HEALTH COMMUNICATION, CULTURE AND THE "GLAMOURISED" KILLER: ASSESSING YOUTH'S KNOWLEDGE AND PERCEPTIONS OF HUBBLY BUBBLY SMOKING RISKS AT A SOUTH AFRICAN UNIVERSITY

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DISSERTATION

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DECLARATION

I declare that **HEALTH COMMUNICATION, CULTURE AND THE "GLAMOURISED KILLER": ASSESSING YOUTH'S KNOWLEDGE AND PERCEPTIONS OF HUBBLY BUBBLY SMOKING HEALTH RISKS AT A SOUTH AFRICAN UNIVERSITY** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of a complete reference and that this work has not been submitted before for any other degree at any other institution.

…… ……

Motloutsi A. M [redacted] **Date**

DEDICATION

I dedicate this work to my late mother Grace Mothasi Kubayi, my twin brother Matome Elmon Motloutsi and my sister Tebogo Mkhari.

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ABSTRACT

Hubbly Bubbly smoking is a visibly growing trend among young people globally. However, health promotion about the risks that result from hubbly bubbly smoking has not been vigilant so far. The study attempts to determine youth's knowledge and perceptions towards the health risks incurred from smoking the HB. The study triangulates three theories namely: The Extended Parallel Process Model, Peer Cluster Theory and Hofstede's Cultural Theory using a mixed method approach among University of Limpopo students. A sample of 350 students was used, made up of n=175 HB users and n=175 non-users. In the quantitive part of the study, a 2 x 2 between and within respondents design was followed. Most HB users 74% (129) and non-users 80% (140) identified lung cancer as the health risk of HB smoking. Participants perceived HB smoking health risks as exaggerated, and that HB is less addictive and less harmful. The majority of participants (75%) had not heard or seen any health communication awareness campaigns about HB risks. Focus group interviews revealed that participants perceived HB as less harmful, less expensive with no visible health warning and not addictive to every user. Findings suggest that there is inadequacy in terms of knowledge as well as negative perceptions towards HB and its health risks. There should be more health communication campaigns that will engage the youth and the public, and the media should speak more about HB and its health risks. The study contributes to the body of knowledge about health communication campaigns about existing problems.

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CHAPTER ONE

INTRODUCTION AND BACKGROUND

1.1. Introduction

Smoking the Hubbly Bubbly (HB) appears to be increasingly becoming a popular trend amongst young people, especially high school and university students and extending to young professionals. However, promotion and advocacy around the health risks of the HB (also known as “Oka pyp” in some parts of South Africa and Waterpipe, Shisha, Hookah, Narghile, Arghile, Ghalyan, Hubble Bubble or Goza, globally) is yet to form part of visible health communication awareness campaigns (Senkubuge, Ayo-Yusuf, Louwagie & Okuyemi, 2012). This study falls within the ambit of health communication. Schiavo (2014) states that health communication informs and influences individual or community decisions and motivates individuals to change health behavior or intentions and increases knowledge and understanding while empowering people.

The Centre for Disease Control and Prevention, United States of America (USA) reveals that between 2011 and 2015, the use of HB intensified amongst students at middle and high school (2017). In 2015, for every 100 middle school students, two (2.0%) revealed having used HB in the past 30 days, a growth from 1.0% in 2011. In the same year, about seven out of every 100 high school students (7.2%) reported having used hookah in the past 30 days, a growth from 4.1% in 2011. In 2018, Mugyenyi, Haberer and O’Neil (2018), focusing on two universities in America, revealed that an occurrence of any lifetime HB use was 25%–28% amongst students at the university, while UK studies show that HB smoking was between 11% and 18% amongst students at the university and 8% amongst students at secondary school.

Martinasek, McDermott and Martini (2011:34) attribute the increase in the smoking of flavoured tobacco, commonly called maassel-smoking, to misconceptions about its safety. WHO (2015:23) reveals that globally, the smoking rates of the HB are high in the African region, where three empirical studies have been conducted in South Africa (Combrink, Irwin, Laudin, Naidoo, Plagerson & Mathee, 2010; Senkubuge et al., 2011; Van der Merwe, Banoobhai, Gqweta, Gwala, Masiea, Misra & Zweigenthal, 2013). The first study was conducted in Johannesburg where 60% of high school students reported having previously used the HB, while daily usage was reported to be 20%

(2010). The second study conducted in Pretoria among students reported that 19% of the students had used the HB (2011). The third study amongst university students in the Western Cape found that 66% of the participants had used the HB before and 18% are still users (2013). Additionally, since the 1990s, HB smoking seems to be growing among a novel population, that of college students and young people (WHO, 2005:4). The consequences of smoking the HB are dire, yet many of the users are unaware of its dangers.

The alarming effects of HB smoking is the impact on one's health at numerous levels. According to the Cancer Association of South Africa [CANSA] (2015), the possible long-term health effects include cancer, lung harm, heart disease, tuberculosis, herpes, and early demise. Irritation from exposure to tobacco juices surges the risk of developing oral cancers. The possible short-term effects relate to hygiene. HB devices used in clubs and restaurants are often not cleansed well, facilitating the increased mushrooming of transmittable illnesses (Herbst, 2014:9). At a family level, especially among females, the consequences of smoking extend to the offspring. Women who made use of one or more Hubbly Bubblies a day in the course of pregnancy, give birth to underweight babies (Herbst, 2014:9) . These babies are also exposed to respiratory disease. Lastly, at a public health level, the charcoal used to heat tobacco in the HB upsurges health risks by manufacturing high levels of carbon monoxide, metals, and cancer-causing chemicals (Herbst, 2014:9).

It is important to note that not only does the HB have negative effects on its smokers, but it also affects secondhand smokers too. Secondhand smokers are defined as people who are not engaging in the practice of smoking, but because they are in close proximity to the smoker are exposed to and breathe in secondhand smoke that comes from the burning end of a cigarette, cigar or pipe and are therefore exposed to worse health risks than the smoker (American Academy of Pediatrics, 2004:1). Secondhand smoke comprises about 4,000 chemicals, many of which are dangerous, and more than 50 are known to cause cancer (American Academy of Pediatrics, 2004:1). Sylvan (2013:1) states that “second-hand smoke exposure has been shown to increase the risk of developing a range of smoking-related illnesses. These include lung cancer, heart disease, stroke, respiratory illnesses, and many other childhood illnesses”.

Despite the health risks involved with smoking the HB, it has become popular because of its stylish characteristics and the glamour attached to smoking it as part of youth culture. According to Martinasek et al. (2011:34), HB smoking has been glamourised because of its novelty, its availability in different appealing flavours, and relatively low cost (See figure 1.1 modern glamourised design of HB).

Figure 1.1. The modern design of Hubbly Bubbly by Lifestyle (2012)

The nominal health-related information on the HB coupled with the lack of research on its control and cessation efforts appears to be overshadowed by glamourised peer marketing. Kruger (2014:2) argues that most research on tobacco control and cessation efforts have focused on cigarette consumption, as it is the most common form of tobacco use, whilst research into other forms of tobacco smoking such as the HB smoking has been neglected. Furthermore, mass ignorance is compounded by the lack of regulatory involvement of governmental bodies, the South African Tobacco Control Act 83 of 1993 being a typical example. This Act was implemented in 1995 and advocated for the placement of health warnings on cigarette packaging, regulated smoking in public places, prohibited tobacco sales to those younger than 16 years and some regulated advertising.

Although the South African Government has employed regulations to discourage the use of tobacco by raising taxation and banning the advertisement of cigarettes, consumption of products such as the HB, smokeless tobacco (snuff and chewing tobacco) remains largely unregulated. In 2008, South Africa amended the Tobacco Products Control Act by elevating the lawful smoking age to 18 years, controlling tobacco funding and advertising as well as authorising more substantial health cautions at points of sale (Wilma, 2013:2). Recently, the South African Government implemented a draft bill to control the use of tobacco products and electronic delivery

systems bill in 2018, in which it encourages standardised wrapping and tagging of electronic delivery systems products, including pipes, HB, and electronic devices. It is stipulated in the bill that no person shall promote or advertise these products and information should be made available on the features of the products and age restrictions (Department of Health, 2018:12). However, this Act does not include HB smoking or prohibit HB smoking in public and indoor places or increase taxation on HB (Daniels, 2012:4). Therefore, HB smoking, which has worse effects than cigarette smoking continues.

Cigarette smoking effects have been largely publicised, however, lack of information about the harmful effects of HB smoking encourages the user to smoke for an extended time than when smoking cigarettes. According to the CANSA (2015), one typical cigarette session takes 5 to 7 minutes—8 to 12 puffs that result in 40 to 75 ml of smoke per puff. Whereas one typical HB smoking session takes 20 to 80 minutes—20 to 200 puffs that result in 0.15 to 1 litre of smoke per puff which equals to puffing the smoke of 100 or more cigarettes. It is from this stance that this study will attempt to assess the knowledge and perceptions of HB smoking health risks among some South African youth.

1.2 Research Problem

Due to HB long smoking duration that results in greater nicotine exposure, HB smoking presents more harm to users than its much-publicised 'cousin', cigarette smoking (Aslam, Saleem, German & Qureshi, 2014). Yet, there appears to be growing use of HB by secondary and tertiary students as well as young professionals for recreation (Daniels, 2012:4). Studies that have been conducted in South Africa are limited to the urban areas of Pretoria, Johannesburg and Cape Town (Senkubuge et al., 2011; Van Der Merwe et al., 2013). As far as the researcher is aware, there are no documented studies about knowledge and use in rural areas of South Africa. The glamourised marketing of the HB as cool, fun and mature among other things may have eclipsed public awareness about its health risks (Cancer Association of South Africa, 2015). Internationally, there are widespread perceptions that smoking HB is relatively safe (Shihadeh & Saleh, 2005:656). This study attempts to contribute by assessing knowledge and perceptions towards the health risks of HB smoking among a largely rural cohort of university students.

1.3. Literature Review

The study reviews literature based on the convergence of cultures, commodification and social acceptance of HB smoking, health communication, campaigns and perceptions around HB smoking health risks. The glamourised nature of HB led into the discussion of HB as a commodity in which is embedded in the 'leisure' culture of youth. This resulted in the discussion of the convergence of cultures and how they promote HB smoking. The study reviews the literature within two chapters in which the first chapter provides literature that supports the qualitative results of this study. The second chapter provides literature that supports quantitative results.

1.3.1. The convergence of Cultures, commodification and social acceptance

Hubbly Bubbly smoking is believed to have emerged from the cultural practice of the elderly in the Middle East and India. The chapter, therefore, starts by deliberating on a brief historical account of HB smoking and the cultural aspects of its use. The chapter also discusses the concept of culture by providing a brief overview. It is possible that HB smoking may be influenced by an amalgamation of cultures, therefore a discussion of the convergence of different cultures that may play a role in the promotion of HB smoking is provided. These include; subcultures and lifestyles, youth culture and club cultures. As media plays a significant role in influencing the behaviour of young persons and how they interact with the world, the study further provides a detailed discussion around media culture.

The study provides a discussion on commodification and how it influences HB smoking. This discussion is driven by an exploration of the high attention garnered by HB as a commodity which the youth require to make their leisure times pleasurable. As different attractive HB designs are introduced to the market, the need to produce the most glamourised and classy designs increases and therefore the growth in HB smoking rates. A brief contextualisation of HB as a commodity is provided as well as the critical analysis of commodification and HB. Commodification at its basic is the transformation of goods, services, ideas and people or objects for trade (Mosco, 2009:127). Furthermore, the chapter discusses the social acceptance of HB looking at the emergence of flavoured tobacco and increased accessibility of HB through cafés and restaurants.

1.3.2. Health communication, campaigns, and perceptions

A discussion on health communication as an instrument to disseminate health messages that enlighten, encourage and raise awareness amongst the targeted audience is offered in chapter three of this study. This is because there are far fewer campaigns that publicise HB health risks compared to cigarettes. This chapter discusses health communication, health communication as a tool to improve personal and public health and conceptualises health communication in terms of its effectiveness.

The chapter further provides a discussion on health communication campaigns, health communication campaigns on tobacco smoking cessations, the use of graphics and hard-hitting/fear appeal messages. It further discusses the prevention of smoking initiation through health communication campaigns and the smoking cessation of HB through health communication campaigns. This discussion gives rise to the review of the literature on awareness, knowledge, and perceptions of HB smoking.

1.4. The Role of Theory

Hubbly Bubbly smoking incorporates and is influenced by several factors. Hence, viewing the problem holistically is necessary. Thus, theoretical triangulation is used. To provide insight into this study, three theories will be discussed, namely: The Extended Parallel Model, Peer Cluster Theory and Hofstede's Cultural Theory. These theories may inform the understanding of the factors that might influence HB smoking behaviours among the youth. The Extended Parallel Process Model will assist in creating an understanding of how perceptions influence behaviour. Secondly, the Peer Cluster Theory will be used to describe how peer pressure leads to the practice of certain behaviour without the knowledge of their consequences. Lastly, Hofstede's Cultural Theory will also be used to understand how culture influences behavioural practices among the youth.

1.4.1. Extended Parallel Process Model

The Extended Parallel Process Model (EPPM) explains how rational thoughts combine to determine behavioural decisions. The degree to which a person perceives to be endangered by a health matter determines his or her enthusiasm to take action, while one’s assurance to successfully lessen or avert the danger determines action itself

(Health Communication Capacity Collaborative, 2014:1). According to Hajian, Shariati, Mirzaii, Najmabadi, Yunesian and Ajami (2015:235), the EPPM explains how a condition under fear appeal thrives or fails in encouraging people to carry out behaviors linked with tolerating or rejecting a health risk message. It clarifies both triumphs and disappointments of fear appeals, and fear is assimilated as a dominant variable in the model.

The assessment of a fear appeal pledges two appraisals of the message—threat appraisal and efficacy appraisal, rejection of fear control and acceptance of a message, according to the EPPM (Hajian et al., 2015:235). This study adopts this theory because of the use of health communication campaigns which contain recommendations about health risk messages aimed to reduce smoking or prevent smoking initiations. It states that these are believed when danger control rules and excluded when fear control rules.

1.4.2. Peer Cluster Theory

This theory was developed by Oetting and Beauvais in 1986. It is a psychosocial theory that was formed to assist in clarifying the robust association between peers' drug use and involvement. The fundamental principle is that adolescent drug use occurs mostly as a group activity occurring in the social environment of peer clusters. Peer clusters involve best friends, couples, or a small group of close friends who share attitudes and drugs and create group norms for drug use. Youth who are at risk tend to self-select into peer clusters.

This theory states that small identifiable peer clusters regulate the circumstances around drug use. It also emphasises the significance of the psychological and social attributes that inspire drug use. These attributes set the stage for peer clusters to begin and progress either toward or away from drug use. As mentioned above, youth subculture affiliation is associated with substance abuse; therefore, peer pressure plays an important role in subcultures as groups are formed by individuals' interests. This study adopts this theory because it describes how peer pressure plays a part in promoting substance abuse among a group of friends.

1.4.3. Hofstede's Cultural Theory

It is a cultural theory that was developed in 1980 by Geert Hofstede. This theory consists of five dimensions, namely individualism and collectivism, uncertainty avoidance, power distance, masculinity, and femininity as well as long-term and short-term orientation. The dimensions under this theory address how people express themselves and their relationship with others. For the purposes of this study, only one dimension will be used, that is individualism and collectivism.

Under individualism, the individual is considered the most significant being in any social setting. According to Hofstede (2011:11), the focus is on independence rather than dependence. Individual achievement rewards and lastly, values form part of each individual's uniqueness. In collectivism, opinions, desires or goals of the group are more significant than any individual opinions, desires, or goals. Commitment to the group is the norm; behaviour is directed by duty, not by the individual desire of rewards. The self is well-defined in relation to others, not as detached from others (Hofstede, 2011:11).

The focus is on cooperation rather than competition. When applied to this study, from the individualistic approach, those individuals who smoke HB do it with a goal to enhance their own personal satisfaction. While from the collectivist, an individual will give the cohesion of the group greater importance. One will smoke HB because their friends are doing it and they want to fit into that group. Moreover, in terms of collectivism, it influences the sharing of the HB even with strangers that can expose them to health risks. The group shares the same values and the same goal influences. There are tendencies to copy the behaviour of others in their group, to belong to their group. Hence, this dimension will be used in this study because it describes how youth can adopt new behaviour from their peers and individually practice certain behaviour without the knowledge of the consequences of the behaviour.

1.5. Definition of key terms

Perceptions - refers to the collecting of information about the world by means of senses (Lewis, 2001:274).

Knowledge - is an awareness or familiarity gained through experience (of a person, fact, or thing) (Biggam, 2001:2).

Culture - in two senses; firstly, to mean a whole way of life, the common meanings, secondly, to mean the arts and learning, the special processes of discovery and creative effort. It is like history, allows for change, it is dynamic, shaping and being shaped by those who occupy it (Williams, 2011:53).

Health risk - is the chance or probability that a person will be harmed or experience an adverse health effect if exposed to a hazard (Chemical factsheets, 2016:1).

Hubbly Bubbly - is a device that is used to smoke tobacco. A special type of tobacco is indirectly heated using coals or wood embers. The tobacco used in a hookah is called shisha or maassel. Shisha is a sticky mixture of tobacco, honey or molasses, and other flavorings. It is available in many flavourings such as bubble gum, peanut butter, mango, grape, and mint (Project Watch, 2013:2).

Youth - they adopt many different identities: daughter-son, sibling, child, teen, peer, friend, student, and so on (Harlan, 2016:2). It is the passage from dependent childhood to independent adulthood when young people are in transition between a world of rather secure development to a world of choice and risk (Perovic, 2016:2).

1.6. Purpose of the Study

1.6.1. Aim of the study

The aim of the study is to explore youth's knowledge of HB risks from health communication and perceptions towards possible harm from the smoking culture.

1.6.2. Objectives of the study

- To determine the University of Limpopo students' knowledge levels about HB smoking health risks.
- To examine the University of Limpopo students' perceptions of HB smoking.
- To evaluate the awareness of the HB smoking health risks among University of Limpopo students.
- To examine whether the University of Limpopo students' knowledge of the health risks would influence their HB smoking behaviour intentions.
- To examine whether the University of Limpopo students' perceptions of HB harm would influence their HB smoking behaviour intentions.

1.6.3. Hypotheses

H_0= if users are not exposed to health risk messages about HB smoking, then they are unlikely to quit smoking, while non-users will be initiated into smoking

H_1= if users are exposed to health risk messages of HB smoking health risks, then they are likely to quit while non-users will not be intitiated into smoking.

1.6.4. Research questions

- What are the knowledge levels of University of Limpopo students about HB smoking health risks?
- What are the perceptions of the University of Limpopo students about HB smoking?
- What is the awareness of University of Limpopo students about HB smoking risks?
- Does the knowledge of HB health risks by the University of Limpopo students influence their smoking behavioural intentions?
- Do the perceptions of University of Limpopo students about HB harm influence their smoking behavioural intentions?

1.7. Research Methodology

The study used a mixed-method research approach. Creswell and Plano Clark (2007:6) observe it as an approach which is a combination of methods. This method attempts to combine the advantages of quantitative and qualitative methods while avoiding their shortcomings (Bless, Smith & Sithole, 2013:58). The data collection also includes collecting both numerical data as well as textual data so that the final record constitutes both quantitative and qualitative data (Creswell, 2003:20). The primary emphasis is on clarifying quantitative findings by exploring certain findings thoroughly to assist in clarifying unanticipated findings (Terrell, 2012:262). For this study, the researcher had two distinctive aspects, with the knowledge aspects best measured quantitatively, while perceptions were best explored qualitatively because they are interpretative. However, the two ties in together because perceptions and knowledge inform behaviour. This is what health communication theory informs us.

1.7.1. Research Design

The study uses an explanatory sequential design. Creswell (2003:16) states that it is a design in which the researcher assembles quantitative and qualitative data to deliver a complete analysis of the research problem. In this design, during the study, the researcher gathers both forms of data at the same time and then consolidates the data in the interpretation of the overall findings (Creswell, 2003:16). This design is suitable for this study because each type of data was collected and analysed autonomously using the methods traditionally related to each data type. In this study, quantitative data was composed to determine the knowledge levels, while qualitative data was collected to determine the perceptions towards HB smoking health risks.

Quantitatively, a within-subjects design under true experimental design was used. In this design, also known as repeated measures design, participants receive all treatments (including any control conditions) in a research study (Leedy & Ormrod, 2013:236). Here the various treatments are administered very close together in time, in some cases concurrently. In this study, the researcher uses two questionnaires designated as ‘Before’ and ‘After’ to apply the different treatments and treatment-specific measures. The participants fill in the Before questionnaire (see appendix B) then the researcher gives the subjects a poster with health risk messages (see appendix A), the subjects then fill-in the After questionnaire (see appendix C). Therefore, the researcher can find out if exposure to health risks messages about the effects of HB smoking influences the youth’s knowledge and perceptions towards their smoking behaviour intentions. The researcher uses a between-subjects design. In this design, different groups of subjects are randomly assigned to the levels of the independent variable (Field, 2009:816). In this study, these groups are non-users and users of the HB.

Qualitatively, the study uses case studies. A case study is a dense and thorough explanation of a social circumstance that occurs within a real-world setting (du Plooy-Cilliers, Davis & Bezuidenhout, 2014:178). The researcher gathers substantial data about the individuals on which the study is focused. These data sets comprise of observations and focus group interviews. The study used observations and focus group interviews. Through observations, the researcher also noted particulars about the contexts around them, together with the information about the physical surrounding

and any historical, economic, and social factors that have an impact on the situation (Leedy & Ormrod, 2013:141).

1.7.2. Population

The population of the study was the University of Limpopo students. The population consists of several subgroups which are unevenly distributed, allowing the researcher to generalise the findings for the sample to the population (Flick, 2011:210). The user behaviour of HB among University of Limpopo students was unknown; hence the population of users was not established.

1.7.3. Sampling

1.7.3.1. Quantitative sampling technique

350 University of Limpopo students formed the sample of this study. This number comprises of users and non-users of the Hubbly Bubbly. The study selected 175 users and non-users using stratified sampling. According to du Plooy-Cilliers et al., (2014:139), this sampling technique splits the population into sub-units of elements that have similar features within the same population. This sampling method was suitable for this study because from users and non-users they are split into sub-units of being exposed and not exposed to the message. This sample number was selected based on the terms that there are no available statistics revealing users or non-users of the HB at this institution. However, it was considered adequate to represent the number of users and subsequently non-users of the HB.

1.7.3.2. Qualitative sampling method

The study conducted two focus groups consisting of University students—users and non-users of the HB with 12 members each. The selection was conducted using snowball sampling. In this method, participants provided recommendations of others who fit in the population parameters of the study, and who would want to partake in the study (du Plooy-Cilliers et al., 2014:143). A sample was created based on what the researcher reflects as typical units (Bless et al., 2013:172).

The researcher chose the elements that he/she wishes to incorporate in the sample based on a list of attributes. du Plooy-Cilliers et al. (2014:137) states that the sample is dissimilar to one chosen by means of probability sampling, in that the elements in

the population will not all have an equivalent chance to form a portion of the sample. This sampling will be suitable for this study because it focuses only on people who live at the residence to permit the researcher to gain a deeper comprehension of the research problem explored. This method was suitable for the study because the researcher ensured that each element of the sample is the most common in the population under investigation.

1.7.4. Data Collection

1.7.4.1. Quantitative data collection method

The study collects data using structured and semi-structured questionnaires. Questionnaires are very popular tools used to assemble demographic information and data about people's attitudes, views, feelings and a degree of gratification, amid other things. The questionnaire enables the researcher to collect more clear and honest answers from the participants. Leedy and Ormrod (2013:191) state that participants can reply to questions with some guarantee that their replies will not come back to haunt them. It allows the ease of presenting questions and participants to ask questions with a long or complex response. Bless et al. (2013:199) state that since participant's fill in questionnaires without writing their names, with a guarantee of concealment, participants are frank in their response. Questionnaires with open-ended and closed-ended questions were given to users and non-users.

1.7.4.2. Qualitative data collection method

This study used focus group Interviews. Focus group interviews were conducted using unstructured or semi-structured questions. The researcher drew up a list of comprehensive questions, issues, and themes. These were used to instigate a dialogue between the focus group participants (Bless et al., 2013:200). According to Bless et al. (2013:200), this method is appropriate because it enables participants to deliberate the issues and question each other, finding that one person's views may spark a whole thread of connected opinions and thoughts in another person (See Appendix D).

1.8. Data Analysis

Traditionally, data analysis in mixed methods research comprises of analysing the quantitative data using quantitative techniques and the qualitative data using qualitative techniques (Creswell & Plano Clark, 2007:128).

1.8.1. Quantitative data analysis

This study uses IBM Statistical Package for Social Science (SPSS: version 24.1) to analyse quantitative data. To find out the possible effect of exposure to the message, before and after, the study uses analyses of variance (repeated measures). Here the researcher uses T-tests to evaluate the outcome of an experiment by linking the amount of discrepancy in the data that the experiment can clarify against the discrepancy that it cannot clarify. Field (2009) states that "if we can explain some of this unexplained variance in terms of other variables, then we reduce the error variance, allowing us to more accurately assess the effect of the independent variable" (Field, 2009:396).

The study uses descriptive statistics to analyse data. Depending on the data collected, the following tests are done. To test the reliability of items used to measure knowledge and perceptions, the study uses Cronbach Alpha. To determine the knowledge levels and perceptions towards HB smoking health risks, the researcher uses cross-tabulations under descriptive analysis. The study compared mean score differences between users and non-users. Experimentally, to discover whether the knowledge acquired from exposure to health risks messages would influence youth's HB smoking behaviour intentions, the researcher uses Independent Sample Tests. To find out whether the perception of harm after exposure to health risks messages would influence the youth's HB smoking behaviour intentions, the researcher uses independent sample T-tests.

1.8.2. Qualitative data analysis

Thematic analysis was used. Thematic analysis is used to analyse categorisations and provide themes (patterns) that narrate the data (Ibrahim, 2012:40). This was appropriate for this study because the respondents' response was significant in giving the most appropriate explanations for the respondents' perception of harm of HB smoking. In this study, the collected data is encoded and clear codes are created.

When the researcher was done with the coding; themes were created. This allowed the researcher to see and make logic of collective and shared meanings and experience (Braun & Clarke, 2012).

1.9. Quality Criteria

1.9.1. Quantitative quality criteria

1.9.1.1. Validity

The study ensured internal and external validity. The true experimental design offers extra control and, as a result, higher internal validity (Leedy & Ormrod, 2013:234). Internal validity is the degree to which experimental outcomes can be ascribed to the independent variable (Frambach, Van der Vleuten & Durning, 2013: 552). Internal validity denotes whether the research technique or design will answer the research question. There should be a minimisation of faults in the design of the research and the research method must be able to help in answering the research question (du Plooy-Cilliers et al., 2014:257).

The study ensures external validity by looking at the previous studies done in South Africa. The studies were done in urban areas. In rural areas, the phenomenon is growing, and it is believed that the sample of users is a relatively large number. External validity puts emphasis on the ability to generalise results from a definite sample to a bigger population (du Plooy-Cilliers et al., 2014:257). The study also used the Raosoft calculator to determine the appropriate sample of the population because there were no statistical records of the number of users and non-users at the University of Limpopo. The study also ensured construct validity which is the degree to which a test measures what it meant to measure (Deniz & Alsaffar, 2013:3). To ensure this, the researcher gave the same questionnaire to two groups (users and non-users) as well as exposing half of the two groups to the same message.

1.9.1.2. Reliability

The study conducted a pilot study to ensure reliability. Reliability is the degree to which findings would be reliable if the study would be duplicated (Frambach et al., 2013:552). Reliability is also seen as the degree to which the findings can be widely applied (du Plooy-Cilliers et al., 2014:254). A pilot study can act as a precaution system because conceivable faults or complications with a measurement instrument will arise in a pilot

study (du Plooy-Cilliers et al., 2014:257). The study used short-administered questionnaires. This enabled the researcher to figure out errors and attend to them to make the questionnaire reliable.

To ensure reliability, the questionnaire used in this study drew upon items from already tested instruments. The selection of this instrument is based on its use in the pre-reviewed literature. The study used Cronbach Alpha to test the reliability of the items used in the instrument.

1.9.1.3. Objectivity

Objectivity refers to the degree to which personal preconceptions are detached and value-free information is collected (Frambach et al., 2013:552). The researcher ensures that personal feelings and other subjective factors are excluded from the data. du Plooy-Cilliers et al. (2014:22) define objective knowledge as knowledge that is non-instinctive, in the sense that it is culture-free, value-free, universal and, thus, firm.

1.9.2. Qualitative quality criteria

1.9.2.1. Credibility

The study ensures that only the participants' information is reported and interpreted without including the researcher's point of view. It asks if there is a correspondence between the respondents' ideas and the way the researcher represents their viewpoints. du Plooy-Cilliers et al. (2014:258) state that credibility denotes the correctness with which the researcher explains the meaning of the data that was supplied by the participants. It is the degree to which, the study's results are truthful and convincing to others (Frambach et al., 2013:552).

It pursues to influence that the results portray the truth of reality understudy, or, that they make sense (Bless et al., 2013:236). The researcher believably demonstrates the relevance and the inclusive logic of the research questions, study design, data collection technique and the method to data analysis (Bless et al., 2013:236). Conducting focus group interviews between both users and non-users assists in ensuring the credibility of the information. The use of adapted instruments for a measure such as an observation guide assists in ensuring credibility.

1.9.2.2. Transferability

The researcher ensures that the data collected allows other researchers to compare and evaluate the similarities among the given circumstances and other situations or settings. Transferability refers to the degree to which the results can be transferred or practical in dissimilar contexts (Frambach et al., 2013:552). The researcher gives a "thick" description, so the reader knows whether it applies to their situation. Bless et al. (2013:237) state that transferability entails the researcher offering thorough descriptions of the setting in which the data was gathered, about the researcher as an individual, and about his or her relationship with the participants.

1.9.2.3. Dependability

The researcher shows that each phase has been accomplished meticulously and cautiously (Bless et al., 2013:237). Dependability stresses that the researcher systematically explains and indeed follows a clear and understandable research approach (Bless et al., 2013:237). Additionally, it refers to the quality of the method of consolidation that occurs between data collection method, data analysis and the theory generated from the data. However, strategies or focus may change as the study continues.

1.9.2.4. Confirmability

The researcher presents a critical assessment of the procedure used so that other researchers can understand it. Therefore, replicate it in another setting and foresee if and how the findings might be diverse (Bless et al., 2013:237). Confirmability refers to how well the data gathered supports the results and the researcher's interpretation. It shows how the results stream well from the data (du Plooy-Cilliers et al. 2014:259). This is achieved by going back and checking the prime sources in recordings and field notes. The data and their interpretation will not be fabricated by the researcher's imagination.

1.10. Significance of the Study

This study contributes to the current academic literature on the awareness, knowledge, and perceptions of health risks associated with HB smoking. Some studies have been conducted among high school and university students. However, these studies have been conducted in urban areas and despite the growing phenomenon,

little is known about the health risks' knowledge and the perceptions among rural-based university students. Such knowledge would be crucial in informing the design of health messages and policy.

1.12. Conclusion

The chapter provides the background of the study and statistical evidence to support and lead to the identification of the research problem. This resulted in the realisation of the aim of this study through which the researcher can draw objectives and research questions to fulfil the purpose of the study. Hypotheses that assist in meeting the objectives set were tested through an experiment. The chapter gives a brief structure of the literature to be discussed in the study that will support the findings of this study. A brief outline of the theories relevant to this study is also provided. The chapter provides the methodology used to collect and analyse data. It further provides the significance of this study as well as the ethics considered during and prior to data collection.

CHAPTER TWO

CONCEPTUALISING HUBBLY BUBBLY AS A CULTURAL PRACTICE

"The main reason I believe HB to be culture…imagine a family with two 11 and 13-year-old girls and a 10-year-old son, the mother asks them to make HB ready for smoking and they do so" (Azodi, Sharif, Azodi, Shirazi, Khalili & Jahanpour 2017:1643).

2.1. Introduction

This chapter provides an overview of HB smoking through a cultural lens. Although culture influences the use of HB, the use of HB in itself is a culture, hence the need to conceptualise culture based on meanings that are relevant to this study. Historically, HB smoking evolved into a subculture which was then embraced mostly by the youth after its re-emergence. Culture is a complex concept, which directly and indirectly influences HB smoking. An overview that illustrates the interconnection between culture and HB smoking is imperative as it outlines how the habitual practice of HB smoking became a subculture. The glamour associated with HB smoking led to an exploration of the concept of culture from the classical approach of critical perspectives i.e. Marxist's approach to class domination and cultural ideas that serve the interest of the ruling elites, Weber's class and status group as well as Bourdieu's approach to social classes. The glamourised nature and the growing market space occupied by HB significantly aggravate the need to look at commodification and commercial aspects of HB smoking.

As HB smoking culture stems from a mother-culture that was initiated decades ago, this exploration therefore relates to the concepts of subcultures, lifestyles, and neo-tribes. Therefore, looking at these concepts is imperative to this study. These concepts are important because they focus on youth who tend to belong to different subgroups, maintain certain lifestyles and appear to keep up with what is offered on the HB market. Youth and club culture are also discussed in this chapter because HB smoking is a commonly and highly embraced practice among the youth who frequent clubs.

The growing dependence on media, especially online media by the youth and mimicking of what the media portray may model the use of HB, as it is portrayed on these media platforms. Moreover, in most cases, the behavior is perpetuated by their favourite media personalities. Exploration of the promotion of HB smoking though

media culture as a spectacle, media as cultural industries as well as media as the capitalist ideology becomes significant to this study.

Through the media, HB smoking culture emerged among the youth as a more embraced and approved activity than cigarette smoking. This is because of the observed growing number of restaurants and cafés where HB smoking takes place, as well as passive legislation proposed to regulate HB smoking. Chapter two discusses the factors that may contribute to the social acceptance of HB smoking as part of glamourisation of its use. However, the researcher finds it important to start with the history of HB smoking and its relation to culture. This is because, although HB is ritualised by the youth as part of their leisure component, it dates to early days where it was performed as a cultural practice. Therefore, history will provide an insight as to when and how it became a well-endorsed activity among the youth.

2.2. The Advent of Hubbly Bubbly smoking

From its inception, HB appears to have been popularised as a harmless substance which may account for its fast spread. Researchers do not agree on how far HB practice dates back, with some stating 400 years ago (Momenabadi, Kaveh, Hashemi & Borhaninejad, 2016:124; Daniels, 2012:1) and others 600 years ago (Kumar, Baig, Ansari, Rizvi, Sharif, Beg, Rauf, Baig & Majeed, 2016:270). A historical account credits a physician named Hakim Abul Fath for inventing HB in India during the sovereignty of King Akbar as of 1556 to 1605 (WHO, 2015:15). The physician proposed that tobacco smoke should first go through a small container of water so that it would become safe.

To understand the misconceptions that led to HB being perceived as harmless, it is important to appreciate how it operates structurally and socially. Structurally, it comprises a bowl at the top, a body, a pipe with a mouthpiece, and a glass bottle at the base of the instrument to hold the water (Urkin, Ochaion & Peleg, 2006). Pulling through the mouthpiece draws the smoke through the water in the glass bottle and then into the mouth and lungs of the smoker (Urkin et al., 2006). The socialisation and group use may add to the harmless perceptions of HB smoking as some users may employ the logic that since others are using it, it must be harmless. These features may indirectly facilitate the growing trend of smoking among the users and create misconceptions that it is healthy. The study found it significant to discuss HB initiation

and the importance of the cultural aspects because of what one of the HB lounge owners, Sammy Khader articulated:

> I wanted a lounge that brought the real roots and culture of hookah. The roots of hookah stem from the act of sitting together, passing the hose and bonding with the company in the room…it is more of a bonding, conversational thing, that's the main reason I opened HB lounge to bring an aspect of the Middle East here. It is going really well, and Americans love the culture of hookah and the music and everything that goes with it (Brandes, 2014:1).

This is supported by Karganova (2018:10) who reported that

> In Turkey, smoking hookah is considered a virtually sacred process. This device is given special attention here, and it plays a great cultural role. For example, if a guest came to a person's house, he must smoke a hookah. If the proposal is denied, it will mean disrespect to the owner of the house, which can lead to a big conflict in the same way and vice versa (Karganova, 2018:10).

In a similar vein, Klein (2008:434) found that the tradition/culture or natural theme has equally been used in current tobacco advertising using Native American images. In truth, American cultures preserved traditional or ritualistic tobacco use as a religious, sacred activity, and would not customarily forgive casual, non-traditional consumption (Klein, 2008:434).

With the rise in cigarette consumption, HB use decreased to a point that it was used most entirely by old people in the impoverished areas of Arabia (Urkin et al., 2009), until its re-emergence in the 1980s (Daniels, 2012:1). Recently, HB smoking has gained rapid growth (Kumar et al., 2016:270). HB users, especially adults, believe that HB use was entrenched in public ethos and custom and was a social sign of communication in family and sociable get-togethers (Momenabadi et al., 2016:126). It can then be argued that culture plays a significant role in promoting HB smoking as the conceptualisation below shows.

2.3. A conceptual overview of culture

Culture has several meanings but under this section, only meanings that are relevant to the subject of this study will be interrogated. Culture tends to hold a strong influence among groups of people who share it. It involves a totality of traits and characteristics that are unique to a group of people to the level that marks them out from other people or societies (Idang, 2015:98). Recently, HB smoking has been an activity to complete the setting of a social gathering among the youth as well as for a gathering to be deemed enjoyable and pleasant. The members within the groups that smoke HB identify themselves in accordance to their unique contribution, that can be either, who

buys the device and its properties or who prepares it well to be enjoyed by the whole group. Therefore, members of certain cultures are expected to behave in accordance with the unique principles guiding members of those cultures. Spencer-Oatey (2012:8) views culture as both an individual construct and a social construct. It exists in each one of us independently as much as it exists as a worldwide, social construct. Spencer-Oatey (2012:8) further argues that individual variances in culture can be seen amongst people in the degree to which they embrace and engage in the attitudes, values, beliefs, and behaviours that, by consensus, make up their culture. Therefore, if you act in harmony with those values or behaviours, then the culture exists in you. If you do not share those values or behaviours then you do not share that culture.

Culture is generally understood to mean the sum of practices, attitudes and behaviours, not fully biological, not natural and not genetically inherited. Instead, culture is attained and learned, and spread both vertically (across generations) and horizontally (across members of the same generation) (Gadagkar, 2017:513). Flynn (2013) sees culture as a process through which societies encourage and attain conformity of behaviour, dress, language, expectations, and rules. It comprises the collection of customs, attitudes, values, and beliefs that characterise one group of people and differentiates them from other groups. It is conceded from one generation to the next generations.

