescents experienced environmental cues that are encouraging or approving of smoking (e.g. their belief that parents and peers favour this behaviour). Furthermore, the adolescents also expressed that may not encounter environmental barriers to smoking as they continually express ease of access both at home and in the school environment, and over at their friend's place.

#### **4.6.5 Tobacco Advertising**

Some of the participants made observations about the advertising on the cigarette packets. They generally noted that they perceived it as either unappealing or ineffective. In many ways they might have been desensitised by these advertisements. They report the following:

**P2: ...since I was in grade 8 I haven't been watching tv much at all.**

**P10: ...They have this label on the top of the side of the Rothmans and the Stuyvesant packet, 'Danger tobacco kills'. These labels really aren't that effective, because you can't stop smoking just like that. It is going to take a lot for you to stop smoking if you have been smoking for like years.**

**P11: ...Cigarettes are there to make money and because it's addictive. Everybody is supporting this thing and more youngsters are starting to smoke. I don't think it's advertising because most youngsters want to be cool and fit into the group.**

**P12: ...And the warnings of the packages it doesn't have an influence, it is too small; it doesn't make it stand out.**

Even though the literature highlighted cigarette packages as being considered the ideal means of advertisements media that will facilitate the transmission of smoking-health risk awareness messages to adolescent smokers (USDHHS, 1989), this study's findings does not support this notion. Furthermore, The WHO Framework Convention on Tobacco's control steering also highlighted in one their principles that the warning labels on cigarette packages will serve to assist all countries to inform all individuals

should be informed of addictive nature, health consequence and mortal threat that tobacco consumption pose (WHO, 2003), but thus far it seems that this seem not be of essence for the study participants. A Mexican investigation explains this phenomenon explains supports our finding by noting their investigation to yield similar results; they found that smokers may familiarise themselves with these warning labels before they become desensitized and that these labels are shown to be of influence (Thrasher, Rousu, Anya-Ocampo, Reynales-Shigematsu, Arillo-Santillán & Hernández-Ávila, 2007).

#### **4.7 Quitting**

Quitting occurs once the relative importance of influences changes. For example, a new non-smoking partner starts smoking, but experiences steep increases in the price of cigarettes. Consequently they also suffer a decrease in spending money and they start work where smoking is not permitted; this can all trigger a decision to stop.

Two of the participant's suffered health consequences was seemingly stimulated by non-smoking efforts. They reported the following:

**P2: ...after the December holidays I was smoking Stuyvesant, and that was quite strong and I had breathing problems and I was struggling to breathe deep and that's when I stopped for about four or five months for the first time and that's when I switched to a lighter cigarette.**

**P4: ...The last time I stopped was last year about September when I started doing quadruples again, because I was quite an athlete. There was a lot of physical work and it was hard on the lungs.**

Furthermore, some of the male participants reflected that the price of cigarettes is a deciding factor to them discontinuing smoking. They indicated:

**P1: ...the second it goes higher than R20...there's no use to smoking. It cost R17,85 for a packet of cigarettes at the shop behind us.**

**P3: ...it really doesn't affect me cause I'm earning nice pay. If it goes up to like 20 or R24 a packet then i would just buy me new cigarettes.**

It is largely debated which gender is affected more by the cigarette price increase as a means to quit smoking. An American study reported men to be more responsive to price increase than women (Chaloupka & Pacula, 1999), whereas UK investigations have reported the women as more responsive to price than men (Townsend, Roderick & Cooper, 1994). In the current study however, the men were more sensitive to price increases in cigarettes. Even though most of the adolescents are too young to purchase cigarettes, they are able to obtain cigarettes from social sources (such as family and friends) (Carpenter & Cook, 2008). It is suggested that increase in cigarette taxes may however compel potential sources as more reluctant to provide them with cigarettes; thus reducing their accessibility to cigarettes (Carpenter & Cook, 2008). Cigarette tax increases in the American states have significantly reduced smoking frequency and participation among high school students (Carpenter & Cook, 2008).

#### **4.8 Smoking Relapse**

At this stage the adolescent have made attempts to quit smoking, but with little or no success which often resulted in a smoking relapse. Varying factors contribute to their relapse, with the emerging themes centring on the adolescents' personality attributes and repeated attempts to quit smoking; peer influence; and tobacco advertising.

##### **4.8.1 Personality Attributes and Repeated Attempts to Quit Smoking**

Attempts to quit smoking have also made the participants more vulnerable to re-establish smoking and in some cases for longer durations. This is marked by the following quotes:

**P2: ...I tried to quit, I've tried to put myself into new sports, i put myself into computers, I tried everything. The other times it was just me telling I'm gonna stop now cause I'm having a breathing problem or maybe I'll be sick and then it'll just happen one afternoon when I'm sitting up alone and bored and then I'll go buy me a cigarette and then I'll start dreading.**

**P3: ...there was a few times when I went for like two weeks and then I started again. I tried to stop from, I always try...it's for athletics. It is very hard for me to do something about it.**

**P8: ...I told my friends that I'm stopping, and then I stop for a week or two. The longest I ever said that I would stop was 3 months.**

**P12: ...I still think it's bad, but I can't get off it. You try so hard but you can't.**

Furthermore, most of the participants showed that they attempted to quit on numerous attempts without much success. They indicated:

**P2: ...I stopped about three times for about three months.**

**P5: ... I told myself I am gonna stop like 10 times already. But then it only last for like a day or two.**

**P6: ...there was a time that I tried to quit, but then there was the craving... I tried quitting a lot of times. It is always after you smoke a cigarette then you say you want to stop; but then you sit for 4 or 5 hours before you smoke again.**

**P7: ...I am trying now, but it is difficult. I smoke now in break also. A lot of times already I make it my New Year resolution and it didn't work out. It only last for a week and then I start again. It just feels like I can't go without it. I don't know what's wrong.**

**P11: ...I lasted for a day without smoking and then the very next morning I went to go smoke. I couldn't anymore, it was just that craving...**

**P12: ...I tried it a lot of times; it's very hard - maybe ten times. And then I don't smoke so for three days and then I smoke again.**

Furthermore, the participants noted that attending parties might have lured them from their non-smoking commitment. They indicated the following:

**P2: ...I would say the urges that you get everyone now and then. They are still smoking and maybe you are at a party and you having a drink or two and then you just get the urge, because I know when you drinking, you smoke more, you smoke a lot more.**

**P3: ... I tried it like thrice already. It doesn't work cause that was a six week time period...what was like the second month or half way of the third month then I would struggle, I won't be able to do it anymore.**

**P8: ...I have tried quitting this year, but it only lasted for three months. I think I went to a party or something with my school friends, and then it just happened.**

**P9: ... then it was like you smoke for fun or when you go to parties.**

**P10: ...when you go to a party and you know you decided you are going to quit, but then you get there and you surrounded by the smell of smoke and you just see cigarettes everywhere. You then feel uncomfortable because everyone knows that I smoke, or that I used to smoke, and I'm standing there and everyone is offering me a cigarette and I'm like no I'm fine.**

Some of them mainly owe this problem as a behavioural and not a physical addiction:

**P3: ...Because your body is used to that amount of smoke and then after a while you just can't anymore. I believe it's a mental thing for everyone to stop smoking; it's not just a physical thing because if you put your mind to it you can and most smokers don't have the mental stuff.**

**P5: ... It's just like you can't wake up in the morning. You just want to sleep on. And then you just smoke a cigarette and then you normal again and then you can go to school.**

Some of the participants however reported that some of them lacked the ability to refuse cigarettes and this further led to a smoking relapse. They reasoned that the second smoking relapse however differed, this time they had already tasted what binge smoking feels like, so it was much easier to give in and their level of resilience was lowered due to the failed first attempt and lack of social support to quit smoking.

Furthermore, they found that the use of alcohol often created strong temptations to smoke (Delfino, Jamner & Whalen, 2001), indicating that alcohol may increase the reward value of smoking cigarettes (Piasecki, McCarthy, Fiore & Baker, 2008). In this study it holds strength as the participants often note attending parties and the effect of the co-use of alcohol with cigarettes, this producing pleasurable effects in enticing the adolescent to start smoking once again (Piasecki, McCarthy, Fiore & Baker, 2008).

#### **4.8.2 Peer Influence**

Participants found that having smoking friends did not help in their cessation efforts:

**P3: ...when i say not that I'm not going to do it anymore, then if feels good, and then i eat about four or five sweets and then it goes away. And then i get all my friends who are smoking and then i get a whiff of it and then it is 'I need that, sweets are not doing it for me anymore'.**

**P7: ... Everywhere I go they smoke.**

**P12: ...all of them must quit so that we can support each other. Not only if one of them quit and all of them is smoking. That is not going to be right. There was a time when I refused to smoke. And they were like ok, they don't worry still.**

**P10: ... And then they are like what's wrong? And I'm like no, I quit. And then they like laugh at me or whatever because they know that I can't. So I decided that I'm going to move up to a lighter cigarette than I usually smoke, because sometimes the effect is strong.**

Evidence from the current study is similar to Canadian and Nigerian investigations which found peer substance use potentially contributes this general pattern of delinquent behaviours (Pleydon & Schner, 2001), and particularly with the combined effect of peer smoking and delinquency further adolescents smoking (Imhonde & Aluede, 2007). As a result, peer smoking may motivate adolescents to start smoking through indirect engagement (by means of social exposure) in delinquent behaviours.

#### **4.8.3 Tobacco Advertising**

During this stage, only one of the participants acknowledged that by simple viewing a cigarette poster they would feel aggravated/agitated, especially when they haven't smoked in a while. Seeing tobacco advertisements makes some of them crave cigarettes:

**P2: ...Yes, it does. That would make me 'damn' I need to go buy me a new cigarette. That would like urge you to want a cigarette cause you can urge for a cigarette if you like look at it and it is not even real it is just a picture.**

This finding is supported by the research that found movie images, such as commercial advertising, partner smoking with celebrities and portray to create desirable behaviour (Basil, 1997). Also, experimental studies report that adolescents hold more positive attitudes to toward smoking after seeing smoking portrayed in movies (Pechmann & Shih, 1999). Exposure to movie smoking is found as positively associated with rebelliousness and the adolescents' sensation seeking tendencies (Dalton et al., 2003).

#### **4.9 Summary of Findings**

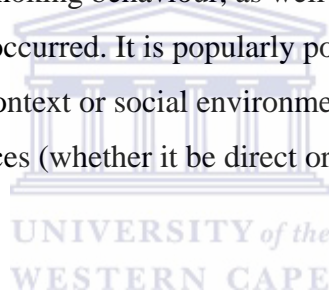
Evidence from this investigation are consistent with other literary studies that suggest cigarette smoking to stem from a complex of cognitive, behavioural and personal factors (Hoyt, 2002). The transition from early to late adolescence is marked by these dramatic developmental shifts in knowledge, attitude and behaviour (Simons-Morton, 2004), and subsequently the family has to undergo acknowledgement of these changes coupled with their altered child-parent relationship (Garmienė, Žemaitienė & Zaborskis, 2006). Furthermore, the adolescents' cigarette smoking behaviour is also marked by the weaning away from the family towards peer attachment and this may subsequently lead to risky behaviour (Reiff, 2001). Essentially, both the parent-child relationship and the transitional adolescent period impacts on the child's behaviour development health risk, which includes cigarette smoking (Garmienė, Žemaitienė & Zaborskis, 2006). The study's findings are similar to other investigations suggesting adolescents belief that smoking to be forbidden to them (Sarafino, 2002), but also available to them with restrictions.

Thematic analysis of participants' response has provided some unique evidence concerning adolescents' susceptibility to smoking and the smoking socialisation that occurred namely in the household and school environment. Evidence of parental smoking, household smoking restrictions, and riding in a vehicle with a smoker is demonstrated to promote the risk for the adolescents' cigarette smoking uptake. The social learning theory socialisation mechanisms aligned as explanation to this result in the parental role modelling their behaviour (Bandura, 1977). Adolescents further exposed themselves when smoking friends who provided positive images of smoking through modelling smoking behaviour and making the cigarettes more accessible.



Caspi (1993) indicates that an adolescent's social context as dynamic as influence and friends' selection work together to produce both continuity and change for the adolescent.

Across all the stages, what remains evident is that there are multiple pathways of connecting the personality factors and risk factors. All these factors either play a facilitative role or it impedes translations between the different factors, such as communication, anti-smoking socialisation messages, etc. A pivotal component guiding the adolescent's behaviours is the parents' emotional connectedness with their children. Younis and Smollar (1985; cited by Yang & Schaninger, 2010) strongly supports this assertion by noting that parent-child emotional connectedness takes precedence over guiding rules and supervision. In this study what remains clear is that these parental factors served as motivation for the peers as they were afforded a direct influence on the adolescent smoking behaviour, as well as any other form of delinquency that might have occurred. It is popularly postulated that the family situation (i.e. the individual context or social environment influence) holds influence on how these varying influences (whether it be direct or indirect) lie in position to each other.



Furthermore, Grusec and Goodnow (1994) illustrated that the risk for adolescent problem behaviour is fostered by poor monitoring and weak family relationships owing to the parents' failure to deliver clear communication of parental values; and parents undermining motivation for their children to comply and attend.

Subsequently, this therefore weakened adolescents' internalization of parental socialisation and their values. It is suggested that if one is to look at effective ways of deterring adolescent smoking then family-based interventions should be aimed for as it intends to enhance behavioural control, parental acceptance and parent-child communication (Chassin, Presson, Rose, Sherman, Davis & Gonzalez, 2005). Ahmadi and colleagues (2001) further supports this evidence by noting that the other risk factors accounting for the early onset or escalation of tobacco use include parenting style, curiosity, beliefs about release tension and pleasure, role modelling, seeking pleasure.

This study's findings are supported by Banerjee and Greene's (2009) conclusions that disclose that peer smoking and other associated delinquent behaviours seem to directly influence adolescent smoking, sensation seeking and parental monitoring contribute indirectly to the adolescent's smoking behaviour through the mediation of peer smoking and delinquent behaviours. These findings are consistent with preceding scholarships that consistently note peer smoking behaviour (Engels, Vitaro, Den Exter Blokland, Kemp & Scholte, 2004) and delinquency (Mason, Hitchings & Spoth, 2007) as related to adolescent smoking. This proof is suggestive that adolescents who engage in cigarette smoking might have more peers who indulge in smoking and delinquent behaviours. Give these results, peer relationships and their related influences should be concentrated on these areas.

The social learning theoretical framework suggests that the family, community, school occupy a participatory active role in promoting social affiliations and enhancing competencies which protect youth from delinquent behaviours.

#### **4.10 Conclusion**

The discussion of results show that the adolescents smoking are not determined by knowledge, beliefs and attitudes alone, but by social and environmental influences as within the home and the school setting as well. Risk and protective factors for adolescent smoking was identified on a psychological, physical, social/environmental level cross-cuttingly on the different stages of the smoking cycle. Of importance was the adolescents' common misinterpretation of 'smoking out of habit' for 'addiction'. The social learning theory further highlighted the significance of learning through observation and imitation of the behaviours of others; such as parents, peers or role models by means of the socialisation process.

## CHAPTER FIVE

### Conclusion and Recommendations

#### 5.1 Introduction

The current study has endeavoured to provide an in-depth understanding of South African adolescents' perceptions regarding the uptake of smoking, as well as the factors promoting it. An understanding of the adolescents' attitudes and behaviours regarding smoking revealed that the role of socialisation in the household, as well as the many social and environmental factors are likely to influence and shape their decisions to smoke. The findings further demonstrated that feeble anti-smoking socialising messages in the household and its related environment may place the adolescent at risk for smoking uptake. Passive sanctions of smoking in the home, vehicles and the school may provide a socialisation means that support adolescents in their resolve to take up smoking, irrespective of the parents smoking status. Furthermore, these actions also increased adolescents' accessibility to cigarettes and may have enhanced their lingering thoughts of acts of smoking. The study also provided insight into the individual and relationship-specific differences in susceptibility to influence from the adolescent's peers.

The current study is one of the few studies simultaneously having explored the accumulation of behaviour systems, perceived environment and personality factors that influence adolescents' cigarette smoking behaviour. The findings were to a large extent compatible with previous research from the African, Asian and Western populations.

Of importance is that this epidemic places adolescents at increased risk in the onset of tobacco smoking. At a societal level, it is noted that South Africa is still in transition and that the changes in the economic, political and social structures, prior and after Apartheid made the country vulnerable to drug abuse. The availability and use of drugs are related to the decline of traditional forms of family structure and social relationships, which was found to have implications for illicit cigarette use, and treatment (Peltzer, Ramlagan, Johnson & Phaswana-Mafuya, 2010). It is reasoned that

this is characteristic of inadequate supervision for much time of the day due to the parents often returning home late from work and leaving the latchkey with children (Peltzer, Ramlagan, Johnson & Phaswana-Mafuya, 2010). Furthermore, it was found that the factors that reflect the adolescents' changed or increased pattern of use, as well as what society factors could account for facilitating the changes in the ease of accessibility and availability with a limited enforcement of cigarette laws within their society.

Within South Africa, the Western Cape (Cape Town), along with Gauteng, are the most highly urbanised provinces and subsequently have the highest rates of drug abuse. The share of female-headed households in urban areas is steadily rising and approximates one-third of households. These above mentioned factors are all characteristic to urbanized cities.

## **5.2 Limitations of this study**

This study faced a number of limitations. The data was collected from the northern suburbs of Cape Town, South Africa and it is not known whether these results would generalize to other parts of the country. The data primarily consisted of White and Coloured adolescents, thereby under-representing other racial groups (e.g., African and Asian). While the data must be interpreted with sampling bias in mind, obtaining an unbiased sample of adolescents is limited given the limited space, particular to ask questions about risk behaviours. Furthermore, the study was also grounded on adolescents self-reports. Future studies may explore observation of participants' actual behaviour or that of their family and friends' reports. In the present study we detailed adolescents perceptions by asking them to report their reasons for smoking and its continuation based on the parents, peers and environmental role in it; and it would be more useful to obtain data from caregivers along with their friends and relevant other sources.

This study also made use of interview method, whereas future studies could employ longitudinal designs to investigate the multiple pathways of influence from parental attitudes and knowledge to peers perceptions and the environmental influence. And subsequent investigate the interplay between them.

Finally, the broad scope of the social learning theory needs to be acknowledged, and the use of other theoretical principles to limit the adequacy of this research. The evidence does not provide causal conclusions but provides support to reasons of adolescents tobacco use. Findings also reflect a comparison between three smoking-uptake levels and two levels of influence thresholds. Further analysis using longitudinal investigations would provide thorough evidence to understand these influences and their various effects.

### **5.3 Future Directions**

This study presents a picture of the adolescents smoking behaviour in Cape Town, South Africa. It underlines the need for prevention strategies such as smoke-free schools, parental anti-tobacco education, no smoking policies in the general community, and improved enforcement measures prohibiting minors from purchasing cigarettes (Lotrean, Sánchez-Zamorano, Valdés-Salgado, Arillo-Santillán, Allen al., 2005). It is generally agreed that non-parental community members can promote adolescents health development by monitoring their behaviour (Sampson, Raundenbush & Earls, 1997)

The prevention efforts needed may target various community facets in order to reach children and adolescents. These considerations may involve community cohesion, beliefs and norms, cultural traditions, collaborating with community organisations. Furthermore, the adult or parents social behaviour should be targeted, especially since adolescents hold strong perceptions around their smoking behaviour; and literature notes there to be associations between adult role modelling and the child's acquisition of learnt behaviour – this in further support of the social learning theory.

Adults or parents need to be informed that adolescents are influenced and aware of these subjective adult norms. There is a need for support to reinforce community cessation and prevention programmes which is marked important in light of the heightened danger that children who initiate smoking at an earlier stage are more likely to evolve into habitual smokers (Escobedo, Marcus, Holtzman & Giovino, 1986). A New Zealand study noted that positive family influences provide a stimulus

and path for tobacco control programmes by focussing on parental and family factors (Wong, Ameratunga, Garrett, Robinson & Watson, 2008). Parental behaviour, and child-parent communication can prove to be influential to the child's behavioural development in promoting the provision of anti-smoking messages to the parents.

Furthermore, it is suggested that the adolescents peers should be included in the quitting programme as friends were more likely to have smoker friends than not. Other studies have noted that smoking is a manner in which adolescents bond with their peer group (Reiff, 2001). The finding suggests that peer-to-peer education is an opportunity for the development of healthy norms, beliefs and behaviours within peer groups. It is recommended that communication is a principle item and it will facilitate the need to address the establishment of joint activities for parents and children. The provision of education for young children on the harmful effects of tobacco consumption and encourage a policy of abstinence. Promoting positive parenting practices, which includes teachings on the supportive role of parenting, the protective role of parental control and monitoring, being involved in children's daily activities is thus essential.