Culture can be understood as a set of common and lasting meaning, values and beliefs that distinguishes national, ethnic or other groups and orient their behaviour (Belshek, 2006). Spencer-Oatey (2012:4) contends that cultural meaning is invincible. Although some features of culture are physically noticeable, these connotations lie exactly and only in the way the insiders interpret these practices. Therefore, one is condemned if they do not conform to these practices. In relation to HB smoking, within those groups or circles of friends, for one to belong, one would need to conform to the rules and activities undertaken by the group that include HB smoking. Even some smokers considered HB as a hereditary issue, for instance, the desired way or rite of passage to get in other tribes (Momenabadi et al., 2016:123). Conformity refers to the adjusting of an individual's behaviour in response to an actual or fictional external influence. It is influenced by the unity, determination, and support of the group (Flynn, 2013). According to Frese (2015:1328), in relation to cultural practices, the notion of a descriptive norm as shared behaviours in society assists us to grasp the concept of

cultural practices. Descriptive norm is a behavioural rule that individuals follow when their experimental prospects of others following the same rule are encountered (Muldoon, Lisciandra, Bicchieri, Hartmann, & Sprenger, 2014:3). Furthermore, according to Hadden and Seybert (2016:250), descriptive norms are perceptions of the prevalence or extent of behaviour (what other people do).

The area of descriptive norms is well established in social psychology: norms explain how people think and behave and they control the behaviour of people (Frese, 2015:1328). Conceptually and in relation to cultural practices: norms are both inputs as well as an output variable in the expansion of practices (Frese, 2015:1328). Norms propose certain behaviours and once these behaviours are socially routinised they become practices (Frese 2015:1328). Thus, cultural norms lead to cultural practices and vice versa. Therefore, both are deduced by perceptions of communal behaviour of others.

2.3.1. Culture: As a norm

Important parts of a culture are its norms, or shared expectations for behaviour (Solomon & Theiss, 2013:40). Norms are social conditions for social relations amid groups and individuals, thus contributing to the structure of, and difference amongst societies, and human behaviour (Flynn, 2013). They are characterised by shared rules, customs, and rules that govern society and define how people should behave in the company of others. They prescribe predictable behaviour in different situations. Norms are entrenched in social relations that lead members of a community to act in agreement with the behavioural standards establishing their common identity (Hadden & Seybert, 2016:250).

Norms are viewed as shared understandings that reflect genuine social purpose (Payne, 2001:37). They are norms because they exist in a societal system. They are sometimes referred to as social norms, which are, according to Mackie, Moneti, Shakya and Denny (2015:7) what individuals in some groups believe to be usual in the group, that is, believed to be an ordinary action, a suitable action, or both. Similarly, Brabers et al. (2016:901) state that social norms specify what is regarded by a group of people as normal, and what actions are regarded as deviant.

Naidoo (2012:3) found that HB smoking is becoming a norm among the youth with the popularity of its habit overtaking other recreational drugs such as cigarettes and alcohol. While Rahman, Chang, Hadgu, Salina-Miranda and Corvin (2012) found that among the youth in the United States, HB smoking might be transitioning from an occasional activity to a regular habit. Daniels (2012) referred to the habit of HB use as being 'hot', whether healthy or not. In this way, the normalisation of HB smoking among the youth is coming to a point where smokers are becoming addicted and feel the need to smoke it frequently, like cigarette smoking.

2.3.2. Culture: As a basic need

Culture becomes part of human life when it is practiced on a regular basis. When HB smoking takes place at each social gathering; it becomes a culture in which those who use HB cannot gather at a party, bash, etc. without smoking it. Profoundly, culture is one of the conditions necessary for there to be such things as "persons", "humans" or "humanity" (Magnusson & Merecek, 2012:20). Human nature is shared by all human beings (Spencer-Oatey, 2012:6). What Magnusson and Merecek (2012) and Spencer-Oatey (2012) mean is that culture and human beings are inextricably intertwined in terms of existence. It is not only those humans developed along with culture, but that we are always within a culture and cannot exist outside of culture, Delaney and Kaspin (2017:10) argue.

Human beings are required to meet biological and social needs to survive, and nature gifted humans with an elementary toolkit comprised of capabilities, temperaments, and preferences to meet these needs (Matsumoto, 2007:1290). Culture influences biological processes in that; the excessive majority of our cognisant behaviour is attained through learning and intermingling with other members of our culture (Spencer-Oatey, 2012:5). Even those responses to our biological requirements that refer to eating, coughing, excreting, amongst others, are regularly influenced by our cultures. Culture is also linked with social groups (Spencer-Oatey, 2012:7), which means that social needs will be met through these social groups. These needs include the need to belong to a certain group, which have specific cultural beliefs to which everyone in that group conforms.

All cultures have some elementary features in common: culture is learned and imparted, shared to some substantial extent by adherents, adaptive to fluctuating

conditions, and attentive on meanings and thoughts rather than on material production (Godwyn & Gittell, 2012:303). According to Spencer-Oatey (2012:12) culture is acquired from the people you intermingle with as you socialise. Culture is also imparted by the clarifications people get for the ordinary and human events around them. Culture is learned, not hereditary, it is derived from one's social setting, not one's genes. Therefore, culture should be differentiated from human nature on one side, and from a person's personality on the other, even though exactly where the boundaries lie amongst human nature and culture, and amid culture and personality, contributes to continuing debate among social scientists (Spencer-Oatey, 2012:6).

Humans are intrinsically social animals and as such, live by taking advantage of the power of the group (Matsumoto, 2007:1291). They have their cultural beliefs, which guide them daily. Cultural beliefs define who people are, how they intermingle with the world and how they act in certain circumstances and can be well-thought-out as amalgamation of religious beliefs, socially recognised norms and traditions (Wegner & Rhoda, 2015:1). These situations may include a health situation, such as recommended health behaviour about smoking. Carroll, Esptein, Fiscella, Volpe, Diaz and Omar (2007) and Omu, Al-Obaidi and Reynolds (2014) find that culture plays an important role in health-related behaviour. It is therefore imperative to take into consideration that culture is a combination of ideas that a group of people agree upon and conform to as well as embrace including health-related behaviour.

2.4. Commodification and Hubbly Bubbly: A critical analysis

Commodification has converted to be a serious subject in today's international society, as it goes hand in hand with consumerism. It is a concern for this study as outlined in the previous section because HB has become a commodity in contemporary society with most youth becoming its regular consumers. Lough and Mumcu (2014) found that commodification is a many-sided concept, having originated from political and economic theory as well as cultural and literary studies. Commodification is the conversion of inconsequential, social relationships into commercial relationships that often utilise the language and conceptual stance of a market driven by economic and consumerist society (Lough & Mumcu, 2014).

Gotham (2002:1737) argues that commodification has reached a stage where images have become commodities themselves and function according to their own

independent logic within a chain of free-floating signifiers. Kellner (2004:1) argues that an internet-based economy has been evolving a hi-tech spectacle as a way of advancement, replication, and the flow and selling of commodities through multimedia and gradually more refined technology to glare consumers.

Therefore, Burton and Dimbleby (2006) argue that these affect the way that we value everything in our lives. Even the social values and relationships among the youth could be valued in terms of smoking the HB together. Therefore, the path to defining social values and relationships in this mode can be referred to as commodification, Burton and Dimbleby (2006) argue. The above may be the context in which students and young adults find themselves. Social values and relationships are built when society agrees on and accepts certain aspects and practices. As such, HB is presented as a style and taste; the sophisticated or cool practice is one in which image, advertising and consumerism take dominance over production. Thus, smoking the HB has decentred and localised consumption, encouraging it as a form of entertainment and lifestyle and becoming the essential facets of the socio-cultural life of the youth.

2.4.1. Contextualisation of Hubbly Bubbly as a commodity

Drawing from HB history, literature illustrates the extent to which commodification of HB in contemporary generations contributes to its increased use. The study examined the degree to which commodification of HB in modern generations contributes to its increased smoking. From Pröschel's (2012) view of commodification, the study has shown the extent to which both the commodity form and the ideological form of combination have affected, or rather increased HB smoking, in relation to increased commercialisation.

Articulating the extent to which commodification fits into the rigid format of HB smoking, Kellner (2004) states that the growing use of the internet by contemporary society has developed a hi-tech spectacle, thus promoting, reproducing, and circulating as well as selling commodities such as HB, using different types of media and gradually sophisticated technology to glare consumers.

In terms of commercialisation, consumers (HB users) choose the event (bash, party or chillas, etc.) they wish to attend, based on the HB designs as well as different types of tobacco flavours they want to smoke. They buy the environment of HB smoking and

they often buy their happiness for a night or any specific time. They purchase the experience of being with people who appreciate HB smoking and who share the same desires as themselves. If they like what they have purchased then they may return, if not they will not return. Often friendships are created and preserved, and this may strengthen the yearning for continued involvement.

2.5. Critical Perspective of Culture: A Classical Approach

In this section, Marx, Weber and Bourdieu's view of culture from the classical approach is discussed. It is necessary to discuss these perspectives given that HB smoking is an influenced culture that exists in different parts of the world and needs to be critically assessed to reveal some of its underlying influencers, which may be ignored. Like Ray (2009), who found that the exercise of HB smoking became popular in areas where the Mughals had a strong influence and thus became a part of the culture.

The general concept of culture developed by Marx and used in cultural anthropology is called anthropological interpretation (Klowskowska, 1979:34). Here, Klowskowska (1979:34) reveals that the meaning incorporates a very wide area of human life: thus, the culture here welcomes all the structures and outcomes of human activity, and which result from custom, emulation, acquiring, and understanding of normally accepted patterns. This means that culture covers all domains of human social activity and its consequences, such as enjoying HB smoking during leisure time that can result in health concerns in the long run. However, Marx views cultures from a classical perspective as maintaining inequality by imposing on all a false unity and similar belief that hides real class differences (Gartman, 2013:6).

Weber's writings were influenced by Marx. As stated by Allen (2004:81),

> The influence of Marxist ideas also meant that Weber was less confident about challenging them on their home ground, one, therefore, finds that some of Weber's comments on class sound like an echo of Marx (Allen, 2004:81).

Weber according to Gartman (2013:6), believes that culture validates inequality by establishing a ranking of different beliefs, which makes the holders of some appear superior to others. According to Gartman (2013:6), Weber reveals that human beings may be cultural beings; but culture exists as a force beyond and outside the individual. However, Weber argues that not all share the cultural beliefs and practices of the

privileged group, but they are somehow recognised by all to be superior (Gartman, 2013:60).

Weber defines a class as established by a shared position in the economic market, where goods are made. Classes are differentiated mostly by the property owned and amenities obtainable in the market (Gartman, 2013:6). So just like producers in the economic marketplace, the competition of producers in the cultural marketplace drives them to offer new and different status goods to maintain old customers and attract new ones. This means that the HB industries produce more improved and sophisticated HB designs and different fruity tobacco flavours. Ray (2009) found that the tobacco industry has picked up on the trend and introduced new flavourings to HB tobacco, such as fruit, chocolate, mint, etc. to appeal to the youth and women. This on its own retains old customers and gains new ones. Chaouachi (2009) openly declared that HB smoking might well be a ploy of the tobacco industry.

Bourdieu also argues like Weber, that cultures generally contain a diversity of ideas and beliefs that are influenced not by economic interests but indirectly by practical preferences molded by class position (Gartman, 2013:7). However, Bourdieu approached culture differently from Weber, where his focus is on a group's economic resources, which are said to condition the actions of individuals from an early age, even before they enter the workforce. Like Marx, Bourdieu holds that cultural power is always determined by economic power (Gartman, 2013:9). Ray (2009) found that the HB is market-driven; however, the target group is young adults, including women, this does not discourage some underage youth from experimenting with it. Therefore, different forms of HB were created to suit all social classes that exist in society. Used by both men and women, young and old, HB has the power to form classes within the social classes that already exist in terms of what type of HB they smoke and who they smoke it with. This is clearly explained in the next section.

2.5.1. Marx on class domination

On Marx's materialistic conception of society, the defining concept of society, putting its mark on all facets of social life is its economic setup, its mode of production (Royce, 2015:24). The relations of production in effect stipulate the rule of the economic game: who has what rights, powers, and privileges. However, these social relations, Marx emphasise, vary from one kind of economic system to another. Marx's materialistic

perspective thus alerts us to the deeper realities often concealed by the surface appearances of everyday life.

However, Kellner (2013:1) argues that for Marx, cultural thoughts of an era aid the interest of the dominant class, offering ideas that validate class dominion. Ideology in Marxian analysis narrates how dominant thoughts of a given class encourage the interests of that class and help disguise tyranny, prejudices, and undesirable features of a given society (Kellner, 2013:1). Those who have power are those who have money. Media, on the other hand, depicts through movies, music videos, and other genres that those who are smoking HB are the classy, modern people. This on its own makes young people want to smoke it and feel like they are classy and live in modern times.

Hebdige (2003:15) states that the thoughts of the dominant class are in every era, the dominant thoughts, thus the class that is the presiding material force of society is at the same time its presiding intellectual force. Additionally, the class, which has a method of material production at its disposal, at the same time has control over a process of mental production, so that, the thoughts of those who lack the way of mental production are succumbed to it. In this case, HB glamourous designs for students and other young adults—those who have access to HB in its different glamour designs through their ability to afford them, create an illusion among those who cannot afford to buy these designs, that they have class and are as vibrant as those who bought it. Kakodkar and Bansal (2013:4319) state that in India, from ancient times, the use of HB was not only a tradition but a substance of pride and status; rich classes were habituated to smoking HB.

Karganova (2018) also found that HB devices were covered with precious stones and gold, the mouthpieces had creative models and were also made of luxurious materials. Nevertheless, such versions were accessible only to the superior classes, and ordinary people had to be content with the simplest options. Therefore, it can be argued that the dominant thoughts are nothing more than the perfect manifestation of the dominant material relationships conceived as ideas; hence, of the relationships which portray the one class as the sovereign class, therefore the ideas of its supremacy. Kellner (2013:8) continues to argue that both culture and ideology intersect and saw ideology analysis as vital to critical cultural studies. He outlines that

both perceived culture as a means of ideological production and control, in which cultural forms help to shape the means of thought and behaviour that persuade individuals to adjust to the social circumstances of capitalist societies.

2.5.2. Weber's Class and status groups

Weber considers class in a slightly Marxian logic of an economic interest group and as a role of the markets, not as a social status group. However, his scrutiny is not Marxian, for he stresses economic dispersal instead of invention. A class he notes "is any group of people occupying a similar class situation and the class situation advances within the economic order" (Turner, 1999:237). The economic order is simply the means in which economic goods and services are dispersed and utilised. As mentioned in 2.5, Weber further defines a class in a more processual context as a function of the market. This implies that the industries as referred to as market in this context, produce HB use processes such as marketing techniques that promote HB smoking. Like Ray (2009), who found that advertising HB on the internet uses associations to an old tradition and an exotic appeal.

The factor that creates a class is unmistakably economic interest, and definitely, only those interests are involved in the existence of the market (Turner, 1999:241). In this way, more focus is directed to the class features of the HB and how much the industries are going to gain when distributing these products to the public. The HB market distributes these substances while shadowing their health effects so that they can have high-profit margins. Like Nakkash and Khalil (2011) who reported that people viewed HB smoking as a pleasurable activity among friends regarding health consequences.

Classes may act concertedly in their own interest but is an important difference in the process of class action. Weber distinguishes that common class action or action is focused on the feeling of the actors that they belong together, and social class action or action is focused on the rationally driven alteration of interests. However, the rise of social or even shared action from a shared class situation is by no way a widespread phenomenon. Therefore, for Weber, classes are subdivided in relation to production and acquiring of goods, while social groups are subdivided according to the forms of their consumptions and the specific ways, they conduct themselves (Berzano & Genavo, 2015:7).

The status group concept, as distinct from that of a class, considers more of cultural elements and social complexity (Berzano & Genavo, 2015:7). Turner (1999:241) distinguished social status from class by stating that class is an outcome of the economic order, while the dwelling of status groups is within the social order, that is, within the scope of the dispersal of honour. Status groups are usually limited groups differentiated with respect to the outside world, social forms sharing a common quality, an expected life conduct, making belonging to that restricted group visible on the part of their members. As the HB has been depicted as a classy object that contains a certain status, therefore, the groups formed by students who smoke it are thought to depict a certain status. Belonging to such a group you need to meet such a status, it can either be in terms of clothes they put on or the kind of beverages they consume. Kakodkar and Bansal (2013) found that some families consider HB smoking as a part of a modern lifestyle. Weber sees status groups, insofar as they develop specific lifestyles, as residing in the sphere of honour and social order, whereas classes appertain to the economic order, just as parties belong to the political order (Berzano & Genova, 2015:7).

2.5.3. Bourdieu on social classes

Bourdieu's views on the matter are not fully compatible with Marxist orthodoxy, in that class structure is not uniquely defined by the structuring of the relations of production, but rather by the construction of people's assets [economic capital, cultural capital and social capital] (Coulangeon & Duval, 2015:7). In relation to HB smoking, those who are economically stable are in a good position to smoke it in terms of affordability. And those who adopted HB smoking as a cultural phenomenon, such as people from Arab countries are likely to condone its smoking patterns. Like Omole et al. (2011:155) state, since HB smoking encourages a sense of cultural identity and unity, this habit is socially approved and is not seen as hazardous. Bourdieu criticises Marxism for its objectivism, insisting that the representation of the social world was an issue to social struggles (Coulangeon & Duval, 2015:7). Bourdieu's approach to the social classes may, in fact, be closer to Weber's conception, except that Weber purposely separated class and status, whereas Bourdieu conflated the two.

Social structure is seen here as formed by the relation between classes. Classes are distinguished based on the number of different forms of capital (Iwona, 2016:2).

Bourdieu suggests that the study of culture requires to be situated anthropologically, in relation to the whole of cultural values, which saturate everyday life. This means that in any one nation, cultural values are to be understood as the completely varied set of everyday principles to which the numerous social practices of common people are oriented (Gillian, 2017:93).

However, Gerhards, Hans and Mutz (2013:160) articulate Bourdieu's argument that there is a homology of social classes on one hand and cultural ingesting on the other. In contrast, theories of individualisation suggest that social class plays only a slight role in shaping lifestyle in modern-day societies. Romain and Renzo (2017:489) reveal that according to Bourdieu, taste, and lifestyle differ not only as of one social class to another but also within social classes themselves, dependent on the type of capital (particularly, cultural or economic) that succeeds among class segments. This disparity is noticeably reliant on the type of capital, be it cultural or economic that triumphs among social classes. This may simply mean that those groups of HB smokers differ in terms of what flavours of tobacco they smoke, preferred brands and prices as well as the HB device designs.

2.6. Subcultures, Lifestyles, and Neo-tribes

Lifestyles and subcultures are tools through which people define themselves by reflecting who they are, who they are like or different from (Berzano & Genoza, 2015). According to Berzano and Genova (2015), lifestyles and subcultures are lenses through which human beings as observers, analyse society, orientate them within it, looking for similarities and variances among individuals and collectivities which permit humans to understand their thoughts and actions. Alongside the notions of "lifestyle" and "scene", the idea of the "neo-tribe" was also deployed as an alternative to subcultural theory (Osgerby, 2014:21). In relation to HB, Grekin, and Ayna (2012:244) state that HB smoking has become part of the "social scene" on several university campuses. There has been a notable rise in the number "HB bars" and "HB cafes" near college campuses, and many students cite socialisation as a prime influence for their HB use. Therefore, the exploration of HB smoking as a subculture is fundamental.

2.6.1. Subculture Tradition

Hubbly Bubbly was first used by old men in Arabic countries and then became an outdated practice. Its re-emergence saw its modification and in turn, attracted young people. Young people then made it a subculture which emerged from the old existing culture. Wong, Alias, Aghamohammadi, Aghazadeh and Hoe (2016:1) revealed that HB smoking is becoming a dominant practice amid medical students in Malaysia. According to Arnold (1973:32), subculture refers to a sub-division of a national culture, comprised of an amalgamation of factorable social states such as class rank, ethnic status, regional and rural or urban residence, and religious membership, but establishing in their amalgamation of effective harmony which has a cohesive influence on the participating individual.

A subcultural group is one that distinguishes itself from the main culture through its discrete attitude and lifestyle, but it links to it over extensive processes (Huq, 2006:18). Subcultures refer to the symbolic-normative structure of those groups which move within society, considered, becoming carriers of values and norms, which are, at least in part, divergent from most widespread and dominant ones (Berzano & Genova, 2015:89). Concentration is above all on the cultural and practical models which characterise these socio-cultural forms with respect to the surrounding environment, drawing an attention to qualities such as the daily conducts, language, behavioural models, belief systems and values which best allow one to identify points of separation from the mainstream of the broader society to which in any case they belong.

Subcultures may take shape as a separate social world with its own ways of acting, talking and thinking. It has its own terminology, its own activities, and interests, its own comprehension of what is important in life and to a certain level, its own structure of life (Berzano & Genova, 2015:90). They further state that the term subculture refers to the social heritage of any relatively small, local groups, such as a clan in a primitive tribe, or in a complex, contemporary society, a marginal group having a mutual religion, social class or country of origin. In short, subculture is usually thought of as a group that is part of the dominant culture, but which varies from it in some significant respects (Sinclair, 2013).

Subculture refers to all groups that have their own cultures, with logic and ethos of their own but, not culture with a capital C, but subcultures (Worsely, 1997:342). In

relation to this study, HB smoking has been embraced by the youth; this is done by logic for instance, where they incorporate it in their social gatherings. This perspective shifts the emphasis to localised subject positions that have established around fashion, lifestyle, and identity and cites.

Maffesoli (1996) prefers to use the term local, minor and working-class youth subcultures such as the Teddy boys and skinheads.[1] Osgerby (2014:11) reveals that parity means ways in which incongruent stylistic elements; music, clothes and leisure activities merged to form a comprehensible symbolic appearance of a subcultural group's uniqueness. These can be a lifestyle in which members of these subcultures adhere to, identifying themselves as part of the subculture.

2.6.2. Lifestyles Tradition

Lifestyle may be referred to as a mode of living, the things that a person or group of people habitually do. Lifestyles are built on individuals' choices, characteristics, personal preferences and surroundings (Seddon, 2011:1). A lifestyle is everyone's unrepeatable psychic print, where behaviour traits, ideas and opinions elaborated by thought, feelings, and emotions all converge, structured in the service of prevailing ends (Berzano & Genova, 2015:29). The notion of lifestyle is connected to social rank and practice, but how people use their relaxation time and income is not an easy reflection of income status but must be viewed as being rooted in social behaviour (Bogenhold, 2001:830).

In addition, Channey (1996:4) assumes that lifestyles are features of the contemporary world or what is called modernity. This means that those who live in contemporary societies will use a concept of lifestyle to describe their own and other's actions. Here lifestyles are patterns of action that distinguish people. The author further reveals that lifestyles are part of the everyday social life of the contemporary world and they function and interact in a way that would be unconceivable to those who do not live in contemporary society. According to Osgerby (2014:19), the concept of lifestyle became especially influential in analyses of young people's patterns of consumption.

[1] Thomas (2017) stated that Teddy Boys became visible in the 1950s to the mods of the sixties while Skinheads emerged in the seventies. In addition, he stated that these tribes are inherently connected, proving to be some of the most meticulous and ambitious social movements of the 20th century. He further stated that members of these tribes, almost exclusively young working-class kids, attempted to distinguish themselves form the rest of the society…through the music they listened to, the attitude the adopted, and the clothes they worshipped.

However, a lifestyle is not only defined on grounds of behaviour, but it also corresponds more generally with a set of people, of their own choices, adopts similar modes of behaviour, in every field of social and individual life while sharing homogeneous values, opinions and attitudes (Berzano & Genova, 2015:41).

During the 1990s, notions of lifestyle attracted renewed interest amid an explosion of research dealing with consumption and identity. Here, the work of Anthony Giddens (1991) was especially influential. For Giddens (1991), many of the beliefs and habitual practices that steered and defined identities in traditional social order (organised religion, for instance) wielded less influence in the “post-traditional” age. Instead, people were faced with a procession of choices in their lives, not just about features such as appearance and lifestyle, but more largely about their life destinations and associations.

As a result, Giddens (1991) proposed, modern individuals had become constantly “self-reflexive”, repeatedly making choices about what they ought to do and who they ought to be. In this situation, the self became a kind of a mission that individuals continuously worked upon; people engaging in an unceasing process of a lifestyle choice as they expounded a comprehensible biographical “narrative” and an unswerving identity. In relation to HB smoking, Ezekiel, Stephen and Mosha (2018:5) found that some participants in the study smoked HB because it is fashionable and a sign of civilisation. In a similar vein, Sterling and Mermelstein (2011:1202) found that HB use has become as stylish now as cigars were in the 1990s.

2.6.3. Neo-tribes: A Postmodern Approach

The relationship between Postmodernism and neo-tribes is established by Maffesoli (2000:13) in Brookman (2001), in the following instances: Postmodernity is a collaboration amongst archaism and technological advancement, in that “we should recognise the movement of re-rooting of the individuals that comes with their unceasing uprooting caused by growth”. What they pursue through the experience of communal emotion may be well-thought-out as a return of the pre-modern fantasy which has been excluded by contemporary thinking. This pre-modern fantasy values ideas that are different to growth, such as a community, locality and recollection. The word “tribe” denotes to this recurrence of quasi-archaic values: a local sense of recognition, religiousness, fusion, group vanity and so on. It is lent from anthropology

which is used to set apart old-fashioned societies where social order was upheld without the presence of dominant power (Cova & Cova, 2002:4).

Therefore, postmodern tribes are created due to communal feelings of belonging. This means the creation of these tribes are maintained by people of the same age group, who usually like the same stuff, enjoy each other's company and hang out together; such groups can be the youth. Moreover, the fluid borders of "neo-tribes" permitted adherents to ramble over various group attachments, so that collective identity was "less a question of belonging to a gang, a family or a community, than of switching from one group to another" (Osgerby, 2014:21).

Evans (1997:239) further explains neo-tribes by arguing that, due to the presence in a distinctive era, where people are no longer reliant on what he labeled as the 'chains of tradition', neo-tribalism is applicable because it assists in comprehending how consumer capitalism offers choices regarding the selection of common lifestyles because of an otherwise 'lost' in collective subject. Neo-tribes, according to Hill, Jäger-Rasmussen, Larsen, Toft and Schrøder (2016:19), can be comprehended as a response to, and an outcome of the death of individualism, since the term comes through in explaining how people then assemble in groups expounding themselves based on tastes and lifestyles, which are common and collective. Maffesoli (1996: foreword) adds that a tribe is then formed owing to peoples' freedom of choice in a postmodern era, where creation of meaning depends on choice.

Nayak and Kehily (2008) describe tribes and neo-tribes as movable groups of young people whose fashioned tastes and lifestyles come together in times of common interest. In addition, Huq (2006:27) describes Neo-tribes as the talks of a new and evolving trend in the growth of small groups and networks and the growing detachment from the abstract public. They are much more temporarily constituted and unsolidified in composition. Membership to them is easily revocable and divorceable from long-term compulsion. Although they appear to be about singular identity, their suppleness allows multiple identifications.

2.6.4. Neo-tribes and group identity

McKerron (2003:1) attests that the creation of identities is a societal exercise done to offer identification with or antagonism to the identity of other people throughout the

course of social collaboration. Individuals within groups reveal the same identities to identify with the others in a group, as a group-in order to reveal a variance to other groups, to distinguish themselves, form borders, and otherwise distinguish themselves for certain purposes. Groups structure their identity around the individuals in the group. The individuals establish their identities from the affluence of their understanding, information, and inspiration, from the previous, current and anticipated future. Added to this, they draw from aspects of identity in their surroundings, choosing, articulating, dumping, selecting and accepting those that are suitable for a certain time and place. The basis for election is emotive and sympathetic, the identification with compatible others. It is a premeditated community. Hetherington (1998) argues that the reason for the existence of these neo-tribes is as a reaction to the turmoil and disintegration of current postmodern society.

However, the tribes are continually unpredictable and the commitment of the tribe members, both figuratively and ritualistically, governs its existence (Cova and Cova, 2002:598), which recounts Maffesoli's (1996) opinion on them being unstable since they rest on emotions (Cova & Cova, 2002: 598). Being linked to a tribe in the postmodern age is further described as coincidental with what is clarified as the normal life (Cova & Cova, 2002:599), since belonging to several tribes is a likelihood and more notably a prerequisite (Cova & Cova, 2002:602). Since Maffesoli (1996) describes, "the persona, the changeable mask which blends into a variety of scenes and situations whose only value resides in the fact that they are played out by many". Maffesoli (1996:10) explains how complicated the construction of meaning is owed to uniting neo-tribes and the importance of a commitment of the tribe members. This commitment is then expressly noticeable on social media since technology offers the platform for connectivity and interaction amid the tribe members (Hill et al., 2016:20).

In contextualisation of this study, youth, especially students could be looking for both the pleasure of breaking away from the inflexibility of the identities performed in their real worlds, these include; studying for exams and other pressures that students face. They are also seeking for the emotional attachment to be found in those HB smoking communities that are formed during the social gathering (e.g. parties, bashes, etc.). In these gatherings, they are looking for what they lack in the real world.

Hunt, Milhet, and Bergeron (2011:115) found that when new substances are introduced to individuals, their practical effects are often stressed. They also found that the early use of tobacco by Europeans was regarded as a kind of food, a counteractant to hunger; users spoke of “eating” the smoke. However, the authors also found that in the 20th century, smoking was a means of weight control, and thus giving up smoking carried the hazard of gaining weight. Tobacco was also used to produce calm, dedication to one’s work, and relief from stress. Other kinds of smoking this tobacco as social ritual involved smoking tobacco in a pipe; the Turkish hookah or waterpipe was collective; and in the 18th and 19th centuries, respectable Dutch and German burghers gathered to smoke their ostentatiously decorated pipes together. The point here is that there is a type of substance ingestion that is socially appreciated.

To appreciate how an individual smoker can otherwise express smokers’ behaviour helps one to comprehend HB consumption from an individual standpoint. However, it is pertinent in connection to the micro-social view in terms of also discovering the position of the individual. Smoking behaviour offers a view on the individual process in consuming the substance and this consumption is defined in relation to consumer behaviour as the active interaction of affect and reasoning, behaviour and environmental events by which human beings oversee the exchange aspects of their lives (Peter & Olson, 1993:8). In this definition, according to Hill et al. (2016:21), the idea here is that consumer behaviour is active and the immersion of interaction and exchange are significant factors. Hill et al. (2016:21) state that consumer behaviour is well-thought-out as active, as a society, and therefore, consumer groups are developing and are in continuous modification, which recounts to the unsettled status quo of neo-tribes in general.

Hence, HB smoking behaviour is evolving and new techniques and substances are added to attract more smokers. Smokers themselves, for example, add other substance such as marijuana, wine or vodka instead of water while others add *nyaope*

[2][3]among other substances to make the tobacco smoked by the HB stronger and enjoyable. In this way, patterns and behaviour among the groups of HB smokers are in endless fluidity, which also relates to the neo-tribe's changeable situation. Therefore, the movement from subcultures to scenes, tribes, neo-tribes, and scapes echoes a move from locally bound to universally linked youth cultures (Nayak & Kehily, 2008). Therefore, youth and club cultures and how they relate in promoting HB smoking forms part of the following discussion.

2.7. Youth and Club Cultures

Youth and club culture go hand in hand in this section as they are both used to explain the subcultures in which young people practice passing their leisure times. According to Brookman (2001:53) within club cultures a loosely defined group of people who attend dance music events exists, as opposed to many communally limited subcultures. Rief (2009:4) sees club cultures as a cultural and social practice and an ambiance that amalgamates electronic, beat-centered music of numerous types, dance, fashion, drugs, and sexuality in numerous temporary and three-dimensional settings of co-existence. 'Club cultures' incorporates a varied array of youth-based music scenes and subcultures (Rief, 2009:4).

The work of Redhead (1997) characterises these fluctuations as a move from subcultures to club cultures. The author indicates the silent occurrence of communal leisure amenities and universal media forms in young people's daily lives. Here, club culture is well-defined as global, unsolidified youth creations that are constructed on media fashions and the niche marketing of dance music as a youth culture for all. Clubbing is referred to by the author as 'pleasure-seeking in hard times' signifying that it is both an escape and a riposte to realities. Modern approaches to youth cultures document the importance of universal media cultures and the patterns of consumption as key variations in young people's lives (Nayak & Kehily, 2008).

[2] *nyaope* is a brown powder due to its mixture with soil, sand or in some instances cement powder (Khine, Mokwena, Huma & Fernandes, 2015:50). In addition, they affirmed that *nyaope* is normally enclosed in marijuana (dagga) leaves and smoked, it is not always clear what all the ingredients of Nyaope are, they vary from sources …*nyaope* may incorporate heroin, detergent powder, rat poison and compressed anti-retroviral drugs (ARVs).

[3] *nyaope* users are typically 14 and 27 years old (Ngwana & Mgidi, 2012:16). Ngwana and Mgidi (2012:16) added that *nyaope* is becoming the 'drug of choice' among thousands of youth across South Africa.

Youth culture, being a culture in a culture, naturally, is unimaginable and does not exist independently but out of the dominating culture of contemporary society (Teslenko, 2016:117). One of the dominant features of youth culture is “having a good time” (Smith, 1976:353). According to Yang (2013:58), the concept of youth culture may refer to the way of life for the youth, the totality of all the lifestyles of youth and can be considered a culture of young students and so on. Although the abovementioned definitions of youth culture may be too broad, and some may be too narrow, Yang (2013:58) simplifies them by describing youth culture as the totality of the tolerable value system, behavioural norms and social relationships communal to young people. According to Águila et al. (2012:4) youth culture is offered from postmodernist readings based on new forms of socialising, identified as “club cultures”, “lifestyles”.

Young and vibrant youth have a desire to try out everything including drugs and alcohol. Young people have the mindset that they must play before they can reach the adulthood stage where they are expected to be responsible. They tend to be caught in the midst of anything that is introduced as part of a leisure experience. According to Yang (2013:58), the young age is a life period occupied with imaginary, eagerness, mystery, and solitude. Therefore, these form part of their youth culture. Hall and Jefferson (2006:4) stresses that the term youth culture guides us to the cultural facets of the youth. The word ‘culture’ can be understood with reference to that degree of which social groups construct separate structures of life and give demonstrative form to their social and material life-experience (Hall & Jefferson, 2006:4). In this case, ‘culture’ is the practice that notices or objectivises group-life in expressive figure and form (Hall & Jefferson, 2006:4).

The term youth culture is grounded on the idea that what transpired for youth in this time is fundamentally and subjectively dissimilar from whatever occurred previously (Hall & Jefferson, 2006:8). Hall and Jefferson (2006:8) suggest that all the activities that young people partake in during this time were more signinficant than the varied kinds of youth groups or differences in their social class composition. Class structure acknowledged youth culture solely with by its most remarkable features, its music, fashion, and leisure consumption. The notion of youth as a distinguishing phase of life was not new (Hall & Jefferson, 2006:8). Contemporary concepts of youth as a distinct, intermediate stage between childhood and adulthood took shape in the late 19th and early 20th centuries (Osgerby, 2014:4).

In 1940, Talcott Parsons (1942; 1943) invented the term youth culture to represent what he saw as a separate set of values and behavior communal to the young (Osgerby, 2014:4). Revealed through clothes, music, and style, youth-subcultural establishments are understood as creative comments on the main culture in which young people creatively redescribe their own lives. Nayak and Kehily (2008) state that young people's play and leisure activities are usually seen as aggressive and troubling. Therefore, the idea that young people need to play and that this may serve useful purposes is rarely indulged. Youth cultures are seen in significance as passing, short-lived establishments (Huq, 2006). Huq (2006) continues to state that youth culture is a universal industry for which continuous rebirth is crucial, safeguarding a fast income of all the linked consumer products such as fashion and music.

Solomon and Theiss (2013:43) referred to the virtual groups or online communities where people find people with similar backgrounds and experiences with which they can provide support, share information, and form a social connection. In this way, this subculture is mostly practiced within the youth culture, where they are virtually connected to share and entertain each other through the media.

2.8. The media

During the past decades to this date, media became a powerful ideological institution that introduced different ideas to society. The media are at the centre, between the society and the ways society should carry out their everyday lives. The understanding of culture and media has been established by Cambpell, Martin and Fabos (2014:6) who state that a means to comprehend the influence of the media on our lives is to explore the cultural setting in which the media function. They explain that culture is often barely linked with art, an exclusive pattern of imaginative expression that give pleasure and set standards about what is factual, decent and attractive.

2.8.1. Media culture

Media culture, according to Kellner (2004), not only takes up swelling moments of modern experience, but also offers more material for imaginary, fantasising, modelling ideas and conduct, and creation of identities. This can apply to youth who want to identify themselves with a certain group of friends in which they influence each other

to practice certain behaviour for pleasure, entertainment or relaxation, such as the HB smoking in this case.

Media culture drives the economy, making corporate profits while circulating the marketing and images of high-consumption lifestyles that assist in replicating the consumer society (Kellner, 2011:3). Political and social life is also moulded more and more by media spectacle (Kellner, 2004:1). Kellner (2011:3) continues to argue that media culture also offers representations for everyday life that mimic consumer standards and personalities and sell consumers on commodity pleasures and solutions to their problems, new technologies, and innovative patterns of identity. Because of its novelty, HB, still in the identity notion, in this way creates a form of identity to the young smokers who will be classy and referred to as being cool.

Culture can be regarded more widely as the means in which people live and characterise themselves at historic epochs. The cultural typology of media by McLuhan is constructed according to which kind of a society is resolute, to a large degree, by the kind of communication that governs this society, and the human perception is determined by the speed with which information is conveyed (Kirillova, 2016:2). Cambpell et al. (2014:6) further state that the idea of culture involves fashion, sports, literature, architecture, education, religion, and science, as well as mass media. Culture itself is always changing. Culture connects individuals to their society by offering both communal and disputed values and the mass media help circulate those values.

2.8.2. Media culture: A spectacle

The concept of media culture connecting it to the spectacle, was coined by Kellner (2004) who states that social and political battles are gradually displayed on the screens of media culture, which displays spectacles like astonishing murder cases, guerrilla bombings, celebrity and political sex scandals, and volatile violence of everyday life (Kellner, 2004). The notions of media events or spectacle were originally established to analyse the power that the media have in generating media events and spectacles (Seeck & Rantanen, 2015:164).

For Debord (1970) the spectacle highlights social topics and diverts them from the utmost crucial task of real life, recuperating the full array of their human powers

through artistic practice (Kellner, 2004:3). In all its specific forms, as information or propaganda, commercial or direct consumption of entertainments, the spectacle is the current model of socially dominant life. Chung (2016) found that smoking scenes in television and movies positively stimulated young viewers, boosted their perceptions of smokers' stature, and amplified their intention to smoke.

Commercials for HB cafes on the Internet used text, images, or audio stimuli to encourage HB smoking (Primack, Rice, Shensa, Carroll, DePenna, Nakkash & Barnett, 2012). Remarkably, these websites publicised that HB use was an innocent, exciting, calming, "tasty" and sweet way to socialise with friends (Haddad, El-Shahawy, Ghadban, Barnett & Johnson, 2015). The spectacle in the media can be used to analyse all events such as news and information (Seeck & Rantanen, 2015:169). See below screenshots from a music video by South African artist, GPG ft. Team Mosha.

Figure 2.1. South African Media personalities smoking Hubbly Bubbly in the music video

Debord (1970:2) also argues that the spectacle is likewise the enduring presence of this validation to the level that it resides in the main part of the time lived outside of contemporary production. While the HB is depicted as a form of entertainment native to modern society, it has in fact occupied the lives of people in times gone by, illustrated clearly by the history of HB tobacco smoking noted earlier in the chapter.