It is of further recommendation that prevention initiatives be embedded in comprehensive frameworks that will drive to transform the smoking and behaviour of teachers. The establishment of non-smoking policies in places (eg., schools) where adolescents congregate is of recommendation. Adolescent's strong relatedness to role models may silence smoking by fostering the adolescents understanding of adults norms against smoking or by founding a home environment which will hinder the adolescent's engagement in smoking (Carvajal, Hanson, Downing, Coyle & Pederson, 2004). Health education and its related anti-smoking practice can centre on diluting the curiosity or impulse of cigarette experimentation.

## References

- Agrawal, A., Madden, P.A.F., Heath, A.C., Lynskey, M.T., Bucholz, K.K. & Martin, N.G. (2005). Correlates of regular cigarette smoking in a population-base sample of Australian twins. *Addiction, 100*, 1709-1719.
- Ahmadi, J., Khalili, H., Jooybar, R., Namazi, N. & Mohammadagaei, P. (2001). Prevalence of cigarette smoking in Iran. *Psychological Reports, 89* (2), 339-41.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*, 179-211.
- Akers, R. (1977). *Deviant behaviour: A social learning approach* (2<sup>nd</sup> ed.). Belmont, CA: Wadsworth.
- Akers, R. (1998). *Social learning and social structure: A general theory of crime and deviance*. Boston: Northeastern University Press.
- Albers, A.B. & Biener, L. (2003). Adolescent participation in tobacco promotions: the role of psychosocial factors. *Pediatrics, 111* (2), 402-6.
- Alexander, C., Piazza, M., Mekos, D. & Valente, T. (2001). Peers, schools, and adolescent cigarette smoking. *Journal of Adolescent Health, 29* (1), 22-30.
- American Lung Association of Sacramento-Emigrant Trails. (2002). Thumbs Up! Thumbs Down! Movie Summary: 1991-20010 Data Summary and Comparison, 2002. Retrieved July 30, 2010, from [www.saclung.org](http://www.saclung.org).
- Andrews, J.A. & Duncan, S.C. (1997). Examining the reciprocal relation between academic motivation and substance use: effects of family relationships, self-esteem, and general deviance. *Journal of Behavioral Medicine, 20* (6), 523-49.
- Andrews, J.A., Hops, H., Ary, D., Tildesley, E. & Harris, J. (1993). Parental influence on early adolescent substance use: Specific and nonspecific effects. *Journal of Early Adolescence, 13*, 285-310.
- Anton, M.M., Cortez-Cooper, M.Y., DeVan, A.E., Neidre, D.B., Cook, J.N. & Tanaka, H. (2006). Cigarette smoking, regular exercise, and peripheral blood flow. *Atherosclerosis, 185*, 201-205.
- Arnold, W., Eysenck, H.J. & Meili, R. (1979). *Lexicon der Psychologie*. Freiburg im Brieisgau, Verlag Herderkg, 1971-1972.
- Audrain-McGovern, J., Rodriguez, D., Tercyak, K.P., Cuevas, J., Rodgers, K., & Patterson, R. (2004). Identifying and characterising adolescent smoking



- trajectories. *Cancer, Epidemiology, Biomarkers and Prevention*, 13 (12), 2023-2034.
- Aufseeser, D., Jekielek, S. & Brown, B. (2006). The family environment and adolescent well-being: Exposure to positive and negative family influences. Washington: Child Trends; and San Francisco: National Adolescent Health Information Center, University of California, San Francisco.
- Avenevoli, S. & Merikangas, K.R. (2003). Familial influences on adolescent smoking. *Addiction*, 98 (Suppl. 1), 1-20.
- Bailey, S.L., Ennett, S.T. & Ringwalt, C.L. (1993). Potential mediators, moderators, or independent effects in the relationship between parents' former and current cigarette use and their children's cigarette use. *Addictive Behaviors*, 18, 601-21.
- Baillie, L., Lovato, C.Y., Johnson, J.L. & Kalaw, C. (2005). Smoking decisions from a teen perspective: A narrative study. *American Journal of Health Behavior*, 29 (2), 99-106.
- Bandura, A. (1965). Influence of models' reinforcement contingencies on the acquisition of imitative responses. *Journal of Personality and Social Psychology*, 1, 589-595.
- Bandura, A. (1977). *Social Learning Theory*. New Jersey: Prentice-Hall.
- Bandura, A. (1986). *Social Foundations of Thought and Action*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1989). Social cognitive theory. In R. Vasta (Ed.), *Annals of Child Development*, 6. *Six theories of child development* (pp. 1-60). Greenwich, CT: JAI Press.
- Banerjee, S.M. & Greene, K. (2009). Sensation seeking and adolescent cigarette smoking: Examining multiple pathways in cross-sectional data. *The Open Addiction Journal*, 2, 12-20.
- Barnes, G.M., Hoffman, J.H., Welte, J.W., Farrell, M.P. & Dintcheff, B.A. (2006). Effects of parental monitoring and peer deviance on substance use and delinquency. *Journal of Marriage Fam*, 68, 1084-104.
- Basil, M.D. (1997). The danger of cigarette "special placements" in film and television. *Health Communication*, 9, 191-198.
- Bauman, K.E. & Fisher, L.A. (1986). On the measurement of friend behavior in research on friend influence and selection: Findings from longitudinal studies of

- adolescent smoking and drinking. *Journal of Youth and Adolescence*, 15, 345-353.
- Beatty, S., Cross, D. & Shaw, T. (2008). The impact of a parent-directed intervention on parent-child communication about tobacco and alcohol. *Drug and Alcohol Review*, 27 (6), 591-601. DOI: 10.1080/09595230801935698.
- Begg, D.J., Langley, J.D., Moffitt, T. & Marshall, S.W. (1996). Sport and delinquency: an examination of the deterrence hypothesis in a longitudinal study. *Br J Sports Med*, 30, 335-341.
- Bisset, S., Markham, W.A. & Aveyard, P. (2007). School culture as an influencing factor on youth substance use. *Journal of Epidemiol Community Health*, 61, 485-490.
- Brady, S.S., Song, A.V & Halpern-Felsher, B.L. (2008). Adolescents report both positive and negative consequences of experimentation with cigarette use. *Preventive Medicine*, 46, 585-590.
- Breakwell, G.M. (1995). Motivation and personality. In: C.P. Smith (Ed). Handbook of thematic content-analysis. *British Journal of Psychology*, 86, 154-155.
- Bond, L., Butler, H. & Thomas, L. (2007). Social and school connectedness in early secondary school as predictors of late teenage substance use, mental health, and academic outcomes. *Journal of Adolescent Health*, 40, 9-18.
- Breslau, N. (1995). Psychiatric comorbidity of smoking and nicotine dependence. *Behavior Genetics*, 25, 95-101. DOI:10.1007/BF02196920.
- Brook, D.W., Rubenstone, E., Zhang, C., Morojele, N.K. & Brook, J.S. (2011). Environmental stressors, low well-being, smoking, and alcohol use among South African adolescents. *Social Science and Medicine*, 72 (9), 1447-1453.
- Brook, J.S., Morojele, N.K., Brook, D.W. & Rosen, Z. (2005). Predictors of cigarette use among South African adolescents. *International Journal of Behavioral Medicine*, 12 (4), 207-17.
- Brown, B. B. (1989). The role of peer groups in adolescents' adjustment to secondary school. In: T.J. Berndt & G.W. Ladd (Eds.), *Peer relationships in child development* (pp. 188-215). New York: Wiley.
- Brown, B.B., Dolcini, M.M. & Leventhal, A. (1997). Transformations in peer relationships at adolescence: implications for health-related behavior. In: J. Schulenberg, J.L. Maggs & K. Hurrelmann (Eds.), *Health risks and*

- developmental transitions during adolescence* (pp. 161-189). New York: Cambridge University Press.
- Bukatko, D. & Daehler, M.W. (1995). *Child Development: A thematic approach*. Boston: Houghton Mifflin Company.
- Burt, R.D., Dinh, K.T., Peterson, Jr. A.V. & Sarason, I.G. (2000). Predicting adolescent smoking: a prospective study of personality variables. *Prev Med, 30*, 115-25.
- Bushman, B.J. & Anderson, C.A. (2001). Media violence and the American public: Scientific facts versus media misinformation. *American Psychologist, 56*, 477-489.
- Carpenter, C. & Cook, P.J. (2008). Cigarette taxes and youth smoking: New evidence from national, state, and local Youth Risk Behavior Surveys. *Journal of Health Economics, 27*, 287-299.
- Carvajal, S.C., Hanson, C., Downing, R.A., Coyle, K.K. & Pederson, L.L. (2004). Theory-based determinants of youth smoking: A multiple influence approach. *Journal of Applied Social Psychology, 34* (1), 59-84.
- Caspi, A. (1993). Why maladaptive behaviors persist: Sources of continuity and change across the life course. In: D. C. Funder , R. D. Parke , C. Tomlinson-Keasey, & K. Widener (Eds.), *Studying lives through time: Personality and development* (pp. 209-230). Washington, DC: APA.
- Castro, F.G., Maddahian, E., Newcomb, M.D. & Bentler, P.M. (1987). A multivariate model of the determinants of cigarette smoking among adolescents. *Journal of Health and Social Behavior, 28*, 273-289.
- Catalano, R.F. & Hawkins, J.D. (1996). The social development model: A theory of antisocial behavior. In: J.D. Hawkins (Ed.), *Delinquency and crime: Current theories* (pp. 149-197). New York: Cambridge University Press.
- Chaloupka, F.J. & Pacula, R.L. (1999). Sex and race differences in young people's responsiveness to price and tobacco control policies. *Tobacco Control, 8*, 373-377.
- Chapman, S. & Rubinstein, P. (1987). Smoker's beliefs and smoking and health. *Medical Journal of Australia, 145*, 502-503.