Modern society accumulates many products produced by industries. Because industries and retailers are after capital, they often overshadow the negative consequences of HB smoking. Only the aspects of fun and enjoyment are emphasised. The spectacle, in its overview is an actual overturn of life, and, as such, the independent movement of non-life. It is a relationship amongst people that is facilitated by images and can neither be comprehended as a cautious misrepresentation of the visual world nor as a product of the technology of mass diffusion of imageries (Jappe, 1999:13). Furthermore, media spectacle in digital culture relates to the extent to which online communities of compatible citizens can make, spread, and endure spectacle with little provision from the mainstream media (Mihailidis & Viotty, 2017:442).

The media produce images that catch people's attention. People are then attracted to the image and feel the urge to partake in whatever activity or product is portrayed, in this case, the HB. To understand the interconnection between media and the spectacle, Kellner (2011) developed what is called the spectacle culture. The author looked at the subject from the perspective of the growing media platform among the youth, which is the target group for this study. This type of culture evolved, mainly due to the dominance of media on social life.

2.8.3. The use on the internet as a spectacle

In the past decades, spectacle culture has expressively changed. Every pattern of culture and increasingly more domains of social life are infused by the logic of the spectacle (Kellner, 2011:1). Young people can see adverts on the HB because of the emergence of the internet, the most significant part of the life of youth. According to Kellner (2011:3),

> The Internet has generated a seductive cyberspace, producing novel forms of information, entertainment, and social interaction, while promoting a dot.com frenzied boom and bust that fuelled and then deflated the "new economy," producing a turbulent new form of creative destruction in the variations of global capitalism (Kellner, 2011:3).

Culture and technology are increasingly significant elements of global capitalism and daily life in the postmodern world. They saturate key realms of life, as well as constitute their own domains and subcultures (Kellner, 2011:12). It would be a mistake to analyse media culture without looking at the internet and exploring the evolution in media

industries and every sphere of life, which the great revolution of global capitalism (currently underway) is imposing upon society (Kellner, 1996) in Kellner (2005).

The impact of the internet in promoting the use of the HB forms part of the following discussion. Having considered how media culture contributes to the rise of HB, there is need for studies to be conducted in South Africa to find out how the internet influences HB smoking among the youth, and to also find out which web-based HB content they are most exposed to. Salloum, Osman, Maziak and Thrasher (2014) found that web-based search enquiries for HB have progressively amplified over the past decade, pointing to a mounting interest in the HB use. Hence, the internet provides information on HB designs, prices, and different tobacco flavours while shadowing its health effects. Eng, Maxfield, Patrick, Deering, Ratzan, and Gustafson (1998) found that this new form of information-seeking is significant since public health resources, both correct and incorrect, can deeply impact public comprehension, attitudes, and behaviour. Mugyenyi et al (2018) found that HB use is also endorsed through flavoured tobacco products and the usage of the internet.

Therefore, the reliance on the internet for information by society exposes them to tempting information that may lead to the use of the HB. Myslín, Zhu, Chapman and Conway (2013) conducted a content analysis of tobacco-related posts on the popular social media site Twitter to determine sentiment (positive or negative) towards tobacco, including HB use. They analysed 7,362 tobacco-related Twitter posts and noted that keywords such as hookah and shisha were classified as showing positive sentiment, compared to the negative sentiment linked with keywords such as nicotine and tobacco.

In addition, Grant and O'Mahoney (2016) analysed 4,439 tweets where HB smoking was portrayed on Twitter. The study found that over half of all tweets about HB smoking were positive. Twitter users here focused on their emotional experience, location, other products they were consuming together with HB smoking, as well as who they were with. The study concluded that HB may be normalised as a pleasant activity in this online environment, presenting a challenge for public health.

2.8.4. Media: A marketing tool

The media uses marketing tactics to sell and promote HB smoking, where it is advertised as something that brings pleasure to its smokers. Hubbly Bubbly smokers

derive pleasure from its use, but the experience is accompanied by consequences that can endanger one's life. Despite the growing trend towards HB use, there is limited research about the publicising tactics used to promote the HB establishment. Therefore, available literature tackling this issue is examined in this section.

While other cafés and restaurants offer a variety of food and even alcohol, others may entice customers using belly dancers, poker nights, musical performances, or free Wi-Fi access (Haddad et al., 2015). Commercials for HB cafes on the Internet use text, pictures, or aural inducements to encourage HB smoking (Primack et al., 2012). Particularly, these websites portray HB smoking as a harmless, amusing, soothing, "delicious" and sweetened way to socialise with friends (Haddad et al., 2015). In addition, Soneji, Ambrose, Lee, Sargent and Tanski (2014) on Direct-to-consumer tobacco marketing and its connection with tobacco use amid adolescents and young adults in the U.S region reported that the respondents who were non-smokers were more likely to see tobacco websites; they also found that respondents exposed to whichever form of direct-to-consumer tobacco advertising were more prospective to smoke currently.

In this case, it means that the marketing of tobacco products such as the HB is associated with smoking behaviour among individuals. Specifically relating to HB, Jawad, Nakkash, Hawkins and Akl (2015) research results agree with Haddad et al. (2015)'s findings, that HB products are diverse in nature and are marketed as healthy and safe products. Likewise, Nakkash and Khalil (2010) found that products smoked in waterpipes are often advertised and labelled as 0.0% tar and 0.5% nicotine or 100% tobacco and nicotine-free (i.e. so-called "herbal" products).

The study by Khalil, Heath, Nakkash and Afifi (2009) found that one fascinating advertising strategy has been the use of health messages to advertise the HB product, wherein one advertisement for locally produced tobacco included the slogan *"untouched by human hands"* to act as a pointer of the cleanliness of the product. This makes the HB appear healthy, more acceptable and more appealing to society. However, these marketing and labelling claims are not always truthful.

The study by Hammal (2014) reported on a laboratory test in California on waterpipe smoking mixtures marketed as tobacco-free found that the products did in fact contain tobacco. The study by Khalil et al. (2009) found that two advertisements were about

what is used to light the Hubbly Bubbly. Charcoal embers were marketed as being natural and made of 100% fruit, smokeless, odourless and free of chemicals. One of these advertisements end with the remark that *“not a single tree was cut down to produce the charcoal”.*

It can then be argued that the HB has been advertised as being environmentally friendly and safe for its users. These researchers concluded by stipulating that although the two examples of the advertisements precisely mention the health aspect of the HB, other messages are more implicit. For example, they found that in a commercial for a brand of mo’assel, the fruit-flavoured HB tobacco, what first entices the eye is the fresh watermelon, constituting the background of the advert. Adverts found to explore how the HB is marketed were from the Eastern Mediterranean region. There are no visible studies done in South Africa. Therefore, studies need to be conducted in South Africa to find out how HB is advertised and how the youth get to know about it and develop desires to try it out.

Therefore, Kellner (2011:12) reveals that today the society and culture of spectacle is forming a new form of information-entertainment society, or what might be termed the "infotainment society". This means that the internet no longer provides information only but embeds entertainment components in it. Therefore, the information on the HB will be accompanied by its entertaining components such as its coolness and classiness, as well as the social aspect of relaxing with friends or family in social gatherings for social acceptance.

2.9. Drivers of social acceptance of Hubbly Bubbly smoking

Behaviour is rendered socially acceptable when society approves of it and allows for it to be included in group practice and relationships. DeWall and Bushman (2011:256) view social acceptance as other people’s indication that they wish to incorporate you in their groups and relationships. In the case of HB smoking, the society has been blindfolded by its accessibility, fruity flavoured tobacco used and lack of regulation policies around it. Therefore, they approve it with the thought that it might be safer or healthier than other forms of tobacco smoking. They accepted it to be part of the entertainment and leisure components used in their social gathering. DeWall and Bushman (2011:256) argue that social acceptance arises when on a continuum that

ranges from just bearing another person's presence to vigorously pursuing someone as a relationship partner.

In this case, society tolerates the use of HB in their social gatherings and might not even question its consequences. Urkin et al., Ochaion and Peleg (2006) found that the HB is so socially accepted that a father may offer it to his adolescent son. They further reveal that cigarette smoking is connected with anxious and busy people, whereas HB is linked with leisure. HB use is now referred to as an accepted familial and social phenomenon, with restrictions apparently decreasing (Bejjani, El Bcheraoui & Adib, 2012). While Kakodkar and Bansal (2013) reported that family members are seen smoking together at home, which perhaps makes this practice more acceptable and easy going. Moreover, Daniels (2012) found that smoking HB is considered socially acceptable and is smoked in the family home. While Anbarlouei, Sarbakhsh, Dadashzadeh, Ghiasi, Ataieasl, Dorosti and Mohammadpoorasl (2018) note the role of family, the accessibility of HB for adolescents in family, as well as its consideration as entertainment in parties.

Similarly, Primack, Sidani, Agarwal, Shadel, Donny and Eissenberg (2008) study on the prevalence of, and associations with HB smoking found that there is a perception of excessive social acceptability. Additionally, Joveini, Dehbari, Ardebili, Mahmoudi, Firouzian and Rohban (2016) reported that one of the reasons for starting HB smoking at an early age is because of the better social acceptance in family and society compared to cigarette smoking. Kruger (2014) found that the sweetness and pleasing taste and aroma of the maassel tobacco created a perception that HB smoking is a socially acceptable practice that facilitates relaxation and social interaction. Therefore, the following section will look at the flavoured tobacco as a contributing factor to HB smoking social acceptance and its impact on the rise of HB smoking.

2.9.1. The emergence of flavoured tobacco

The introduction of flavoured tobacco has been associated with a high rate of HB smoking. Rastam, Ward, Eissenberg and Maziak (2004) found that HB smokers considered that the recent resurgence of HB popularity is due to the introduction of maassel. Maassel is a deliberately prepared tobacco with sweetened fruit flavours and mild sweet-smelling smoke (Rastam et al., 2004:2). The World Health Organisation (2015:17) state that maassel is distinctively factory-made by fermentation of tobacco

with molasses, glycerine, and fruit essence, producing a moist, pliable mixture. From this, the sweeter smell and the smoothness of the maassel smoke allure the youth to start smoking the HB.

The industrialisation and commercialisation of maassel and its amplified obtainability and diversity made it attractive to young people, flagging the way for mass advertising over the internet and easy preparation (Maziak, Ward & Eissenberg, 2004). Sutfin, Song, Reboussin and Wolfson (2014) reported that HB is commonly used to smoke flavoured tobacco that is shredded and mixed with honey or molasses and dried fruit and flavourings. Sutfin et al. (2014) found that 90% of students who had ever used the HB, smoked maassel. It is, therefore, clear that young people prefer flavoured tobacco smoking.

In addition, Jawad et al. (2015) found that on waterpipe industry products, brands were flavoured and sold either as prepared or unprepared tobacco as many are drawn to this method of tobacco smoking because of the sweet-smelling, smooth smoke and the diversity of flavours of maassel (WHO, 2015:18).

Therefore, Villanti, Johnson, Ambrose, Cummings, Stanton, Rose, Feirman, Tworek, Glasser, Pearson and Cohn (2017) concluded that flavoured tobacco products might entice young users and serve as starter or entry products to regular tobacco use. From this point, one can argue further by indicating that the introduction of flavoured tobacco used in HBs has facilitated that it is endured and accepted by society and people and thus smoked freely in public spaces. The following section discusses the spread and popularity of HB worldwide.

2.9.2. The global spread of Hubbly Bubbly

In the Middle East, traditionally HB is widely smoked. Its use recently spread to European countries and the USA (Arziman, Acar, Yildirim, Cinar, Cevik, Eyi & Kaldirim 2011.:254). There seems to be a growing number of HB cafés along with an increasing trend towards HB smoking in the Middle East among adults and the youth (Jaam, Al-Marridi, Fares, Izham, Kheir & Awaisu, 2016:38). The high prevalence of HB use in the Middle East and North African cultures has led to a false notion that HB use has a religious dimension, especially among Muslim people (Hammal, 2014). HB is distinctively used in social environments such as cafés and restaurants and is very regularly used by urban youth, young professionals, and university and college

students, and now gradually among medical students in Malaysia (Wong et al., 2016:1).

HB restaurants and cafés are prevalent in various parts of Britain, France, Spain, and Russia and all over the Middle East, and are rising in popularity in the United States of America (USA) (American Lung Association, 2007). Cobb, Ward, Maziak, Shihadeh, and Eissenburg (2010) confirm that HB tobacco use has spread across the globe and to the USA. Although HB tobacco smoking has allegedly become linked with old men in the Middle East, it has recently flowed to become a scourge amongst young people. The introduction of flavoured tobacco contributed to the diffusion of HB internationally, predominantly among young people as the unflavoured tobacco that was smoked by the elderly tended to be harsh and irritating to the throat (Carroll, Chang, Sidani, Barnett, Soule, Balbach & Primack, 2014:1549). This tendency began in the Middle East and spread to universities and schools in many countries and continents (WHO, 2015:18).

In the US, HB tobacco smoking is becoming more communal, particularly on college campuses, Cobb et al. (2010) reported. A press report by D'Andrea (2007) supports the idea that the United States is in the initial stages of an HB pandemic among its college-age population; HB use has been reported in at least 33 states, with most reports coming from cities with a big university. HBs have become common place at fraternity parties at these universities. Between one-quarter and one-half of all university students in the US have tried HB and the prevalence of HB among high and middle school students is growing (Carroll et al., 2014:1549).

While in South Africa, there is limited research regarding the prevalence of HB smoking among students (Albers, Mathee, Naicker & Wright, 2015:37). One study in Johannesburg among grade 10 pupils by Combrink et al. (2010) found that 60% used HB with 33% reported using it daily. Two similar studies among older students in the Western Cape also found that 60% of students try or were using HB. Among these, 18% (Van der Merwe et al., 2013) and 40% (Daniels & Roman, 2013) were current HB users. The study by Van der Merwe (2013) found that most HB users began smoking in High school. Combrink et al. (2010) reported that young people preferred to smoke the HB at parties, with friends or at home.

2.9.3. State policies and regulations

Having considered these above-mentioned drivers of HB smoking, it is with no doubt that the growing accessibility, as well as the social acceptance of it, contribute to the growth of its use. Therefore, it is important to examine the effects policies and regulations have on HB smoking. According to Teare and Naicker (2018:40), a projected five million deaths per year are caused by tobacco use, and this figure is anticipated to surpass eight million by the year 2030. In South Africa, smoking has been found to account for 8-9% of the burden of mortality (Teare & Naicker, 2018:40). The discussion of the policies is important in this study because it explores whether the HB regulations exist in South Africa and whether the public and the HB café owners follow them. They are examined to find out if these policies assist in ensuring that public places are safeguarded to protect non-smokers.

In South Africa, The Control of Tobacco Products and Electronic Delivery Systems Bill, which was issued for public remarks in May 2018 by Department of Health (2018:12), pursues to control public smoking, smoking in the workplace as well as the sale and promotion of tobacco and electronic cigarettes. Among others, it seeks for the following variations in SA's smoking laws which will affect many South Africans: The Bill plans to present a zero-tolerance policy on indoor smoking and an obligation that smoking areas are at least 10 meters away from public entrances. The Bill also suggests a prohibition on smoking inside a vehicle when a child under the age of 18 years is inside and there is more than one person in that vehicle. This will not only be effective to cigarettes but also spreads to tobacco products and electronic delivery systems such as pipes, HBs, and electronic devices. There will be a prohibition on smoking in any walled communal places of a multi-unit residence. Smoking in the workplace will also be controlled whether the workplace is a homebased or office based. This will affect employers who smoke in the presence of their domestic workers or gardeners on their premises. In addition, it considers that "you may not smoke in your home if you use it for teaching, tutoring or profitable childcare".

The WHO's Study Group on Tobacco Product Regulation (2015) urges contemplation of the following public health initiatives too; Education of health professionals, regulators, and the public at large is immediately required about the dangers of HB use, as well as high possible levels of second-hand exposure among children,

pregnant women, and others. HBs should be exposed to similar rules as cigarettes and other tobacco products.

Inhibiting youth smoking initiation is of paramount for tobacco regulation initiatives as most adult tobacco smokers become hooked during their young age (Al-Kubaisy, Abdullah, Al-Nuaimy, Halawany and Kurdy, 2012:60). Lantz, Jacobson, Warner, Wasserman, Pollack, Berson, and Ahlstrom (2000) reported that interventions that restrict the availability and advertising of cigarettes have been active in dropping youth cigarette smoking. However, youth are smoking tobacco using HB. Therefore, conventional interventions that reduce youth cigarette smoking should be used to originate interventions that may be useful in dropping HB use.

Potential policy interventions should contain equalising tobacco tax rates for all tobacco types, necessitating warning labels on HB tobacco and correct labelling of product contents, encompassing the cigarette flavouring prohibition to HB tobacco, passing smoke-free air laws and eradicating exclusions for HB lounges, and intensifying shipping limitations on tobacco products (Morris, Fiala & Pawlak, 2012). These will guide the development of appropriate HB-specific legislation and policy interventions to address this distinct form of tobacco consumption (WHO, 2015).

South Africa is a leader in tobacco regulation on the African continent—all tobacco publicity and smoking in public places was banned in 1999 (Daniels, 2012:31). Although developed countries have controlled the use of the HB through strong legislation, these laws are not properly enforced in developing countries such as South Africa. The extent to which HB smoking has speared through the South African society is difficult to establish since very little research has been done. Van Der Merwe et al. (2013) argue that the South African Tobacco Regulation policy forbids tobacco smoking in public spaces, but policies explicitly prohibiting hookah pipe smoking in public spaces have not yet been executed.

However, the Department of Health (2018) released a draft for regulation of tobacco products and electronic delivery systems bill, demanding a zero-tolerance policy on in-door smoking in public areas and an extension of these regulations to not only cigarettes but also any devices used in connection with tobacco products and electronic delivery systems such as pipes, HB and electronic devices. The draft did not include the show of health warning signs on HB devices.

2.10. Conclusion

In this chapter, the researcher has discussed the emergence of HB and how it connects to culture. The chapter discussed culture from its overview to how it relates to commodification and commerce, contextualised HB to commodity and the critical analysis of commodification with HB. Subcultures and lifestyles were also discussed leading to deliberation on youth and club cultures. Under media culture, the researcher explained media culture in terms of cultural industries, spectacle, and capitalism and as marketing tools. The chapter also analysed and established the relationship between these aspects.

The chapter also discussed the factors that drive the acceptance of HB smoking. The chapter explored the existence of the HB policies and regulations to find out if such policies exist in South Africa and whether they are being followed by HB sellers and the public. The public should be educated about these policies through health communication campaigns.

Therefore, it is imperative to study HB smoking behaviour when developing Health Communication Campaigning strategies since they cannot work in the same way as anti-tobacco smoking health communication campaigns. Health communication campaign designers must understand what smokers' reason, sense and do. The interaction is the relationship between reasoning, affect and behaviour and the places that affect and the objects and places that are prompting those factors (Hill et al., 2016:21). From this, the following chapter will discuss the importance of health communication campaigns in disseminating information on HB smoking health risks.

CHAPTER THREE

HEALTH COMMUNICATION CAMPAIGNS

3.1. Introduction.

The study provides two Literature review chapters—one chapter examines culture, while the other chapter explores health communication campaigns. Chapter two examined cultural aspects by providing insight into the phenomenon and expounding on the role of culture in enabling the emergence of the HB, its use and its popularisation. This chapter examines the health aspects of HB. Examining both, the cultural and health aspects contributes to a more holistic understanding of the subject of the study. This chapter discusses health communication, i.e. health messages that are distributed using different campaigns, as an effort to improve personal and public life. These messages reach people from different communication platforms. The person receiving the messages then makes decisions regarding their own behaviour.

This chapter is necessited by obeservations of Reynolds (2013:2) who identified areas of study of health communication by stating that health communication may be better understood in context of the four primary areas of study including patient-provider communication, health communication campaigns, health and medical informatics. Reynold (2013:2) further states that the study of health communication dates back to the 1970s (e.g., Costello, 1976) but degree programs and coursework in communication departments is only 20 years old (Kreps & Thornton, 1992). Messages regarding health have proven to be delivered well through different kinds of health communication campaigns targeted at specific audiences in any given society.

Health communication campaigns which focus on HB smoking cessation, as well as the prevention of HB smoking, are explored. To better understand smoking campaigns and given the limited literature on campaigns available for HB smoking, this study looks at campaigns that focus on tobacco smoking in general. Therefore, the study saw the significance of using available information on campaigns on tobacco smoking in general to provide a foundation for limited HB smoking campaigns.

Through health communication campaigns which aim to raise awareness and provide basic knowledge to the public, the chapter examines the literature that discusses the

awareness and knowledge levels of health risks associated with HB smoking. Based on the diverse information around health behaviour in societies, perceptions are believed to play a role in behavioural decision making. Therefore, this study looked at the literature on perceptions of the health risks of HB smoking.

3.2. Health Communication

To better understand the function of health communication campaigns, it is imperative to look at the meaning of health communication and its unique function by definition. Schiavo (2014:8) defines health communication as the usage of methods and skills to (positively) encourage individuals, populations, and organisations for promoting conditions conductive to human and environmental health. Here, the use of techniques forms the basis of health communication. These may include the use of well-designed campaigns with unique and appealing messages that may influence audiences exposed to the campaigns to act on their behaviour. Across varied health arenas, there is a significant body of evidence indicating how health communication influences individuals' knowledge, beliefs, attitudes, and behaviour (Ross, Noar & Sutfin, 2017:2). Health communication incorporates the study and use of communication tactics to enlighten and influence individual and community decisions that improve health (Healthy People, 2010:3).

If properly designed, health communication activities can upsurge the targeted audiences' knowledge, impact their perceptions, beliefs, and attitudes, change norms, rapid action, establish skills, strengthen a behaviour, advocate a position, and upsurge demand for services (Lagarde & Banks, 2007:4). In addition, the National Collaborating Centre for Methods and Tools (2010:1) state that health communication is the course of encouraging health by publicising messages over mass media, interpersonal channels and events. The use of new media to disseminate a different range of information including health-related information cannot be ignored.

The growing trend in the use of new media has been observed around the globe. Therefore, the use of digital media in disseminating health-related information cannot be underestimated. The digital and social media environment has redesigned the notion of health communication by allowing innovative, straight and influential communication channels amongst researchers and the public (Fontaine, Lavallee, Cadotte, Picass & Bourbonnais, 2017). Similarly, Anand, Gupta, and Kwatra (2013:39)

state that electronic media have stepped to the forefront of communication, public and health communication has advanced to mirror this.

The impact of digital and social media in disseminating health-related information on contemporary society cannot be underestimated in this regard. Public health communication strategies are also changing to match the gradually persuasive and fast developing social media revolution (Anand et al., 2013:39). As internet access and usage upsurge, consumers wish to take full advantage of its potential and the prospects that new internet technologies present to health communication (Robertson, 2014:39).

The advent of technology-mediated communication platforms, such as social media, has been instrumental in facilitating a paradigm shift as they provide the opportunity of distributing tailored health communication messages to very closely distinctive groups (Chou, Hunt, Beckjord, Moser & Hesse, 2009). According to Anderson and Speed (2010:4), social media impacts on health in such a way that it caters for citizen information creation through tools to support the construction of information resources through collaboration. Such tools offer the means to capture ‘alternative’ opinions and tacit knowledge that is doubtful to be provided by ‘official’ information sources.

Of interest are health-related social networks that are introduced and administered by people who are not part of formal health care systems but may be interested in health for themselves or in the interest of other people, as well as society more generally (Griffiths, Dobermann, Cave, Thorogood, Johnson, Salamatian, Gomez Olive & Goudge, 2015: 475). Therefore, Narayanaswami, Gronseth, Dubinsky, Penfold-Murray, Cox, Bever, Martins, Rheaume, Shouse and Getchius (2015) found there is some evidence that social media is valuable for distributing medical information, but the quality and correctness of information may differ and may even be deceptive. There is a need for tactics that can ensure the communication and dissemination of sincere health information (Quintana, Feightner, Wathen, Sangster & Marshall, 2001:1760). However, the importance of health information disseminated to the public cannot be overshadowed by the misappropriate use of the digital tool by non-health professionals. Therefore, the impact that health communication has on persons and the public is taken into serious consideration in the following section.

3.2.1. Health communication an effort to improve personal and public health

Health communication appears to have bearing for almost every facet of health and welfare, as well as disease prevention, health advancement and quality of life (Rimal & Lapinski, 2009:247). Rimal and Lapinski (2009) report on the increase in prominence of the health communication field, noting that its current growth trajectory with important developments taking place, including the focus on the study of environmental, social and psychological influences on behaviour and health. Health communication connects the domains of communication and health and is progressively recognised as an essential component in an attempt to advance personal and public health (Antunez, 2007:1). With health promotion programs, awareness of the HB health risks will be known by the public and people will decide to adopt the recommended behaviour or continue smoking.

Health promotion programs are primarily designed to reinforce what Catalán-Matamoros (2011:399) outlined as enlightening and teaching the public, but also setting the agenda for public deliberation about the health topic, thus amending the climate of opinion surrounding it; inspiring local and national policy changes to generate a supportive environment that enables people to change their behaviour.

Health communication has advanced into what is called strategic health communication, characterised by multichannel incorporation, the diversity of stakeholders, amplified attention to evaluation and evidenced-based programming and large-scale impact at the national level. This type of communication is more persuasive (O'Sullivan, Yonkler, Morgan & Merritt, 2003). Mass media campaigns have mostly intended to change knowledge, awareness, and attitudes, contributing to the goal of changing behaviour (Catalan-Matamoros, 2011:399). However, Kaye, White and Lewis (2017:1534) state that, with health campaigns and the possibly significant role that these advertisements may have on improving population health, it is important that health advertisements are perceived by the targeted audience to be influential and, in turn, result in behaviour change. This can apply to health communication campaigns that create awareness on the health risks of HB. The messages on these campaigns should be made persuasive in such a way that they promote behavioural change

Although health communication has been said to be the way in which health information is communicated to the public, however for this communication to succeed it needs to be effective for the audience it is intended. This is because the information that is meant to change health behaviour which is mostly rooted in societal settings and there is therefore a need to consider what different channels of communication should be used for different segments of society, either urban or rural. Each message requires to be uniquely designed to be effective for each audience. Following is a discussion of the effectiveness of health communication and how it can be applied in designing health communication campaigns for HB smoking.

3.1.2. Effectiveness of Health communication

Effective health communication is central to promote health information because the end results should be the message reaching the right person, with the right channels of communication and at the right time. Defining effective communication in this regard can provide an understanding of what is meant by the effectiveness of health communication. The National Archive (2013:10) defines effective communication as a comprehensive message sent and entirely understood by an audience. In addition, it further states that reliant on the nature of the message and audience, the audience may participate in a fruitful dialogue of the message. This means that after the message is sent to the public there should be a channel in which they can be able to discuss the matter furthermore and find answers as well as provide the information, which might be unknown to the health promoters.

Godinho, Bezbaruah, Neyyar, Gautam, Saccdeva, Behara and Nong (2017) outlined the elements of effective communication as follows: Multi-pronged communication plans including a mix of media channels, Audience segmenting and audience-centric messaging, Timing of campaign activities (seasonality of epidemics, for example) and Participation of key opinion leaders. Audience segmentation is a vital means in health communication that consents program planners to categorise subgroups of people within their targeted audience who have comparable features, communication requirements, and behaviours that relates to detailed communication objectives (Babalola, 2017:908).

Therefore, consideration must be exercised around the social and economic backgrounds of the target audience. Maibach, Maxfield, Ladin and Sleter (1996)

recommend that the notion of audience segmentation for contemporary health communication would result in effective health communication. Segmentation has been considered a central mechanism of 'consumer-based' or 'consumer-oriented' health communication in that developing a true consumer orientation needs one to identify and profile homogenous target audiences, Maibach et al. (1996), argues. Regardless of its position as a backbone in the health communication toolbox, the segmentation techniques are distinctively based on broad marketing tactics. These tactics include segmentation based on demographics, geo-demographics, behaviour or some combination thereof.

Kellner and Lehmann (2008) reveal that effective health communication involves more than just communication amongst the health care providers and their patients as well as their families, but there are numerous issues to be well-thought-out. These include: message strategies (anxiety, framing, richness and base/case effects, physical versus social outcomes, referencing, argument strength, source credibility, bilateral arguments, number of exposures, tailored versus ordinary, emotions and health goal) and individual characteristics (gender, age, race, involvement and regulatory focus).

Effective health communication is important because it can improve the well-being and self-sufficiency of individuals, families, organisations, and communities (Theory at a glance, 2005). This is because when messages are designed, they use research-based tactics to form the products and determine the channels that distribute them to the right intended audience. Prilutski (2010) found that cultural knowledge often affects the way that medical information is efficiently communicated in Ghana. The researcher also reported that it has been determined that the best communication tactic for developing countries is grounded on the idea of integration with the community.

In this regard, communities must be involved when health issues are discussed and when communication messages are being formulated so that they do not conflict with the cultural beliefs of the community. The principle of inclusion, involvement and self-determination help overthrow the major problems seen with solely growing understanding of why certain health behavior is wrong. Therefore, when these messages are planned carefully they will address the health issues with a caution to the cultural aspect of these issues.

In relation to this study, effective health communication messages about HB smoking health risks make use of suitable channels for different audiences, looking at their different frames of reference, and can therefore be successful in disseminating relevant information to the vulnerable population, especially the youth. Effective communication will also encourage the adoption of desired health behaviours such as smoking cessations and prevention of smoking initiations among those who never smoked but are thinking of starting to smoke.

3.2. Health communication campaigns on tobacco smoking

Public health communication is a systematic advancement, tactical distribution, and critical assessment of pertinent, correct, reachable, and comprehensible health information, communicated to and from targeted audiences to improve the health of the public (Godinho et al., 2017). This study will look at the relevance of the use of health communication in raising awareness of HB smoking. Kaye et al. (2017:1534) argue that health campaigns focus on raising awareness of the negative outcomes associated with carefree behaviour, averting future health problems by encouraging healthy behaviour and/ or spotting possible life-threatening diseases. Communication campaigns utilise a determined positive tactic to transform knowledge, attitudes, behaviour or policy in a precise, targeted audience via advertising and publicity methods (Potter, 2014:2).

Anand et al. (2013:39) state that evaluations have found that mass media campaigns in public health can be active in encouraging desirable health behaviour. The same evaluations had shown that campaigns were able to increase awareness and recall of public messages, and other Web.10 applications can change behaviour in interested volunteers. However, in relation to tobacco smoking, health communication interventions are evidence-based approaches for averting the instigation of tobacco use, encouraging and enabling cessation, and changing beliefs and attitudes about tobacco use (Farrelly, Duke, Nonnemaker, MacMonegle, Alexander, Zhao, Delahanry, Rio & Allen, 2017:47).

Communication campaigns are environmental prevention tactics that try to balance the impact of advertising that encourages tobacco and alcohol use by utilising similar media channels and advertising techniques to offer the target populations with anti-tobacco and anti-alcohol messages that “level the playing field” (Potter, 2014:2).

According to National Collaborating Centre for Methods and Tools (2010:1) comprehensive health communication campaigns are aimed at informing, persuading or motivating behaviour change; work at the individual, network, organisational and societal levels; target rather large, distinct audiences; offer non-commercial benefits to society; take place during a given time period; comprise an amalgamation of media, interpersonal and community events; and include an organised set of communication activities. With all the above mentioned, the following section discusses health communication campaigns that counteract tobacco smoking.

3.2.1. Campaigns on tobacco smoking cessation

Several studies have been conducted about tobacco smoking especially cigarette smoking, yet few are available about HB smoking which is a relatively new phenomenon. Hence a brief discussion would serve to provide an insight into how such campaigns would be relevant for HB smoking as it has been shown to be even more dangerous. Durkin, Brennan and Wakefield (2011) concluded that mass media campaigns that encourage quitting are significant investments as part of all-inclusive tobacco control programmes to teach about the dangers of smoking, set agenda for discussion, change smoking attitudes and beliefs, upsurge quitting intentions and quitting attempts and reduce adult smoking prevalence. Less recognised is the fact that mass media campaigns can function through incidental ways by cumulative interpersonal discussion about tobacco and these discussions may themselves lead to quitting attempts (Southwell & Yzer, 2007).

Communication campaigns have been used to caution about the risks of the health hazards of tobacco use, to encourage smoking cessation, and to generate support for tobacco control policies. A campaign aims to create specific outcomes or effect a great number of individuals within a definite period and through an arranged set of communication activities (Noar, 2011:5). According to Langley, Lewis, McNeill, Glimore, Szackwski, West and Slims (2013), campaigns differ in theme, purpose, emotional tone and style. These campaigns are designed to promote healthy behaviours among societies and among individuals. In relation to tobacco use, there is evidence that messages in the form of health warnings (Brewer, Hall, Noar, Parada, Stein-Seroussi, Bach & Ribisi, 2016; Noar, Francis, Bridges, Sontaq, Ribisi & Brewer,

2016) and communication campaigns (Durkin, Brennan & Wakefield, 2012) are active in reducing tobacco use.

The use of campaigns has a significant role in changing undesirable behaviour within societies and among individuals. Moreover, in terms of tobacco smoking, the media has successfully campaigned against tobacco smoking. Again, the tobacco industry uses the media to present smoking as distinctive and socially-desirable behaviour. Quattrin, Filiputti, and Brusaferro (2015:1) report that communicating a wide range of health messages to an extensive variety of audiences is thought-provoking and, in this context, the role of mass media (such as radio, newspapers, billboards, posters, leaflets) cannot be underestimated but rather considered as being important. While in 2014, the World Lung Foundation (WLF) report that on TV, in print, and gradually through advanced use of internet-based social media platforms, mass media campaigns now use the explicit, sensitive messages that bluntly distribute health hazards of tobacco use (Mullin, 2014:68). In relation to HB smoking, Allem, Ramanujam, Lerman, Chu, Cruz and Unger (2017) found that Tobacco control programmers in control of risk communication may consider targeting individuals posting positive messages about HB on Twitter or designing messages that increase negative opinions. Posts on Twitter communicating positive opinion towards HB could increase the normalisation of HB use and is an area for future research. Given the scarcity of literature on fear appeal messages designed to combat the use of HB, the following section looks at fear appeal messages used to combat tobacco smoking in general. This will give a foundation on what campaign designers may build on when creating messages specifically for HB.

3.2.1.1. The use of graphics and "hard-hitting/fear appeal" messages

The use of graphic designs has shown to be more effective because unlike messages that depend on humour or insincerity, they interpret in a straightforward manner and thrive across language and culture. For example, the World Lung Foundation (2014) Reports that in Senegal the "Sponge" campaign produced a 63% recall and a 144% growth in smokers who intended to quit. While in Norway, the very same campaign produced a 68% recall and inspired quit attempts in 59% of people who saw the adverts (Mullin, 2014:68). This means that "lungs are like sponges, if you could wring

out the cancer-producing tar that goes into lungs of pack-a-day smoke every day, this is how much they would get" on the below picture.

Figure 3.1. The "Sponge" campaign picture by World Lung Foundation (2014) in American Cancer Association (2018)

Brown, Kotz, Michie, Stapleton, Walmsley and West (2014) report that harm-focused messaging often called "hard-hitting/fear appeal messages" appear to be more active in producing quitting thoughts and behaviour than either focusing on anti-industry or how to quit themes. The term "hard-hitting/fear appeals" has been used to describe advert campaigns that are rigorously direct, often with robust fear-inducing messages and personal stories about negative health outcomes of smoking (Riley, Ultrich, Hamann & Ostroff, 2017:476). These types of adverts are supported by well-confirmed theories of health behaviour change that focus on reasoning, emotive, and social processes that predict behaviour.

Durkin, Biener and Wakefield (2009) found that "hard-hitting/fear appeal" adverts have appeared to be more active than entertaining or neutral educational communication messages at reducing smoking. While Langley et al. (2013) revealed that negative-effects messages which stress the consequential health effects of smoking for individuals and/or family or friends are generally more active than how-to-quit messages providing information about operative methods of smoking cessations or anti-industry commercials.

3.2.1.2. Emotional appeals

Emotional appeal designed messages bring people's attention to significant occurrences in their lives, be it big or small events. Emotional appeal is defined as a way of influencing a customer using intangible and emotive expression (Islam and Sheikh, 2016:12). Kotler (1971) in Islam and Sheikh (2016:12) divided emotional appeal into positive and negative appeal. Positive appeals create a positive impression of the product being advertised and help consumers remember the advertisement for a longer period (Rawal & Saavedra Torres, 2017:88). Whereas negative appeals are advertisements aimed at the negative prevention of negative future events (Shin et al., 2017:473). They often use fear appeal messages as discussed in section 3.2.1.1.

The fear appeal has been a widespread method in anti-smoking campaigns in many advanced countries, particularly those related to health messages such as illness and demise (Chung, 2016:2). Chung (2016:2) further states that disease and demise themes explain how smokers agonise from sicknesses instigated by smoking; the intent is to increase the perceived health risk harshness extending from serious sicknesses to ultimate death because of smoking. This method complied with Witte's (1994) Extended Parallel Process Model which proposes that when an individual is exposed to fear, he/she is extremely driven to control the risk by decreasing their vulnerable behaviour or control the fear through rejection when they sense that the threat is dire, as discussed in chapter 4 section 4.1

Islam and Sheikh (2016) found that the efficiency of anti-smoking media advertisements typically lies on factors like the emotional subject matter, messages, and theme. In a study that developed a point-of-of sale health communication campaign for cigarettes and HB, results show that messages engrossed on ingredients found in the smoke from these two products may be a hopeful method and adolescents and young adults often discount long-term health effects and believe cosmetic effects can be lessened, highlighting the toxic chemicals that are inhaled with each puff may demoralise imminent use (Sutfin, Cornacchione, Ross, Lazard, Orlan, Suerken, Wiseman, Reboussin, Wolfson & Noar, 2019).

3.2.1.3. Celebrity endorsement

Contemporary celebrity advertising originates from the United States (Muda, Musa & Putit, 2017:22). However, the practice has vividly amplified in other parts of the world owing to the expansion of commodity culture and mass media technology (Muda et al., 2017:22). Celebrities are the personalities that are well known by the public either because of their credibility, their attractiveness or both (Zippoarah & Mberia, 2014:178). According to Muda et al. (2017:23), many consumers desire to share the values and lifestyles of celebrities as models of success as they emulate and even mimic celebrity behaviour to increase their own self-esteem. Such replications comprise the way celebrities live, dress, communicate and most significantly, the branded products they prefer to use (Muda et al., 2017:23).

Sterling, Moore, Pitts, Duong, Ford and Eriksen (2013) studied the exposure to celebrity-endorsed small cigar advertisements and vulnerability to use amongst young cigarette users. Fourteen percent revealed that they have been exposed to the artists' endorsement of the small cigar and 45.4% reported an intention to smoke the product in the future. In a similar vein Phua, Jin and Hahm (2018) found that celebrity endorsers expressively amplified positive attitudes towards e-cigarettes and smoking intentions, compared to non-celebrities or products only. Celebrity endorsers also rated expressively higher on trustworthiness, knowledge, goodwill, and attractiveness. In contrary, Chapman and Leask (2001) reported that in 2000, the Australian government used Shane Warne, a cricket player and immensely popular celebrity with the youth. He had an obligation to accept that his smoking would be noted by many young people and would undoubtedly act to weaken public health efforts to deglamourise smoking.