- Chapman, S., Wong, W.L. & Smith, W. (1993). Self-exempting beliefs about smoking and health: differences between smokers and ex-smokers. *American Journal of Public Health, 83* (2), 215-219.
- Chassin, L.S.J., Montello, D. & McGrew, J. (1986). Changes in peer and parent influence during adolescent: longitudinal versus cross-sectional perspectives on smoking initiation. *Developmental Psychology, 22*, 327-334.
- Chassin, L., Presson, C.C., Todd, M., Rose, J. & Sherman, S.J. (1998). Maternal socialisation of adolescent smoking: The intergenerational transmission of parenting and smoking. *Developmental Psychology, 34*, 1189-1201.
- Chassin, L., Presson, C. C., Pitts, S.C. & Sherman, S.J. (2000). The natural history of cigarette smoking from adolescence to adulthood in a midwestern community sample: Multiple trajectories and their psychosocial correlates. *Health Psychology, 19*, 223-231.
- Chassin, L., Presson, C.C., Rose, J., Sherman, S.J., Davis, M.J. & Gonzalez, J.L. (2005). Parenting style and smoking-specific parenting practices as predictors of adolescent smoking onset. *J Pediatric Psychology, 30*, 333-44.
- Chassin, L., Presson, C., Rose, J., Sherman, S.J. & Prost, J. (2002). Parental smoking cessation and adolescent smoking. *Journal of Pediatric Psychology, 27* (6), 485-496.
- Chassin, L., Presson, C., Todd, M., Rose, J. & Sherman, D. (1998). Maternal socialisation of adolescent smoking: The intergenerational transmission of parenting and smoking. *Developmental Psychology, 34*, 1189-1202.
- Chen, X., Stanton, B., Fang, X., Li, X., Lin, D., Zhang, J. et al. (2006). Perceived smoking norms: socioenvironmental factors, personal attitudes and adolescent smoking in China: a mediation analysis with longitudinal data. *Journal of Adolescent Health, 38*, 359-368.
- Chilcoat, H. & Anthony, J.C. (1996). Impact of parent monitoring on initiation of drug use through late childhood. *Journal of the American Academy of Child and Adolescent Psychiatry, 35*, 91-100.
- Choi, W.S., Ahluwalia, J.S., Harris, K.J. & Okuyemi, K. (2002). Progression to established smoking: the influence of tobacco marketing. *American Journal of Preventive Medicine, 22*(4), 228-33.

- Clark, P.I., Scarisbrick-Hauser, A., Gautam, S.P. & Wirk, S.J. (1999). Anti-tobacco socialisation in homes of African-American and white parents, and smoking and nonsmoking parents. *Journal of Adolescent Health, 24*, 329-339.
- Cohen, S. & Wills, T.A. (1985). Stress, social support, and buffering hypothesis. *Psychological Bulletin, 98*, 310-357.
- Colby, S.M., Tiffany, S.T., Shiffman, S. & Niaura, R.S. (2000). Measuring nicotine dependence among youth: A review of available approaches and instruments. *Drug and Alcohol Dependence, 59*, S23-S39.
- Corbett, K. (2001). Susceptibility of youth to tobacco. *Respiration psychology, 128*, 103-18.
- Crawford, A.M., Pentz, MA., Chou, C.P. & Dwyer, J.H. (2003). Parallel developmental trajectories of sensation seeking and regular substance use in adolescents. *Psychol Addict Behavior, 17*, 179-92.
- Centers for Disease Control and Prevention (CDC). (2000). Measuring health days: Population assessment of health-related quality of life. Atlanta, Georgia: CDC.
- Centers for Disease Control and Prevention (CDC). (2002). Usual sources of cigarettes for middle and high school students—Texas, 1998–1999. *MMWR, 51*, 900-1.
- Centers for Disease Control and Prevention (CDC). (2003). Cigarette smoking among adults—United States, 2001. *Morbidity and Mortality Weekly Report, 52*, 953-956.
- Clark, P.I., Scarisbrick-Hauser, A., Gautam, S.P. & Wirk, S.J. (1999). Anti-tobacco socialisation in homes of African-American and White parents, and smoking and nonsmoking parents. *Journal of Adolescent Health. 24*, 329-339.
- Colby, S.M., Tiffany, S.T., Shiffman, S. & Niaura, R.S. (2000). Are adolescent smokers dependent on nicotine? A review of the evidence. *Drug and Alcohol Dependence, 89*, S83-S95.
- Dalton, M.A., Sargent, J.D., Beach, M.L., Titus-Ernstoff, L., Gibson, J.J., Ahrens, M.B. et al. (2003). Effect of viewing smoking in movies on adolescent smoking initiation: a cohort study. *Lancet, 362*, 281-85.
- Dalton, M.A., Tickle, J.J., Sargent, J.D., Beach, M.L., Ahrens, M.B. & Heatherton, T.F. (2002). The incidence and context of tobacco use in popular movies from 1988 to 1997. *Preventive Medicine, 34* (5), 516-23.

- Darling, N. & Cumsille, P. (2003). Theory, measurement, and methods in the study of family influences on adolescent smoking. *Addiction*, 98 (Suppl 1), 21-36.
- Delfino, R.J., Jamner, L.D. & Whalen, C.K. (2001). Temporal analysis of the relationship of smoking behavior and urges to mood states in men versus women. *Nicotine & Tobacco Research*, 3, 235-248.
- Den Exter Blokland, E.A.W., Hale, W.W.III, Meeus, W. & Engels, R.C.M.E. (2006). Parental anti-smoking socialisation: Associations between parental anti-smoking socialisation practices and early adolescent initiation. *European Addiction Research*, 12, 25-32.
- Den Exter Blokland, E.A.W., Hale, W.W.III, Meeus, W. & Engels, R.C.M.E. (2007). Parental support and control and early adolescent smoking: a longitudinal study. *Substance Use Misuse*, 42 (14), 2223-32.
- Denzin, N.K. & Lincoln, Y.S. (1994). *Handbook of qualitative research*. Thousand Oaks, California: Sage.
- Department of Health, Medical Research Council & OrcMacro (2007). South Africa Demographic and Health Survey 2003. Pretoria: Department of Health.
- Dick, D.M., Viken, R., Purcell, S., Kaprio, J., Pulkkinen, L. & Rose, R.J. (2007). Parental monitoring moderates the importance of genetic and environmental influences on adolescent smoking. *Journal of Abnormal Psychology*, 116, 213-8.
- DiFranza, J.R. & Coleman, M. (2001). Sources of tobacco for youths in communities with strong enforcement of youth access laws. *Tob Control*, 10, 323-8.
- Distefan, J.M., Gilpin, E.A., Sargent, J.D. & Pierce, J.P. (1999). Do stars encourage adolescents to start smoking? Evidence from California. *Prev Med.*, 28, 1-11.
- Dillon, F.R., Pantin, H., Robbins, M.S. & Szapocznik, J. (2008). Exploring the role of parental monitoring of peers on the relationship between family functioning and delinquency in the lives of African American and Hispanic adolescents. *Crime Delinq*, 54, 65-94.
- Dedobbeleer, N., Béland, F., Contandriopoulos, A.P. & Adrian, M. (2004). Gender and the social context of smoking behaviour. *Social Science and Medicine*, 58, 1-12.
- Eagly, A.H. & Chaiken, S. (1993). *The Psychology of Attitudes*. Orlando, Florida: Harcourt Brace Jovanovich.



- Eccles, J.S., Barber, B.L., Stone, M. & Hunt, J. (2003). Extracurricular activities and adolescent development. *Journal of Social Issues*, 59, 865-889.
- Engels, R.C.M.E., Finkenauer, C., Kerr, M. & Stattin, H. (2005). Illusions of parental control: Parenting and smoking onset in Swedish and Dutch adolescents. *Journal of Applied Social Psychology*, 35, 1-28.
- Engels, R.C.M.E., Vitaro, F. Den Exter Blokland, E., de Kemp, R. & Scholte, R.H.J. (2004). Influence and selection processes in friendships and adolescent smoking behavior. *Journal of Adolesc*, 27, 531-44.
- Engels, R.C.M.E. & Willemsen, M.C. (2004). Communication about smoking in Dutch families: Associations between anti-smoking socialisation and adolescent smoking-related cognitions. *Health Education Research*, 19, 227-238.
- Ennett, S.T. & Bauman, K.E. (1994). The contribution of influence and selection to adolescent peer group homogeneity: the case of adolescent cigarette smoking. *Journal of Personality and Social Psychology*, 67, 653-663.
- Ennett, S.T., Bauman, K.E., Foshee, V.A., Pemberton, M. & Hicks, K. (2001). Parent-child communication about adolescent tobacco and alcohol use: What do parents say and does it affect youth behavior? *Journal of Marriage and the Family*, 63, 48-62.
- Ennett, S.T., Bauman, K.E., Hussong, Faris, R., Foshee, V.A., DuRant, R.H. et al. (2006). The peer context of adolescent substance use: Findings from social network analysis. *Journal Res Adolescent*, 28, 159-86.
- Escamilla, G., Craddock, A.L. & Kawachi, I. (2000). Women and smoking in Hollywood movies: a content analysis. *American Journal of Public Health*, 90 (3), 412.
- Escobedo, L.G., Marcus, S.E., Holtzman, D. & Giovino, G.A. (1986). Sports participation, age at smoking initiation, and the risk of smoking among U.S. high school students. *JAMA*, 256, 2859-62.
- Everett, S.A., Schnuth, R.L. & Tribble, J.L. (2004). Tobacco and Alcohol Use in Top-Grossing American Films. *Journal of Community Health*, 23 (4), 317-24.
- Fagerstrom, K.O., Heatherton, T.F. & Kozlowski, L.T. (1990). Nicotine addiction and its assessment. *Ear, Nose and Throat Journal*, 69 (11), 763-5.



- Fernander, A.F., Flisher, A.J., King, G., Noubary, F., Lombard, C., Price, M. et al. (2006). Gender differences in depression and smoking among youth in Cape Town, South Africa. *Ethn Dis.*, 16 (1), 41-50.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford: Evanston, Row & Peterson.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Flay, B.R., Hu, F.B. & Richardson, J. (1998). Psychosocial predictors of different stages of cigarette smoking among high school students. *Preventive Medicine*, 27, A9-A18.
- Flay, B., Petraitis, J. & Hu, F. (1999). Psychosocial risk and protective factors for adolescent tobacco use. *Nicotine and Tobacco Research*, 1, S59-S66.
- Flay, B.R., Hu, F.B. & Richardson, J. (1998). Psychosocial predictors of different stages of cigarette smoking among high school students. *Preventive Medicine*, 27, A9-A18.
- Flisher, A.J., Parry, C.D.H., Muller, M., & Lombard, C. (2004). Stages of substance use among adolescents in Cape Town, South Africa. *Journal of Substance Use*, 7, 162-167.
- Fontana, A. & Frey, J.A. (2000). The interview: From structured questions to negotiating text. In N.K. Denzin & Y.S. Lincoln (Ed.), *Handbook of qualitative research (2<sup>nd</sup> Ed.)*. London: Sage Publications.
- Foshee, V. & Bauman, K.E. (1992). Parental and peer characteristic as modifiers of the bond-behavior relationship: an elaboration of control theory. *Journal of Social and Health Behavior*, 33, 66-76.
- Frankenberger, K.D. (2004). Adolescent egocentrism, risk perceptions, and sensation seeking among smoking and non-smoking youth. *J Adolescent Res*, 19, 576-590.
- Fredricks, J.A. & Eccles, J.E. (2006). Is extracurricular participation associated with beneficial outcomes? Concurrent and longitudinal relations. *Developmental Psychology*, 42, 698-713.
- French, S.A. & Jeffery, R.W. (1995). Weight concern and smoking: A literature review. *Annals of Behavioral Medicine*, 17, 234-244.
- Friedman, L.S., Lichtenstein, E. & Biglan, A. (1985). Smoking onset among teens: an empirical analysis of initial situations. *Addictive Behaviors*, 10, 1-13.

- Garmienė, A., Žemaitienė, N. & Zaborskis, A. (2006). Family time, parental behaviour model and the initiation of smoking and alcohol use by ten-year-old children: an epidemiological study in Kaunas, Lithuania. *BMC Public Health*, 6 (287).
- Garniefski, N. & Diekstra, R.F. (1996). Perceived social support from family, school, and peers: relationship with emotional and behavioural problems among adolescents. *J Am Acad Child Adolesc Psychiatry*, 35 (12), 1657-64.
- Gau, S.S., Chong, M.Y., Chen, T.H. & Cheng, A.T. (2005). A 3-year panel study of mental disorders among adolescents in Taiwan. *Am J Psychiatry*, 162, 1344-50.
- Gau, S.S., Lai, M.C., Chiu, Y.N., Liu, C.T., Lee, M.B. & Hwu, H.G. (2009). Individual and family correlates for cigarette smoking among Taiwanese college students. *Compr Psychiatry*, 50 (3), 276-85.
- Geist, C.R. & Hermann, S.M. (1990). A comparison of the psychological characteristics of smokers, ex-smokers, and nonsmokers. *J Clin Psychol*, 46, 102-5.
- Gilpin, E.A., Lee, L. & Pierce, J.P. (2004). Does adolescent perception of difficulty in getting cigarettes deter experimentation? *Prev Med*, 38 (4), 485-91.
- Glendinning, A., Shucksmith, J. & Hendry, L. (1997). Family life and smoking in adolescence. *Social Science and Medicine*, 44, 93-101.
- Global Youth Tobacco Survey Collaborative Group (GYTSCG). (2002). Tobacco use among youth: a cross country comparison. *Tobacco Control*, 11 (3), 252-270.
- Gottfredson, M.R. & Hirschi, T. (1990). A general theory of crime. Stanford, CA: Stanford University Press.
- Griesbach, D., Amos, A. & Currie, C. (2003). Adolescent smoking and family structure in Europe. *Social Science and Medicine*, 56, 41-521.
- Gritz, E.R., Prokhorov, A.V., Hudmon, K.S., Mullin Jones, M., Rosenblum, C., Chang, C.C. et al. (2003). Predictors of susceptibility of smoking and ever-smoking: longitudinal study of a triethnic sample of adolescents. *Nicotine and Tobacco Research*, 5, 493-506.
- Grekin, E.R., Sher, K.J. & Wood, P.K. (2006). Personality and substance dependence symptoms: modeling substance-specific traits. *Psychol Addict Behav*, 20, 415-24.

- Grusec, J.E. & Goodnow, J.J. (1994). Impact of parental discipline methods on the child's internalization of values: a reconceptualization of current points of view. *Developmental Psychology, 30*, 4-19.
- Guidon, G.E. & Boisclair, D. (2003). Past, current and future trends in tobacco use. NHP, Discussion Paper. *Economics of Tobacco Control*, Paper No. 6. Washington, D.C.: World Bank.
- Guo, H., Reeder, A.I., McGee, R. & Darling, H. (2011). Adolescents' leisure activities, parental monitoring and cigarette smoking – a cross-sectional study. *Substance Abuse Treat Prev Policy, 6* (6), 12.
- Halpern-Felsher, B.L., Biehl, M., Kropp, R.Y. & Rubinstein, M.L. (2004). Perceived risks and benefits of smoking: differences among adolescents with different smoking experiences and intentions. *Preventative Medicine, 39*, 559-567.
- Hansen, W. B., & Malotte, K. (1986). Perceived personal immunity: The development of beliefs about susceptibility to the consequences of smoking. *Preventive Medicine, 15*, 363-372.
- Harakeh, Z., Scholte, R.H.J., Vermulst, A.A., De Vries, H. & Engels, R.C.M.E. (2004). Parental factors and adolescents' smoking behavior: an extension of the theory of planned behavior. *Preventive Medicine, 39*, 951-961.
- Harakeh, Z., Scholte, R.H.J., De Vries, H. & Engels, R.C.M.E. (2005). Parental rules and communication: their association with adolescent smoking. *Addiction, 100*, 862-870.
- Harris, J.E. & López-Valcárcel, B.G. (2008). Asymmetric peer effects in the analysis of cigarette smoking among young people in the United States, 1992-1999. *Journal of Health Economics, 27*, 249-264.
- Hazan, A.R., Lipton, H.L. & Glantz, S.A. (1994). Popular films do not reflect current tobacco use. *American Journal of Public Health, 84* (6), 998-1000.
- Hawkins, J.D. & Weis, J.G. (1985). The social development model: an integrated approach to delinquency prevention. *Journal of Primary Prevention, 6*, 73-97.
- Henriksen, L. & Jackson, C. (1998). Anti-smoking socialisation: Relationship to parent and child smoking status. *Health Communication, 10*, 87-101.
- Herbert, D.F. & Schiaffino, K.M. (2007). Adolescents' smoking behavior and attitudes: The influence of mother's smoking communication, behavior and attitudes. *Journal of Applied Developmental Psychology, 28*, 103-114.

- Hoffman, B.R., Sussman, S., Unger, J.B. & Valente, T.W. (2006). Peer influences on adolescent cigarette smoking: A theoretical review of the literature. *Substance Use Misuse*, 41, 103-55.
- Hoyle, R.H., Stephenson, M.T., Palmgreen, P., Lorch, E.P. & Donohew, L. (2002). Reliability and validity of scores on a brief measure of sensation seeking. *Pers Individ Dif*, 32, 401-14.
- Hoyt, A. (2002). Delivering primary substance abuse prevention in primary care. *Clinical excellence for nurse practitioners*, 6 (3), 31-7.
- Imhonde, H.O. & Aluede, O. (2007). Smoking intensity among Nigerian secondary schools adolescent smokers. *Educ Res Q*, 32 (2), 55-71.
- Jackson, C. (1997). Initial and experimental stages of tobacco and alcohol use during late childhood: Relation to peer, parent, and personal risk factors. *Addictive Behaviors*, 22, 685-98.
- Jackson, S., Bijstra, J., Oostra, L. & Bosma, H.A. (1998). Adolescents' perceptions of communication with parents relative to specific aspects of relationships with parents and personal development. *Journal of Adolescence*, 21, 305-322.
- Jackson, C. & Henrickson, L. (1997). Do as I say: parent smoking, antismoking socialisation, and smoking onset among children. *Addictive Behaviors*, 22, 107-114.
- Jessor, R. (1984). Adolescent development and behavioral health. In J.D. Matarazzo, S.M. Weiss, J.A. Herd, N.E., Miller & S.M. Weis (Eds.), *Behavioral Health: A handbook of health enhancement and disease prevention* (pp.69-90). New York: Wiley.
- Jessor, R. (1991). Risk behaviour in adolescence: A psychosocial framework for understanding and action. *Journal of Adolescent Health*, 12, 597-605.
- Jessor, R., Turbin, M. S. & Costa, F. M. (1998). Protective factors in adolescent health behavior. *Journal of Personality and Social Psychology*, 75, 788-800.
- Kapito-Tembo, A., Muula, A.S., Rudatsikira, E. & Siziya, S. (2011). Smoking among in-school adolescents in Dar es Salaam, Tanzania: results from the Global Youth Tobacco Survey. *Tanzania Journal of Health Research*, 13 (3), 196-204.
- Kegler, M.C., Escoffery, C. & Butler, S. (2008). A qualitative study on establishing and enforcing smoking rules in family cars. *Nicotine Tob Res.*, 10, 493-7.

- Khuder, S.A., Dayal, H.H. & Mutgi, A.B. (1999). Age at smoking onset and its effect on smoking cessation. *Addict Behav*, 24 (5), 673-7.
- Kimberly, K. (2003). Peers and adolescent smoking. *Addiction*, 98 (Suppl. 1), 37-55.
- King, C.M., Rothman, A. J. & Jeffery, R.W. (2002). The Challenge Study: theory based interventions for smoking and weight loss. *Health Education Research*, 17, 522-530.
- King, G., Flisher, A.J., Psych, F.C., Mallett, R., Graham, J., Lombard, C., et al. (2003). Smoking in Cape Town: Community influences on adolescent tobacco use. *Preventive Medicine*, 36, 114-123.
- Klein, J.D., Brown, J.D., Childers, K.W., Oliveri, J., Porter, C. & Dykers, C. (1993). Adolescents' risky behavior and mass media use. *Pediatrics*, 92 (1), 24-31.
- Kobus, K. (2003). Peers and adolescent smoking. *Addiction*, 98 (1), 37-55.
- Kosterman, R., Hawkins, J. D., Spoth, R., Haggerty, K. P. & Zhu, K. (1997). Effects of a preventive parent training intervention on observed family interactions: Proximal outcomes from Preparing for the Drug Free Years. *Journal of Community Psychology*, 25 (4), 337-352.
- Koval, J.J., Pederson, L.L., Mills, C.A., McGrady, G.A. & Carvajal, S.C. (2000). Models of the relationship of stress, depression, and other psychosocial factors to smoking behavior: A comparison of a cohort of students in grades 6 and 8. *Preventive Medicine*, 30, 463-477.
- Krohn, M.D., Massey, J.L., Skinner, W.F. & Lauer, R.M. (1983). Social bonding theory and adolescent cigarette smoking: a longitudinal analysis. *Journal of Health and Social Behavior*, 24 (4), 337-49.
- Law, K.L., Struod, L.R., LaGarse, L.L., Niaura, R., Liu, J. & Lester, B.M. (2003). Smoking during pregnancy and newborn neurobehaviour. *J Pediatrics*, 111, 1318-23.
- Leedy, P.D. (1997). *Practical Research: Planning and Design*. 6th ed. New Jersey: Prentice-Hall, Inc.
- Leone, A., Landine, L. & Leone, A. (2010). What is tobacco smoke? Sociocultural dimensions of the association with cardiovascular risk. *Curr Pharm Des*, 16 (23), 2510-7.