3.2.1.4. The use of narratives

The theatre is an active platform to create awareness and publicise messages related to good health (Golechha, 2016:4). In Africa, in both rural and urban settings, the theatre has proven to be an effective and amusing tactic for distribution of health information and strengthening of positive health messages (Mbizvo, 2006:30). According to Mbizvo (2006: 30), theatre can overcome literacy barricades through the usage of local experience and dialect to incite emotional and analytical responses in the audience. Perry, Komro, Dudovitz, Veblen-Mortenson, Jeddeloh, Koele, Gallanar,

Farbakhsh, and Stigler (1999) assessed a theatre production to inspire non-smoking among elementary-age children. The study found that 10% more students reported that they would on no occasion smoke a cigarette after watching relevant theatre production.

3.2.2. Effectiveness of campaigns on the prevention of smoking initiation

The advanced occurrence of smoking amongst youth and young adults is an almost worldwide result in epidemiological research that scrutinises smoking. Preventing youth from smoking initiation is a global issue that requires to be addressed with thorough initiatives. According to Subramaniam, Shahwan, Fauziana, Satghare, Picco, Vaingankar and Chong (2015:8957), the use of tobacco starts and develops during adolescence. They further state that, once smoking behaviour is rooted, cessation is tough if not impossible, and the possibility of quitting is advanced in those who initiate smoking at an older stage.

Upton, Davey, Evans, Mikhalovich, Simpson, and Hacklin (2014) suggest that the most active way to prevent smoking in young people is to de-normalise smoking and reduce the prevalence of smoking in adults since the role modelling provided by parents and siblings who smoke has an important influence on youth uptake of smoking. It typically takes time for an individual to become a smoker, allowing for numerous chances for tobacco regulatory interventions that can either emphasise on the deterrence of experimentation or advance to higher smoking levels (Pierce, White and Emery, 2012).

Campaigns are often designed to combat health problems and disseminating information regarding recommended behaviour to fight against these problems is the core of these campaigns. Sachs (2010) found that anti-smoking advertisements traditionally focus on conveying the message of cessation, which works more efficiently when directed to adults rather than youth. Most smokers become hooked as teenagers rather than adults, so promoting smoking prevention is shown to be more active among youth than adult promoting cessation. It is vital that youth tobacco prevention programs are in place to delay and possibly prevent the onset of youth tobacco use (Tobacco Free Nebraska, 2009). One of the Tobacco Free Nebraska's goals is to preserve youth from tobacco initiation.

Farrelly, Davis, Haviland, Messeri and Healton (2005:901) found that 'Truth', the national youth smoking prevention campaign led by the American Legacy Foundation, has been both extremely active and lucrative in stopping America's youth from smoking initiation. Furthermore, Holtgrave, Wunderink, Vallone and Healton (2009) found that Truth was unswervingly responsible for keeping 450,000 teens from smoking initiation during its first four years, while a second study found that the campaign brought about savings of between $1.9 billion and $5.4 billion in health care costs in just the first two years.

In Africa, between January 2011 and June 2012, 17 African countries led a national media campaign (lasting at least 3 weeks) to advise about the health hazards of tobacco. In 29 countries, there was no national anti-tobacco campaign executed in the course of this time (WHO, 2013). There is wide-ranging evidence that mass media campaigns are active at inspiring smokers to quit and averting youth from smoking initiations, particularly when these campaigns are combined with other interventions, such as amplified taxation, smoke-free policies, and community-or school-based education programs (Jepson, Harris, Platt & Tannahill, 2010; Wakefield, Loken & Hornik, 2010).

Continued media campaigns are utmost active at creating long-term outcomes, as the tobacco industry will carry on with publicising and promoting its products once a campaign has ended (Wakefield et al., 2010). Compared to traditional venues for communication, such as television and radio, early research proposes that social media could be an influential venue for tobacco control messaging (Hefler, Freeman & Chapman, 2013; Jordan, 2012). The use of social media is growing in Africa and tapping into these networks could be a fresh way of evolving tobacco regulations across the continent.

For example, the study by Hefler et al. (2013) reveals that using online activism in this way is also an inexpensive way to support tobacco control activists in low and middle-income countries. WHO (2003:10) requires that there should be promotion and strengthening of public consciousness of tobacco control issues through extensive access to public awareness and educational campaigns and public access to information (WHO, 2003:10). Such campaigns may enlighten the public about the health hazards of tobacco use and secondhand smoke, teach users about the rewards

of quitting, and offer information about tobacco industry practices. In relation to HB smoking, few studies have been conducted looking at campaigns that deal with HB smoking cessation. An exploration of these campaigns and their effectiveness follows in the next section.

3.2.3. Hubby Bubbly smoking cessation campaigns

Hubbly Bubbly smoking is increasing globally. Smoking cessation campaigns targeted at users are few and far between. The increasing prevalence of HB use is thought to be due to several factors (as discussed in chapter two) these are; the relationship between social aspect of HB smoking and a booming café and restaurant culture, the introduction of flavoured tobacco, lack of governing policy frameworks specific to HB smoking, the perception of reduced harm and the growth of social media (Wright, Burrow & Hurst, 2016). Only a few studies have discussed public campaigns regarding HB smoking. Islam, Salloum, Nakkash, Maziak and Thrasher (2016) concluded that placing Hubbly Bubbly-specific labels on HB devices may be active in reducing HB smoking.

The study by Jawad et al. (2015) concluded that a more thorough evaluation, mainly among adolescents, is required. Evidence is lacking in terms of smoking cessation interventions specific to HB use. Wright et al. (2016), concluded that the literature on HB cessation is scarce, but proposed that there are opportunities to build on the huge experience of smoking cessation interventions in cigarette smokers. Hubbly Bubbly users view their practice very differently to cigarette smokers. Hubbly Bubbly users view the habit as enjoyable, societal and cultured, while cigarette smokers view the habit as addictive and mundane (Wright et al., 2016).

Therefore, these diverse views mean that diverse cessation interventions are likely to be needed. Treating nicotine addiction is needed but the cultural and social aspects of HB smoking should also be well-thought-out. Hence, developing specific HB cessation programs that consider the unique motivators for this habit is necessary. While this habit contains severe health risks, campaigns that discourage its smoking initiation are imperative. However, literature that discusses the campaigns that focus on the prevention of HB smoking initiations could not be located by the researcher.

3.3. Awareness of Hubbly Bubbly smoking health risks

Campaigns create awareness and should be used to create awareness of HB smoking health risks. A discussion around the meaning of 'awareness' and what it entails is imperative to provide insight into this section. Awareness occurs when you are aware that something exists, it manifests in all forms of perceptions (which will be discussed later in this chapter) and in all forms of knowing. Awareness-raising about the potential health risk of HB smoking plays a crucial role in this regard. According to Brussa and Van Wanrooij (2012:11) awareness-raising is an extensive and somewhat ambiguous term, yet one that is almost automatically understood in most societies and cultures. Awareness-raising is an important factor of primary prevention tactics (European Institute for Gender Equality, 2017:1). Awareness-raising is a reciprocal street, nurturing communication and information exchange to improve mutual understanding as well as bring about the necessary change in attitudes and behaviour. This can be well achieved through awareness-raising campaigns. A well-intended and thoughtfully resented awareness-raising campaigns is debatably one of the most well-organised and active means of communicating information about a topic or issue to a large and geographically detached body of people (Sayers, 2006:12; European Institute for Gender Equality, 2017:1).

When applied to health, awareness-raising campaigns are more effective when aligned with other services and interventions. Boyce, Robertson and Dixon (2008) state that, these campaigns are also more effective when there is a deliberate and careful target, the target group should be clearly defined. People make decisions when they are aware of the consequences of certain behaviour. Pepper (2014) reports that because HB tobacco is humidified with sweeteners and flavourings and will not burn on its own, it needs a heat source, typically charcoal positioned on top of a piece of pierced aluminum foil that covers the tobacco-filled head. Thus, HB smoking includes the inhalation of both charcoal and tobacco smoke. Therefore, Urkin et al. (2006) concluded that public awareness is required to invent primary and active means of reducing the spread of HB use and action should take place over diverse interventions. The media should be used to disseminate the message that smoking HB is at least as risky as smoking cigarettes.

A study by Kakodkar and Bansal (2013) found that 54-82% of participants were unaware of HB smoking health effects. The study by Doski and Ahmed (2016), shows that overall awareness about the harmfulness of HB was poor among the attendees of cafés. Kumar et al. (2016) concluded that a significant number of medical students and pharmacy students were unaware of some of the serious consequences of HB smoking.

Furthermore, Obeidat, Khabour, Alzoubi, Mahasneh, Bibars, Khader and Alsa'di (2014) concluded that dental students' awareness about the dangers of HB is not ideal, and initiatives are required to guarantee delivery of such knowledge to students. However, Al-Nomay and Ahmed (2015) found that most of the participants were aware that HB smoking is a risk factor for oral cancer, periodontal diseases, bad taste, tooth and oral tissue staining, as well as bad breath. Having discussed the literature that looked at the awareness of health risks of HB smoking, the next section will look at the knowledge levels acquired during exposure to HB smoking campaigns. From the studies above, it is also important that this study examines literature that discusses knowledge levels in terms of HB smoking health risks.

3.4. Knowledge about Hubbly Bubbly smoking health risks

When exposed to campaigns that address health concerns regarding a certain issue, in this case, HB smoking health risks, people tend to acquire knowledge on the subject. If they become more interested in the issue, they will seek more knowledge. Knowledge levels of HB smoking risks play an important role in measuring the impact of the campaigns that are designed to create awareness about HB smoking health risks. Knowledge is not a given phenomenon, but something that is delineated by operating with a concept which is created as an answer to certain needs, or pursuit of certain ideals (Vega-Encabo, 2016:189). In this way, exposure to messages about health risks of HB smoking, with different interventions that are designed for different segments of society may lead to people acquiring knowledge on its health risks. The researcher in this study found several studies which looked at the knowledge levels of HB smoking health risks. In most studies, people were shown to lack knowledge.

In the study by Anjum, Ahmed and Ashfaq (2008), the results show that the knowledge on the participating students concerning HB smoking enhanced to some level after the health awareness sessions, especially in terms of health risks linked with HB smoking.

While Khalil, Ayyad, Sharaf Al-Akawi, Ali Khalil, Awadalla and Asofan (2015) found that the knowledge scores were significantly higher in the young age group, higher qualifications, and higher income. Khalil et al. (2015) revealed a lack of knowledge amongst the adults who assume that health risks of HB are lower than cigarettes.

In addition, Lipkus, Eissenberg, Schwartz-Bloom, Prokhorov and Levy (2014) found that the overall factual knowledge about the harms of HB was poor, accurate and perceived knowledge was weakly associated, both forms of knowledge were related paradoxically to perceived risks and worry, and neither form of knowledge was linked with the desire to quit. Essa-Hadad et al. (2015) concluded that the tailored web-based program may be a capable tool to reduce HB smoking among university students. This intervention was not fruitful at significantly reducing cigarette smoking or increasing knowledge, but the intervention did upsurge participants' intentionality to quit smoking. Therefore, if this type of program can be designed specifically to combat HB use, it can achieve the same quitting desire among smokers.

Thabit, Mohsin, and Niazy (2015) found that the knowledge responses were not satisfactory regarding health risks: people mainly knew that it causes cardiovascular disease, it is more harmful than cigarette smoking and causes infective hepatitis. In addition, AlQahtani (2017) found that females had better knowledge than males regarding the hazardous outcomes of smoking on health and as a risk factor of brain thrombosis, heart attack, and lung cancer. However, in this study, both male and female students believed that smokeless tobacco and HB smoking are less harmful.

Sidani, Shensa, Barnett, Cook, and Primack (2013) show that accurate knowledge concerning toxicants linked with HB smoking was not expressively connected with initiation. Furthermore, Chaaya, Jabbour, El-Roueiheb and Chemaitelly (2004) show that women knew little about the detrimental ingredients of HB smoking and had many misconceptions about how HB worked or how it can produce harm. Moreover, Awan, Alrshedan, Al Kahtani and Pati (2016) found that one-sixth (14,9%, n=80) of participants were unsuccessful in identifying a single injurious effect, while a clear majority of participants considered HB smoking to be less unhealthy than cigarette smoking. They concluded that HB is very popular and knowledge amid the students at the university about the risks of HB smoking is very low.

3.5. Perceptions of Hubbly Bubbly smoking

Although people may acquire knowledge of HB smoking health risks, their perceptions play a vital role in the adoption of the desired behaviour. As people belong to different segments in society and are culturally different so their perceptions and how they perceive their surrounding will differ. These perceptions will lead people to condone or condemn certain practices, e.g. HB smoking. Perceptions play a crucial role in the behaviour of individuals in some situations. Perception is closely associated to attitudes (Pickens, 2005:52). A person's awareness and reception of the stimuli play an imperative role in the perception process (Pickens, 2005:54). Receptiveness to stimuli is extremely selective and may be restricted by a person's prevailing beliefs, attitude, motivation, and personality.

Individuals will choose stimuli that is in line with their instant needs and may neglect stimuli that may cause psychological unease (Pickens, 2005:54). Individuals' beliefs about the outcomes of their actions and perceptions of their susceptibility to those outcomes play a crucial role in behaviour (Millstein & Halpern-Felsher, 2001:15). Therefore, people acknowledge risks according to their perception of the dangers that they bring (Zang & Fan, 2013:2133).

In relation to health, Zang and Fan (2013:2133) state that the public perception of risk is a vital consideration in public health and risk management decision-making. They continue to state that the perception of risk varies with age, gender, education, and geographic region. Decision-makers need to consider how the public values risk matters.

An understanding of the factors (which will be discussed in section 3.5.1) influencing the public perception of health matters and dangers will assist in determining how the perception of danger should be addressed when handling health risk matters (Krewski, Lemyre, Turner, Lee, Dallaire, Bouchard, Brand & Mercier, 2006). Sen (2002:860) reveals that one of the difficulties in assessing health states emerges from the fact that a person's own comprehension of his or her health may not be in consensus with the assessment of medical specialists. There is an abstract contrast amongst internal views of health (based on the patient's own perceptions) and external views (based on the observations of doctors or pathologists). That is, our understanding and explanation of health are shaped and established by our society. Moreover, how we

interpret health and what we think it means is more a result of what our society tells us than it is us coming up with such an explanation.

If one desires to assist a community advance its health, one must learn to reason like the people of that community. Before asking a group of people to adopt new health behaviours, it is sensible to establish the prevailing behaviours, how these behaviours are connected to one another, what purposes they achieve, and what they mean to those who practice them (Hyder & Morrow, 2005:41). Therefore, people around the world have beliefs and behaviours related to health, the illness that stems from cultural forces (as discussed in chapter two) and individual experiences and perception.

In relation to this study, one can argue that whenever HB health-related issues are discussed and information about them is shared with the society, perceptions of individuals' in that segment of the society should be considered. Thorough background research should be conducted to find out what influences those existing perceptions to develop relevant tactics to reverse those perceptions. In reversing those perceptions, cultural forces should be investigated so as not to stand in conflict with the beliefs of that group.

3.5.1. Misconceptions about Hubbly Bubbly health risks

There are numerous misconceptions about the health risks of HB smoking. These might increase its smoking rates. Several studies (Akl, Jawad, Lam, Co, Obeid & Iran, 2013; Alvur, Cinar, Akduran & Dede, 2014; Al-Naggar & Saghir, 2011) found that participants perceived HB smoking to be harmless when compared to cigarette smoking. Similarly, Kakodkar and Bansal (2013) reported that most of the participants (about 71-80%) had misconceptions about the safety of HB use over cigarette smoking. These misconceptions include that HB smoking is not harmful because its smoke does not burn the lungs (Alvur et al., 2014). Martinasek et al. (2011) agreed that misconceptions about HB safety happen owing to lack of conformity and overall lack of regulations on packaging and labelling. In addition, Singh, Enzhong, Reidpath and Allotey (2017) found that misconception of harm is intertwined with the certainty that HB use is less detrimental than cigarette smoking.

Not only do these studies reveal the misconceptions regarding the safety of HB smoking, but they also reveal other issues. The qualitative study by Roskin and

Aveyard (2009) reveals that students' perceived HB smoke as entering the lungs in a different path than cigarette smoke. The above-mentioned studies looked at this issue from either a qualitative or quantitative method. Therefore, this study will attempt to find out if the same misconceptions exist among the youth in South Africa using a mixed-method approach. These misconceptions, however, may have been driven by the perceived risk factors that exist among HB smokers.

3.5.2. Perceived risk factors leading to Hubbly Bubbly smoking

There are several factors that lead to HB smoking. The researcher identified a few studies that address these factors. The study by Skade (2010) provides anecdotal evidence that reveals that HB smoking is not constrained to areas of poverty and that youth, particularly high school and University students, across the wealth spectrum, are gradually taking up this practice. Skade (2010) further reports that HB was being used as a gateway drug as teens were now either adding *Nyaope* to the tobacco or replacing the water with alcohol. Therefore, HB smoking has gone further to introduce youth to other drugs which can be detrimental to their health. *Nyaope* is already destructive to human health but smoking it when mixed with tobacco that is also being burnt, creates a far worse combination. Moreover, Singh et al. (2017) found that the use of alcohol or marijuana was linked with HB initiation, especially among newly enrolled youth in a higher education institution.

In addition, Schiavo et al. (2014) found that there is an opinion among users that the health risks of HB are less compared to cigarette smoking. However, Jones (2013) reported contrary results that youth smoke the HB because it does not give off the smell that cigarettes do. There is also a misconception that as the smoke is drawn through the water, the filtration procedure eliminates hazardous elements in the smoke (Omole et al., 2011). In relation to the above mentioned, Roskin and Aveyard (2009) report that the students did not think tremendously about health risks connected with it and thought that if no warning was visible, it was undoubtedly harmless. However, Daniels and Roman (2013) found that HB users perceived the health risks of smoking the HB to be overstated (48%) and less addictive (58%) than non-users (13% and 17%, $p<.001$). While Wong et al. (2016) found that HB users perceived HB use as cool and trendy.

Furthermore, flavours in most tobacco products seem to play a substantial role in how users and non-users, particularly the youth, perceive, initiate, progress and continue using tobacco products, Haung, Baker, Meernik, Ranney, Richardson and Goldestein (2016) contend. In this regard, one can argue that through health messages that are designed to suit every unique aspect of each segment of the society, looking at their differences and similarities, these abovementioned perceptions may be overturned.

3.6. Conclusion

This chapter has offered an insight into the significance of health communication and its effectiveness in promoting desirable health behaviour. The promotion of healthy behaviour was explained better by providing the use of health communication campaigns aimed at promoting smoking cessation as well as the prevention of smoking initiation. That provided a foundation to the discussion of limited literature that looked at HB smoking cessation campaigns that the researcher managed to locate. Given that campaigns are used to create awareness; the study saw the significance of discussing the literature that looked at the awareness of HB smoking health risks. This led to the discussion of the literature on knowledge levels regarding HB smoking health risks by the public. Because of the societal impact in HB smoking and the beliefs which lead to different perceptions, the chapter discussed perceptions towards HB smoking. Perceptions were discussed looking at misconceptions that exist regarding HB smoking as well as the perceived risks that lead to HB smoking.

CHAPTER FOUR

THE ROLE OF THEORY

4.1. Introduction

This chapter discusses available literature on theories applied in this study—the Extended Parallel Process Model, Peer Cluster Theory and Hofstede's Cultural theory. Extended Parallel Process Model (EPPM) will be deliberated on looking at its application to smoking and HB smoking. The EPPM is relevant because it was specifically developed to predict the responses to anti-smoking messages. This chapter discusses Peer Cluster Theory looking into peer clusters and substance use as well as peer encouragement to use substances. The study will further look at Hofstede's Cultural Theory. This theory is discussed looking only at the Individualism and collectivism dimension identified by Hofstede. The inclusion of Hofstede's dimensions was driven by the sharing culture of the HB among its smokers.

4.2. Extended Parallel Process Model

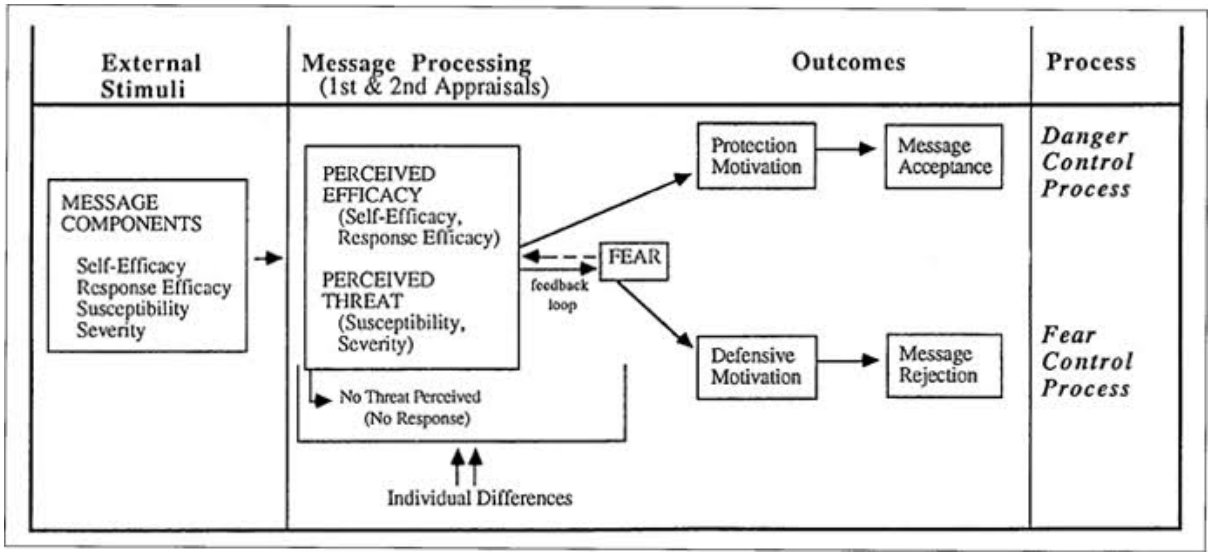

Figure 4.1. Extended Parallel Process Model by Witte, Meyer and Martel 2001

The EPPM foresees that fear of health risks such as smoking effects can be a basis for either adjustable, self-shielding or dysfunctional, self-defeating actions (Health Communication Capacity Collaborative, 2014:1). Health Communication Capacity Collaborative (2014:1) further outlines that, when perceptions of a threat are robust and perceived levels of efficiency are elevated, the model foresees self-shielding

behaviour. When perceptions of a threat are robust, but perceived levels of efficacy are minor, the model foresees nonadoptive denial or rejection of defensive behaviour.

The EPPM consists of four major constructs in which two are related to threats, namely; perceived severity and perceived susceptibility and two related to efficacy namely; response efficacy and self-efficacy (Allahverdipour, MacIntyre, Hidarnia, Shafii, Kzamnegad, Ghaleiha & Emami 2007:67). Popova (2012:457) explain the constructs in the following manner: Perceived severity relates to beliefs about the degree or importance of the threat and the gravity of its outcomes, yet it has been defined in terms of emotions, for example, one's feelings regarding the gravity of a threatening event (Gore & Bracken, 2005:29). Perceived susceptibility relates to beliefs about the possibility of personally experiencing the threat. Perceived susceptibility is measured by items such as "I am at risk of [being under] health threat" (Witte, 1996). Response efficacy relates to message aspects that underline the efficiency of response in preventing the threat and self-efficacy is information about the ability of the intended audience to transmit the endorsed response.

Fear appeals in this regard, are influential messages constructed to frighten people by describing the awful things that will happen to them if they do not do what the message endorses (Witte, 1992:329). According to Witte (1992:337), an overview of the EPPM contemplates what transpires when a person is presented with a fear appeal portraying the elements of threat, and elements of efficacy. A fear appeal incites two appraisals in the mental encoder. First, people evaluate the perceived threat of the danger. If the appraisal of threat results in moderate to the high perceived threat, then fear is prompted, and people are inspired to start the second appraisal, which is an assessment of the efficacy of the endorsed response. EPPM portrays fear inducing messages as having the possibility to incite two appraisals, one of the threats and one of the efficacy of the intended response (Allhverdipour et al., 2007:66).

When the threat is perceived as low, there is no inspiration to process the message further, efficacy is not assessed and there is no response to fear appeal when both perceived threat and perceived efficacy are elevated, danger control processes are initiated. When people fear an applicable and important threat, and when they perceive a response that would practicably and successfully stop the threat, they are driven to control the danger by thinking of tactics to stop the threat. Fear may contribute to the

enthusiasm to process a message if it is cognitively appraised. In relation to smoking, this implies that if people are threatened by the graphics of people who suffer the consequences of smoking they are motivated to quit smoking or rather reduce smoking.

In short, perceived threat controls the degree or power of the response to the message, while perceived efficacy controls the nature of the response. Individual variances influence the appraisal of threat and efficacy. Each person assesses the components of a message in relation to his or her past experience, culture and personality characteristics. Thus, the same fear appraisal may produce dissimilar perceptions in different people, thereby, inducing successive outcomes. Therefore, in relation to smoking, these fear appeal messages may bring about different reactions to the messages presented. People may not be motivated to change their smoking behaviour after only one exposure to the message while others may immediately adapt to the recommended behaviour. Rahman, Mannan and Rahman (2018) report that perceived susceptibility and perceived self-efficacy were observed to have controlling effects on intention to quit smoking, however, perceived self-efficacy was not found to have any important direct effect on the intention to quit smoking. This study looked at literature that applied EPPM on smoking in general because of the scarcity of literature that looked at the application of EPPM on HB smoking. However, the researcher discusses the limited literature available on HB after the following section.

4.2.1. Application of EPPM on smoking

The logic behind the use of such images to induce strong emotional reactions from the target audience is that members of these audiences are apathetic or resilient to health messages that public authorities are trying to convey to them (Lupton, 2014:4). According to Rigotti and Wakefield (2012:907), the intended outcome is to upsurge smoker's sense of personal vulnerability to serious disease and upsurge their sense of urgency of quitting. In addition, pairing the personal testimonial in each advertisement with simple actionable information allows smokers to access free assistance with smoking cessation that is active but underused (Rigotti & Wakefield, 2012:907).

Most lately, the 'Tips from Former Smokers' campaign containing real people in agony from consequential medical conditions because of smoking and exposure to second-

hand smoke, has been credited with an estimated 1.64 million American smokers making a quit attempt; 100,000 of these smokers are expected to maintain smoking abstinence (Centre for Disease Control and Prevention, 2017). In addition, the biggest outcome is in relation to the promotion of cessation as measured through access to cessation support services. Few studies have established a strong relationship among anti-smoking television campaigns and the growth in the number of quitting attempts (Farrelly, Duke, Nennemaker, Kamyab, Willett & Juster, 2012; McAfree, Davis, Alexander, Pechacek & Bunnell, 2013).

For example, the study by Farrelly et al. (2012) assessed the elevation of smoking cessation with emotional and/or graphic antismoking marketing among adult smokers in New York (NY). The study used two types of measures, these are the impact of exposure to antismoking commercials overall, emotional and/or graphic commercials and other types of commercials on reported efforts to halt smoking was scrutinised. The results show that both measures of exposure to anti-smoking commercials are positively connected with some amplified chances of making a quit attempt amid all smokers, among smokers who want to quit, and among smokers in diverse household income brackets and education levels. In addition, exposure to emotional and/or graphic commercials is positively connected with making quit attempts among smokers overall and the yearning to quit, income, and education, while exposure to commercials without robust negative emotions or graphic images had no effect.

However, Durkin et al. (2011) state that there is little research on the success of campaigns focusing on positive messaging. Health communication mediation can be influential implements for averting tobacco initiation, encouraging and aiding cessation and modelling social custom allied to tobacco use. Therefore, the formulation of campaigns that will prevent youth from smoking initiation is more important than formulating the ones that encourage them to quit when they are adults.

Tailored to the prevention of smoking initiation, EPPM has been active in non-smoking programs amongst individuals (Gharlipour, Hazavehei, Moeini, Nazari, Beigi, Tavassoli, Heydarabadi, Reisi & Barkati, 2015: 3). Gharlipour et al. (2015) concluded that educational programs based on EPPM enlarged the perceived threat and perceived efficacy for the preventative behaviour of smoking. Predominantly, EPPM assists in designing messages that are widely applied to a variety of health

promotional campaigns and is the basis of tobacco counter-marketing (Gould, Watt, McEwen, Cadet-James & Clough, 2015:2).

Using fear appeals, Zhao, Roditis and Alexander (2019) found that that in the U.S the national youth smoking prevention media campaign 'The Real Cost' utilised both fear and humour in its campaigning messages, where the risks of smoking are meant to catch teens attention and engage them in content associated with their media consumption habits. Similarly, LaVoie and Quick (2013) reported that the EPPM has also been used to assess 'The Truth' Campaign that allowed teens to make their own informed choices about tobacco use. The campaign included TV ads, print ads, interactive websites, and apps for social networking sites. It used a unique approach to promote smoking prevention.

4.2.2. Extended Parallel Process Model on Hubbly Bubbly smoking

Ebrahimipour, Allahverdipour, Najar, Esmaeili, Gharlipour and Shahrooudi (2014) determined the perception of fear and adoption of a risk control process of HB use among male students in Mashhad. The study found that the mean score of the perceived susceptibility, perceived severity, and self-efficacy to hookah use consequences was more in hookah non-user students than in hookah users. The mean score of the perceived effectiveness in hookah user students was less than that in hookah non-user students. Cornacchione, Wagoner, Wiseman, Kelley, Noar, Smith and Sutfin (2016) found that active messages may be those that emphasise on the severe/instant health and cosmetic effects since adolescents and young adults undervalue and discount the long-term risks connected with HB and Little Cigars/Cigarillos use.

The messages that emphasise on grave/direct health effects should be designed to communicate a high threat to motivate the perceived efficacy. Sabahy, Divsalar, Bahreinifar, Marzban and Nakhaee (2011) found that the most significant perceived motives for HB smoking, as stated by respondents, were pleasure (55.8%), dealing with depression (22.1%), stress relief (9.0%), peer pressure (8.2%) and dealing with anger (4.9%). The following Peer Cluster Theory looks at how peer pressure plays a role in HB smoking.

4.3. Peer Cluster Theory

Peer Cluster Theory (PCT) is applicable to the study because it proposes that the socialisation factors that accompany adolescent development interrelate to produce peer clusters that promote drug involvement or offer sanctions against drug use (Oetting & Beauvais, 1987). PCT was developed as a psychosocial model in 1987 by Oetting and Beauvais. These peer clusters are small, much unified groupings that form a great deal of adolescent behaviour, including drug use. The theory proposes that other socialisation variables—the strength of the family, family sanctions against drug use, religious identification, and school adjustment impact drug use only indirectly, through their effect on peer clusters.

Youth whose families communicate antidrug values and attitudes are likely to develop friendships with other healthy youth (Oetting, Edwards, Kelly & Beauvais, 1997:94). The subsequent peer clusters are likely to share prosocial and antidrug attitudes and beliefs. However, when there are weak bonds with the family and/or school when the family is dysfunctional, or when antisocial or prodrug norms are communicated, young people are more likely to be attracted to, and associate with other problem youth. When this happens, the chances are significantly amplified that the subsequent peer clusters will become involved with drugs.

It is said that in PCT small, recognisable peer clusters determine the where, when, and how of drug use and that these clusters work to shape attitudes and beliefs about drugs (Halverson, 2004:4). Halverson (2004) establishes the variance between a peer group and a peer cluster. Peer groups are formal and informal groups the youth may associate with, offering the possible setting within which peer clusters develop. Peer clusters are smaller subset-cohesive groupings in which communal behaviours and visibly defined attitudes mark membership. Clusters comprise of pairs like best friends or couples.

Within the peer, cluster model is basic conditions identified by Oetting and Beauvais (1987) that make an individual vulnerable to drug involvement or that, if not, inclined to stop drug use. Some characteristics are environmental; such as poverty, education, and family while others are internal to the person; such as personality traits, needs, values, and beliefs Halverson (2004) adds. The theory proposes that group members

affect each other and the association among peers and drug use is direct (Parsai, Voisine, Marsiglis, Kuli & Neiri 2009:3).

4.3.1. Peer Cluster Theory and risk factors for substance use

Discussion of risk factors to substance use plays an important role in providing insight into how the significant others play a role in the encouragement and discouragement of substance use such as HB smoking. Risk factors for substance use may be defined as any effect that upsurges the likelihood of such behaviour. The most frequently studied risk factors can be categorised into three domains: interpersonal (family, peer, school), character, and background. These risk factors for adolescent/youth substance use that are identified by Kim, Zane and Hong (2002:566) include: favourable parental attitudes towards substance use, low family bonding, family conflict; association with substance-using peers, peer rejection, and peer deviance; academic failure, poor school adjustment, school size; and low educational aspirations and genetic differences. These are associated with alcoholism; sensation-seeking, low self-esteem, isolation, rebelliousness, impulsivity; aggressiveness, antisocial behaviour, emotional distress, and early and continual problem behaviours; low religiosity, deviancy, nonconformity, meaninglessness in life and laws and norms that reflect favourable attitudes towards substance use and obtainability.

Friends and peers who use substances may be a risk factor for adolescents. During adolescence, peers establish a source of friendship and familiarity and employ an influence on day-to-day behaviours. As children progress through adolescence, peers become more significant. This is well complemented by PCT because it recognises that certain elementary conditions (such as the environment and individuals' beliefs and values) make a person vulnerable to drug involvement or, otherwise, resilient to it (Oetting & Beauvais, 1987).

Oetting and Beauvais (1987) believe these social and psychological variables interrelate "to form a substrate that can make an individual susceptible to drug involvement or can inoculate that youth against drug use." However, when a young person uses substances, it is likely a direct image of the peer group. It has been long familiar that peers play a serious role in deviant behaviour. According to Goliath and Pretorius (2016:115), peer influence can be direct or indirect, and occurs through four mechanisms namely; informed by group norms, direct peer pressure, peer influence

through modelling and creating structured opportunities. Modes of peer influence may operate simultaneously or independently, but they occur mostly in peer clusters, which are referred to as a designated section of the peer group that has become the primary source of influence on the values, attitudes, and beliefs of its members (Goliath & Pretorius, 2016:115).

Peer influence has been documented as a powerful link to substance use. When young people, be it adolescents or young adults, associate with peers who use the substance of any kind, they are more likely to initiate substance use (Bahr, Hoffman & Yang, 2005:533). According to family sanctions stipulated by this PCT, parental and siblings influence also play a crucial role in substance use—how parents feel it is wrong or right for their adolescents or youth to use various substances. Bahr et al. (2005:534) state that parental attitudes towards drug use impact the possibility that adolescents will use drugs. When parents disapprove of HB smoking in this case, students are less likely to smoke HB and if they do they will smoke the HB less and the opposite is also true. In contrary, Bahr et al. (2005:529) reveal that parental influences are small and irrelevant after peer influences are considered.

4.3.2. Peer influence/pressure and Hubbly Bubbly smoking

Adolescence is a time when peers play a progressively significant role in the lives of youth. Here teens start to make friendships that are more close, absolute and more continuous than their earlier years (De Guzman, 2007:1). According to De Guzman (2007:1), these friendships are essential components of development. De Guzman (2007:1) reveal that these friendships offer safe venues where youth can discover their identities, where they can feel recognised and where they can grow a sense of belongingness. During this period, the youth feel that they are better off spending time with their peers as compared to spending time with their parents or any adult (Chimwamurombe, 2011:10). However, their interactions are not always positive. They may influence each other to practice unhealthy behaviour such as unprotected sexual intercourse, alcohol consumption and tobacco use such as cigarette and HB smoking.

In the case of HB smoking, young people may smoke it to fit in and avoid rejection or name-calling by their friends. As young people pass through the adolescence stage,

this stage is connected with higher sensitivity to social assessment and higher yearning for social association (Silk, Stroud, Siegle, Dahl, Lee & Nelson 2012:93).

Therefore, social comparison becomes rooted in daily life, possibly making adolescents sensitive to cues for social acceptance and rejection (Silk et al., 2012:93). Young adults may find it very difficult to deal with such rejection as most want to boost their egos and make some sort of impression. According to Sente, Lindernberg, Omvlee, Ormel and Veenstra (2010:120), peer relations are attractive for adolescents in realising a sense of belonging since they are free, less supervisory, and less condemnatory than relations with adults. Therefore, in youth, peers become of growing significance as social agents. Adolescents whose friends smoke HB were more likely to intend to smoke (Schröder, Chaaya, Saab & Mahfoud, 2015). This relates to peer pressure which these authors found to be an important determinant of HB initiation.

Fashion and curiosity were additional motives for university and school students Allam and Elaziz (2015). The study on medical students by Khan, Siddiqui, Padhiar, Hashmi, Fatima and Muzaffar (2008) found that 90% of the students started smoking due to the influence of friends. While Jaffri, Yousufand and Qidwai (2012) report that almost half of the students started HB out of curiosity, the other one third started to seek pleasure and the remaining due to boredom, stress and peer pressure. In a similar vein, Haroon, Munir, Mahmed and Hyder (2014) report that curiosity and peer pressure were found to be the core reasons for the initiation and popularity of HB smoking, resulting in its use becoming more fashionable.

In young adults and college students, having friends that smoked HB might encourage non-smokers to initiate HB use (Ramji, Arnetz, Nilsson, Jamil, Norström, Maziak, Wiklund & Arnetz, 2015). Additionally, Taha, Sabra, Al-Mustafa, Al-Awami, Al-Khalaf, and Al-Momen (2010) found that friends and peer pressure have an influence on HB smoking among the students in their study. Recently, Al-Rawi, Alnuami and Uthman (2018) reported that among other factors, peer pressure has been found to be contributing to the increasing trend in HB smoking. Likewise, Mugyenyi et al. (2018) found that HB use amongst young people is encouraged mostly through peer influence and that most young people learn to smoke from friends, particularly in high school or university.

4.4. Hofstede's Cultural Theory

Culture is the shared programming of the mind that differentiates the members of one group or category of people from others (Hofstede, 2009:1). However, this study will not dwell much on definitions of culture as it has been discussed thoroughly in chapter two. The most common characteristic of all cultures is that it is always a shared phenomenon, but it can be linked to diverse collectives (Hofstede, 2011:3).

Hofstede (1991, 2001) in Hofstede (2009:5) has identified five dimensions of culture namely as "(1) Power Distance, related to the different solutions to the basic problem of human inequality; (2) Uncertainty Avoidance, related to the level of stress in a society in the face of an unknown future; (3) Individualism versus Collectivism, related to the integration of individuals into primary groups; (4) Masculinity versus Femininity, related to the division of emotional roles between women and men; (5) Long Term versus Short Term Orientation, related to the choice of focus for people's efforts: the future or the present and past".

This study adopts the individualism and collectivism dimension. Collectivism is cultural in that African cultures are collectivist therefore more likely to share. Ijabadeniyi, Govender and Veerasamy (2016) found that South African values significantly show high collectivistic rather than individualistic tendencies. They further report that South Africa embraces the values fostered by the spirit of Ubuntu which was coined from the following phrase "umntu ngu umntu nga bantu", a person is a person through other people (Ijabadeniyi et al., 2016).

The individualism-collectivism dimension has been used broadly in the study of social behaviours, particularly in efforts to predict behavioural patterns (LeFebvre and Franke, 2013:132). According to Realo (1999:12), the emotions of individualists are more self-focused; the expression of emotions serves the goal of facilitating personal achievement and maintaining the sense of distinctiveness and independence. On the other hand, the emotions of collectivists tend to be more socially engaged and other-focused (Realo, 1999:12). In collectivist cultures, the aim is to maintain group harmony and interdependence, it is important for collectivists to recognise and understand the emotions of others (Realo, 1999:12).

Collectivism is also differentiated into relational and group-centered collectivism. Relational collectivism refers to the network of interpersonal sharing, cooperation and

obligations (e.g. relying, trusting and helping family members and friends, depending on a superior and supporting a subordinate). Group-centered collectivism shows in communal membership of a collective or a symbolic group such as a community, caste, religion, region, or a political party. Symbolic groups have been further distinguished as having closer or detached boundaries (Sinha, 2016:28).

In relation to smoking, Lang, Abrams and De Sterck (2015:4) found that individuals derive utility from smoking via two mechanisms. First, they derive utility straight from the act of smoking (individual utility). Second, they derive utility from social interaction with other smokers (social utility). The authors noted that social utility usually shows itself in the form of peer influence or peer pressure. Panaino, Soares and Campos (2014) observed that sociability in the environment of friends allowed the representation of smoking as a sharing experience. These two types of utilities relate to individualism and collectivism as individual utility relates to an individual HB smoker whereas social utility relates to collective HB smokers in groups. The application of individualism and collectivism to HB smoking is discussed in the following sections.

4.4.1. Application of Hofstede's individualism to Hubbly Bubbly smoking

Individualistic orientation does not inspire equally strong association within-group norms, beliefs, and goals; rather it encourages attitudes that place self-interest over group-interest (Pokhrel, Bennett, Regmi, Idrisov, Galimov, Akhmadeeva & Sussman 2017:1057). HB smoking, being a behavioural practice, Pokhrel et al. (2017) found that higher individualism orientation was linked with lesser substance use. In relation to HB smoking, Heinz, Giedgowd, Crane, Veilleux, Conrad, Braun, Olejarska and Kassel (2013) found that 8% of the participants rarely smoked HB alone with 58% of the participants never smoking HB alone. Kakodkar and Bansal (2013) reported that 5.61% of participants smoked HB alone. This suggests that the individual use of HB is rarely evident, while collective use was shown to always persist in every context of HB smoking. It can then be argued that HB smoking occurs more on a collectivism dimension than it does on an individualism dimension. Therefore, the following section discusses the application of collective use of HB.

4.4.2. Application of Hofstede's collectivism on Hubbly Bubbly smoking

Collectivist orientation inspires self-construal as a member of a group that shares one's own norms, beliefs, and goals, it inspires group-oriented values such as sharing

of resources among one's kin, surrendering individual goals for the reward of the group, and general interrelationship (Pokhrel et al., 2017:1057). Similarly, Traindis (2001:909) state that in collectivist cultures, people are interrelated within their in-groups (family, tribe, nation, etc.) and give importance to the goals of their in-groups, structure their behaviour mainly grounded on in-group norms and act in a collective way. Here people are specifically concerned with relationships. They prefer methods of maintaining relationships rather than destroying them. HB smokers also smoked it to maintain good relationships with friends. Wong et al. (2016) reported that HB users smoked it because many of their friends are smoking it. Kakodkar and Bansal (2013) reported that 79.5% of participants smoked HB with their friends.

From a collectivist perspective, Baheiraei, Sighaldeh, Ebadi, Kelishadi and Majdzadeh (2015) found that when engaged in HB use as a family tradition, mothers sometimes wanted their daughters to prepare a HB. When preparing the HB for their mother, the girl may take at least one or two puffs. In this condition, the girl is influenced by the traditional values of the family. Joveini et al. (2016) reported that HB smoking in the eastern Mediterranean is mainly a social activity which happens mostly in groups. Sighaldeh, Baheiraei, Dehghan and Charkazi (2018) concluded that HB smoking has been found to be a suitable entertainment method with the contemplation of advantages, such as gathering with friends and family members and consolidating relationships. However, sharing HB can transmit communicable diseases among users (CANSA, 2015). However, Syed, Rani and Memon (2015) found that although students share the cost HB smoking with friends, they may unknowingly contract certain communicable diseases.

4.5. Conclusion

The chapter provided a theoretical framework that guided the study and the important role that theory plays in research and discussed the role of theory in this study. The theories include The Extended Parallel Process Model, Peer Cluster Theory and Hofstede's Individualism and Collectivism cultural dimension. Under the Extended Parallel Process Model (EPPM), the researcher discussed the model and its application to smoking in general and in HB smoking. The use of EPPM in smoking behaviour was discussed while giving examples from different authors. The researcher

then discussed the EPPM in relation to HB smoking and examples were also provided from previous research conducted using this model.

The chapter discussed Peer Cluster Theory (PCT) looking at how it can be applied to substance use. It looked at the theory in relation to risk factors for substance use, where different views from different authors were outlined. The researcher further discussed how peer pressure influences HB smoking by providing evidence from previous research. Hofstede's Cultural Theory was discussed looking at individualism and collectivism dimension. Under which its application to HB smoking has been explained.

Considering what has been reviewed from previous research in chapter two, three and four, the researcher will now discuss the methodological process followed when collecting and analysing data for this study in the following chapter.

CHAPTER FIVE

RESEARCH METHODOLOGY

5.1. Introduction

This study sought to determine knowledge levels of HB health risks from two groups of participants—those who have used HB before and those who never used HB. The study used a mixed-method research approach. Creswell and Plano Clark (2007:6) observe that it is an approach that makes use of a combination of methods. This method attempts to combine the advantages of quantitative and qualitative methods while avoiding their disadvantages (Bless et al., 2013:58). “The data collection also includes assembling both numeric information as well as text-based information so that the final database embodies both quantitative and qualitative information” (Creswell, 2003:20). Creswell (2003) in Subedi (2016:572) identifies six types of mixed-method design, including, “the convergent parallel design, the explanatory sequential design, the exploratory sequential design, the embedded design, the transformative design, and the multiphase design”.

In this study, the researcher used explanatory sequential design. The primary focus is to explain quantitative results through qualitative research that explores certain findings in more detail or helps clarify startling findings (Terrell, 2012:262). The study used this design because it sought to explain in detail the subjective perceptions of harm and social acceptance of HB smoking, both found to play a vital role in the increase of HB smoking.

5.2. The explanatory sequential design

The study used explanatory sequential design. Creswell (2015:38) states that the intent of this design is, to start with a step of quantitative data collection and analysis and then conduct a second step of qualitative data collection and analysis to explain the quantitative results. In this study, the researcher followed the procedure expounded by Creswell (2015:38). The researcher assembled and analysed quantitative data and examined the findings of the analysis to determine what findings would need more exploration and what questions to ask participants in this qualitative phase. Thirdly, the researcher conducted qualitative data collection and analysis to

clarify some of the quantitative findings. Lastly, the researcher drew inferences about how the qualitative results assisted in explaining the quantitative results.

This design was suitable for this study because each quantitative and qualitative data set was collected and analysed individualistically using the methods traditionally related with each data type. After analysing quantitative data, the researcher determined that perceptions of harm associated with HB smoking and social acceptance needed further exploration because they are subjective, and their impact cannot be underestimated. Therefore, the researcher formulated questions that yielded the perception of HB smoking harm and social acceptance by respondents. The questions posed to participants included; How safe is HB smoking compared to cigarette smoking? How safe is smoking fruity flavoured tobacco in HB? Does fruity flavoured tobacco in HB make it healthier? Do you (non-users)/people (users) feel endangered when people smoke the Hubbly Bubbly next to them? This design was suitable because its strength lies in the fact that the two phases (quantitative data collection and analysis step and qualitative data collection and analysis step) build upon each other so that there are distinct, easily recognised stages of carrying out the methodology design (Creswell, 2015:38). This design was applied from data collection, analysis, and presentation of the results.

In this study, this design assisted the researcher in determining which quantitative results needed further explanation. The researcher was able to make choices that included selecting HB participants who were found at students bashes who also suggested others who may like to partake in the qualitative data collection process. In this process, the researcher listed the findings from quantitative and qualitative components and considered where results from each method agree, provide complementary information on the same issue, or seem to oppose each other (O'Cathain, Murphy & Nicholl, 2010:2). The researcher integrated quantitative and qualitative results and discussed them in terms of the research objectives, hypotheses, and research questions to establish where the results support and contradict each other.

Quantitatively, under true experimental design, the study had two groups of participants. One group of people who have used the HB and another group of people who have never used it. The study used two times two design which is a within and

between-group design. Within groups, participants understand the experimenter's intentions and change behaviour accordingly, either consciously or not (Charness, Gneez & Kuhn, 2012:2). This means that this type of design occurs when the researcher is making comparisons within the same group of participants. In this study, the researcher made a comparison within HB users who were exposed to health risk messages and the same treatments were applied to HB non-users. Charness et al. (2012:2) state that the between groups method is statistically simple to perform as along as random assignment is achieved across groups. Here one group is treated and the other one is not treated. In this study, there were users and non-users who were exposed to health risk messages and users and non-users who were not exposed to health risk messages. In this design, also known as repeated measures design, participants received all treatments which were exposure and non-exposure to the health risk message (Leedy and Ormrod, 2013:236). Here the two treatments are ran very close together in time, in some instances concurrently. The researcher used two questionnaires designed as Before and After to apply the exposure treatments to both HB users and non-users within these two groups and treatment-specific measures which were non-exposure to the message between HB users and non-users. The researcher also used the between-subjects design. In this design, HB users and non-users' groups were randomly assigned to the levels of the independent variable (Field, 2009:816). In this study, these groups were non-users and users of the HB.

Qualitatively, the study considered cases of users and non-users as representatives of these groups. Here, the researcher composed thorough data on the persons on which the study is focused (du Plooy-Cilliers et al., 2014:178). The data was assembled through focus group interviews. The researcher conducted focus interviews with students who are HB users and non-users at the University of Limpopo. The researcher interviewed 12 users first, followed by 12 non-users. This study used case studies comprised of users and non-users of the HB. The study also used partial observations that assisted in answering objective 2 of quantitative results and research questions of qualitative results. The questions were based on the perception of harm and the perception of social acceptance.

5.3. Population

The population of the study was students at the University of Limpopo comprising of users and non-users of HB. Pilot and Hungler (1999:3) define a population as a collective or a total of all objects, subjects or members that conform to a set of specialisation. According to Kothari (2004:55) in a population, it can be assumed that in such a review, when all items are covered, no element of chance is left out, and the highest accuracy is attained. It was not possible to estimate the total population of the users of HB as this information is undocumented.

5.4. Sampling

5.4.1. Quantitative sampling method

350 students at the University of Limpopo formed the quantitative sample of this study. This sample was chosen using Raosoft calculator (see Figure: 1.4) because the researcher did not have information on the exact population of users vs non-users.

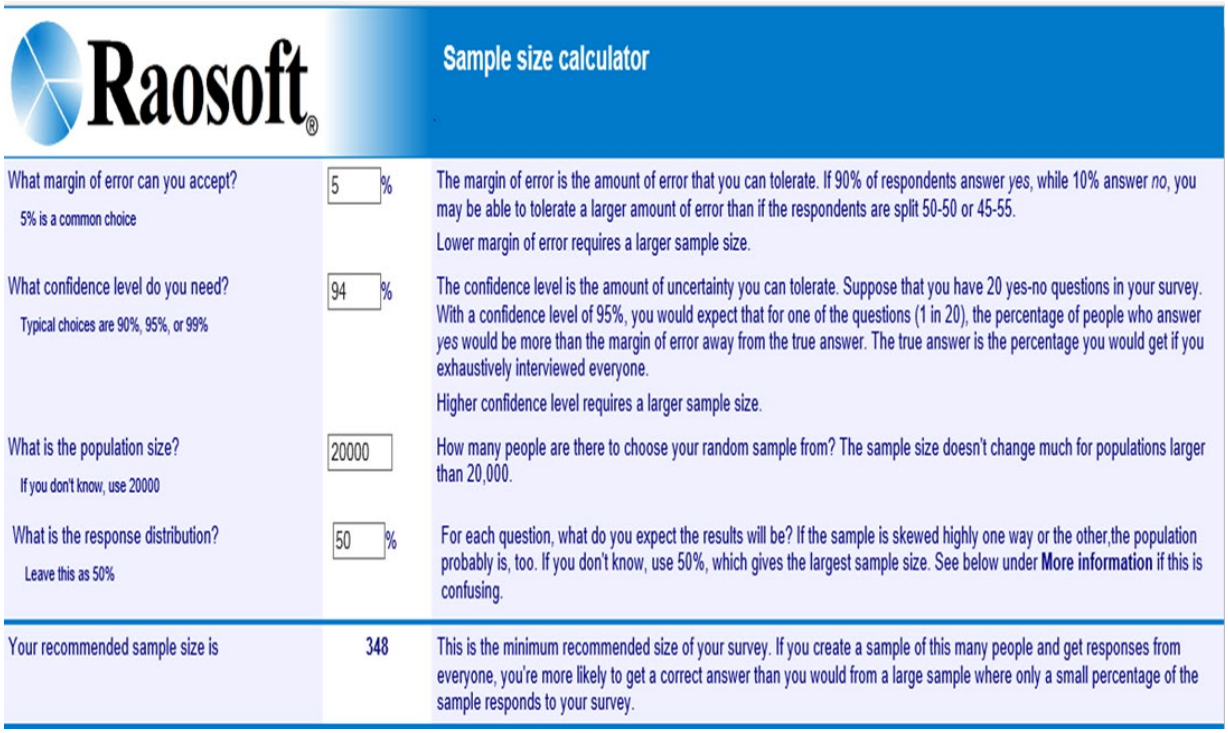

Figure 5.1. Raosoft Sample Size Calculator

However, it is considered adequate to represent the number of users and subsequently non-users of the Hubbly Bubbly—175 users and 175 non-users were selected using stratified sampling. It is the sampling technique that divides the population into sub-units of elements that share similar attributes within the same

population (du Plooy-Cilliers et al., 2014:139). This method was appropriate because, within both groups of users and non-users, groups were split into sub-units of exposed and not exposed participants.

This random sampling method was suitable for the study because it avoided researcher biases, as the researcher was not able to select the sample that only included those elements that provided responses that favour the research questions (du Plooy-Cilliers et al., 2014:138).

5.4.2. Qualitative sampling method

To conduct a more in-depth understanding of the two groups, two focus groups were constituted, made up of the University of Limpopo students. They were users and non-users of the HB with 12 members each; one group made up of users only, and the other group made up of non-users was selected using snowball sampling. In this method, participants provided proposals of others who also fit in the population parameters of the study, and who could and wanted to partake in the study (du Plooy-Cilliers et al., 2014:143).

A sample is chosen based on what the researcher reflects as representative elements (Bless et al., 2013:172). Based on a list of attributes, the researcher chose the elements that they wished to add in the sample. The sample is unlike the one chosen using probability sampling, in that the elements in the population will not all have an equivalent chance to form part of the sample (du Plooy-Cilliers et al., 2014:137). This sampling was suitable for this study because it focused on how many people the researcher needed to interview to gain a detailed comprehension of the research problem explored. This method was suitable for the study because the researcher ensured that each element of the sample was the most common in the population under investigation.

5.5. Data collection

5.5.1. Quantitative data collection

Data were collected using structured questionnaires. Questionnaires are very popular instruments used to assemble demographic data and information about people's attitudes, views, impressions, and levels of gratification, among other things. The questionnaire enabled the researcher to provide detailed instructions on how to

complete it and clarity was also given to participants who did not comprehend some of the questions. The questionnaires also enabled the researcher to collect data from many people quickly, easily and efficiently. Also, questionnaires are simple and easy to generate, code and interpret, particularly when closed questions are used in this case. Leedy and Ormrod (2013:191) state that participants can answer to questions with some guarantee that their answers will not come back to haunt them. It allows the ease of presenting questions and allows participants to ask questions without a long or complex response. In addition, Bless et al. (2013:199) state that participants complete questionnaires without writing their names, concealment guaranteed and resulting in participants being truthful when answering. Because of anonymity the questionnaires provided, the respondent felt free to give as many honest answers as they could because they knew that they could not be traced back.

5.5.1.1. Data collection tool

The researcher formulated a questionnaire. The English language is a medium of instruction; therefore, English was used. The questionnaire consisted of seven Sections. Section A, demographics and Section B, tobacco smoking experience. Section C, HB smoking experience and Section D, HB smoking behaviour. The purpose of these above-mentioned sections was to establish the background of the participants in terms of their tobacco and HB smoking patterns. Section E, awareness of HB smoking health risks. Section F, knowledge of HB smoking health risks which assisted in determining the knowledge level of the participants and determining the influence of health risk message exposure on the participants' knowledge. Section G assisted in determining the participants' perceptions about HB smoking and establishing the influence of health risk message exposure on participants' perceptions. The purpose of including all the above sections was for the collection of data that will assist in addressing all the objectives identified by this study as well as the hypotheses.

5.5.1.2. Standardisation of Questionnaire

Standardisation of research methods facilitates confidence among researcher's conformity to them, that they and others who also conform are gathering new knowledge about the same phenomena (Weinberg, 2007). Standardised questions about knowledge and perceptions were adapted from Daniels and Roman (2013) and

Haroon et al. (2014). While questions in the smoking behaviour section were adapted from Anjum et al. (2008), Global Adult Tobacco Survey Collaborative Group (2011) and Maziak, Ward, Soweid and Eissenburg (2005). The need to adopt standardised questions was based on the fact that already used instruments create uniformity which according to Weinberg (2007), promotes the adoption of question formats and other kinds of measurement instruments across studies.

5.5.1.3. Data collection instrument

An experiment was conducted to test existing materials of health risk messages on the HB adapted from the Cancer Association of South Africa (2015), See Appendix A. Message as an independent variable and the dependent variables are intentions to quit or not to start smoking, knowledge and perceptions. The researcher selected this instrument because it contained information regarding HB smoking health risks. The researcher conducted the experiment in pursuit of finding the relationship between the exposures of health risk messages on HB smoking and the influence it will have on the users' intention to quit smoking HB and the non-users' intention to start smoking HB, knowledge and perceptions. The emphasis of a social experiment is on the alleged relationship between a factor (which might become an element of the treatment of a social program) and some desired effect (Rieken et al, 1974:5). A social experiment is the one that is intended test a plausible hypothesis…in the development of social program. The researcaher conducted the experiment with the intention of finding the relationship between the exposure of health risk messegages on HB smoking and the influence it will have on the users' intentions to quit smoking HB and the non-users' intentions to start smoking HB as well as their knowledge and perceptions.

5.5.1.4. Quantitative Data collection procedure

The researcher asked for ethical clearance from TREC to collect the data from the students. After receiving the clearance certificate, the researcher asked permission to collect data from students in classes. Upon arrival at those classes, the researcher explained what the research is about and those who were willing to participate filled in consent forms and were grouped into participants of users and non-users.

The researcher had research assistants who assisted in explaining the questions which the participants did not understand, but the assistant did not help the

participants in answering the questions. The researcher collected the data between HB users and non-users and within users and non-users. Between users the researcher gave 175 users and 175 non-users questionnaires to complete (see appendix B). Then the researcher, within these groups of users and non-users, exposed 100 users and 100 non-users to HB health risk messages (see appendix A). The researcher then gave them a second questionnaire to complete immediately after exposure to the message (see appendix C). The remaining 75 participants of both users and non-users were not given the second questionnaire because they acted as an inactive control group. The inactive control group receives no comparison treatment at all during the study or receives treatment after the study ends (Byrd-Bredbenner, Wu, Spaccarotella, Quick, Martin-Biggers & Zhang 2017:3). In this study, the HB user /non-user not exposed group did not receive the treatment at all. This is because there is an increased likelihood of yielding large effect size because they are least likely to change targeted cognitions or behaviours (Byrd-Bredbenner et al., 2017:3). This was done to find out if exposure to health risk messages will have an influence on exposed participants' knowledge levels, perception of HB harm and HB smoking behaviour intentions.

5.5.2. Qualitative data collection

The study used two qualitative collection methods—focus group interviews and observation. The observation was done to check on HB smokers' behavior. The study used both methods because observation assisted the researcher to check for non-verbal expression of feelings such as the shared mood when smoking HB, determine who interacts with whom during the HB session and check how much time is spent on smoking HB. According to Kawulich (2005), observation provides researchers with avenues to check for nonverbal expression of feelings, determine who networks with whom, grasp how participants communicate with each other and check how much time is spent on numerous activities. The researcher used observation to check the situation described by participants during the focus group interview. The researcher also observed HB smoking behaviour as they unfold. It became clear that during focus group interviews respondents were either unable or unwilling to share with whom they may have felt impolitic, impolite or insensitive.

5.5.2.1. Focus group interviews

To explore further on HB smoking behaviour, perceptions of social acceptance and perceptions of HB smoking harm, the study used focus group interviews. This is because perceptions are not objective and here reality as a social construct is not experienced in a similar way by everybody (du Plooy-Cilliers et al., 2014:29). Therefore, the social world is fluid and delicate and changes as people's perceptions change (du Plooy-Cilliers et al., 2014:29). From this, focus group interviews were done using semi-structured questions. The researcher drew up a list of questions based on perceptions of harm and perceptions of social acceptance of HB smoking. These questions were used to instigate a dialogue between the focus group participants (Bless et al., 2013:200). The focus group interviews took place in one class at the University of Limpopo. The researcher gave an hour between the groups where users were the first to be interviewed and the interview lasted close to an hour. After an hour, non-users arrived at the same class and the interview took place.

Focus groups provided information about a variety of thoughts and feelings that individuals had about certain topics, as well as revealing the variances in viewpoint amongst groups of individuals (Rabiee, 2004:656). According to Bless et al. (2013:200) this method, was suitable because it enabled participants to deliberate on the issues in question with each other and one person's sparked off a whole thread of related views and thoughts in another person. This process was also suitable for this study because of its ability to produce data grounded on the combined effect of group interaction (Rabiee, 2004:656). In this study, the responses provided assisted the researcher to generate themes and sub-themes built from the interaction the group had regarding the questions asked.

5.5.2.2. Observation

The study used onlooker observation. According to du Plooy-Cilliers et al. (2014:181) in an onlooker observation, the researcher observes a social process without becoming involved in it at all. An onlooker method was conducted at students' socials, the researcher observed groups that were smoking HB as an outsider. Observation is a pre-arranged research instrument that is carried out to serve research questions and objectives. When using this technique, the researcher observed the patterns of HB

smoking among the youth on several occasions, as they occur. Flick (2006: 219) states that observation is an effort to observe events as they normally unfold.

More prominently, observation enabled the researcher to merge generated data with questionnaires and interviews to assemble objective first-hand information (Johnson & Turner, 2003:314). To this end, Merriam (1998:96) reveals that observation is a kind of data triangulation to validate the results. Fraenkel and Wallen (2003:453) state that observers study the subjective factors objectively. However, Nation (1997:276) stresses that the researchers attempt to study the depictions of behaviour rather than the behaviour itself. If the research is conducted in a public space, the researcher may be observing the behaviour of a certain group and not get involved in the activity (du-Plooy-Cilliers et al., 2014:179). Some of the items on the observation guide were adapted from Carroll et al. (2014).

5.5.2.3. Data collection tools

Following what is mentioned above about focus groups, the researcher formulated an interview schedule that was guided by research questions (see Appendix D). The questions looked at the perception of social acceptance and perception of harm. For observation, the researcher formulated an observation guide (see Appendix F) that provided direction on which information should be noted to assist the researcher in attaining a better comprehension of the environment of the phenomenon under study.

5.5.2.4. Data collection procedure

The procedure followed for constituting focus groups, the researcher approached people who matched the population of the study and asked them to suggest others who may have an interest to participate in the research. According to du Plooy-Cilliers et al. (2014:143), participants in the study provide suggestions of others who also fit the population parameters. To avoid bias, and to ensure the sequence of the design, participants who had participated in the quantitative experiment were excluded from participation in the qualitative experiment. After the researcher had 12 members required for both group he/she asked for consent from the respondent before the interviews began. This number was a requisite number because ideally, each focus group should have six to twelve participants (du Plooy-Cilliers et al., 2014:183). The researcher explained what the research is about and began the interview. The

researcher first interviewed the users then interviewed non-users and both interviews were audio-recorded. See Appendix E for audio transcripts.

For observations, three students' bashes were observed by the researcher. According to Thorpe and Olive (2005) observations are a method of data collection involving the systematic recording of human behavior in particular environments. The researcher systemically recorded what he/she observed. The researcher observed HB smoking behaviour as it occurred. The first one was a Valentine's bash on the 16th of February 2018 at Thammy square, the University of Limpopo where the researcher observed three groups of HB smokers. The second one was a Welcome bash on the 17th of February 2018 at the University of Limpopo pond where the researcher observed four groups. Lastly, it was a Fresher's ball on 05th May 2018, University of Limpopo pond where the researcher observed six groups. For each group on those bashes the researcher recorded information that addressed the group formation, the shared mood during HB smoking, behaviour during and after HB smoking, smokers' focus of attention and standard of morality.

5.6. Data analysis

Traditionally, data analysis in mixed method research consists of analysing the quantitative data by means of quantitative techniques and the qualitative data with qualitative techniques (Creswell & Plano Clark, 2007:128). The procedures, systems, and patterns used in analysing data for this study are thoroughly explained in the next section.

5.6.1. Quantitative

This study used IBM Statistical Package for the Social Science (SPSS: version 25) to analyse quantitative data. Analyses of variance (repeated measures) were conducted to find out the possible effect of exposure to the message, before and after. Here the use of Independent Sample Tests was used to measure the effect of an experiment by comparing the amount of unpredictability in the data that the experiment can clarify against the unpredictability that it cannot clarify (Field, 2009:396). Field (2009:396) further states that "if we can clarify some of this mysterious discrepancy in terms of other variables, then we decrease the error discrepancy, allowing us to more precisely measure the effect of the independent variable".

The study used descriptive statistics to analyse data to determine participants' demographics, tobacco experience, HB experience, and the use of HB concurrently with other substances. Descriptive statistics were used to determine the youth's knowledge level about HB smoking health risks from both users and non-users. Reliant on the nature of the data, the study used independent Sample Tests to analyse the data from 100 exposed participants, both users and non-users. The tests were used to find out if exposure to a message will influence their knowledge. The same tests were also used to test the effect of the message on the youth's perceptions. These tests were performed after cross-tabulation was used to determine the perceptions before the participants were exposed to the message. To evaluate the awareness of HB health risks, the study used descriptive statistics.

To find out whether the youth's smoking intentions will be influenced by exposure to the message, the study started by comparing mean differences between users and non-users. These were done to determine if increasing their acquired knowledge will increase their desire to quit smoking after exposure. Furthermore, there were also done to find if intentions to start smoking by non-users before exposure changed after exposure.

5.6.2. Qualitative

For focus group interviews, texts are broken up into fragments, which share some communal features (Bless et al, 2013:342). Du Plooy (2014:115) describes qualitative data analysis as the procedure of bringing order, structure, and sense to the mass of data. It is also the method of decreasing the size of raw information, examining importance from trivia, categorising important patterns and creating a framework for communicating the essence of what the data discloses.

In this study, the collected data was encoded and clear codes were created. When the researcher was done with the coding; themes were created from coding. The theming phase involved exploring the codes and collected data to find important broad patterns of meaning or potential. It also involved organising information applicable to each candidate theme, to work with the data and evaluate the practicality of each candidate theme. The study used thematic analysis which is also known as conceptual or concept coding (du Plooy- Cilliers et al., 2014). This is a method of analysis where the text or the data is reduced by means of categorising themes.

The researcher used an inductive process that allows the researcher to reduce and summarise the raw data and launch clear links between the research objectives and the results obtained from the raw data. The researcher achieved this by using a list of themes developed and known from the literature review. The researcher analysed the answers provided by the participants by categorising them under the identified themes. The researcher categorised the data by dividing them into phrases, then developed categories and came up with themes from the categories.

For observation, the researcher incorporated the results into the themes that emerged from focus group interviews to support, complement or contradict the focus group interview findings.

5.7. Quantitative quality criteria

Quality criteria in quantitative research are indirect, rather than obvious and are often stated in the products of research as part of the stages of the research process e.g., sampling and procedures (Cameron, 2011:2). This research looked at the most preferred concepts used for quantitative quality criteria, these are validity and reliability. Cameron (2011:2) states that most literature refers to the concepts of validity and reliability which are entrenched in the positivist and quantitative traditions of the scientific method.

5.7.1. Validity

In quantitative research, validity is the level in which any measuring instrument measures what it is intended to measure (Mohajan, 2017:14). This study ensured internal and external validity.

5.7.1.1. Internal validity

The study ensured internal validity. Mohajan (2017:14) states that internal validity shows whether the findings of the study are genuine because of the means in which the groups were selected, data was recorded, or analysis was done. In this study, it was ensured by the presentation of only the results from the questionnaires that were given to participants, the researcher selected HB users and non-users' groups, data was collected using questionnaires and analysis was done using Statistical Packages for Social Sciences. According to Mohajan (2017:15), internal validity refers to whether a study can be repeated. The researcher described appropriate methods used when

conducting the study hence, the study can be replicated. Internal validity denotes whether the research method or design will answer the research question. There must be minimisation of errors in the design of the research and the research method must be able to help in answering the research question (du Plooy-Cilliers et al., 2014:257). Internal validity is concerned with the question and whether the research design has omitted all other conceivable hypotheses that could explain the disparity of the dependent variable (Bless et al., 2013:131).

5.7.1.2. External Validity

This study ensured external validity by using the Raosoft Sample Calculator to get the sample that represented the population and randomly selected participants. It was also ensured by precisely described methods used in the study to allow for duplication of the study across diverse populations and settings. According to Mohajan (2017:15), external validity indicates whether the findings given by the study are transferable to another group of interest. External validity is the degree to which the findings can be generalised from the research sample to the population (Frambach et al., 2013:552). In a similar vein, external validity focuses on the ability to generalise results from a specific sample to a bigger population (du Plooy-Cilliers et al., 2014:257).

5.7.2. Reliability

The researcher conducted a pilot study to ensure reliability. This was done to ensure that the questionnaire items precisely addressed the research objectives. The pilot study was also done to test whether the questionnaire was comprehensible and appropriate in terms of question design, the use of simple and understandable language and the duration it took to complete the question. Kinchin, Ismail and Edwards (2018:1) contends that the pilot study helps researchers find or improve a research question, determine what methods are best for pursuing it, and approximate how much time and what resources will be required to accomplish the large final version of the study. “A pilot study can act as a precaution system since conceivable faults or complications with your measurement instrument will arise in the course of a pilot study” (du Plooy-Cilliers et al., 2014:257). The researcher recruited 10 subjects to participate, with adequate time to consider whether they wished to participate. They comprised of five HB users and non-users. The questionnaire required self-completion by the participant. The researcher used self-administered structured questionnaires.

This allowed the researcher to use the results from the study to figure out errors and attend to them to make the questionnaire reliable for the final version study.

Furthermore, Bless et al. (2013:221) define reliability as the level in which apparent and empirical measures represent some theoretical concepts that are exact and constant over repeated observations. To ensure reliability in terms of what Bless et al (2013:221) termed as repeated observations, the questionnaire used in this study drew upon items from already tested instruments developed by (Anjum et al., 2008; Daniels & Roman, 2013; Global Adult Tobacco Survey Collaborative Group, 2011; Haroon et al., 2014; Maziak et al., 2005). The choice of this instrument was based on its use in the pre-reviewed literature. Reliability is seen as the degree to which the findings can be generalised and that the same findings will be attained if the research was done again (du Plooy-Cilliers et al., 2014:254). This was done to ensure that should the research be done again; it will produce analogous findings.

The reliability test of the items used to measure the core concepts of this study which are knowledge and perceptions of HB smoking health risks was done. The study used Cronbach's alpha. This was done to ensure that items used to test the above mentioned two core concepts are reliable. Because of the nature of the data collection, as explained in the data collection section, the reliability testing was done in the items used on the questionnaire used before participants were exposed to health risk messages and on items used on the questionnaire used after participants were exposed. Table 1 shows the results.

Table 5.1: Cronbach's alpha reliability tests

Reliability testing	Cronbach's	Average inter-item	No. of items
Knowledge before	0.904	0.575	7
After	0.985	0.906	7
Total	**0.903**	**0.370**	**14**
Perceptions before	0.837	0.251	16
After	0.980	0.777	16
Total	**0.932**	**0.277**	**32**
Overall	**0.954**	**0.272**	**46**

The items used to determine knowledge among the participants before exposure to the message were 0.904% and after exposure was 0.985% and the total of both was 0.903% which was >0.5%. This implies that the items used were reliable. The items used to examine the perceptions among the participants scored 0.837% before message exposure and 0.980% after and the total of both being 0.932% which was >0.5%. This means that the items used to examine perceptions were reliable. The overall score of both knowledge and perceptions items scored 0.954% which was >0.5%. Which means that all the items used were reliable. See table 1

5.7.3. Objectivity

The researcher ensured that his/her personal feelings and other subjective factors were excluded from the data to avoid bias. Objectivity refers to the level in which personal preconceptions are detached and value-free data is collected (Frambach et al, 2013:552). du Plooy-Cilliers et al. (2014:22) define objective knowledge as knowledge that is non-instinctive, in a way that it is culture-free, value-free, universal and certain. The use of adapted items in the instruments for measure assisted to ensure objectivity.

5.8. Qualitative quality criteria

Quality criteria in qualitative research refer to the ways in which eminence can be attained when conducting qualitative research and how quality can be established in qualitative research outputs (Treharne & Riggs, 2015:57). In this study, the researcher ensured that credibility, transferability, dependability, and confirmability were maintained during the collection of data and analysing the data

5.8.1. Credibility

The researcher constructed the focus group discussion questions by focusing on the research questions and used audience ethnography which allowed the researcher to spend time with the audience. The researcher ensured that only the participants' information is reported, interpreted without including the researcher's opinion, it asked if there was a correspondence between the way the respondents perceive social ideas and the way the researcher portrayed their viewpoints. Credibility refers to the

correctness with which the researcher interpreted the data that was supplied by the participants (du Plooy-Cilliers et al., 2014:258).

It is the extent to which, the study's results are trustworthy and realistic to others (Frambach et al., 2013:552). It pursues to prove that the results portray the truth of reality under study, or, that they make sense (Bless et al., 2013:236). The researcher persuasively established the suitability and the complete logic of the research questions, study design, data collection process and the method of data analysis (Bless et al., 2013:236). Conducting focus group interviews between both users and non-users assisted in ensuring the credibility of the information.

5.8.2. Transferability

The researcher ensured transferability by providing the participants' responses with a rich description of how they perceived HB smoking harm. The way the researcher interpreted the results of the participants' responses made the results easier to be evaluated by the reader. According to Treharne and Riggs (2015:58), naturalistic generalisation in transferability happens when the results are in agreement with the experiences of the individual assessing the research, and thus seem transferable in the eyes of the reader.

The researcher ensured that the data collected will allow other researchers to compare and evaluate the similarities between that given situation and other contexts or circumstances. Transferability refers to the degree to which the results can be transferred or functional in diverse contexts (Frambach et al., 2013:552). The researcher gave a "thick" explanation so the reader knows whether it will apply to their situation. Bless et al. (2013:237) state that transferability necessitates the researcher to offer thorough descriptions of the environment in which the data was assembled, about the researcher as an individual, and about his or her relationship with the respondents. The researcher did not have any close relationship with the participants; however, he/she managed to have a favourable context to collect data from the participants. This was done through the researcher's ability to explain to the participants what the study was about and why the study was conducted which also increased the participants' willingness to participate in the study and comfortability to interact as a group throughout the focus group interview. The researcher also thanked the participants when the interview was concluded.

5.8.3. Dependability

The researcher explained the process undertaken when conducting focus group interviews which were the tool used to collect data and, how the recorded responses were analysed. The researcher showed that each step has been done carefully and cautiously (Bless et al., 2013:237). This will allow producing similar results if someone wishes to undertake the same research. Treharne and Riggs (2015: 58) state that dependability refers to whether analogous results would be produced if someone else also undertook the research. Dependability stresses that the researcher meticulously describes and indeed follows a clear and considerate research strategy (Bless et al., 2013:237). Additionally, it refers to the eminence of the method of incorporation that takes place between that data collection method, data analysis and the theory generated from the data. However, strategies or emphasis may change as the study continues.

5.8.4. Confirmability

The researcher reported participants' responses only and did not report what he/she thought the participants wanted to say or meant, but only the exact explanations and words of the participants. Dependability entails that the results are a product of participants' answers and not the researcher's favoritisms, motivations, interests, or viewpoints (Treharne & Riggs, 2015:58). The researcher presented a critical evaluation of the methodology used so that other researchers can understand it, therefore, replicate it in another setting and foresee if and how the findings might be dissimilar (Bless et al., 2013:237). Confirmability refers to how well the data assembled support the results and interpretation of the researcher. It specifies how well the results stream from the data (du Plooy-Cilliers et al., 2014:259). This will be accomplished by going back and examining the original sources in transcripts, documents, journals, field notes. It is the degree to which the results are based on the study's participants and contexts instead of researchers' preconceptions (Frambach et al., 2013:552). The data and their interpretation were not being fabricated by the researcher's imagination.

5.9. Ethical Considerations

The researcher maintained ethical standards throughout the study. In research, ethics are vital as they can possibly have an impact on all the stakeholders (du Plooy-Cilliers et al, 2014:263). Research ethics assisted in the prevention of research abuse and

assisted the researcher in understanding his/her responsibilities as an ethical scholar (Bless et al, 2013:28). Before data collection, ethical clearance was sought from the relevant University committee, Turfloop Research Ethics Committee.

5.9.1. Autonomy and informed consent

The researcher ensured that informed consent from the participants was solicited (See appendix J). The researcher informed the participants that they were taking part in research and they provided formal informed consent. Participants had the right to be unidentified and to be protected against any physical or emotional damage that can be caused by the researcher (du Plooy-Cilliers et al, 2014:266). The autonomy of the participants was assured. Autonomy incorporated the freedom of individual's actions and the choice whether to partake in research, therefore, no person should be coerced, either visibly or secretly, to partake in research (Bless et al., 2013:30).

5.9.2. Confidentiality

The participants' identity was protected, the data collected was strictly confidential and the findings of the study were used for academic purposes. Data provided by participants, mostly delicate and personal data, was protected and has not been made accessible to anyone other than the researcher (Bless et al., 2013:32). The researcher did not ask the participants to provide personal data such as names or national identity number. Similarly, the researcher did not record participants' names at any step of the research process, and therefore the researcher was unable to match participants' identity to their research answers in any way (du Plooy-Cilliers et al., 2014:267). Participants in the quantitative and qualitative focus groups were identified using numbers.

5.9.3. Justice

The researcher treated all participants similarly irrespective of their age, gender, race or religion, and even culture (Bless et al., 2013:30). The researcher did not consider the variance in participants and they were all treated equally. The researcher treated participants with respect and dignity. As human beings, all participants have lawful and human rights, therefore no research project should in any way, intrude upon these rights when participants are recruited (Bless et al, 2013:31).