- Lindblom, E. (2002). New state-specific tobacco's toll data from CDC. *National Center for Tobacco Free Kids*. Retrieved July 30, 2010 from <http://tobaccofreekids.org/research/factsheets/pdf/0195.pdf>.
- Logan D. & Carlini-Marlatt B. (2004) Smoking and Adolescence: some issues on prevention and cessation. *Prevention Perspectives* vol 5. Retrieved May 2, 2011 from [http://www.mentorfoundation.org/pdfs/prevention\\_perspectives/5.pdf](http://www.mentorfoundation.org/pdfs/prevention_perspectives/5.pdf)
- Lotrean, L.M., Sánchez-Zamorano, L.M., Valdés-Salgado, R., Arillo-Santillán, E., Allen, B., Hernández-Avila, M. et al. (2005). Consumption of higher numbers of cigarettes in Mexican youth: the importance of social permissiveness of smoking. *Addictive Behaviors*, 30, 1035-1041.
- Lovato, C., Linn, G., Stead, L. & Best, A. (2003). Impact of tobacco advertising and promotion on increasing adolescent smoking behaviours. *The Cochrane Database of Systematic Reviews* 2003, Issue 3. DOI:10.1002/14651858.CD003439.
- Lucas, K. & Lloyd, B. (1999). Starting smoking: girls' explanations of the influence of peers. *Journal of Adolescence*, 22, 647-655.
- Lupton, D. & Barclay, L. (1997). *Constructing Fatherhood: discourses and experiences*. London: Sage Publications.
- Luther, E.J., Parzynski, C.S., Jaszyna-Gasior, M., Bagot, K.S., Royo, M.B., Leff, M.K. et al. (2008). Does allowing adolescents to smoke at home affect their consumption and dependence? *Addictive Behaviors*, 33, 836-840.
- Maes, H.H., Neale, M.C., Kendler, K.S., Martin, N.G., Heath, A.C. & Eaves, L.J. (2006). Genetic and cultural transmission of smoking initiation: An extended twin kinship model. *Behavioral Genetics*, 36, 795-808.
- Mahoney, J. L. & Stattin, H. (2000). Leisure activities and adolescent antisocial behavior: The role of structure and social context. *Journal of Adolescence*, 23, 113-127.
- Malan, M. & Leaver, R. (2003). Political change in South Africa: new tobacco control and public health policies. In: J. de Beyer & L.W. Brigden (Eds.), *Tobacco control policy: Strategy, success, and setbacks* (pp. 121-153), Washington, D.C.: Word Bank and International Development Research Center.



- Mansfield, P., Nixon, C. & Thomas, P. (2006). An exploratory analysis of the relationship between consumer socialisation agents and children's consumption of tobacco. *Journal of College Teaching & Learning*, 3 (1), 23-28.
- Marshall, C.B. & Rossman, G. (1999). *Designing qualitative research: 3<sup>rd</sup> edition*. Thousand Oaks: Sage Publications.
- Mason, W.A., Hitchings, J.E. & Spoth, R.L. (2007). Emergence of delinquency and depressed mood throughout adolescence as predictors of late adolescent problem substance use. *Psychol Addict Behav*, 21, 370-81.
- Mathers, C.D. & Loncar, D. (2006). Projections of global mortality and burden of disease from 2002 to 2030. *PLoS Med*, 3 (11), e442.
- Mayberry, M.L., Espelage, D.L. & Koenig, B. (2009). Multilevel modelling of direct effects and interaction of peers, parents, school, and community influences on adolescent substance use. *Journal of Youth Adolescence*, 38, 1038-1049.
- Mayhew, K., Flay, B.R. & Mott, J.A. (2000). Stages in the development of adolescent smoking. *Drug Alcohol Dependence*, 59(Suppl.1), S61-S81.
- McCaffery, J.M., Niaura, R., Swan, G.E. & Carmelli, D. (2002). A study of depressive symptoms and smoking behaviour in male adult twins from the NHLBI twin study. *Nicotine Tob Res*, 5 (1), 77-83.
- McIntosh, W.D., Bazzini, D.G., Smith, S.M. & Wayne, S.M. (1998). Who smokes in hollywood? Characteristics of smokers in popular films from 1940 to 1989. *Addictive Behaviors*, 23, 395-398.
- McClernon, F.J., Westman, E.C., Rose, J.E. & Lutz, A.M. (2007). The effects of foods, beverages, and other factors on cigarette palatability. *Nicotine & Tobacco Research*, 9, 505-510.
- McCool, J.P., Cameron, L.D. & Petrie, K.J. (2001). Adolescent perceptions of smoking imagery in films. *Social Science and Medicine*, 52, 1577-1587.
- Mekemson, C. & Glantz, S. (2002). How the tobacco industry builds its relationship with Hollywood. *Tobacco Control*, 11, i81-i91.
- Menezes, A.M.B, Gonçalves, H., Anselmi, L., Hallal, P.C. & Araújo, C.L.P. (2006). Smoking in early adolescence: Evidence from the 1993 Pelotas (Brazil) birth cohort study. *Journal of Adolescent Health*, 39, 669-677.
- Metzger, A., Dawes, N., Wakschlag, L.S. & Mermelstein, R. (2011). Modeling Longitudinal Pathways from Adolescent Organized Activity Involvement and



- Problem Peer Associations to Youth Smoking. *Journal of Applied Developmental Psychology*, 32, 1-9.
- Mitchell, S. H. (1999). Measures of impulsivity in cigarette smokers and non-smokers. *Psychopharmacology*, 146, 455-464.
- Michell, L. & Amos, A. (1997). Girls, pecking order and smoking. *Social Science and Medicine*, 44, 1861-1869.
- Michell, L. & West, P. (1996) Peer pressure to smoke: the meaning depends on the method. *Health Education Research*, 11, 39-49.
- Morgan, M. & Grube, J.W. (1991). Closeness and peer group influence. *British Journal of Social Psychology*, 30, 159-169.
- Morojele, N.K., Parry, C.D.H. & Brook, J.S. (2009). Substance abuse and the young: Taking action. MRC Research Brief. Retrieved January 20, 2011 from <http://www.sahealthinfo.org/admodule/substance2009.pdf>.
- Moschis, G. (1985). The role of family communication in consumer socialisation of children and adolescents. *Journal of Consumer Research*, 11(4), 898-914.
- Motion Picture Association of America. (2011). What each rating means. Retrieved October 29, 2012 from <http://www.mpa.org/ratings/what-each-rating-means>.
- Murray, C.J.L. & Lopez, A.D. (1997). Alternative projections of mortality and disability by cause 1990-2020: Global Burden of Disease Study. *Lancet*, 349 (9064), 1498-1504.
- Muula, A.S., Siziya S. & Rudatsikira, E. (2008). Cigarette smoking and associated factors among in-school adolescents in Jamaica: comparison of the Global Youth Tobacco Surveys 2000 and 2006. *BMC Research Notes*, 5, 55.
- Nichter, M., Vuckovic, N., Quintero, G. & Ritenbaugh, C. (1997). Smoking experimentation and initiation among adolescent girls: qualitative and quantitative findings. *Tobacco Control*, 6, 285-295.
- Niknami, S., Akbari, M., Ahmadi, F., Babae-Rouchi, G. & Heidarnia, A. (2008). Smoking initiation among Iranian adolescents: a qualitative study. *Eastern Mediterranean Health Journal*, 14 (6), 1290-1300.
- O'Byrne, K.K., Haddock, C.K. & Poston, W.S. (2002). Parenting style and adolescent smoking. *Journal of Adolescent Health*, 30, 418-25.
- Oetting, E. R. & Beauvais, F. (1986). Peer cluster theory: drugs and the adolescent. *Journal of Counseling and Development*, 65, 17-30.

- Olvera, N., Poston, W.S.C. & Rodriguez, A. (2006). Parental socialisation of smoking initiation in Latino youth. *Journal of Adolescent Health, 39*, 758-760.
- Panday, S., Reddy, S.P. & Bergstrom, E. (2003). A qualitative study on the determinants of smoking behaviour among adolescents in South Africa. *Scandinavian Journal of Public Health, 31*, 204–210.
- Paretti-Watel, P., Halfen, S. & Grémy, I. (2007). Risk denial about smoking hazards and readiness to quite among French smokers: An exploratory study. *Addictive Behaviors, 32*, 377-383.
- Parker, I. (1999). Qualitative research. In: P. Bannister, E. Burman, I. Parker, M. Taylor & C. Tindall (Eds.), *Qualitative methods in psychology: A research guide* (pp. 49-71). Buckingham: Open University Press.
- Patton, M.Q. (1980). *Qualitative evaluation methods*. Newbury Park, CA: Sage.
- Patton, M.Q. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage Publications, Inc.
- Pechman, C. & Shih, C.F. (1999). Smoking scenes in movies and antismoking advertisements before movies: Effects on youth. *Journal of Marketing, 63*, 1-13.
- Pederson, L. L., Koval, J. J. & O'Connor, K. (1997). Are psychosocial factors related to smoking in grade-6 students? *Addictive Behaviors, 22*, 169–181.
- Peltzer, K. (2003). Depressive symptoms in relation to alcohol and tobacco use in South African university students. *Psychol. Rep., 92*, 1097-1098. DOI: 10.2466/PRO.92.4.1097-1098.
- Peltzer, K., Ramlagan, S., Johnson, B.D. & Phaswana-Mafuya, N. (2010). Illicit drug use and treatment in South Africa. *Subst Use Misuse, 45* (13), 2221-2243.
- Petro, R., Lopez, A.D., Boreham, J., Thun, M., Heath, C.J. & Doll, R. (1996). Mortality from smoking worldwide. *British Medical Bulletin 52*, 12-21.
- Petro, R. & Lopez, A. D. (2001). Future worldwide health effects of current smoking patterns. In C.E. Koop, C.E. Pearson & M.R. Schwarz, M.R. (Eds.), *Critical issues in global health*, (pp.154-161). San Francisco, Wiley (Jossey-Bass).
- Pleydon, A.P. & Schnier, J.G. (2001). Female adolescent friendship and delinquent behavior. *Adolescence, 36* (142), 189-205.
- Piasecki, T.M., McCarthy, D.E., Fiore, M.C. & Baker, T.B. (2008). Alcohol consumption, smoking urge, and the reinforcing effects of cigarettes: An ecological study. *Psychology of Addictive Behaviors, 22* (2), 230-239.