5.10. Conclusion

This chapter outlined the methods and techniques used in this study. The study was a mixed-method study, in which explanatory sequential design was used. Quantitatively, surveys were carried out using structured questionnaires to collect data and SPSS was used to analyse the data and quality criteria for this method of the study were ensured. Experimentally, the study used two times two experimental design to examine the influence of health risk messages on knowledge levels as well as participants' perceptions of HB smoking harm. As perceptions change and they are subjective in nature and mostly influenced by people's surroundings, the researcher explored these perceptions using qualitative methods. A process of conducting focus group interviews was explained and how the results were analysed and interpreted by the researcher and the explanation of how quality criteria were ensured in this method.

The next two chapters present quantitative and qualitative results. Quantitatively, the first chapter presents participants' demographics, HB smoking behavior and perception of social acceptance. The chapter presents knowledge levels between users and non-users. Within users and non-users, results are presented looking at the influence of messages before and after exposure. For perceptions, the mean difference is presented between users and non-users. The chapter presents the results emanating from the exposure to a message that influences the perception of harm within users and non-users. While participants' awareness of HB health risks is also presented. The chapter further presents the user's intention to quit HB smoking and non-users' intention to start smoking HB before and after message exposure.

The second chapter present results that explore the perception of social acceptance and perception of HB harm through the results emanating from focus group interviews. These results will also be supported by observation results. The explanation of both chapters is provided here because although they are stand-alone, they relate to each other in that qualitative results provide more details and explanations to quantitative results that the researcher saw the importance of exploring qualitatively.

CHAPTER SIX

QUANTITATIVE FINDINGS

6.1. Introduction

The previous chapter elaborated on the data collection and analysis procedures adopted in this study. This chapter thus presents and interprets the findings resulting from the data collected following the procedures outlined. The chapter presents demographics of the participants which were determined using descriptive analysis as well as HB smoking behaviour and the reasons why participants use HB provided through open-ended questions. The chapter presents HB users' appeals determined through descriptive analysis as well as the settings in which participants use HB with how many people and whom they were smoking with. The results of the perception of social acceptance are presented along with the results of the use of HB concurrently with other substances.

The first objective was addressed by determining participants' knowledge levels of HB health risks. Between users and non-users, knowledge was determined by comparing the means. To answer objective four, within users, and non-users exposed to health risk messages, Independent Sample Tests were used to determine the influence of the message before and after message exposure, in which the results are presented in this chapter. To address objective two, results of compared means between users and non-users' perceptions of harm are presented. Independent Sample Testing was used to find out whether exposure to health risk messages will influence users and non-users' perceptions before and after message exposure to address objective five. Objective three is also addressed using descriptive analysis to determine the participants' HB health risk awareness. To answer the hypotheses, a custom table was used to determine the users' intention to quit HB smoking before and after message exposure as well as to non-users' intention to start smoking HB before and after message exposure.

6.2. The study demographics

The study consisted of 350 participants determined using Raosoft sample calculator who filled in questionnaires. From these participants, 56% (n=197) were females and 43.7% (n=153) were males. Their age ranges were 48.6% (n=170) between 17-20 years old, 40.6% (n=142), 21-23 years old, 6.6% (n=23), 24-26 years old, 3.1% (n=11), 27-29 years old, 0.6% (n=2), 30+ years old and 0.6% (n=2) did not indicate. An open-ended question was asked to find out if they were using tobacco products other than HB in which, 36 participants were shown to be using cigarettes.

6.2.1. Hubbly Bubbly smoking behaviour

To understand the HB smoking behaviour among the participants, the study established when the participants started using HB by tracking the age in which the users started smoking HB. The results show that n=65 started smoking HB when they were under 18 years old, while n=105 started when they were 18 years old and above. Open-ended questions were asked to provide reasons why they use HB. The results are as follows:

Participant no.1 smoke HB "*to smell nice":*, no.10 "*When I am bored at home, I just light it to get busy, and when I am at parties I use it since it's the only substance I use to be busy and enjoy the party*", no.32 "*To bring about a sense of enjoyment*", no.39 "*It is fun taking the smoke out and it is not addictive*", no. 50 "*To avoid loneliness and have a fun time*", no.52 " *Used for pleasure and peer pressure was the other reason I smoked it*", no. 64 "*To clean my mind*" and no. 74 "*It is nice and not harmful*"

The study also established if whether other tobacco products were experimented with by the participants. The results reveal that most HB users experimented with other types of tobacco. N=87 users first experimented with cigarettes, n=4 electronic cigarettes and n=106 added HB as part of the tobacco they first experimented, n=2 cigars, n=2 snuff, n=1 BB and n=1 dissolvable tobacco.

Although the study sample has HB, some indicated that they also experimented with tobacco products, N=4 HB, n=2 bidis, n=12 cigarettes.

To find out how HB appeals to users, participants were asked closed questions meant to solicit answers about whether it is fun to smoke HB or whether it made them look sophisticated. The participants were given several choices to tick answers from in

which they ticked more than one answer. Therefore, the frequency does not give a total of 175. However, these results are from n=175 users only. Descriptive analyses were conducted to find the frequency on each choice they made. Results show that more than half of the participants who use HB, n =94 out of 175 (54%) perceived smoking the substance as individuals to be fun. In addition, 41 participants found the use of HB appealing because it allows people of different genders to share, others (n=33) found it a sweet way to socialize with their friends, while yet another group of participants (n=25) found it a safe and relaxing way to socialize with friends. The least number of participants, n=4 found it appealing because of its ability to boost a user's ego. Of interest is that a small number of users found it appealing to use because of lack of health warnings. The results are presented below in table 6.1.

Table 6.1: Hubbly Bubbly appeals for users (n=175)

	Variables	Frequency
HB appeals	It's fun	(n=94)
	It's sophisticated	(n=8)
	Improves concentration	(n=7)
	Boots ego	(n=4)
	It's cool	(n=30)
	Doesn't have health warnings	(n=12)
	It's tasty	(n=18)
	It's fashionable	(n=18)
	It's a new experience	(n=23)
	It's a sweet way to socialise with friends	(n=33)
	It's a safe and relaxing way to socialise with friends	(n=25)
	It's mature	(n=5)
	Attracts people of a different gender to share	(n=41)

The study also sought to find out how many people do smokers smoke HB with and how long do they smoke? (n=105) users indicated that they smoke with more than 5 people, (n=166) smoke with friends, (n=10) can smoke with strangers, (n=4) smoke

alone and (n=3) smoke with their family members, (n=70) users smoked HB for more than one hour.

6.2.3 Perception about Societal Acceptance

The study found that (n=149) users agreed that society approves of HB smoking. The following questions were asked to find out the assumed factors that may drive social acceptance of HB smoking. Users were asked the following question; when do you use HB? In which (n=135) use HB in a social gathering, that includes parties, bash, club or restaurant. Among this n=135, (n=54) used HB whenever they consume alcohol and (n=2) used HB at a family home or right after meals. A total of (n=58) smoked at the bash. In terms of flavoured tobacco brand name, (n=85) users did not know the brand of the tobacco flavour used in HB, while (n=42) smoked Royal, (n=18) Starbuzz and (n=15) smoked Amaren.

The users indicated that they use HB concurrently with other substances. Majority of the participants (n=94) mixed the tobacco used in HB with marijuana. While, (n=2) mixed with nyaope, (n= 32) replaced water with wine and (n=7) mixed with all the above-mentioned substances. This was supported by providing reasons for mixing the substances in an open-ended question as follows: Participant 14 "*It increases my dopamine*", no.28 "*To increase the feeling of euphoria and be in a more relaxed state of mind*", no.59 "*Because it does not have after-effects*"

The researcher also asked if non-users have been in an environment where people were smoking HB and which places.

Table 6.2: non-users' exposure to Hubbly Bubbly smoking (n=175)

	Variables	Percentage and frequency
Exposure to HB smoking	Yes	70% (n=123)
	No	29% (n=51)
Environment exposed	Home	5% (n=8)
	Club/restaurant	5% (n=8)
	Bash	30% (n=53)
	Chillas	10% (n=17)
	Parties	17% (n=29)
	Friend's house	7% (n=12)
	All of the above	5% (n=9)
Times exposed	Once	11% (n=20)
	Twice	15% (n=27)
	Three times	2% (n=4)
	More than three times	38% (n=67)
	not sure	32% (n=57)

The study sought to find out if HB non-users were ever exposed to an environment where people were smoking HB. A clear majority of non-users were exposed in different social settings and most were exposed more than three times while a significant number showed that they are not sure of how many times they were exposed to HB second-smoking.

The other significant question was whether the government should put into place policies that regulate HB smoking, the study found that 58% (203) agreed with this statement, 36% (n=126) disagreed and 6.0% (n=21) were not sure.

6.3. Knowledge of Hubbly Bubbly health risks

This section deals with both the first and the fourth objectives of the study. The first objective addresses the knowledge levels of the students, while the fourth one examines the relationship between knowledge and behavioural intentions.

The first objective of the study was to determine the University of Limpopo students' knowledge levels about HB smoking health risks. To establish knowledge about health

risks, the following questions were asked; HB is dangerous to health, it has a significant amount of tobacco, it can cause an ulcer, it can cause lung cancer, it can cause heart disease, it can cause diabetes and it can cause communicable diseases. The four-point Likert scale was presented with strongly Agree, Agree, Disagree and strongly disagree options. Results are presented in the tables 6.3 and 6.4 below for users and non-users.

Table 6.3: User's knowledge of health risks

HB is;	Strongly Agree	Agree	Disagree	Strongly Disagree	Did not indicate	Total
Dangerous to health	N=68 38.8%	N=75 42.8%	N=15 8.5%	N=4 2.2%	N=13 7.42%	N=175 100%
Has significant amount of tobacco	N=40 22.8%	N=93 53.1%	N=19 10.8%	N=9 5.1%	N=14 8%	N=175 100%
Can cause ulcer	N=56 32%	N=79 45.1%	N=21 12%	N=7 4%	N=12 6.8%	N=175 100%
Can cause lung cancer	N=69 39.4%	N=77 44%	N=11 6.2%	N=5 2.8%	N=13 7.4%	N=175 100%
Can cause heart disease	N=61 34.8%	N=70 40%	N=23 13.1%	N=9 5.1%	N=12 6.8%	N=175 100%
Can cause diabetes	N=52 29.7%	N=65 37.1%	N=38 21.7%	N=8 4.5%	N=12 6.8%	N=175 100%
Can cause communicable diseases	N=56 32%	N=76 43.4%	N=18 10.2%	N=10 5.7%	N=15 8.5%	N=175 100%

Table 6.4: Non-users' knowledge of health risks

HB is;	Strongly Agree	Agree	disagree	Strongly disagree	Did not indicate	Total
Dangerous to health	N=39 22.2%	N=89 50.8%	N=36 20.5%	N=9 5.1%	N=2 1.1%	N=175 100%
Has significant amount of tobacco	N=24 13.7%	N=89 50.8%	N=47 26.8%	N=11 6.2%	N=4 2.2%	N=175 100%
Can cause ulcer	N=27 15.4%	N=70 40%	N=60 34.2%	N=13 7.4%	N=5 2.8%	N=175 100%
Can cause lung cancer	N=52 29.7%	N=88 50.2%	N=24 13.7%	N=8 4.5%	N=3 1.7%	N=175 100%
Can cause heart disease	N=29 16.5%	N=75 42.8%	N=53 30.2%	N=12 6.8%	N=6 3.4%	N=175 100%
Can cause diabetes	N=10 5.7%	N=31 17.7%	N=95 54.2%	N=28 16%	N=11 6.2%	N=175 100%
Can cause communicable diseases	N=48 27.4%	N=68 38.8%	N=43 24.5%	N=9 5.1%	N=7 4%	N=175 100%

Within 175 users and non-users, 100 participants in each group were exposed to health risks messages to find out whether the message will influence their knowledge levels. Custom tables were used to determine the mean difference between users and non-users' knowledge levels. Independent Sample Tests were used to determine the knowledge levels within users and non-users after message exposure. The study

compared the mean difference of the knowledge between users and non-users using custom tables to find out the variance of means. The results show that there is a significant difference between the knowledge of users and non-users. The mean difference shows that users have more knowledge as compared to non-users, see table below.

Table 6.5: The mean difference of knowledge between users and non-users

Knowledge			
Use	Mean	N	Std. Deviation
User	16.42	175	4.384
Non-user	14.69	175	6.856
Total	15.55	350	5.811

The fourth objective of this study was to examine whether the University of Limpopo students' knowledge of the health risks would influence their HB smoking behaviour intentions. Independent sample Tests were conducted within users and non-users to find out if exposure to health risk messages influenced their knowledge levels and therefore influence their smoking behaviour intentions. See table 6.7, Independent Sample Test used reveals that there is a significant difference between knowledge scores before the participants were exposed to the message and no significant difference after they were exposed to the message. This means that there was a change in users' and non-users' knowledge after they were exposed to health risk message. This is because the significance (2-tailed) was <0.5% before and >0.5% after. This means that the knowledge increased after message exposure, see Table 6.7

Table 6.6: the mean difference of knowledge within between users and non-users before and after message exposure

Group Statistics					
Use		N	Mean	Std. Deviation	Std. Error Mean
knowledge before	User	100	16,47	4,409	0,441
	Non-user	100	14,78	6,701	0,670
knowledge after	User		13,93	5,090	0,509
	Non-user		13,50	7,531	0,753

Table 6.7: Independent Sample Tests for knowledge before and after message exposure

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Knowledge before	Equal variances assumed	7,688	0,006	2,107	198	0,036	1,690	0,802	0,108	3,272
	Equal variances not assumed			2,107	171,202	0,037	1,690	0,802	0,107	3,273
Knowledge after	Equal variances assumed	4,180	0,042	0,473	198	0,637	0,430	0,909	-1,362	2,222
	Equal variances not assumed			0,473	173,824	0,637	0,430	0,909	-1,364	2,224

6.4. Perceptions of Hubbly Bubbly smoking

The second objective of this study was to examine the University of Limpopo students' perceptions of HB smoking.

In order to find out how participants perceived HB smoking, users and non-users were provided with the items related to perceptions in which they stated whether they Strongly Agree, Agree, Strongly disagree and disagree. The results are presented in the tables 6.8 and 6.9 below.

Table 6.8: Hubbly Bubbly Users' perceptions

HB;	Strongly Agree	Agree	disagree	Strongly Disagree	Did not indicate	Total
Contains less nicotine than cigarettes	N=54 (30.8%)	N=81 (46.2%)	N=27 (15.4%)	N=7 (4%)	N=6 (3.4%)	N=175 (100%)
Addictive as cigarette	N=17 (9.7%)	N=28 (16%)	N=82 (46.8%)	N=45 (25.7%)	N=3 (1.7%)	N=175 (100%)
Occasional cigarette more harmful than HB	N=56 (32%)	N=61 (34.8%)	N=38 (21.7%)	N=14 (8%)	N=6 (3.4%)	N=175 (100%)
HB health risks are exaggerated	N=32 (18.2%)	N=76 (43.4%)	N=54 (30.8%)	N=10 (5.7%)	N=3 (1.7%)	N=175 (100%)
HB is harmless to one's health	N=30 (17.1%)	N=50 (28.5%)	N=62 (35.4%)	N=25 (14.2%)	N=8 (4.5%)	N=175 (100%)
HB is less addictive as cigarette	N=68 (38.8%)	N=76 (43.4%)	N=16 (9.1%)	N=11 (6.2%)	N=4 (2.2%)	N=175 (100%)
HB smoke contains harmful chemicals	N=37 (21.1%)	N=86 (49.1%)	N=39 (22.2%)	N=10 (5.7%)	N=3 (1.7%)	N=175 (100%)
HB smokers can quit easily	N=82 (46.8%)	N=49 (28%)	N=24 (13.7%)	N=13 (7.4%)	N=7 (4%)	N=175 (100%)
HB more dangerous as compared to cigarette	N=26 (14.8%)	N=33 (18.8%)	N=58 (33.1%)	N=54 (30.8%)	N=4 (2.2%)	N=175 (100%)
Water filters smoke by removing toxic chemicals	N=38 (21.7%)	N=78 (44.5%)	N=53 (30.2%)	N=3 (1.7%)	N=3 (1.7%)	N=175 (100%)
Burning coals burns cancer causing agents	N=6 (3.4%)	N=31 (17.7%)	N=92 (52.5%)	N=39 (22.2%)	N=7 (4%)	N=175 (100%)
Fruity flavoured tobacco makes HB healthier	N=15 (8.5%)	N=36 (20.5%)	N=93 (53.1%)	N=27 (15.4%)	N=4 (2.2%)	N=175 (100%)
HB smoking helps one to relax	N=40 (22.8%)	N=88 (50.2%)	N=30 (17.1%)	N=13 (7.4%)	N=4 (2.2%)	N=175 (100%)
HB smoking helps one to stay thin	N=7 (4%)	N=19 (10.8%)	N=103 (58.8%)	N=43 (24.5%)	N=3 (1.7%)	N=175 (100%)
The government should put into place policies that regulate the public use of HB	N=38 (21.7%)	N=59 (33.7%)	N=42 (24%)	N=32 (18.2%)	N=4 (2.2%)	N=175 (100%)
Society approves of HB smoking	N=30 (17.1%)	N=63 (36%)	N=55 (31.4%)	N=23 (13.1%)	N=4 (2.2%)	N=175 (100%)

Table 6.9: Hubbly Bubbly non-users' perceptions

HB;	Strongly Agree	Agree	Disagree	Strongly Disagree	Did not indicate	Total
Contains less nicotine than cigarettes	N=41 (23.4%)	N=87 (49.7%)	N=26, (14.8%)	N=10, (5.7%)	N=11 (6.2%)	N=175 (100%)
Addictive as cigarette	N=45 (25.7%)	N=56, (32%)	N=51 (29.1%)	N=11 (6.2%)	N=12 (6.8%)	N=175 (100%)
Occasional cigarette more harmful than HB	N=57 (32.5%)	N=72 (41.1%)	N=24 (13.7%)	N=8 (4.5%)	N=14 (8%)	N=175 (100%)
HB health risks are exaggerated	N=16 (9.1%)	N=32 (18.2%)	N=34 (19.4%)	N=12 (6.8%)	N=81 (46.2%)	N=175 (100%)
HB IS harmless to one's health	N=47 (26.8%)	N=40 (22.8%)	N=42 (24%)	N=25 (14.2%)	N=21 (12%)	N=175 (100%)
HB is less addictive as cigarette	N=28 (16%)	N=72 (41.1%)	N=41 (23.4%)	N=19 (10.8%)	N=15 (8.5%)	N=175 (100%)
HB smoke contains harmful chemicals	N=56 (32%)	N=66 (37.7%)	N=31 (17.7%)	N=8 (4.5%)	N=14 (8%)	N=175 (100%)
HB smokers can quit easily	N=34 (19.4%)	N=65 (37.1%)	N=39 (22.2%)	N=21 (12%)	N=16 (9.1%)	N=175 (100%)
HB more dangerous as compared to cigarette	N=24 (13.7%)	N=43 (24.5%)	N=66 (37.7%	N=23 (13.1%)	N=19 (10.8%)	N=175 (100%)
Water filters smoke by removing toxic chemicals	N=10 (5.7%)	N=72 (41.1%)	N=46 (26.2%)	N=29 (16.5%)	N=18 (10.2%)	N=175 (100%)
Burning coals burns cancer causing agents	N=13 (7.4%)	N=41 (23.4%)	N=57 (32.5%)	N=45 (25.7%)	N=19 (10.8%)	N=175 (100%)
Fruity flavoured tobacco makes HB healthier	N=27 (15.4%)	N=43 (24.5%)	N=58 (33.1%)	N=30 (17.1%)	N=17 (9.7%)	N=175 (100%)
HB smoking helps one to relax	N=18 (10.2%)	N=62 (35.4%)	N=48 (27.4%)	N=27 (15.4%)	N=20 (11.4%)	N=175 (100%)
HB smoking helps one to stay thin	N=12 (6.8%)	N=37 (21.1%)	N=78 (44.5%)	N=29 (16.5%)	N=19 (10.8%)	N=175 (100%)
The government should put into place policies that regulate the public use of HB	N=43 (24.5%)	N=63 (36%)	N=33 (18.8%)	N=19 (10.8%)	N=17 (9.7%)	N=175 (100%)
Society approves of HB smoking	N=14 (8%)	N=42 (24%)	N=57 (32.5%)	N=46 (26.2%)	N=16, (9.1%)	N=175 (100%)

The fifth objective was to determine whether exposure to HB health risk messages will influence the participants' perceptions of HB harm. The study addressed this objective by first comparing the mean difference between users and non-users using a custom table. The results show that there is a significant mean difference between the perceptions of users and non-users. It shows that non-users perceived HB to be harmful to human health than users. See Table 6.10

Table 6.10: Mean difference in perceptions between users and non-users

Perceptions			
Use	Mean	N	Std. Deviation
User	36.20	175	6.835
Non-user	40.82	175	10.636
Total	38.51	350	9.221

Within the users and non-users, independent sample tests were conducted. The results show that there is a significant difference before message exposure and after message exposure. This means that the perceptions changed after exposure to health risk message. It shows that non-users perceive HB to be more harmful. This is shown by the significance (2-tailed) score which is 0. 001% before message exposure for both groups and 0.007% for users and 0.008% for non-users score after message exposure. See table 6.11 and 6.12.

Table 6.11: Mean difference within between users and non-users before and after message exposure

Group statistics		N	Mean	Std. deviation	Std. Error Mean
Perception before	User	100	35,94	6,198	0,620
	Non-user	100	39,91	9,504	0,950
Perception after	User		42,79	7,167	0,717
	Non-user		47,10	14,248	1,425

Table 6.12: independent Sample Test for significance difference of perceptions before and after the message exposure

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Perception before	Equal variances assumed	5,606	0,019	-3,499	198	0,001	-3,970	1,135	-6,208	-1,732
	Equal variances not assumed			-3,499	170,318	0,001	-3,970	1,135	-6,210	-1,730
Perception after	Equal variances assumed	20,635	0,000	-2,702	198	0,007	-4,310	1,595	-7,455	-1,165
	Equal variances not assumed			-2,702	146,081	0,008	-4,310	1,595	-7,462	-1,158

6.5. Awareness of Hubbly Bubbly smoking health risks

The third objective of the study was to evaluate the awareness of the HB smoking health risks among University of Limpopo students.

To evaluate the awareness of health risks incurred when smoking HB, the researcher asked the participants if they have ever seen campaigns than educated about HB smoking risks (see table 6.13).

Table 6.13: Awareness of HB smoking health risks

heard/seen awareness campaigns about the health risks of HB smoking					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	87	24.9	24.9	24.9
	No	260	74.3	74.3	99.1
	Did not indicate	3	.9	.9	100.0
	Total	350	100.0	100.0	

Participants were asked whether they had seen or heard messages about health risks emanating from HB smoking. They were specifically asked to name the medium/media. Some named more than one type of medium whether mass media, interpersonal interaction or online media from which they had been exposed to the message. The results show that n=87 participants had seen/heard messages about HB smoking health risks. From those who were exposed to messages, N=27 participants had seen/heard about these risks through the interpersonal communication (friends, relatives, and nurse/doctor), n=63 participants learned about the health risks through mass communication (radio, television, newspaper, magazine, and posters). n=7 participants became aware of HB health risks through public communication (campaign by cancer organisation). Lastly, n=26 learned through

online communication (internet and social media). This information is important in this study because it can assist in explaining the rapid growth of HB smoking because of lack of awareness of its health risks.

6.6. Results pertaining hypotheses

$H_{0=}$ if users are not exposed to health risk messages about HB smoking they are unlikely to quit, while non-users will be initiated into smoking.

A custom table using SPSS was used to test the users' intentions to quit and non-users intentions to start smoking before exposure to health risk messages. The results show that before exposure to messaging n=26 users were not willing to quit smoking, while n=57 were willing to quit and n=17 were not sure if they will quit smoking HB or not. For non-users, the results show n=3 intended to start smoking HB, while n=69 did not intend to start smoking HB and n=28 were not sure if they will start smoking or not. Figure 6.1 and 6.2 present the results derived from the custom table

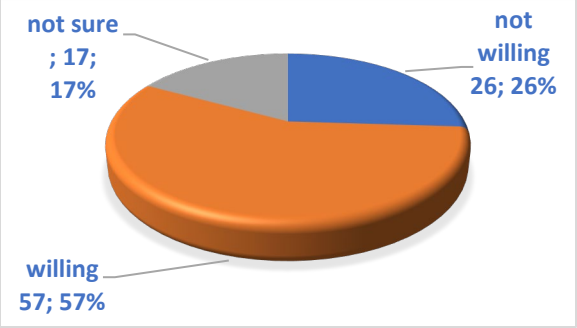

Figure 6.1 Willingness to quit before message exposure

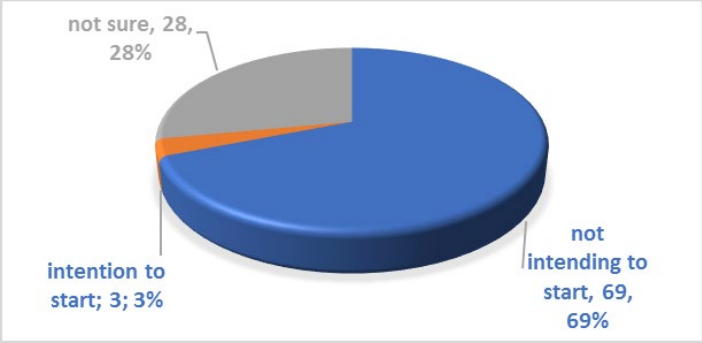

Figure 6.2: intention to start smoking before message exposure

H_1= if users are exposed to health risks messages about HB smoking they are likely to quit, while non-users will not be initiated into smoking.

The custom table was used to test users' intentions to quit and non-users' intentions to start smoking HB after health risks message exposure. The results for users after exposure to message show that n=15 were willing to quit smoking HB, while n=11 not willing to quit and n=74 were not sure if they will quit or not. For non-users, the results after exposure to health risks messages show that n=5 intended to start smoking, while n=71 were not intending to start smoking HB and n=24 were not sure if they will start smoking or not. Figure 6.3 and 6.4 presents results derived from the custom table.

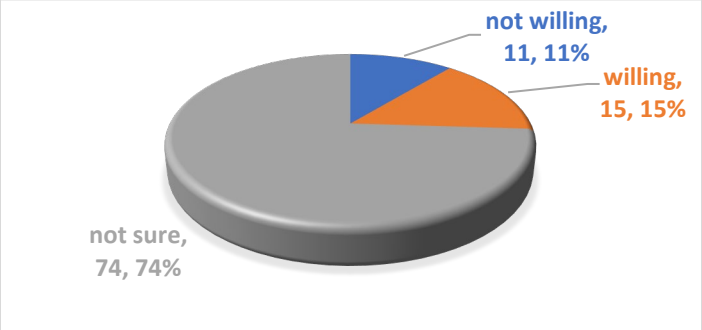

Figure 6.3: willingness to quit after message exposure

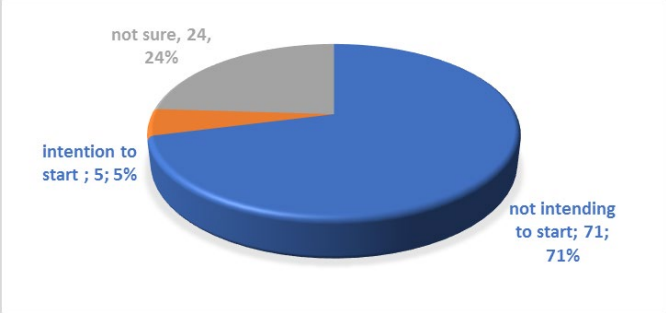

Figure: 6.4. Intention to start smoking after message exposure

6.7. Conclusion

This chapter provided the quantitative findings of this study. Demographics of the participants were provided. HB culture among the participants was provided looking at the age of HB smoking initiation supported by the reasons why participants smoke HB. Who they smoke with and how many people they were smoking with was also

established. In addition, results from the participants' experimentation of other tobacco products named by the participants were presented to provide a framework of the tobacco use among the participants. The chapter further presented the HB users' appeals in which several were mentioned. This provided a framework on how these appeals may contribute to HB smoking rapid growth among its users. The chapter presented the results of the participants' perception of HB social acceptance. The results were based on HB settings, when users' smoke HB, and the flavoured tobacco brands. The chapter also established what substances are mixed with the flavoured tobacco used on HB. The chapter presented results of non-users' exposure to HB environment, this was established to provide a framework in which HB is becoming more present in a social setting. Therefore, the results of the government putting into place policy regulations were also presented.

The chapter established the knowledge levels of HB smoking health risks among users and non-users. The results from before and after message were presented, in which the knowledge between users and non-users were established. Independent Sample Testing was used to determine the influence of message exposure within the users and non-users' knowledge. For perceptions before and after message exposure, results were presented between users and non-users' perceptions. Independent Sample Testing was used to determine the influence of message exposure within users and non-users' perceptions. The custom table was used to provide the results for intention to quit HB smoking by users and intention to start smoking HB by non-users as per hypotheses stated. The following chapter will explore the perception of social acceptance and perception of HB smoking harm qualitatively. This is to provide more details on these perceptions.

CHAPTER SEVEN

PRESENTATION OF QUALITATIVE RESULTS

7.1. Introduction

An explanatory sequential design was used whereby one data set (qualitative) provided a supportive exploration of the other data set (quantitative). After collecting quantitative data, the researcher explored the perceptions of HB smoking qualitatively. In one of the objectives, the study sought to determine the perceptions of HB smoking among the students. Therefore, the researcher explored these perceptions of harm and perceptions of HB social approval by means of focus group interviews supported by onlooker observation. Two focus groups among HB users and non-users at the University of Limpopo were conducted on the 6th of September 2018. The groups were moderated by the researcher. The study used thematic analysis to analyse the focus group interview response. Thematic analysis, according to Braun and Clarke (2006) in Maguire and Delahunt (2017:3352) “is the process of identifying patterns and themes within qualitative data”.

This study applied six steps of thematic analysis as identified by Braun and Clarke (2006) in Maguire Delahunt (2017:3355). “Step 1: Becoming familiar with the data; in this step, the researcher read and re-read the transcripts of focus group interviews. Then make notes and jot down early impressions. Step 2: Generate initial codes; Here the researcher started to organize the data in a meaningful and systematic way. This process reduced lots of data into small chunks of meaning. Step 3: Search for themes; in this case, the researcher examined the codes that were related to perceptions on health effects of HB perceptions of social acceptance. At the end of this step, the codes had been organized into broader themes that seemed to say something about research questions. Step 4: Review themes: here the researcher reviewed modified and developed preliminary themes that were identified in step 3. Step 5: Define themes: in this step, themes were refined to identify the essence of what they are about. Step 6: Writing-up: this is the end where the researcher reports the results”. Themes generated are presented in the table below.

Table 7.1: Categories and key themes of qualitative analysis

Category 1: Perception of HB harm
Key themes
HB is harmless
HB health risks
Second-hand smoking effects
Category 2: Perceived risks leading to HB smoking
Key themes
Inexpensive
Pleasure
Attract ladies
Good smell
Category 2: Perception of social acceptance
Key themes
Acceptance by parents
Sharing with community members
Availability and normalisation of HB use

The main categories and themes identified in the Focus group interviews are given in Table 13 and details are provided in the following text. The observation results will be incorporated under the same themes to support, complement or contradict with the results found in focus group interviews.

Category 1: Perception of Hubbly Bubbly harm

7.1.1. Hubbly Bubbly is harmless.

The reasons identified that reveal the perceptions of non-harmfulness of HB smoking by HB users include the non-existence of nicotine, the effects of HB are different from the cigarette ones. One respondent commented:

> "as for cigarettes it has second-hand smoking effects, if you're smoking next to someone who has asthma or synapses that person will be harmed, as for Hubbly Bubbly it does not harm people and it is not regularly smoked", Resp12 (user, male)

Invisible warning signs on HB were some of the reasons for non-users to refer to HB as not harmful. Some reasons include HB harmlessness, flavoured tobacco, water filter and fruity flavoured makes HB less dangerous. One respondent commented:

> "I am not sure…but I think the fruits make it less dangerous", Resp2 (user, female)

However, there were some HB users who pointed out the harm of HB smoking, the reasons given include, the smoke that the smoker inhales and exhales is a lot, despite its flavoured tobacco it's almost as bad as cigarette it's not worse and that people know HB is bad for one's health, but they smoke because they see people smoking it. As one responded stated:

> "I smoke Hubbly Bubbly because some of the flavours are nice but one other thing that I do agree that is almost as bad as cigarette if it is not worse, you are smoking coal you know, I think It is one of the psychological things like you know that it is bad for you but you still do it because people do it when they are having fun like it is nice to smoke Hubbly Bubbly", Resp2 (user, female)

These results are supported by observation results in which the study found that under group formation, people in groups smoked HB for more than 80 minutes as stipulated to be dangerous. It was observed at the Valentine's bash group 1 and 2, Welcome bash group 1, 3 and 4 and lastly, Fresher's ball group 2, 4, 5 and 6. See Appendices H, I and J.

In contradiction, HB non-users also perceived HB smoking to be harmful and gave reasons for such, that includes, HB is 10 times more harmful than cigarettes, HB causes lung cancer, HB has dangerous chemicals, flavours are there for smell but it is still dangerous and that smokers inhale and exhale the smoke and the second-hand smoker inhales the exhaled smoke. As one responded revealed:

> "I remember when I was in high school, we were told that Hubbly Bubbly is 10 times harmful than a cigarette, a puff of Hubbly Bubbly is like smoking a pack of cigarettes… I know I will get lung cancer, but I think Hubbly Bubbly will hurt more", (Resp7, female, non-user)

In a similar vein, most HB users have shown that HB smoking is not safe. They provided reasons that include; both cigarettes and HB are not safe because they all lead to cancer, the coal in HB is bad for lungs, passive smoking hurt non-smokers, makes one sick, give chest pains, flavours are artificial and not healthy. Some respondents stated:

> "I think people should not be smoking Hubbly Bubbly or cigarettes and if they are it's okay for recreational use…… smoking leads to cancer, passive smoking can hurt other people who don't even smoke so it's just not a good habit plus its very expensive and it just makes you sick at the end of the day", Resp2 (user, female)

> "By fruity flavoured, it's not mainly dried fruits and they made into that kind of tobacco for Hubbly Bubbly. It's just some tobacco that is being coloured and made wet just so that we can smoke, it's not healthy", Resp1 (user, female)

On the other hand, non-users also revealed the unsafe nature of HB to its smokers because sharing an HB hose with a lot of people lead to mouth infections, one can be addicted, develop cancer, breathing problems, and headache because of more smoke and that flavoured tobacco it's just to cover-up sales because it is a business. Some respondents commented:

> "Fruity flavoured tobacco it's just a cover-up for the sales because it's a business, everybody wants something that will sell well, so, I feel like they wanted it to smell different from cigarette so, they put flavours there so that it attracts several people especially young people", Resp7 (female, non-user)

> "There is tobacco before they add flavours of fruits, that tobacco is still not good for one's health", Resp8 (female, non-users)

7.1.2. Hubbly Bubbly health risks

The health effects identified to be incurred when smoking HB were lung cancer and addictive effects. Some respondents stated:

> "…it is going to damage your lungs…" Resp8 (user, male)

> "…it messes with your lungs…" Resp2 (user, female)

> "…it causes cancer in most people like lung cancer…" Resp1 (user, female)

> "…Hubbly Bubbly even if it might be addictive it is less harmful than cigarettes, Resp2 (non-user, female)

> "Smokers can be addicted and develop cancer because of smoking it", Resp12 (non-user, male)

"…Hubbly is another kind of smoking and smoking can cause cancer…" Resp9 (non-user, female)

7.1.3. Second-hand smoking effects

Effects of second-hand smoking on non-users stated included:

"…they don't feel the danger it's just something that their friends do", Resp2 (user, female)

"…they are going to smoke eventually because its fashion like, it's a trend!" Resp9 (user, male)

There were some respondents who discouraged HB second-hand smoking, and the reasons they gave are as follows:

"…because the smoke affects them", Resp3 (user, male)

"…I personally the smoke affects me, it chokes me…", Resp6 (non-user, female)

"…I feel like if you stay around people who smoke you get more of the smoke and the effects than those who are pulling it in", Resp7 (non-user, female)

"…I think it depends because there are some Hubbly Bubblies that are mixed with weed, so if you blow not everyone likes weed", Resp10 (user, "male"

"There was this other day whereby we were chilling… one person who was not smoking Hubbly Bubbly and we closed all the windows and doors. That person had an asthma attack, so it causes danger to them. We call it second-hand smoking which is more dangerous than smoking Hubbly Bubbly itself", Resp1 (user, female)

Category 2: Perceived risks leading to HB smoking

7.1.4. Inexpensive

Although users revealed the dangers of smoking HB, some users provided some factors that may contribute to HB smoking. For users, one of the reasons provided was because HB is less expensive, some respondents stated:

"HB is less expensive because you can buy one HB and use it for a long time", Resp7 (user, male)

"… HB you buy the device once and use it in many parties and bashes unlike cigarettes whereby you just go to the shop and get one more often", Resp9 (user, male)

7.1.5. Pleasure

Both users and non-users stated the reasons for smoking HB which is for fun and entertainment. Some respondents commented that:

> "it's fun to smoke HB and its entertaining", Resp2
>
> "Just having fun with my friends, it's all about creating a fun moment", Resp1 (user, female)
>
> "…you still do it because people do it when they are having fun like it is nice to smoke Hubbly Bubbly", Resp2 (user, female)
>
> "…because we are all enjoying…Resp9 (user, male)
>
> "…Some do it for fun, just to experiment", Resp6 (non-user, female)
>
> "…they just smoke for having fun with their friends", Resp10 (non-user, male)

The observation results complement the abovementioned results, such that under shared mood the study observed the pleasure that the smokers experience. The shared mood includes, dancing, too excited, it looked more fun when people as people were joining in, acting like pros showing others how to keep the hose longer in their mouth, lots of laughing, relaxed, lots of talking, singing along, dancing at the same time, lots of conversation and singing in high notes.

7.1.6. Attracts ladies

Some users revealed that they smoke HB so that they can attract ladies to come and smoke with them. Some respondents commented:

> "Hubbly Bubbly attracts ladies at the pub, so they can come to us to smoke Hubbly Bubbly with us", Resp11(user, male)
>
> "To have fun and I think as a guy I will say it attracts girls" Resp12 (user, male)
>
> "It does attract some girls…" Resp9 (user, male)

These results are complemented by the observational results in which this study found that there were ladies who were attracted to join the groups that were smoking under group formation. At the welcome bash, group 1 had 10 ladies that joined the group, see Appendix I. while at Fresher's ball, group 2 had 12 ladies who passed by and smoked HB.

7.1.7. Good smell

Some of the reasons provided that contribute to the rise of HB smoking is the good smell of its flavours, as some respondents stated:

> "…it brings about awesome smell…", Resp5 (user, male)
>
> "…it even smells nice", Resp7 (user, female)
>
> "…people say it smells nice…" Resp3 (non-user, female)
>
> "…but it smells so good…" Resp7 (non-user, female)
>
> "Hubbly Bubbly smells so good and cigarette smells very bad", Resp1 (non-user, female)

Category 3: Perception of social acceptance

7.1.8. Acceptance by parents

From the perspective of the HB user respondents, HB is socially acceptable because as youngsters their parents do not shout at them when they smoke HB unlike when they smoke cigarettes, they can smoke with their siblings at home and that people do not complain when they smoke around them as it smells nice.

> "…people do not have a problem with HB because it is not dangerous even my parents don't shout at me when I smoke it, unlike cigarettes" …Resp10 (male, user)
>
> "if your dad smokes it…you won't see anything wrong with", Resp7 (user, male)

7.1.9. Sharing with community members

For HB non-user respondents, they perceived HB to be socially acceptable because some of the parents of the smokers also smoke it, they do not see a problem when people smoke HB, they see it in every bash or party they attend, and they don't see anything wrong when people smoke it.

> "I see it in every bash or party, so it is something that we know we will find, and we don't see it as something that is wrong when people are smoking", Resp6 (non-user, female)
>
> "people who do not smoke do not have a problem, they even come to us and ask if they can smoke with us", Resp11 (user, male)

These results above are supported by the observational results in which the study found that in most of the groups observed there were strangers who were passing by and just took a hose and smoked. This was seen in all groups observed under group formation at

Valentine's bash (see Appendix H), two groups at the Welcome bash namely group 1 and group 2 (see Appendix I), and lastly at Fresher's ball, groups 4,5,3 and 4 (see Appendix J). Again, this study during the observations found there was no occurrence where a person was smoking alone.

7.1.10. Availability and normalisation of Hubbly Bubbly use

The reasons identified for the social acceptance of HB in terms of availability and normalisation of HB use include questions about what kind of party it would be without an HB, HB is always there on parties and bashes and that it's unlikely to have a party without HB. Some respondents commented:

> "When we drink alcohol we just need HB there to make us hyper-fast", Resp11(user, male)
>
> "…I mean it is what everyone would want to do probably, like let say 90% of our population are teenagers and would go for Hubbly Bubbly as it is always at the parties and bashes…" Resp5 (user, male)
>
> "What kind of a party would we have without smoking Hubbly, HB its fine" Resp12 (user, male)

These remarks are supported by what the researcher observed under behaviour that almost in all the groups observed, there were frequent smoking of HB and it was not strange to see people smoking HB. Again, during observations, the researcher also found that under the focus of attention, many smokers in many groups per bash, they focused a lot on smoking HB than other things, (see Appendices H, I and J). Also, under standard of morality it was found that smokers performed a certain standard of smoking by following certain cycles (see Appendices H, I and J), and did tricks with the smoke which they captured on pictures and videos.

7.2. Conclusion

This chapter began by explaining its purpose which was to provide supportive exploration of quantitative data. It outlined the qualitative tools which are focus group interviews and observation used to collect data for this part of the study. The chapter explained the thematic analysis steps takes when analysing data. It provided the categories and key themes that emerged from focus group interview responses during data analysis. The chapter gave a description of each key theme from the insights provided by the

respondents. The results were supported, complemented and contradicted by the observation results. Having considered this, the following chapter will provide discussion of the results by means of integrating both sets of results and in some instances supported by the existing literature identified by the researcher.

CHAPTER EIGHT

DISCUSSION, RECOMMENDATIONS, LIMITATIONS AND CONCLUSION

8.1. Introduction

Globally, HB smoking by youth has increasingly become a popular social trend and a public health issue. In this study, the researcher used a mixed-method technique to better assess youth knowledge and perceptions of HB smoking health risks. Quantitative methods were used to determine the knowledge levels regarding HB health risks as well as the awareness of HB health risks. Additionally, quantitative methods were used to determine whether health risk message exposure will have an influence on HB smoking behavior. Therefore, qualitative methods were used to give a more in-depth understanding of the perceptions toward HB smoking which are a social phenomenon that is socially constructed and subjective.

This chapter deliberates on the results of this study based on the objectives, research questions, hypotheses and theoretical framework that guides the study. A complete argument of the research results is offered in this chapter and the results from both types of results are discussed with support from the literature review that is presented in chapters two and three of the study. The aim of this study was to explore youth knowledge and perceptions towards the health risks incurred from smoking HB using mixed methodology.

8.2. Discussion of the quantitative results

The chapter discusses the two types of methods separately. It begins with the discussion of quantitative results.

8.2.1. Study demographics

8.2.1.1. HB experience

Experimentation with other tobacco products is more evident among HB users. However, most of the participants that experimented did so with cigarettes. The quantitative section

of this study highlights that most of the students started using HB at the age of 18 and above. This age corresponds to the average age group of university students. This is similar to the findings by Asfar, Ward, Eissenberg, and Maziak (2005) of a mean age of 22 years for HB smokers among university students. Most of the user participants found that HB appeals to them because it allows people of a different gender to share an experience with them.

This is consistent with the previous studies that revealed that most youth HB users were associated with the susceptibility of smoking cigarettes (Kheirallah, Alzyoud & Ward, 2015 & Jiang et al., 2016). Reports from other studies reveal that there is an increase in University students smoking HB (Mugyenyi et al., 2018). Many of the user participants found that HB appeals to them because it allows people of a different gender to share. This shows that smoking HB may have self-perceived positive psychological effects on users, including improving concentration, being a sweet way to socialize with friends, being sophisticated and fashionable.

8.2.2. Knowledge level about HB health risks

Most of the participants agreed that lung cancer is an HB health risk. However, they showed a lack of knowledge in terms of other health effects. The study found a substantial knowledge gap where a clear majority of participants had inadequate knowledge in terms of HB health risks. This is compatible with the results of, Awan et al. (2016) who found that one-sixth of participants failed to identify a single detrimental effect. This study found that most non-user participants did not know that HB can cause diabetes. This sizeable lack of knowledge of HB health risks identified in this study agrees with results from other studies. This is supported by Thabit et al. (2015) who found that the participants identified that HB causes cardiovascular diseases.

Although this study did not demonstrate a link between knowledge and HB use, this study found that amid users and non-users, users remained more knowledgeable when it comes to HB health risks than non-users. These findings may stem from the fact that users or non-users may not necessarily be eager to seek to know the health risks of HB smoking and that one may personally be at risk of detrimental consequences when they smoke HB.

8.2.3. Perceptions of HB smoking

This study found that many users and non-users perceived HB to be less damaging when compared to cigarettes. This is compatible with the previous findings in studies where it was found that most participants perceived HB to be less harmful when compared to cigarettes (Akl et al., 2013; Alvur et al., 2014; Al-Naggar & Saghir, 2011; Kakodhar & Bansal, 2013; Singh et al., 2017). The results of this study show that public health education, programs, and interventions are urgently needed to address the misperceptions that HB could be less harmful than a cigarette in order to curb the rise of HB smoking, especially among the youth. This positive association of the tobacco in HB highlights the need to assess the patterns of use of other tobacco products like cigarettes. This may assist in the formulation of messages that will be in association with all tobacco products, inclusive of HB smoking. Therefore, the examination of the health effects related to the dual-use or multi-use of tobacco products is also imperative.

It was also found in this study that many users and non-users perceive that water filters the smoke by removing toxic chemicals. The previous study by Omole et al. (2011) found that the participants perceived that water filters the smoke and remove dangerous particles during HB smoking. This study found that a greater number of users and a lesser number of non-users perceived HB health risks as being exaggerated and less addictive. These results are supported by Daniels and Roman (2013) who found that more HB users perceived health risks of HB use to be overstated and less addictive than users.

8.2.4. Awareness of Hubbly Bubbly smoking health risks

This study found that a larger number of participants were unaware of the Hubbly Bubbly smoking health risks. This is unswerving with the results of the below-mentioned studies where it was found that a great number of participants were unaware of the HB health risks (Kakodar & Bansal, 2013; Obeidat et al., 2014; Doski & Ahmed, 2016; Kumar et al., 2016). This may be because, in most health communication campaigns about smoking, cigarette smoking health risks had received more emphasis when compared to HB smoking health risks. This neglect of publicising these HB smoking health risks to the public may have been driven by the neglect of emphasising the regulations and policies towards HB smoking. Given the fact that this study was done at a higher institution of

learning, and the participants were largely students, it can be assumed that they should at least be aware of the health risks, but that was not the circumstance. However, a study by Al-Nomay and Ahmed (2015) found that most of the participants were aware that HB smoking is a hazard factor for oral cancer, periodontal illnesses, bad taste, tooth and oral tissue staining, and depraved breath.

However, what can be noteworthy about this study is that the questionnaires given to the participants acted as an eye-opener for those who were not aware of HB health risks. This on its own may have encouraged users to think about quitting habits and hinders non-users from starting to smoke. This realisation of HB health risks even if only for those who participated in this study may be useful to create a wave effect of awareness amongst other HB users and non-users. This can be done through word of mouth and through casual talks amongst peers.

8.2.5. Knowledge influence on Hubbly Bubbly smoking behaviour intentions after message exposure

Within the exposed groups this study found that among the users the knowledge mean difference decreased, which means that they increased their intention to quit smoking. In relation to these results, Anjum et al. (2008) found that the participants' HB health risk knowledge improved after a health awareness session. Although the experiment was not done within-subjects, interchangeably with Essa-Hadad et al. (2015) and Lipkus et al. (2015) it was found that knowledge was linked with the yearning to quit and that web-based programs may be a promising tool to reduce HB smoking because they have increased the participants' intention to quit smoking cigarettes.

However, smoking cessation may be made difficult because of the reasons behind smoking. These may include social reasons such as peer pressure and its social acceptability in terms of availability and access. The reasons may also include the psychological influences that HB has on its smoker like quitting HB is easier than cigarette smoking.

Therefore, it is important to implement campaigns that will disseminate information regarding HB health risks as well as motivate those who are not sure if they will quit HB

smoking and those with no interest in quitting. This may be achieved by providing support and encouragement from the significant others i.e. family, friends, co-workers, health professionals, etc. Constantly enlightening the HB users about the direct and long-term benefits of quitting can, in the long run, reduce smoking habits as they will be informed and knowledgeable about the health risks of HB. If such interventions are extensively applied to a large proportion of HB users, they have the potential to achieve vital successful quitting attempts.

Among the non-users, it decreased as well, which means that they reduced their intentions to start smoking. Although these results may show that prevention may be more successful than cessation, this study provided evidence of HB being used at home and at social gatherings and users mostly using it with friends. This may play a huge role in HB initiation among non-users. Therefore, it can be suggested that if peers smoke HB it is not unusual for their friends to also be a smoker and particularly university students during conversion from being under parent's guidance to being independent.

Non-smokers may be influenced by their peers to start smoking. This is true for this study as this study found that most users smoke because their friends were smoking, and they wanted to have fun with their friends. In this case, friends may encourage their fellow peers to start smoking. In these situations, non-users often accept their friends' offer because they do not want to disappoint their friends, or they do not want to feel left out. The glamourisation of HB use—male users are very proud to smoke HB and do so in the presence of people simply because it attracts ladies. According to the male users in this study, HB has an add-on benefit for them. This is when ladies start to smoke HB beside them, therefore, these ladies no longer criticise them for smoking HB but surround them and have a good time with them.

8.2.6. An influence of message exposure on youth' perceptions of HB harm

Within the exposed groups, after message exposure, this study found that among the mean of users' perception of harm increased. Among non-users, the study found that the mean of the perceptions also increased. That means that non-users also perceived HB to be more harmful after exposure to the message. This means that exposure to health risk messages in this regard has influenced both users' and non-users' perceptions.

Both groups appear to have been impacted by the level of risk contained in HB smoking. Therefore, it may imply that risk perception is an important basis of smoking behaviour and behavioural intention. Therefore, the increased perception of HB harm may have control over their HB use, in turn, encouraging greater attempts of quitting or increase hindrance of HB smoking initiation. The use of risk communication strategies is significant in this regard because they may provide warnings that may be active in dispiriting the youth from using HB. These strategies may focus on amending misconceptions by cumulative knowledge and beliefs about the dangers and costs of using HB even if some use it irregularly.

Messages around toxic chemicals present in HB may possibly correct misconceptions that these products are normally more harmless than a cigarette. To add to this, there is a need for the identification of warnings for HB wrapping and industry commercials that would discourage use for all people. As previous studies have found, warnings used on cigarette packs that comprise imagery had larger effects on credibility, negative brand attitudes, and intent to not start smoking, amongst many other results. Graphic warnings may be effective because they elicit a strong, negative emotional response and might complement the knowledge that individuals would have acquired around the dangers linked with HB smoking. The images make those undesirable effects seem more real and accurate.

8.2.7. Users' intentions to quit HB smoking

The study found that after the youth were exposed to messages about the health risks of HB, the majority of the user participants were not sure if they will quit smoking or not. The study found a few studies on quitting attempts of HB which found that specific labels on HB devices, more detailed smoking cessation interventions specific to HB may increase quitting attempts for HB smoking (Islam et al., 2016; Jawad et al., 2015; Wright et al., 2016). There may be a lack of awareness campaigns that provide warnings about harm incurred when smoking HB. Most participants were unaware of HB smoking health risks which suggest that that the invisibility of these HB health risks on campaigns that combat smoking leaves a gap in communication, with few or no campaigns that address their health effects, especially since the smoking of HB is increasing. Although this study found

that once-off exposure to messages did not convince the users to quit, it is possible that repeated exposure could be more effective.

Therefore, the development of cessation programs for HB smoking, both behavioural and psychological is important. This may assist in providing a wide range of behavior change techniques that are relevant to supporting HB smokers to quit. This may also assist in carrying out an assessment of readiness to quit of previous attempts, therefore, facilitate the process of identifying barriers to cessations. Hard-hitting/fear appeal messaging is found to be more effective in quitting cognition and behaviour (Brown et al., 2014; Riley et al., 2017; Durkin et al., 2009; Langley et al., 2013; Rigotti & Wakefield, 2012; Farrelly et al., 2012; McAfree et al., 2013).

There may also be cumulative awareness of the ills of HB smoking and advantages of quitting and relapse prevention and in doing so, sustaining ex-smoker status. This will be accomplished by offering information on the pros and cons of quitting and not quitting. In terms of relapse, information on relapse prevention should also be provided. These reversion prevention programs need to target health hazards of HB use to enlighten former users about the risks and consequences of using the product.

8.2.8. Non-user's intention to start smoking HB

This study found that after exposure to messages about health risks of HB, the majority of the non-user participants had no intention to start smoking HB. The results agree with the findings on the general use of tobacco by Subramaninan et al. (2015) who found that preventing smoking initiation at an adolescence stage is better than cessation. It is advisable to denormalise smoking (Upton et al., 2014). There also lies a greater opportunity for tobacco control interventions that can motivate the deterrence of experimentation or development to advanced smoking levels (Pierce et al., 2012). Campaigns reported to be effective in youth smoking prevention were identified by Farrelly, Healton, Davis, Messeri, Hersey and Haviland, 2002; Holtgrave et al., 2009; WHO., 2013 and Jepson et al., 2010.

Therefore, exposure to health risk messages may have an influence on their future intentions of starting to smoke HB. The prevention of smoking is, therefore, more effective

than encouraging cessation, which is more difficult. It is therefore advisable for campaigners to create messages that focus on preventing future smokers while working on cessation of current smokers.

The findings in this study express a greater prerequisite for education or awareness on health hazards of HB smoking use amongst non-users with special emphasis on the current youth users, to promote HB use prevention and curb HB smoking initiation among university students. Among these non-users, social acceptability can be associated with the intention to use HB. It was found in this study that there was a greater perception of the social acceptability of HB.

These findings indicate that the participants are in support of normative belief when most of them indicated that society approves HB smoking. Therefore, among both users and non-users, these results may predict the intention of HB use in the future. Social acceptability may also be linked with the findings of this study where it was found that most HB users smoke with friends and that most indicated that HB is a sweet way to socialise with a friend; therefore, here social reasons come into play. Therefore, exploring the peer-to-peer prevention initiative may be advantageous given the value positioned on social influences amid university students. Understanding intention to use HB and along with assessments of instigation and use may contribute to the achievement of present and imminent tobacco control efforts on university campuses.

8.3. Qualitative results discussion

This part of the study focused on the perceptions of smoking HB, as well as the perception of HB social acceptance. To better understand the perceptions towards social acceptance of HB, the study conducted observations to confirm the presence of HB at social gatherings. This observation was done at students' bashes. This activity assisted this study in supporting and complementing what has been revealed during focus groups. The observations focused on the number of people per group who share an HB device, their focus of attention when smoking, their shared mood, their behaviour and the standard of morality. Understanding the perceptions towards HB harm is necessary to frame suitable prevention, cessation and policy involvements. This qualitative part of the study is particularly important for South African youth from institutions of higher learning. This is

because the use of HB is becoming the most common tobacco smoking method used and being slowly incorporated into youth's form of entertainment culture.

8.3.1. Hubbly Bubbly is harmless

Based on the findings in this study, the respondents revealed that they believed that HB does not contain nicotine and that it does not have effects like those of cigarettes. However, it has also been found that users compared HB with cigarettes and revealed that HB is more dangerous as one is smoking coal and that the amount of smoke one inhales and exhales is a lot more than that of cigarettes. It has also been found in this study that users thought of HB to be more harmful to one's health although it comes with nice flavours and HB is also worse because they add chemicals.

Some non-users also revealed that HB does not have a health warning, unlike a cigarette box where warnings are visibly clear. The lack of regulations or conformity to the general regulation available on packaging and labelling may contribute to these kinds of perceptions. Also, HB does not harm people who have asthma or synapses if one happens to smoke next to them. On the other hand, some non-users revealed that HB is less dangerous because of its fruity flavoured tobacco. Also, HB does not contain nicotine. However, some non-users revealed that HB is more harmful because the smell of flavours does not remove the danger of tobacco. Also, that HB is 10 times more harmful than a cigarette, where a puff of HB is like smoking a pack of cigarettes.

In contrast, it was found that users revealed that HB is not safe in the sense that it is bad for the lungs as one smokes coal and it can affect the lungs and can lead to cancer. Also, that some had chest pains after smoking the fruity flavoured tobacco on HB. Moreover, most non-users also revealed that HB is not safe because it is shared by a lot of people which can lead to mouth infection. Also, those fruity flavours are just a cover for the sales because it is a business, so HB is made to be different from cigarettes so that it can attract several people especially young people.

It appears to be a common phenomenon among the HB users as well as non-users to perceive that HB smoke is sifted through the water and thus is less detrimental as compared to cigarettes, as found in the quantitative part of this study. To enhance this,

commercials on the internet and the continued embracing of HB by its users on social media make this a thought-provoking task to grip. This study, however, interestingly found that some respondents, both users, and non-users seem to know that HB smoking is not safe for one's health, as they revealed that HB is dangerous despite the use of fruity flavoured tobacco.

8.3.2. Hubbly Bubbly health effects

Unlike cigarette smoking, little is known about the dangers of HB use. This study found that respondents could only identify lung cancer and addiction as the effects of HB. It seems like respondents did not know that HB can cause heart disease. While the previous study revealed that after 45 minutes of HB use, the heart rate is found to expressively increase (Aslam et al., 2014). As indicated that most respondents reported at least two HB health effects, messages should be given to HB users that stipulate that smoking HB contributes to a higher number of health effects.

It was observed in this study that most groups smoked HB for more than 45 minutes. This means that the participants in these groups exposed themselves to an expressively heart rate increase as Anjum et al (2014) noted above. CANSA (2015) reported that 20-80 minutes duration of HB use equals to inhaling smoke of 200 cigarettes. It was also observed that the practice of sharing HB hoses that may pose substantial jeopardy of transmission of communicable diseases including TB and Hepatitis. Aslam et al. (2014) stated that HB hose and the water inside the HB device can become a residence to the bacteria such as those causing TB, which can result in the blowout and transmission of the disease. The findings in this study make it clear that the lack of knowledge of HB related health risks is leaving behind a thick haze of strong misconceptions. It is therefore important to discourage issues related to social, health and aspects of HB use, with an emphasis on new ways of prevention.

8.3.3. Second-hand smoking effects of Hubbly Bubbly

This study found interesting results concerning HB second-hand smoking effects. Some respondents showed that non-users are not affected by HB second-hand smoking, while others opposed these sentiments. Notably, the existing study stated the effects of HB

second-hand smoking including wheezing, nasal congestion, and chronic cough. HB second-hand smoking can further result in exposure to risky levels of particulate matter, as well as carcinogenic polycyclic sweet-smelling hydrocarbons, carbon monoxide and nicotine (Kassem, Kassem, Liles, Jackson, Chatfield, Jacob III, Benowitz & Hovell, 2017).

8.3.4. Inexpensive

It appears that HB is a cheap hobby that youth engage in to entertain them. It is cheap because they use the device repeatedly. Here findings might indicate that there are many dominant factors that contribute to HB smoking. Similar to a study by Wong et al. (2016) who found that smoking HB is an inexpensive way to socialise with friends. Friends can also share responsibilities of buying HB accessories separately such as one buying flavours and the other buying coal etc. They then come together and put it together and smoke. Azodi et al. (2017) also found that low cost which makes the materials of HB relatively available contributes to the rise of HB smoking as a cheap group recreational activity to engage in with friends.

Several studies that are intended at dropping tobacco use worldwide have revealed that cumulative taxes on tobacco products can be used as a tobacco regulation tactic (Chaloupka, Yukekli & Fong, 2012; Van Walbeek, 2003; Whitehead, Brown, Riches, Rennick, Armour, McAteer, Laird & Reid, 2018) if this strategy is well executed. For HB, high prices on all its accessories not only on flavoured tobacco may greatly reduce its use.

8.3.5. Pleasure

The study found that most of the users smoked HB because it is fun and it is entertaining, these sentiments were also revealed by non-users who gave their thoughts around the reason people smoke HB. The study observed these sensations and are supported by Yang (2013) who found that young age is a life stage occupied with fantasy, pleasure, mystery, and solitude. Therefore, these pleasing relaxed sensations can have an impact on the increase of HB use. This can be to such an extent that respondents believe that it has a useful purpose as a social activity that they can engage with friends. Therefore, assigning a positive value to HB smoking as a behavior sets the stage for rapid use. It

seems that HB smoking has become a situational norm and has predisposed and inspired many who belong to the same social group to adopt the behaviour.

These findings may mean that social norms approach should be used to discourage the growth in the HB smoking trend. Therefore, social marketing interventions may be effectively used to reduce or promote quitting smoking among university students. In terms of inexpensiveness, this study found that respondents state that they indulge in HB smoking because of its cheap hobby as you buy one device collectively and use it on repeated occasions. This may imply that when smokers go out with their friends, they would choose a group entertainment and that hobby will be affordable and shared amongst each other. It was also found in this study that smoking HB brings fast hype during alcohol consumption, the smoke doesn't choke, and it doesn't leave an after taste like a cigarette. For HB non-users, HB is less harmful than cigarettes and it has a good smell.

Many people still hold the misconceptions that HB is less harmful because the tobacco is fruity flavoured. This on its own may be the contributing factor in the rise of HB smoking among the public. This means that these perceptions are deeply rooted in society to an extent that reversing these perceptions leaves much to be desired.

8.3.6. Attracts ladies

From male HB users' respondents' perspective, they smoked HB because it attracts ladies to come and smoke with them. As observed and found that there were ladies in those groups who came to smoke HB. For men, it may not just be an issue of entertainment and joy, but partly a functional habit that makes them attractive to the ladies. Therefore, in the quantitative part of this study it was found that few people revealed that they smoke HB in solitude.

HB has become a hobby that shows up in most gatherings. HB seems to make people happy. This feeling of happiness is not only due to HB smoking but also because HB necessitates men to sit next to ladies, which they seem to enjoy as observed under shared mood. Therefore, this collective happiness resulting from the interaction between guys and ladies while smoking HB encourages other people who have never smoked HB to

give it a try because the happiness makes them think that HB is socially desirable and they can smoke it if other people smoke it.

When curious people arrive at social gatherings, where the atmosphere is filled with thick smoke, fruity flavoured tobacco smell, laughter, joy, music, dances and ladies, they are encouraged to try HB. Here the motivating factors would be the abovementioned brought by HB.

8.3.7. Good smell

It is known that the re-emergence of HB was coupled with flavoured tobacco that has a pleasant smell and plays a crucial role in promoting HB smoking among the youth. Consistent with previous studies who found that many are drawn to HB as a method of tobacco smoking because of the sweet-smelling, smooth smoke and the various flavours of maassel (Jawad et al., 2015; WHO, 2015; Vilanti, et al., 2017; Sutfin et al., 2014; Rastam et al., 2004). Nakkash, Khalil and Afifi (2011) found that tobacco documents pointed out sensory characteristics like taste and smell as features manipulated by worldwide tobacco companies to continue to lure consumers.

In this instance, considering what inspires people to smoke such as the sensory qualities described in the findings of this study may assist in shaping anti-smoking messages. Campaigns should be united with market regulations to stop the production of new flavours.

8.3.8. Acceptance by parents

The study found that most of the participants agreed that HB is socially approved. This is complemented by focus group interview responses where it is revealed that people do not have a problem with HB smoking and parents don’t shout at them when they smoke HB as they do when they smoke cigarettes. The social approval of HB smoking is driven by the presence of HB in social gatherings in which the study found that the majority used it in clubs, restaurants, parties, and bashes. Hence, this study conducted observations on students’ bashes.

Another characteristic of the results in this study is that some user respondents smoked because their fathers smoke HB and that they can smoke with their siblings. As previous

studies pointed that family members are seen smoking together at home, which probably makes HB habit more acceptable and easy-going (Kakodkar & Bansal, 2013; Daniels, 2012; Anbarlouel et al., 2018; Joveini et al., 2016; Bejjani et al., 2012; Urkin et al., 2006). This instance alone leads to the spread of HB smoking among the youth. It is apparent that when something is tolerable for adults in the families, it may simply be extended in the community and becomes a fragment of the normal social behaviour of the youth. However, more research is required to prove this finding.

8.3.9. Sharing with community members

Regarding social approval, the study found that the majority preferred flavoured tobacco. During the focus group interview, the respondents revealed that the youth smoke HB because it smells nice and it has flavours that smell like fruits. The culture of sharing HB may contribute to the blowout of communicable diseases owing to the continuous use of one or two hoses during HB sessions. It has been found in previous studies that sharing HB can fundamentally increase the risk of being infected with tuberculosis, herpes, and hepatitis, this may be caused by an allowance of commensal and pathogenic organisms to be transmitted between the different users.

The sharing of HB may contribute to it being rooted in the users' leisure traditions as it mainly occurs during parties, bashes and other social gatherings. In relation to the collective culture as Trandis (2009) states "people are interdependent within their in-groups (family, tribe, nation, etc), give priority to the goals of their in-groups, shape their behaviour primary based on in-group norms and behave in a communal way". Joveini et al. (2016) reported that HB smoking in the eastern Mediterranean is mainly a social activity that happens in groups. While Sighaldeh et al. (2018) concluded that HB smoking has been found to be a proper entertainment method with the reflection of advantages, such as gathering with friends and family members and merging relationships.

Other factors that may contribute to the social acceptability of HB may include easy access through family, friends, and storefronts such as clubs and bars. The advertising of HB on the internet and when people post videos while smoking HB may drive for HB initiation and use, among young adults.

8.3.10. Availability and normalisation of Hubbly Bubbly use

Respondents in this study seemed to have a belief that the prevalence and availability of HB use at social gatherings or at home are effective for the normalisation of HB use. Recently, in many entertainment places, HB is available to everyone, whether woman or man. If HB is considered normal by society, it will increase in use. Therefore, social problems such as HB smoking can be influenced by societal beliefs. People have never stood up against HB smoking because it may have always been referred to as a normal practice.

It was also observed in this study under the standard of morality that there was a sort of standard practice followed during smoking and people knew what to do when the HB is off and performed certain tricks with the smoke. During the performance of these tricks they were taking pictures and videos of each other. These visuals may have ended up circulating on social media platforms and have lured other people to envy and start smoking HB. As Grant and O'Mahoney (2016) concluded that HB may be normalised as a pleasant activity in the online environment, presenting a contest for public health. While Primnack et al. (2012) found that websites advertised HB smoking as a harmless, entertaining, calming, "tasty" and sweet way to socialise with friends (Haddad et al., 2015). This relates to what Mihailidis and Viotty (2017) found that media spectacle in digital culture is the degree to which online communities of citizens can generate, spread, and sustain spectacle with little provision from the mainstream media.

HB has been a part of people's entertainment culture since its re-emergence with flavoured tobacco and families having never taken it seriously and most people believing it to be harmless. In recent years, the gesture of HB smoking is seen as classy and glamourous for young adults and teenagers. Since HB can create a feeling of physical and psychological dependence, as observed, people seemed to be enjoying it more when they smoked in groups. It may also draw the person towards addiction to other substances such as marijuana and other opium drugs like nyaope as it is found that HB users use it concurrently with marijuana and nyaope in the quantitative part of this study. Therefore, maintaining the health of the society, the culture of not using HB should be vital.

8.4. Policies and regulations

The study found that most of the participants agreed that the government should introduce policies and regulations that are designed specifically for HB smoking. This resulted from the Department of Health's (2018) draft for control of tobacco products which stipulated that there should be a policy that limits in-door smoking in public areas, which included HB smoking. However, HB equally occurs in outdoor areas such as bashes. During the observations, the researcher observed certain groups at bashes where there was more than one HB device and the smoke-filled the atmosphere.

That means that those who were not smoking second-hand smoked. This is supported by the results from this study in which the majority of non-users were exposed to HB smoking during bashes and were exposed more than three times. This is supported by the WHO's Study Group on Tobacco Product Regulation (2015) that urged for public health initiatives to teach health professionals, regulators and the public about the hazards of HB smoking as well as high levels of second-hand exposure.

8.5. Recommendations

Looking at the results found using the experiment, there should be a development of prevention and cessation programs that will address the health hazards of HB smoking. Health communication campaigns that will deglamourise HB smoking might assist in decreasing the social tolerability of HB among the youth and avert the desire of HB use by non-users. Health professionals should unceasingly monitor HB use and comprehend that HB use may encourage cigarette smoking behaviour in terms of nicotine dependence among the youth. Looking at the current generation where youth spend most of their time on the internet, there should be the development of campaign messages that will circulate on the internet, especially social media platforms.

There should be risk warning labels on HB devices because it was found that in most cases people found the HB already prepared and the tobacco-box threw away. On designing campaigns, outlining on communicable disease transmission through sharing HB should be emphasised, especially because they share HB hoses with strangers. And this can lessen the peer pressure on some youth. When designing campaigns, the culture

behind HB smoking should be kept in mind to avoid conflicts between the culture and messages disseminated to the public. The fear appeal graphics and messages should be aggressively used on campaigns so that at least among some youth the perceived severity of smoking HB will outweigh the perceived benefits.

8.6. Limitations

It should be noted that the researcher is not a health professional rather a student of communication studies. Under the field of communication studies, research has been conducted about health communication aspects including knowledge and awareness of health-related problems in order to inform health communication media campains. Furthermore, most respondents were non-users who they were talking about the use of HBs. Therefore, more studies should be conducted, which solicit answers from HB users. The study was conducted in a rural area, therefore results from an urban area may differ.In addition if the study is replicated in other rural areas of South Africa, results may differ because human behavior is not homogenous. Therefore, there is need to design and implement health communication campaigns that will deliver messages about the health effects of HB on human health specifically for rural areas. However, HB exists in different forms of devices, many different flavours and the preparation processes also differ—with their own antiquity and methods of smoking. Such aspects on their own are more likely to influence the HB effect on human health, perceptions, and knowledge linked with its use and health effects as well as the possible campaigns to reduce or prevent its use. Given the relative scarcity of literature about knowledge and perceptions of HB health risks in rural areas in South Africa, in this study, the literature was merged across from studies done in urban areas and other countries.

Moreover, the health risk message used was general and adopted from CANSA, and maybe the use of message adapted to the targeted audience or designed specifically with young black students before exposure.

8.7. Conclusion

The results of this study reveal inadequate knowledge in terms of HB health risks among the youth. It also confirms the false perceptions that HB is harmless and non-addictive as

compared to cigarettes. It also highlights the alarming rate of concurrent use of HB with other substances. In the experiment, between HB users and non-users, lung cancer as the HB health risk was identified by most participants and both groups had negative perceptions towards HB smoking and its health risks. Within the users and non-users, after exposure to HB smoking health risk messages, there was a change in knowledge score. In terms of perceptions, within users and non-users, after exposure to message exposure, they perceived HB to be more harmful. The exposure to messages influenced the youth's HB smoking behaviour intentions as the hypotheses revealed the intention to quit by users and intention not to start HB smoking by non-users.

However, the qualitative part of this study revealed that ther were some respondents who perceived HB to be harmless stating that it maybe because of the invicibility of health warning on HB accessories. The study found that respondents did note the effects of second-hand smoking as some HB non-users revealed that the smoke chokes them and that non-users usually inhale more smoke than users. The study also found that HB is perceived to be socially acceptable since some respondents revealed that they do not see any problem with smoking HB and their parents approve it and not shout at them. The availability and normalisation of HB smoking was also revealed to be another factor that drives social acceptance of HB as revealed by some respondents that what would a party be without HB. This was also supported by observation results as seen by the researcher that there were HB available in those bashes observed. The study also revealed the pereceived risks that may lead to HB smoking that include pleasure, attrats ladies, inexpensiveness and good smell. These was supported by observation where it was found that ladies were joining groups which smoked HB.

Through campaigns, campaigners need to engage with the overall population and the media should engage more in speaking about HB and its health risks. This is particularly true for youth and anyone who networks with young people, given the high and cumulative commonness of HB in this age group, especially those in institutions of higher learning. They use HB during parties, bashes and when they go out to clubs and restaurants. To preserve the quality of health information provided to HB users and non-users and the public at large, it is important to be aware of the culture behind HB smoking and different

forms of HB and the fact that fruity flavoured tobacco used in HB are doubted any 'healthier' than any tobacco types like cigarettes, given their measured toxicant content.

8.7.1. Future studies

The research potential for HB is large, and researchers should continue to discourse areas where there is a lack of insight such as growing trends (particularly youth prevalence), short and long-term health effects and smoking prevention and cessation interventions. Researcher partnerships should be stimulated to maximise resources and generate ideas, particularly as the available evidence in the literature is falling behind the current popularity of HB. Exploring social media for messaging about the consequences of smoking HB may be significant in this case as many young people spent most of their time online. Furthermore, exploring if the behaviour is acceptable by adults in families and may result in the smoking of HB in communities and therefore become part of normal social behaviour.

8.7.2. Regulations of Hubbly Bubbly devices

Although the draft on tobacco control in South Africa has included HB as one of the types of tobacco, the following should be considered; HB legislations should be placed on a parity with cigarette smoking. That comprises of no longer excepting HB cafes from indoor smoking bans. This will, hypothetically, decrease the occurrence of carbon monoxide poisoning in the short term and the risk of heart disease in the long term, including the ills that are linked with side-stream smoke and exhaled smoke to both smokers and non-smokers alike. Hubbly Bubbly should be taxed in the same way as other tobacco products to discourage purchase, and packaging that is non-compliant with the Framework Convention on Tobacco Control should be banned.

As profitable HB venues do not traditionally show HB tobacco packages to their clients (the pipe is offered pre-packed with tobacco), noticeable graphic health warnings should be noticeable on the device and related accessories. Finally, HB café owners should be made aware of such legislative necessities. On the balance of probabilities, it would seem

wise to contemplate precautionary tactics and to put into practice the outlined recommendations before HB does, indeed, become a public health urgency.

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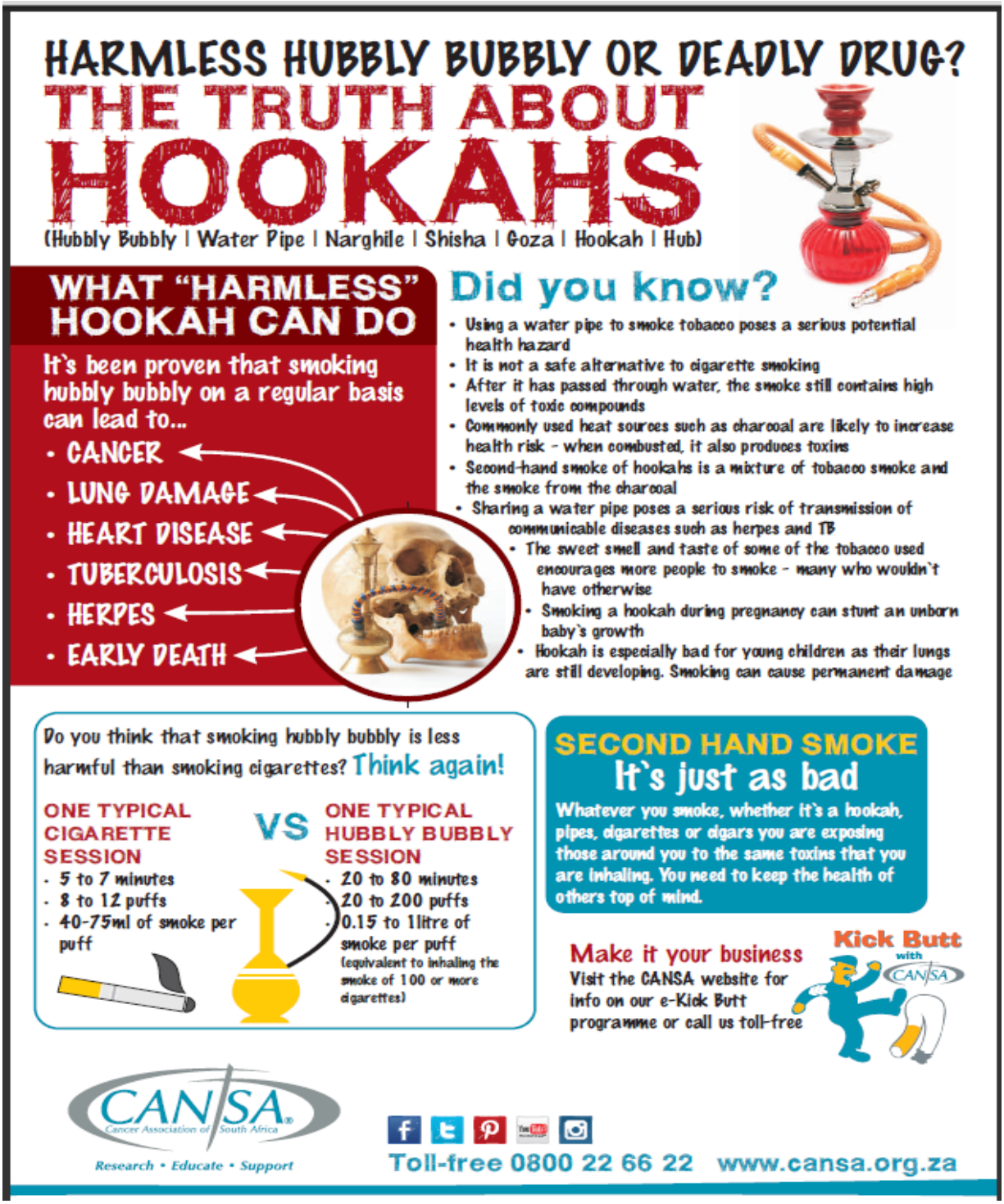
APPENDIX A: HB health risk poster by CANSA (2015)



APPENDIX B: Questionnaire one

Dear participant

My name is Aniekie Mohlabine Motloutsi, currently registered for an MA in Communication studies. I am doing a research study in Health Communication. Thank you for agreeing to take part in this study.