- Piper, M.E., Piasecki, T.M., Federman, E.B., Bolt, D.M., Smith, S.S., Fiore, M.C. et al. (2004). A multiple motives approach to tobacco dependence: The Wisconsin Inventory of Smoking Dependence Motives (WISDM-68). *Journal of Consulting and Clinical Psychology, 72*, 139-154.
- Potter, B.K., Pederson, L.L., Chan, S. S., Aubut, J.A.L. & Koval, J.J. (2004). Does a relationship exist between body weight, concerns about weight, and smoking among adolescents? An integration of the literature with an emphasis on gender. *Nicotine & Tobacco Research, 6* (3), 397-425.
- Poulsen, L.H., Olser, M., Roberts, C. Due, P., Damsgaard, M.T. & Holstein, B.E. (2002). Exposure to Teachers Smoking and Adolescent Smoking Behaviour: Analysis of Cross Sectional Data from Denmark. *Tobacco Control, 11*, 246-251.
- Reid, J.L., Manske, S.R. & Leatherdale, S.T. (2008). Factors related to adolescents estimation of peer smoking prevalence. *Health Education Research, 23*, 81-93.
- Reiff, M. (2001). Health compromising behaviors: why do adolescents smoke or drink? Identifying underlying risk and protective factors. *Journal of Developmental and Behavioral Pediatrics, 22*, 148-9.
- Robinson, L.R., Dalton, W.T. & Nicholson, L.M. (2006). Changes in adolescents' sources of cigarettes. *Journal of Adolescent Health, 39*, 861-867.
- Rocha-Silva, L., De Miranda, S. & Erasmus, R. (1996). *Alcohol tobacco and other drug use among black youth*. Pretoria: Human Sciences Research Council.
- Rodgers-Farmer, A.Y. (2001). Parental monitoring and peer group association: Their influence on adolescent substance use. *J Soc Serv Res, 27* (2), 1-18.
- Rohde, P. A., Atzwanger, K., Butoskaya, M., Lampert, A., Mysterud, I., Sanchez-Andres, A. et al. (2003). Perceived parental favoritism, closeness to kin, and the rebel of the family. The effects of birth order and sex. *Evolution and Human Behavior, 24*, 261-276.
- Rose, J.E. & Levin, E.D. (2006). Inter-relationships between conditioned and primary reinforcement in the maintenance of cigarette smoking. *British Journal of Addiction, 86* (5), 605-609.
- Rose, J. S., Chassin, L., Presson, C. C. & Sherman, S. J. (1999). Peer influences on adolescent cigarette smoking: a prospective sibling analysis. *Merrill-Palmer Quarterly, 45*, 62-84.

- Olvera, N., Poston, W.S.C. & Rodriguez, A. (2006). Parental socialisation of smoking initiation in Latino Youth. *Journal of Adolescent Health, 39*, 758-760
- Reddy, P. (2003). Preliminary report on the global youth tobacco survey: 2002. Prepared for World No Tobacco Day. KwaZulu Natal: Medical Research Council.
- Sarason, I.G., Mankowski, E.S., Peterson, A.V. & Jr, Dinh. K.T. (1992). Adolescents' reasons for smoking. *J Sch Health, 62*(5), 185-90.
- Sarafino. E.P. (2002). *Health psychology: biopsychosocial interaction, 4th ed.* New York: John Wiley.
- Sampson, R.J., Raudenbush, S.W. & Earls, F. (1997). Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science, 277*, 918-924.
- Sargent, J.D., Dalton, M.A., Beach, M.L., Mott, L.A., Tickle, J.J., Ahrens, M.B. et al. (2002). Viewing tobacco use in movies: Does it shape attitudes that mediate adolescent smoking. *American Journal of Preventative Medicine, 22* (3), 137-145.
- Sargent, J.D., Tickle, J.J., Beach, M.L., Dalton, M.A., Ahrens, M.B. & Heatherton, T.F. (2001). Brand appearances in contemporary films and contribution to global marketing of cigarettes. *Lancet, 357* (9249), 29-32.
- Sargent, J.D., Dalton, M., Beach, M., Bernhardt, A., Heatherton, T. & Stevens, M. (2000). Effect of cigarette promotions on smoking uptake among adolescents. *Prev Med, 30*, 320-327.
- Sargant, J. & Dalton, M. (2001). Does parental disapproval of smoking prevent adolescents from becoming established smokers? *Pediatrics, 108* (6), 1256-1262.
- Sargent, J., Beach, M.L., Dalton, M.A. Titus-Ernstoff, L., Gibson, J.J., Ahrens, M. et al. (2001). Effect of seeing tobacco use in films on trying smoking among adolescents: cross sectional study. *British Medical Journal, 323*, 1394-97.
- Sanders, M.R., Montgomery, D. & Brechman-Toussaint, M.L. (2000). The mass media and the prevention of child behaviour problems: The evaluation of a television series to promote positive outcome for parents and their children. *Journal of Child Psychology and Psychiatry, 41*, 939-948.
- Schultz, A.S.H., Nowatzki, J., Dunn, D.A. & Griffith, E.J. (2010). Effects of socialisation in the household on youth susceptibility to smoking: a secondary analysis of the 2004/05 Canadian Youth Smoking Survey. *Chronic Diseases in Canada, 30* (3), 71-77.

- Scragg, R., Laugesen, M. & Robinson, E. (2002). Cigarette smoking, pocket money and socioeconomic status: results from a national survey of 4th form students in 2000. *The New Zealand Medical Journal*, 115 (1158), 1-8.
- Scragg, R. & Laugesen, M. (2007). Influence of smoking by family and best friend on adolescent tobacco smoking: results from the 2002 New Zealand national survey of Year 10 student. *Australian and New Zealand Journal of Public Health*, 31 (3), 217-223.
- Sellström, E. & Bremberg, S. (2006). Is there a “school effect” on pupil outcomes? A review of multilevel studies. *J Epidemiol Community Health*, 60, 149-55.
- Shek, D.T.L. (2003). Economic Stress, Psychological Well-Being and Problem Behavior in Chinese Adolescents with Economic Disadvantage. *Journal of Youth and Adolescence*, 32 (4), 259-266.
- Silbereisen, R. (1995). How parenting styles and crowd contexts interact in actualising potentials for development: Commentary. In L. Crockett & A. Courter (Eds.), *Pathways through adolescence* (pp. 197-207). Mahwah, NJ: Lawrence Erlbaum Associates.
- Simons-Morton, B.G. (2004). The protective effect of parental expectations against early adolescent smoking initiation. *Health education research*, 19(5), 561-9.
- Simons-Morton, B.G., Chen, R., Abrams, R. & Haynie, D.L. (2004). Latent growth curve analyses of peer and parent influences on smoking stage progression among early adolescents. *Health Psychology*, 23 (6), 612-621.
- Simons-Morton, B.G., Chen, R., Hand, L. & Haynie, D. (2008). Parenting behavior and adolescent conduct problems: reciprocal and meditational effects. *J Sch Violence*, 7, 3-25.
- Siziya, S., Rudatsikira, E., Muula, A.S. & Ntata, P.R.T. (2007). Predictors of cigarette smoking among adolescents in rural Zambia: results from a cross sectional study from Chongwe district. *Rural and Remote Health*, 7 (728). Retrieved 10 July, 2012, from <http://www.rrh.org.au>.
- Skara, S., Sussman, S. & Dent, C.W. (2001). Predicting regular cigarette use among continuation school students. *American Journal of Health Behavior*, 25, 147-56.
- Sorina, I. (2010). Tobacco smoking among school personnel in Romania, teaching practices and resources regarding tobacco use prevention. *Applied Medical Informatics*. Retrieved 16 February, 2012, from <http://readperiodicals.com/201004/2095711521.html#b>

- Statistics South Africa. (1999). Official statistics in the new South Africa: The first five years. Pretoria: Statistics South Africa.
- Stanton, W. R., Lowe, J. B. & Gillespie, A. M. (1996). Adolescents' experiences of smoking cessation. *Drug and Alcohol Dependence*, 43, 63–70.
- Steier, F. (1991). Reflexivity and methodology: an ecological constructionism. In Steier, F. (ed.), *Research and Reflexivity*, (pp. 163-185). London: Sage.
- Steinberg, L. (2007). Risk taking in adolescence: New perspectives from brain and behavioral science. *Current Directions in Psychological Science*, 16, 55-59.
- Strauss, A. & Corbin, J. (1990). *Basics of qualitative research*. London: Sage.
- Strauss, A. & Corbin, J. (1998). *Basics of qualitative research: grounded theory procedures and techniques, 2<sup>nd</sup> Edition*. London: Sage Publications.
- Streubert, H.J. & Carpenter, D.R. (2003). *Qualitative research in nursing: advancing the humanistic imperative*. Philadelphia: Lippincott.
- Sullo way, F. J. (1995) Birth order and evolutionary psychology: a meta-analytic overview. *Psychological Inquiry*, 6, 75-80.
- Sussman, S., Sun, P. & Dent, C.W. (2006). *A meta-analysis of teen cigarette smoking cessation*. *Health Psychology*, 25 (5), 549-557.
- Sussman, S., Dent, C.W., McAdams, L.A., Stacy, A.W., Burton, D. & Flay, B.R. (1994). Group self-identification and adolescent cigarette smoking: a 1-year prospective study. *Journal of Abnormal Psychology*, 103, 576–580.
- Sussman, S., Dent, C.W., Burton, D., Stacy, A.W. & Flay, B.R. (1995). Developing school-based tobacco use prevention and cessation programs. Thousand Oaks, CA: Sage.
- Swart, D. & Reddy, P. (1998). Strengthening comprehensive tobacco control policy development in South Africa using political mapping. Tygerberg: Medical Research Council.
- Swart, D., Reddy, S.P., Panday, S., Philip, J.L., Naidoo, N. & Ngobeni, N. (2004). The 2002 global youth tobacco survey (GYTS): The 2<sup>nd</sup> GYTS in South Africa (SA) – a comparison between GYTS (SA) 1999 and GYTS (SA) 2002. Cape Town: South African Medical Research Council.
- Taras, H. (2005). Nutrition and student performance at school. *Journal of School Health*, 75, 199-213.