- Your participation is voluntary with no remuneration.
- This questionnaire should only take you 15-20 minutes to complete.
- Be as honest as you can when answering the questions.
- Be assured that the information you provide for this study will be kept in the strictest confidentiality and only be used for academic purposes.

Regards

Ms. Motloutsi AM

Please note that Hubbly Bubbly will be abbreviated to (HB) in this questionnaire

SECTION A: Demographics and University characteristics

Please answer the following by making a cross (x) in the appropriate block or blocks.

For example

The sky is

White	
Blue	**X**

1. Gender

Female	
Male	

2. Age group

17-20 years old	
21-23 years old	

24-26 years old	
27-29 years old	
30+	

3. Which faculty are you enrolled at?

Humanities	
Health Sciences	
Science and Agriculture	
Management and Law	

4. Which level are you attending?

1	
2	
3	
4	
Postgraduate	

SECTION B: Tobacco experience

5. How often do you smoke tobacco?

Never	
Everyday	
Once a day	
Once a week	
Once a year	

6. What forms of tobacco did you first experiment? (please choose all appropriate options)

Bidis	
Cigarettes	
Cigars	
Dissolvable tobacco	
Hubbly Bubbly	
Electronic cigarette	
Kreteks	
Pipe	
BB	
Chewing tobacco	

Snuff	
Other, please specify……..	
Not applicable	

7. If user, what forms of tobacco do you currently use? .....

SECTION C: <u>Hubbly Bubbly</u> smoking experience

8. Have you ever smoked the Hubbly Bubbly?

Never	
Once a year	
Once a month	
Once a week	
Everyday	

9. If never, have you been in an environment where people are smoking HB?

10. In which environment were people around you smoking the HB?

At home	
At the club/restaurant	
At the Bash	
At a parties	
At a friend's house	
All of the above	
Not applicable	

11. How many times were you exposed to people smoking the Hubbly Bubbly?

Once	
Twice	
Three times	
More than 3 times	

12. At what age did you start smoking the Hubbly Bubbly? .....

13. When do you smoke the Hubbly Bubbly?

Family home	
In a social setting-party/bash/restaurant/café/bars	
With alcohol consumption	

After meals	
Other, please specify……	
Not applicable	

14. How many people do you smoke with?

Two	
Three	
Four	
More than five	
Not applicable	

15. Who do you normally smoke with?

Friends		
Family		
Strangers		
Alone		
Other, please specify…….		
Not applicable		

16. How long per session do you smoke?

15 minutes	
30 minutes	
45 minutes	
More than 1 hour	
Not applicable	

17. Where do you smoke the Hubbly Bubbly?

At home	
At the club/restaurant	
At the Bash	
At a parties	
At a friend's house	
All of the above	
Not applicable	

18. Why do you smoke the Hubbly Bubbly? Please provide the reason……

19. Which brand do you prefer?

Royal	
Soex	
Al Fakher	
Amaren	
Starbuzz	
Other, please specify……	
Not applicable	

20. Which other substance have you used concurrently with the Hubbly Bubbly?

Marijuana	
Nyaope	
Cocaine	
Nothing	
Other, please specify ……	
Not applicable	

21. Why have you used it concurrently with such a substance? Please explain……

22. Society approves Hubbly Bubbly smoking

Strongly Agree	
Agree	
Strongly Disagree	
Disagree	

SECTION D Hubbly Bubbly smoking behaviour

23. Do you intend to quit smoking the Hubbly Bubbly?

Not at all	
In the next month	
In the next 3 months	
In the next 6 months future	
In future	
Not applicable	

24. How many times have you attempted to quit smoking the Hubbly Bubbly?

Once	
Twice	

Three times	
Four times	
Other, please specify……	

25. Hubbly Bubbly smoking appeals to you because;

It's a new experience	
It's cool	
It's sophisticated	
It's fashionable	
It improves my concentration	
It doesn't have a health warning	
Other, please specify…..	
Not applicable	

26. If you have never smoked the Hubbly Bubby, do you intend to start smoking it?

Not at all	
In the next month	
In the next 3 months	
In the next 6 months	
In the future	
Not applicable	

SECTION E: Awareness of the smoke and smokeless tobacco health risks

27. I have heard/seen any awareness campaign about the health risks of smoking

Yes	
No	

28. If yes, where have you heard/seen the campaign about health risks smoking? (please tick all appropriate options)

Friend	
Relative	
Nurse/doctor	
Radio	
Television	
Newspaper	
Magazine	
Poster	
Internet	
Social media	
School	
A campaign by a cancer organisation	
Other, please specify……	

29. If you have heard/seen the campaign what type of tobacco health risks were discussed during the awareness campaign? e.g (cigarette, snuff, BB, etc) **……**
……

30. Hubbly Bubbly smoking is hazardous to health?

Strongly agree	
Agree	
Disagree	
Strongly Disagree	

31. I have heard /seen awareness campaigns about the health risks of Hubbly Bubbly smoking

Yes	
No	

32. If you agree, where have you heard/seen the campaign about health risks smoking? (please tick all appropriate options)

Friend	
Relative	
Nurse/doctor	
Radio	
Television	
Newspaper	
Magazine	
Poster	
Internet	
Social media	
School	
A campaign by a cancer organisation	
Other, please specify……	

33. messages will prevent non-smokers from starting to smoke the HB.

Most likely	
Likely	
Unlikely	
Most unlikely	

34. Health risks messages will assist users to quit smoking.

Most likely	
Likely	
Unlikely	

Most unlikely	

SECTION F: Knowledge of the Hubbly Bubbly smoking health risks

Questions **<u>Hubbly Bubbly smoking …</u>**	Strongly Agree	Agree	Disagree	Strongly Disagree	Not sure
35. is dangerous to health					
36. Has a significant amount of tobacco					
37. Can cause ulcer					
38. Can cause lung cancer					
39. Can cause heart disease					
40. can cause diabetes					
41. Can cause communicable disease (Tuberculosis, herpes, etc)					

42. Knowledge of the risks of smoking the HB will make me quit using it (users)

Most likely	
Likely	
Most unlikely	
Unlikely	

43. Knowledge of the risks of smoking the HB will discourage me from starting to use it

Most likely	
Likely	
Most unlikely	
Unlikely	

SECTION G: Perceptions about the Hubbly Bubbly (Please answer the following questions by marking (X) in one appropriate box)

Questions	Strongly Agree	Agree	Disagree	Strongly Disagree	Not sure
44. HB contains less nicotine than a cigarette					
45. HB is as addictive as cigarette					
46. An occasional cigarette smoking is more harmful than smoking HB					
47. HB smoking health risks are exaggerated					
48. Smoke inhaled from HB contains harmful chemicals					
49. HB smokers can quit easily					

50. HB smoking is more dangerous as compared to cigarette						
51. Water filters the smoke by removing toxic products						
52. Burning coal helps to burn cancer-causing agents of tobacco						
53. Fruity flavoured tobacco makes HB smoking healthier						
54. HB smoking helps one to relax						
55. HB smoking helps one to stay thin						
56. The government should put into place policies that regulate the public use of HB as they do for cigarette						
57. Society approves of HB smoking						

APPENDIX C: Questionnaire two

QUESTIONNAIRE TWO

SECTION: A

1. Do you intend to quit smoking the Hubbly Bubbly?

Not at all	
In the next month	
In the next 6 months	
In the future	
Not applicable	

2. How many times have you attempted to quit smoking the Hubbly Bubbly?

Once	
Twice	
Three times	
Four times	
Other, please specify……	

3. Hubbly Bubbly smoking appeals to me because;

It's a new experience	
It boasts my ego as it attracts people to me	
It's cool	
It's sophisticated	
It's fashionable	
It improves my concentration	
It doesn't have a health warning	
It's a sweet way to socialise with friends	
It's a safe and relaxing way to socialise with friends	
It's fun	

It's mature	
It's tasty	
Other, please specify…..	
Not applicable	

4. If you have never smoked the Hubbly Bubby, do you intend to start smoking it?

Not at all	
In the next month	
In the next 6 months	
In the future	
Not applicable	

SECTION B:

5. Hubbly Bubbly smoking is hazardous to health?

Strongly Agree	
Agree	
Disagree	
Strongly Disagree	

6. Messages about health risks will assist smokers to quit smoking HB.

Most likely	
Likely	
Unlikely	
Most Unlikely	

7. messages will prevent non-smokers from starting to smoke the HB

Most likely	
Likely	
unlikely	
Most Unlikely	

SECTION C: (Please answer the following questions by marking (X) in one appropriate box)

Questions **Hubbly Bubbly smoking …**	Strongly Agree	Agree	Disagree	Strongly Disagree	Not sure
is dangerous to health					
Has a significant amount of tobacco					
Can cause ulcer					

Can cause lung cancer					
Can cause heart disease					
can cause diabetes					
Can cause communicable disease (Tuberculosis, herpes, etc)					

15. Knowledge of the risks of smoking the HB will make me quit using it (users)

Most likely	
Likely	
Most unlikely	
Unlikely	

16. Knowledge of the risks of smoking the HB will discourage me from starting to use it

Most likely	
Likely	
Most unlikely	
Unlikely	

SECTION C (Please answer the following questions by marking (X) in one appropriate box)

Questions	Strongly Agree	Agree	Disagree	Strongly Disagree	Not sure
HB contains less nicotine than a cigarette					
HB is as addictive as cigarette					
An occasional cigarette smoking is more harmful than smoking HB					
HB smoking health risks are exaggerated					
Smoke inhaled from HB contains harmful chemicals					
HB smokers can quit easily					
HB smoking is more dangerous as compared to cigarette					
Water filters the smoke by removing toxic products					
Burning coal helps to burn cancer-causing agents of tobacco					
Fruity flavoured tobacco makes HB smoking healthier					
HB smoking helps one to relax					
HB smoking helps one to stay thin					

The government should put into place policies that regulate the public use of HB as they do for cigarette					

APPENDIX D: focus group interview schedule

1. Explain what you know about Hubbly Bubbly
    1.1. What motivates you **(users)**/ people **(non-users)** to smoke the Hubbly Bubbly?
    1.2. Why are you not smoking HB **(non-users)**?
2. How do you compare Hubbly Bubbly to regular cigarettes?
    2.1. Is Hubbly Bubbly smoking safer than cigarette smoking? Yes/no
    2.2. If Yes, why?
    2.3. If No, why?
3. Describe the health effects(risks) that the Hubbly Bubbly have on human health
4. Do people feel safer when smoking fruity flavoured tobacco such as in Hubbly Bubbly? Yes/no
    4.1. If Yes, why?
    4.2. If No, why?
5. Do you **(non-users)**/people **(users)** feel endangered when people smoke the Hubbly Bubbly next to them? Yes/No
    5.1. If Yes, why?
    5.2. If No, why?
6. Do you think fruity flavoured tobacco on Hubbly Bubbly makes it healthier, yes/no?
    6.1. If Yes, why?
    6.2. If No, why?

APPENDIX E: Focus group interview Audio Transcripts

Interviewer: Explain what you know about Hubbly Bubbly (users)

Respondent2

In Hubbly Bubbly there is coal, flavor, you need a sheet of foil, you put the coal inside the bowl and the sheet of foil over and burn coal on top of the foil, there is water in the container, you such the pipes/hoses, you inhale and exhale the smoke.

Respondent4

One pull of Hubbly Bubbly is like 100 pulls of cigarette

Respondent8

The smoke from Hubbly Bubbly is very thick compared to the smoke from the cigarette

Respondent7

In Hubbly Bubbly they use chemicals to make Hubbly Bubbly and most the youth use liquor to replace water and there are different flavours.

Respondent9

Hubbly Bubbly make some people dizzy when they smoke it and consuming alcohol at the same time, it has nicotine, coal has nicotine

Respondent1

What I know about Hubbly bubbly is that they say it is better than a smoking cigarette but is the same to me, because they say it does not damage the lungs but if you read more into it there is a lot. And another thing with Hubbly Bubbly is different because the amount of smoke you inhale and exhale is a lot than the one of the cigarette

Respondent5

I know Hubbly Bubbly has an effect on fatty tissues found on our butts, it reduces the butts.

Respondent11

When we drink alcohol we just need Hubbly bubbly there to make us hyper very fast

Respondent12

I think from my point of view, it's just something for entertainment, we use it to entertain ourselves not to smoke as a habit

Interviewer: What motivates you (users)/ people (non-users) to smoke the Hubbly Bubbly?

Respondent1

Just having fun with my friends, it's all about creating a fun moment.

Respondent7

It is fun to smoke Hubbly Bubbly and it is entertaining

Respondent2

I smoke Hubbly Bubbly because some of the flavours are nice but one other thing that I do agree that is almost as bad as cigarette if it is not worse, you are smoking coal you know, I think It is one of the psychological things like you know that it is bad for you but you still do it because people do it when they are having fun like it is nice to smoke Hubbly Bubbly

Respondent5

It brings about awesome smell compared to cigarette, weed, and joints

Respondent11

Hubbly Bubbly attracts ladies at the pub, so they can come to us to smoke Hubbly Bubbly with us

Respondent12

To have fun and I think as a guy I will say it attracts girls

Respondent9

It does attract some girls, I smoke it just to have fun

Interviewer: How do you compare Hubbly Bubbly smoking to regular cigarettes?

Respondent5

I just said, it brings about awesome smell and it does not make one to choke/cough unlike cigarette when you are a beginner you cough. From Hubbly Bubbly you smoke continuously without having that after taste in your mouth but with a cigarette, you can smoke, and you be left with tar taste and Hubbly Bubbly taste so good.

Respondent7

Hubbly Bubbly compared to cigarettes, cigarettes are more expensive, and Hubbly Bubbly is less expensive because you can buy one Hubbly Bubbly and use it for a long time but cigarette after smoking it is finished.

Respondent3

You smoke Hubbly Bubbly occasionally and cigarette you smoke daily

Respondent1

For me, after smoking Hubbly Bubbly I feel dizzy, it gives me a bit of migraine compared to smoking cigarettes because after smoking cigarette I feel relieved

Respondent2

> I think when I smoke Hubbly Bubbly I also feel a bit light headache but as compared to smoking a cigarette I think it takes like two or three minutes to smoke cigarette and finish and you are inhaling a little bit of smoke whereas with Hubbly Bubbly I think the reason why you get so light headache is because you are pulling so much so that you get all that knockout and some people can even blow rings and they do tricks with the smoke from Hubbly Bubblies

Respondent12

> Cigarette can kill you and it harms your body while Hubbly Bubbly, it does but then the effects are different because with cigarette can kill fast, as it states on the cigarette box “smoking can kill you”, but for Hubbly Bubbly it’s not like that

Respondent9

> Cigarette contains tobacco I don’t know about nicotine but then Hubbly Bubbly does not contain a lot of tobacco, so cigarettes are harmful bur then Hubbly Bubbly is harmful “*in a good way*” and also Hubbly Bubbly you buy the device once and use it in many parties and bashes unlike cigarettes whereby you just go to the shop and get one more often

Interviewer: Do People feel safer when smoking fruity flavoured tobacco such as used in Hubbly Bubbly?

To unpack this question, the researcher asked developed sub-questions which will assist in unpacking these broad questions. The following sub-question was asked to the participants, is Hubbly Bubbly smoking safer than cigarette smoking?

respondent7:

No, because it is proven that smoking one pull of Hubbly Bubbly is equivalent to smoking 50 cigarettes.

Respondent8:

No, I don't think both Hubbly Bubbly and cigarette are safe because they all lead to cancer

Respondent5:

As I said, they reduce our fatty tissues from our bums. And it not having an effect on our mentality, but it has an effect on our fatty tissues

Respondent1:

No, it's not safe in Hubbly Bubbly we smoke coal and coal is bad for the lungs and it's like more dangerous compared to smoking cigarette, what I mean by affecting the lungs and what not

Respondent2:

No, I think people should not be smoking Hubbly Bubbly or cigarettes and if they are its okay for recreational use but I think that people should always have in mind the fact that is probably a good idea to quit soon because smoking leads to cancer, passive smoking can hurt other people who don't even smoke so it's just not a good habit plus its very expensive and it just make you sick at the end of the day

Respondent9:

Yes, because most people don't often smoke Hubbly Bubbly, it's an occasional thing unlike cigarettes whereby you just go to the shop and get one more often

Respondent12:

Yes, as for cigarettes it has second-hand smoking effects, if you're smoking next to someone who has asthma or synapses that person will be harmed, as for Hubbly Bubbly it does not harm people and it is not regularly smoked

Interviewer: Do people feel safer when smoking fruity flavoured tobacco in Hubbly Bubbly?

respondent5:

Yes, it does not have an effect on our mentality and thoughts and it does not influence our decision making compared to others like a weed

Respondent12:

Yes, because they have a taste

respondent8:

Even though we might feel safer I don't think it is healthier because we are going to smoke fruity flavoured tobacco which has colourants and add ons, whereby the raw tobacco it is just tobacco as it is.

Respondent10:

I feel like it is worse because they added chemicals and people might think it is good with those chemicals, but it is still tobacco.

Respondent1:

No, I personally don't like fruity flavours when coming to Hubbly Bubbly I prefer the other one called "*sex on the beach*" and "*fire mix*". Because for me fruity flavours they give me chest pains

Respondent2:

No, fruity flavours kind make me feel nauseous and they have an after taste. I prefer if it's something minty because it's like you are chewing gum or something like that

Respondent9:

No, I don't feel safe because the flavours sometimes get burnt and it becomes rusty when you smoke it

Interviewer: Describe the health effects that are Hubbly Bubbly have on human health.

respondent5:

Headache, too much Hubbly Bubbly, too much headache, and sore throat

Respondent7:

When you smoke Hubbly Bubbly, the next day you feel dizzy

Respondent4 said:

Can lead to low libido

Respondent8:

It is going to damage your lungs first and foremost, as I said is a given note and there is no going back. And let me just say it has some addictive effects on other people but not everyone

Respondent2:

I think that the main thing that smoking does to you Hubbly Bubbly included is that it messes with your lungs. I mean I remember reading that it makes the blood network in the lungs to the clock and that is why when people smoke they get out of breath quicker than someone who doesn't smoke. Because people who smoke are less fit than other people because your lungs are working harder to get air into your body than if you were someone who didn't smoke

Respondent1:

What I heard about health effects is that it causes cancer in most people like lung cancer and it can cause other health issues like asthma attacks and anxiety attacks

respondent9:

It doesn’t have effects

Respondent12:

I don’t know any negative effects

Interviewer: Do non-smokers feel endangered when smokers smoke Hubbly Bubbly next to them?

respondent3:

Yes, because the smoke affects them

Respondent10:

I think it depends because there are some Hubbly Bubblies that are mixed with weed, so if you blow not everyone likes weed

Respondent1:

There was this other day whereby we were chilling and there was one person who was not smoking Hubbly Bubbly and we closed all the windows and doors. That person had an asthma attack, so it causes danger to them. We call it second-hand smoking which is more dangerous than smoking Hubbly Bubbly itself.

respondent5:

No, I don’t think so, because I mean it is what everyone would want to do probably, like let say 90% of our population are teenagers and would go for Hubbly Bubbly as it is always at the parties and bashes, so I don’t think they will feel they are in danger

Respondent4:

No, I think most would just enjoy the smell, they wouldn’t even notice that they are also smoking

Respondent11:

I think it does not have an effect on them because when we smoke around them they also wish to smoke with us, they can even ask "*can we join you guys?*"

Respondent1:

People do not see the problem of smoking HB because it even smells nice

Respondent2:

I think most of it comes from the fact that if you have friends that smoke and friends that don't smoke usually the ones that don't smoke don't judge you for smoking or don't mind the fact that you smoke. So, I feel like if someone was uncomfortable it's just the matter of leaving the room but, I have never sat with someone and they are like "please stop smoking". Meaning that they don't feel the danger it's just something that their friends do

Respondent7:

People do not see the problem of smoking HB because it even smells nice

Respondent9:

No, because we are all enjoying, they are going to smoke eventually because its fashion like, it's a trend!

Respondent12:

No, because it doesn't harm those who have asthma and synapses. I can also smoke HB with my younger sibling at home, it is not a problem. What kind of party wouls we have without HB, HB is fine

Interviewer: Do you think fruity flavoured tobacco on Hubbly Bubbly makes it healthier? Why?

respondent5:

No, you cannot smoke vitamins into your system, it is impossible, you must take them in, in the form of eating

Respondent8:

I don’t think it makes them healthier or anything, because you have never seen fruits in the smoke so if you smoke something purple it does not mean it has berries in it, it is colourants, the preservatives not the actual fruit

Respondent11:

Those fruits that they do flavours with they are just for smell only not for health

Respondent2:

No, because even the flavours it’s artificial, it’s already not healthy for you. So, I don’t think any component of the ingredients that go into Hubbly Bubbly whether we are saying fruity because fruits are healthier than other things, I don’t it changes the effect and impact of smoking Hubbly Bubbly

Respondent1

No, by fruity flavoured it’s not mainly dried fruits and they made into that kind of tobacco for Hubbly Bubbly. It’s just some tobacco that is being coloured and made wet just so that we can smoke, it’s not healthy

Respondent9:

No, it just makes the Hubbly Bubbly easy to smoke and the smoke to smell flavoured

Respondent12:

I think the reason is to make it tasty

Hubbly Bubbly non-users interview responds

Interviewer: explain what you know about Hubbly Bubbly

Respondent2

What I know about Hubbly Bubbly is like a kettle and it has pipes that people use to smoke, and they use water, charcoal, and flavor and sometimes they add weed

Respondent1

I know they use charcoal and water to make the smoke not to be strong and to lessen the damage the smoke can have on people and it can be used by many people

Respondent7

What I know about Hubbly Bubbly is mostly very commercial a lot of people use it because people feel like it is not addictive neither is it harmful to the human body

Interviewer: why are you not smoking HB?

Respondent5

Since I don't know much about it I just thought if I smoke it I will get cancer

While respondent2:

I don't know it is just a decision I made not to smoke

Respondent1:

I don't know but I don't smoke hubbly

Respondent6:

I don't have a specific reason why I don't smoke it

Respondent7:

I don't know

Respondent3:

Hubbly Bubbly is interesting, and people say it smells nice but according to me it doesn't smell nice as I thought so I just decided not to smoke it

Respondent1:

First, its peer pressure obvious maybe stress, depression, things like that.

Respondent6:

Some do it for fun, just to experiment

Respondent5:

I think people smoke Hubbly Bubbly because it looks beautiful from outside, it doesn't even look like something dangerous, so people smoke it and it has those colours, those flavours, maybe that is why they smoke it

Respondent7:

It's a family thing if your dad smokes it obviously you don't see anything wrong with it. I think people just smoke it and it smells so nice, likely honestly, I don't smoke it, but it smells so good, so people don't think it is harmful

Interviewer: How do you compare Hubbly Bubbly smoking with cigarette smoking?

Respondent7:

I remember when I was in high school we were told that Hubbly Bubbly is 10 times harmful than a cigarette, a puff of Hubbly Bubbly is like smoking a pack of cigarettes. So, if I compare I will say if something looks good it doesn't mean it is good, so, it smells nice, but I will prefer smoking cigarette, yes, I know I will get lung cancer, but I think Hubbly Bubbly will hurt more

Respondent5:

I think cigarettes are more harmful than Hubbly Bubbly even myself I know on cigarette box they warn that I am going to get cancer but on Hubbly Bubbly they don't write anything so, cigarettes are more dangerous

respondent1:

Hubbly Bubbly smells so good and cigarette smells very bad

respondent2:

When you want to smoke Hubbly Bubbly you take time to prepare it, so, the cigarette you don't take time to smoke. Hubbly Bubbly is less harmful than cigarette as it contains nicotine and Hubbly Bubbly doesn't contain nicotine

respondent6:

A cigarette is easier to carry around and Hubbly Bubbly is huge, you can't take it everywhere, you can do it in the household but cigarette you can smoke it anytime, anywhere but Hubbly Bubbly, that thing is too much, just one puff is too much

Interviewer: Is Hubbly Bubbly smoking is safer than cigarette smoking?

respondent5:

Yes, I feel like Hubbly Bubbly is less harmful compared to cigarette smoking, you know why? Because Hubbly Bubbly you just put your flavor there and put that water pot down there so, Hubbly Bubbly is better than cigarettes

Respondent2:

Yes, because Hubbly Bubbly even if it might be addictive it is less harmful than cigarettes

Respondent3:

I think than Hubbly Bubbly is safer than cigarette because its ingredients are not harmful than those of cigarettes. So, I think it's safer than cigarettes

respondent7:

I will say no, Hubbly Bubbly you are sharing the mouth with a thousand number of people, remember you don't know what the mouth has in it, you can get mouth infections. Both Hubbly Bubbly and cigarettes are not safe

Respondent6:

No, it is not safe that smoke from the hubbly is just too much

Respondent12:

I think hubbly is better than cigarette because it doesn't smell bad

Interviewer: Describe the health effects of smoking Hubbly Bubbly.

respondent3:

I am not sure about any effects

respondent6:

Hubbly Bubbly smoking can cause lung cancer.

respondent5:

I am with respondent no.5

Respondent1: I am also with respondent no.5

Respondent2:

I think it can block your vocal cord a little bit

Respondent10:

It can cause cancer

Respondent12:

Smokers can be addicted and develop cancer because of smoking it

Respondent8:

I also think it can cause cancer because people are smoking it in every party and bash they go to

Respondent4:

I can cause breathing problem because the smoke from hubbly is too much

Respondent9:

Hubbly is another kind of smoking and smoking can cause cancer, so hubbly can cause cancer too

Respondent7:

I think hubbly can cause a headache because of the lot of smoke that comes from it

Interviewer: Do smokers feel safer when smoking fruity flavoured tobacco used in Hubbly Bubbly.

respondent5:

Yes, because it's a flavour you see, they think it's not harmful it's just a flavour

Respondent6:

Yes, because it smells nice and everything that goes with it maybe it destructs from the other things inside the Hubbly Bubbly

Respondent3:

Yes, because they feel like when they are smoking Hubbly Bubbly they are safer than when smoking cigarette, they feel like they are away from those diseases caused by cigarettes

Respondent4:

Yes, maybe because of the way it smells unlike cigarette that doesn't smell good

Respondent8:

Yes, they seem to enjoy it more

Respondent11:

I would say they feel safe because some refuse to smoke a cigarette with their friends but they are smoking hubbly

Respondent1:

Smokers think they are safe when smoking the fruity flavours while they will get cancer because of the tobacco chemicals

Respondent10:

I don’t think they think about the safety because they just smoke for having fun with their friends

Respondent2:

Smokers think they are safe because of the fruit smell but later in life, they will suffer the consequences

Interviewer: Do non-users feel endangered when users smoke Hubbly Bubbly next to them?

respondent6:

Yes, because I personally the smoke affects me, it chokes me. I see it in every bash or party so it is something that we know we will find and we don’t see it as something that is wrong when people are smoking.

Respondent7:

Research shows that people who are prone to smoke are people who inhale the after-effects, are the ones who are prone to diseases, so, I feel like if you stay around people who smoke you get more of the smoke and the effects than those who are pulling it in

Respondent2:

Yes, I think I am in danger because they inhale and exhale and I only inhale the smoke

Respondent3:

Yes, I feel like I am choking when someone smoke hubbly next to me, so it shows that is it also dangerous to me

Respondent8:

Yes, I read somewhere and they said the smoke from hubbly is too much and it can affect even the one who is not smoking but is surrounded by people who are smoking

Respondent12:

I do not feel like I am in danger because of the fruits in the hubbly smell nice. I don't smoke HB, but I do not see any problem when someone smokes it

Respondent4:

Yes, I am in danger because every time someone smoke hubbly next to me I have a headache the next day

Respondent1:

Yes, it is dangerous because the smoker inhale and exhale the smoke while myself I inhale that exhaled smoke

Respondent10:

Yes, even if it smells nice it has chemicals that can affect me as well

Respondent5:

I will prefer smoking HB because it smells nice

Interviewer: Is the fruity flavoured tobacco makes Hubbly Bubbly healthier?

respondent7:

No, because it's just a cover-up for the sales because it's a business, everybody wants something that will sell well, so, I feel like they wanted it to smell different from cigarette so, they put flavours there so that it attracts several people especially young people

Respondent3:

No, because the smell of these flavours don't remove the danger of tobacco

Respondent1:

No, the chemicals are still there, the smell it’s just a smell, the dangerous chemicals are still there

Respondent11:

No, the fruity flavours are just there to make it smell nicer but it is still dangerous

Respondent9:

I would not say the flavours are healthy but I won’t mind if someone smoke Hubbly next to me even if it is not good for my health

Respondent8:

There is tobacco before they add flavours of fruits, that tobacco is still not good for one’s health

Respondent2:

I am not sure about that but I think the fruits make it less dangerous

Respondent10:

I agree with respondent no.8, even when they add fruits on the flavours the tobacco remains unhealthy

APPENDIX F: Observation guide

	Name of the bash	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
Bashes observed	**Valentine's bash**						
	Welcome bash						
	Fresher's ball						
Group formation							
Shared mood							
Behaviour							
Standard of morality							

Adapted from Carroll et al (2014:1552)

APPENDIX G: Valentine's bash

16 February 2018 (Valentine's bash)	
Theme category	**Observations**
1. Group formation	**Group 1** • Between four to five minutes, the HB was smoked by one guy and the HB has two hoses. • After some few minutes, five people joined and he seems to be knowing the first 2 guys but the other 3 guys were passing by. • Later on, 1 lady joined too. And for 15 minutes she was smoking those two hoses alone. • They were standing and circled around the HB. • They smoked for 1 hour 30 minutes **Group 2** • When they switched on the HB about 8 people were waiting to smoke. • 4 ladies came and joined this group and smoke HB • Here anyone who passed by and wanted to smoke they just handed over the hose freely. • They smoked for 2 hours **Group 3** • The HB has two hoses and three guys exchanging the hoses and 5 minutes later one guy joined them. • They smoked for 1 hour.
2. Focus of attention	**Group 1** • The focus was on HB all the time, but the lady was trying to take the focus away from the HB by initiating conversations with the guys whom she was smoking with. She was doing this while holding the hose. **Group 2** • Their focus was on HB and they were more welcoming to female smokers than with males. **Group 3** • The focus was on HB and who came to smoke because they only allowed one guy to join them and it seemed like they knew the guy.

3. Shared mood	**Group 1** • The lady and one of the guys started dancing while holding HB hoses after smoking the HB for some time and they were too excited. • It looked more fun when more people came and join the group even though they left after smoking for a while. **Group 2** • They started dancing one by one while one of the guys was taking videos. • Two guys acted like pros wearing shades and they were showing the group how HB is smoked and how long they kept the hose in their mouth. **Group 3** • There were lots of joking because they were laughing and they were also yelling when they spoke to each other because of the loud music.
4. Behaviour	**Group 1** • The lady started the conversation with the guy who just arrived and joined them. • After 39 minutes of smoking, the HB went off, and the lady waited for those guys to switch it on again, then she continued smoking. • Strangers mostly the guys were coming to join this group and that lady was always initiating the conversation with those new guys. **Group 2** • They were inhaling the smoke and exhaling it inside their drink's glasses and drink the smoke with their drinks. **Group 3** • After their HB went off they continued dancing a lot for some time.
5. Standards of morality (etiquette)	**Group 1** • It appeared that they were starting from the lady and passing it to other guys until it goes back to the lady to start the cycle again. **Group 2** • There was no cycle followed on the turns of smoking. Anyone was just taking the hose and smoke. • Sometimes some smokers would hold the hose longer than others and when they pass it to others they would quickly get it back and hold it longer again.

	Group 3 • The start it from one guy and pass it to the rest of the three guys with an order.

APPENDIX H: Welcome bash

17 February 2018 (Welcome bash)	
Theme category	**Observations**
1. Group formation	**Group 1** • At first, there was only 1 guy smoking the HB and after some time three guys joined. • About 10 ladies also joined. • They smoked for 2 hours **Group 2** • Three guys were smoking the HB • They smoked for 1 hour 30 minutes **Group 3** • More than 8 guys are circling around one HB and exchanging the hoses. And 3 guys who are passing by just smoked. • 4 girls joined this group. • They smoked for 1 hour 50 minutes **Group 4** • Only four people are sharing the HB. • This group has three girls and 1 guy. • They smoked for 2 hours.
2. Focus of attention	**Group 1** • The focus is on HB and on inviting ladies to join. **Group 2** • The focus is more on the HB and they are less interested in inviting ladies or any other gender to join them. **Group 3** • The focus was on HB smoking as well as inviting ladies to join them. **Group 4**

	• The focus is on HB with and allowing two more guys to join them after some time.
3. Shared mood	**Group 1** • They were all relaxed. • A lot of talking • One guy is doing a lot of storytelling **Group 2** • A lot of storytelling. **Group 3** • They enjoyed sharing the HB and smoking as a group because the smokers in the group seemed to be more excited. **Group 4** • The mood is intense with a lot of dancing and singing along.
4. Behaviour	**Group 1** • Talks a lot. • Laughs a lot. • Frequent smoking. **Group 2** • Dances a lot. • Frequent smoking. • Laughs a lot. • One of the guys always initiates conversations. • One of the guys exhales the smoke with his nose. • The same guy took the two hoses from the two guys who were smoking in this group and smoked them alone while drinking beer. **Group 3** • Frequent smoking • They all want to initiate conversation/they want to talk at the same time. • One guy tries to make conversation with one lady who is smoking with them. **Group 4**

	• Smoke while drinking alcohol. • One of the ladies tries to make a conversation with a guy who was passing by and she dances a lot than others. • Frequent smoking. • Singing with high notes.
5. Standards of morality (etiquette)	**Group 1** • They were passing the hose very quickly because they were many and all wanted to smoke. **Group 2** • Most of the time the girls were the ones who were deciding whom to give the hose to after all the girls have smoked. • They would even have a second round of smoking before they can give the hose to the guys. **Group 3** • One of the young ladies seemed like she was showing other ladies on how to smoke and exhale by nostrils. **Group 4** • It seemed as if they were all concentrating on keeping the HB on by smoking while putting on more charcoal and adding the tobacco.

APPENDIX I: Fresher's ball

05 May 2018 (Fresher's ball)	
Theme category	**Observations**
1. Group formation	**Group 1** • This group has 6 people. • They smoked for 1 hour. **Group 2** • There are 7 people in this group who brought camp chairs with them and its mixed-gender as well but males are dominating the group. • They smoked for 2 hours. **Group 3** • There are 4 people in this group. • On this group, there are two HBs present but only a lady and a guy are smoking one of the HBs while the other people on the group are smoking the other one. • They smoked for 1 hour. **Group 4** • The appears to be one lady on this group with about 6 guys • Any guy who joins the group seemed to be in conversation with the lady before they start smoking the HB. • They smoked for 1 hour 30 minutes **Group 5** • This group has 8 people • The people in this group are approachable in the sense that it looks easier for other people to pass by and smoke. • They smoked for 1 hour 30 minutes. **Group 6** • There are 12 people in this group • They smoked for 2 hours.

2. Focus of attention	**Group 1** • The focus is on the HB but these ladies try to focus on the performers than HB. **Group 2** • In this group, they are focusing on taking live videos while smoking and pictures as well. **Group 3** • They seem to be regular with each other, so the focus is on conversations because they speak while smoking. **Group 4** • One of the guys seemed to be in charge because his attention is on changing flavours and insure that the HB doesn't go off. **Group 5** • The focus is on HB smoking and drinking and they are not even looking at the direction of the stage where the performance is taking place. **Group 6** • This group also seemed to be focusing more on taking live videos and pictures of the performances on stage.
3. Shared mood	**Group 1** • They were doing a lot of talking while passing the hose around each other. **Group 2** • They all danced at the same time. **Group 3** • They all looked excited to be around each other because when one member arrives they would show affection by hugging each other. **Group 4** • There is a lot of conversation going on between members. **Group 5** • The more they smoke the more the mood becoming intense with a lot of singing in high notes. **Group 6** • They seemed to be more excited when people join them.
4. Behaviour	**Group 1** • Frequent smoking

	• Dancing a lot **Group 2** • Becoming more energetic by singing along **Group 3** • One lady was seen to be leaving with one guy **Group 4** • They are smoking while drinking alcohol, one guy dances more than others. **Group 5** • Frequent smoking and the guys started to stop any girl who was passing by. **Group 6** • Dancing and singing along with high notes.
5. Standards of morality (etiquette)	**Group 1** • The girls were puffing a lot than the guys who were present in this group. **Group 2** • The person who was in charge first had the two hoses by himself and smoked them at the same time before he could pass it to the other person. **Group 3** • There was no sequence of smoking one person could have two round or more before the other one smokes. **Group 4** • This group used a sequence on whom should start smoking but after that, they would be confused on whom should be the last one, because many people were passing by and smoke, that, disturbed the sequence. • This allowed other members of this group to have more sessions than others. **Group 5** • They were just smoking the HB without following who started and who ended the session. **Group 6** • Some group members would hold the hose for a longer period than others.

APPENDIX J: Consent form

I, ……. (initials only), declare that I give consent to participate in this study, I understand that information disclosed will be kept private and confidential. I furthermore understand that I am under no obligation to answer any or all of the questions posed, and I am participating in this study on my own free will.

Date……...

APPENDIX K: Ethical clearance certificate

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TURFLOOP RESEARCH ETHICS COMMITTEE CLEARANCE CERTIFICATE

MEETING: 02 November 2017

PROJECT NUMBER: TREC/397/2017: PG

PROJECT:

Title: Communication, Culture and the "Glamourised" killer: Assessing youth's knowledge and perceptions of the Hubbly Bubbly smoking health risks among South African

Researcher: AM Motloutsi
Supervisor: Dr E Lubinga
Co-Supervisor: Ms J Le Roux
School: School of Languages and Communication Studies
Degree: Masters in Communication Studies

PROF TAB MASHEGO
CHAIRPERSON: TURFLOOP RESEARCH ETHICS COMMITTEE

The Turfloop Research Ethics Committee (TREC) is registered with the National Health Research Ethics Council, Registration Number: **REC-0310111-031**

Note:
i) **Should any departure be contemplated from the research procedure as approved, the researcher(s) must re-submit the protocol to the committee.**
ii) **The budget for the research will be considered separately from the protocol.**
PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES.

Finding solutions for Africa

APPENDIX L: Confirmation of Editing

CHENGETAI CHIKADAYA

Confirmation of editing

Dear Sir/Madam

RE: Confirmation of editing services

This hereby confirms that the Masters Thesis,
Communication: Culture and the "Glamourised" killer: Assessing youth's knowledge and perceptions of Hubbly Bubbly smoking heath risks at a South African University has been edited by Chengetai Chikadaya.
The thesis is by Aniekie Mohlabine Motloutsi (201300559).

CHENGETAI CHIKADAYA IS A TALENTED AND DETAIL-ORIENTED CONTENT WRITING PROFESSIONAL WITH OVER 10 YEARS OF EXPERIENCE COMMUNICATING AND EDITING TECHNICAL, CREATIVE AND ACADEMIC INFORMATION CLEARLY AND EFFECTIVELY.

For any questions or additional information, please do not hesitate to contact me.

Kind Regards
Chengetai Chikadaya

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