- Tickle, J.J., Sargent, J.D., Dalton, M.A., Beach, M.L. & Heatherton, T.F. (2001). Favourite movie stars, their tobacco use in contemporary movies, and its association with adolescent smoking. *Tobacco Control, 10*, 16-22
- Thompson, E.M. & Gunther, A.C. (2006). Cigarettes and cinema: Does parental restriction of R-Rated movie viewing reduce adolescent smoking susceptibility. *Journal of Adolescent Health, 40*, 181.e1-181.e6.
- Thrasher, J.F., Rousu, M.C., Anya-Ocampo, R., Reynales-Shigematsu, L.M., Arillo-Santillán, E. & Hernández-Ávila, M. (2007). Estimating the impact of different cigarette package warning policies: The auction method. *Addictive Behaviors, 32*, 2916-2925.
- Topolski, T.D., Patrick, D.L., Edwards, T.C., Huebner, C.E., Connell, F.A. & Mount, K.K. (2001). Quality of life and health-risk behaviors among adolescents. *Journal of Adolescent Health, 29*, 426-435.
- Townsend, J., Roderick, P. & Cooper, J. (1994). Cigarette smoking by socioeconomic group, sex, and age: Effects of price, income and health publicity. *British Medical Journal, 309*, 923-927.
- Turner, L., Mermelstein, R. & Flay, B. (2004). Individual and contextual influences on adolescent smoking. *Annals New York Academy of Sciences, 1021*, 175-197.
- Unger, J. B. & Chen, X. (1999). The role of social networks and media receptivity in predicting age of smoking initiation: a proportional hazards model of risk and protective factors. *Addictive Behaviors, 24*, 371-381.
- United Nations Population Fund. (2003). *What is adolescents?* Retrieved 13 July 2010 from <http://www.spc.int/arh/faqs.htm>.
- Urberg, K. A., Shyu, S. & Liang, J. (1990). Peer influence in adolescent cigarette smoking. *Addictive Behaviors, 15*, 247-255.
- Urberg, K. A., Degirmencioglu, S. D. & Pilgrim, C. (1997). Close friend and group influence on adolescent cigarette smoking and alcohol use. *Developmental Psychology*.
- Urberg, K.A., Luo, Q., Pilgrim, C. & Degirmencioglu, S.M. (2003). A two-stage model of peer influence in adolescent substance use: individual and relationship-specific differences in susceptibility to influence. *Addictive Behaviors, 28*, 1243-56.



- US Department of Health and Human Services (USDHHS). (1989). *Reducing the health consequences of smoking: 25 years of progress. A report of the Surgeon General*. Bethesda, MD: US Department of Health and Human Services.
- US Department of Health and Human Services (USDHHS). (1994). Preventing tobacco use among young people: A report of the Surgeon General. Atlanta Georgia: Public Health Service, Center for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.
- US Department of Health and Human Services (USDHHS). (2004). The health consequences of smoking. A Report of the Surgeon General. Atlanta, GA: USDHHS.
- Van Walbeek, C. (2001). Effective development policies require political will: The example of tobacco control in South Africa. *Economics of Tobacco Control Project*, UCT. Political Will Required: Tobacco control in South Africa, IDRC Seminar, 13 June.
- Waa, A., Edwards, R., Newcombe, R., Zhang, J., Weerasekera, D., Peace, J. et al. (2011). Parental behaviours, but not parental smoking, influence current smoking and smoking susceptibility among 14 and 15 year-old children. *Aust N Z J Public Health*, 35 (6), 530-6.
- Waldron, I. (1991). Patterns and causes of gender differences in smoking. *Social Science & Medicine*, 9, 989-1005.
- Ward, S. (1974). Consumer socialisation. *Journal of Consumer Research*, 1 (2), 1-14.
- Wen, X., Chen, W., Muscat, J.E., Qian, Z., Lu, C., Zhang, C. et al. (2007). Modifiable family and school environmental factors associated with smoking status among adolescents in Guangzhou, China. *Preventative Medicine*, 1-9.
- Whalen, C.K., Jamner, L.D., Henker, B. & Delfino, R.J. (2001). Smoking and moods in adolescents with depressive and aggressive dispositions: Evidence from surveys and electronic diaries. *Health Psychology*, 20 (2), 99-111.
- Wills, T.A. & Vaughan, R. (1989). Social support and substance use in early adolescence. *Journal of Behavioral Medicine*, 12 (4), 321-339.
- Wiiium, N., Torsheim, T. & Wold, B. (2005). Normative influences and adolescent's smoking behaviour in Norway: A multilevel analysis. *Social Science and Medicine*, 62, 1810-1818.

- Wisker, G. (2001). *The Postgraduate research handbook: Succeed with your MA, M Phil, EdD and PhD*. Wales: Palgrave.
- Wong, G., Ameratunga, S.N., Garrett, N.K.G., Robinson, E. & Watson, P.D. (2008). Family influences, acculturation, and the prevalence of tobacco smoking among Asian youth in New Zealand: Findings from a national survey. Adolescent health brief. *Journal of Adolescent Health*, 43, 412-416.
- World Health Organization (WHO). (1997). Health effects. In: Lopez A, editor. Tobacco or health: a global status report. Geneva: World Health Organization (pp.43–8).
- World Health Organization (WHO). (2003). *Framework convention on tobacco control*. Geneva, Switzerland: World Health Organization Tobacco Free Initiative.
- World Health Organization (WHO). (2009). Global health risks: Mortality and burden of disease attributable to selected major risks. Geneva: World Health Organization.
- Yach, D. (1995). Tobacco control in the new South Africa: new government, same industry tactics. *Promotion and Education*, 2, 18-22.
- Yang, Z. & Schaninger, C.M. (2010). The impact of parenting strategies on child smoking behaviour: The role of child self-esteem trajectory. *Journal of Public Policy and Marketing*, 29 (2), 232-247.
- Yanovitzky, I. (2005). Sensation seeking and adolescent drug use: The mediating role of association with deviant peers. *Health Communication*, 17, 67-89.
- Zulu, R., Siziya, S., Muula, A.S. & Rudatsikira, E. (2009). Association of advertisement promotion- sponsorship with current cigarette smoking among in school adolescents in Zambia. *Annals of African Medicine*, 8, 229-235.



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### Appendix: A

### PARTICIPANT INFORMATION SHEET

**Title of Study:** Adolescents' perceptions of the onset of their cigarette smoking behaviour and the factors that maintain their habit.

**Researcher:** Najuwa Arendse  
MA Research Psychology student at the University of the Western Cape

As a Masters student at the University of the Western Cape, I am conducting a research study as part of my degree. I wish to investigate adolescents' perceptions of the onset of their cigarette smoking behaviour and the factors that maintain their habit.

I will be audio-taping the individual interviews of the adolescents. These tapes will be transcribed, and on completion of the study the participant can claim their interviewed tape or I can preserve the information in a safe. Your name will not appear in the transcripts of the interviews, or in any reports relating to the research. The individual interviews will take place on the school premises at the end of school day. After your taped individual interviews are transcribed to paper, you will be shown a copy, which you may read, and you may make changes to your responses if you wish.

Before participating, you will be asked to complete a form, which indicates your willingness to participate. You may withdraw from the study at any stage without being disadvantaged in any way. You are free to speak with others before consenting to participate in this study.

All personal details elicited in this study will remain strictly confidential, no names or personal particulars will be disclosed and the final research report will contain only summaries and not specific details from any individual.

After the interviews, referral will be made available should you require any. Please feel free to ask questions if you have any concerns regarding the research study.

Najuwa Arendse  
MA Research Psychology student  
Contact details:  
(Cell): 083 375 4625  
(Email): najuwa@gmail.com



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**Appendix: B**

**LETTER OF INFORMED CONSENT TO THE PARENTS**

.....  
.....  
.....

Dear Sir/Madam,

Re: Request for your son/daughter’s participation in a research.

I am a postgraduate student of psychology at the University of the Western Cape. I plan to carry out a research on the above subject in fulfilment of the requirements for a Masters of Arts degree in research psychology.

The aim of my study is to explore adolescents’ perceptions of the reasons why they begin to smoke, and to explore the reasons why they continue to smoke. It is hoped that the information gained in this study could assist in the formulation of appropriate and successful intervention strategies for adolescents’ smoking behaviour.

I write to you to ask if you would be willing to allow your son/daughter to participate in this study, in order for them to provide their perceptions on the topic. This will involve tape-recording interviews, the recordings of which will be transcribed. Only the researcher will have access to the audio recordings. These recorded interviews will be destroyed after the completion of the writing up of the research study. Confidentiality will be ensured in the reporting of any information your son/daughter will provide to the researcher. Participation is voluntary. Should your son/daughter feel uncomfortable at any time during the interview they are free to withdraw. Should you have any questions, please feel free to contact me on the contact details listed below.

**Please provide your acceptance below if you consent your son/daughter to participate in this study:**

I agree that the researcher is allowed to interview my son/daughter.

Signature of Parent: .....

Date: .....

I look forward to working with you and your son/daughter.

Yours sincerely,  
Najuwa Arendse (Master Student)

Contact details:

(Cell): 083 375 4625

(Email): najuwa@gmail.com





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**Appendix: C**

**PARTICIPANT’S ASSENT FORM**

**Title of Study:** Adolescents’ perceptions of the onset of their cigarette smoking behaviour and the factors that maintain their habit.

I ..... agree to participate in this research project on adolescent’s perceptions of the onset of smoking behaviour and the factors that maintain this habit. I understand the purpose and the nature of this study and I am participating voluntarily. I give permission for the information obtained form this interview to be used for the purposes of a master’s research project in psychology at the University of the Western Cape. This conversation may be tape-recorded. I understand that I am not obliged to reveal any information about myself that I consider to be too personal. I am also aware that I may, at any time, decline from participating in this research project. All personal details elicited by this study remain strictly confidential, no names or personal particulars will be disclosed and the final research report will contain only summaries and not specific details from any individual. It is also my right to have access to the final research report, and any comments that I have to make regarding this study will be respected and valued.

.....  
**Signature of Participant**

.....  
**Date**

.....  
**Signature of Researcher**

.....  
**Date**

**Appendix: D**

**DEMOGRAPHIC DETAILS**

Pseudonym: .....

Age: .....

Gender: .....

Race: .....

Religion: .....

Residential Area: .....

Home Language: .....

High School: .....

Level of Education: .....





## Appendix: E

### INDIVIDUAL INTERVIEW GUIDE

**Title of Study:** Adolescents' perceptions of the onset of their cigarette smoking behaviour and the factors that maintain their habit.

(Below are questions which we think would best answer the research question. As stated in the research, we hope to have more of a conversation with the participants instead of a question-answer section. The following questions will serve as a guideline to the interview.)

1. How did you start to smoke?
  - 1.1 How did you find your first experience?
  - 1.2 Where did you start?
  - 1.3 What was your attitude toward smoking?
  - 1.4 How were your parents' attitudes towards smoking?
  - 1.5 How were your friends' attitudes toward smoking?
  - 1.6 What do you think about tobacco advertising?
  - 1.7 How did you feel about smoking?
2. Why do you continue to smoke?
  - 2.1 Was there ever a time when you tried to quit smoking?
  - 2.2 When do you prefer to smoke?
  - 2.3 Where do you prefer to smoke?
  - 2.4 With whom do you prefer to smoke?
3. What do you know about the effects of smoking?