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**The American University in Cairo**  
**School of Global Affairs and Public Policy**

# **Egyptian Student Perceptions of Visual Warnings on Cigarette Packs.**

**A Thesis Submitted to Journalism and Mass Communication  
Department In partial fulfillment of the requirements for the  
degree of Master of Arts**

**By Hala Touta**

 **Under the Supervision of Dr. Ronnie Close**

## ACKNOWLEDGEMENTS

Reaching this far in my Masters Degree has been first and foremost by the grace of God. Beyond the spiritual, my sincerest appreciation goes to my husband Sameh Atalla who suggested I get a masters degree in the first place and has encouraged and supported me all the way, you are the wind beneath my wings. My son Rani and my daughter Maya, thank you for bearing with me, the distractions you gave me and the distractions I gave you turned to be a silver lining to what we thought was a cloud. To my mother and my idol Dr. Evonne Tadros, I now know how hard it was on you too studying for your masters with three young children. To My father Dr. Helmy Touta, Pappy, I hope you are watching from above with pride. To My amazing sisters Noha Touta and Dina Touta, I thank you both for always being there for me. Special gratitude goes to Nihal Greiss for cheering me on all the way, and to my remarkable mother-in-law Lucy Takla. I am truly grateful to my Supervisor Dr. Ronnie Close and my defense committee Dr. Amani Ismail and Professor Galal Zaki. I also thank the very special Dr. Mervat Abou Oaf and all my professors who were part of this journey.

I am forever grateful to Nesrine Serour whose heart and door were always open and to Sawsan Mardini whose kindness I will never forget. I also thank John Mounir for his time and effort.

Hanan Omary and Yousra El Sayed, my lovely friends you are very much part of this degree.

Last but not least, Aline Bahari, you made it all worth the while.

## DEDICATION

*To Dina and Emad, my fear for you runs as deep as my love, you were on my mind  
with every word I wrote.*

## **Abstract**

This Thesis examines how Egyptian students perceive the visual warnings on cigarette packs.

First the study presents some significant global and regional statistics alongside a history of cigarette manufacturing, social associations, and advertising from the twentieth century. Three theories are reconciled, namely the theories of Normative Influence, Fear Appeal, and the Protection Motivation Theory to fully capture why the Egyptian young people continue to smoke despite the disturbing graphic images that are required by law to be placed on the front and back of cigarette packs. In engaging with these theories, the study explains how the human psyche develops a protective or adverse mechanism and how an individual's self-perception largely depends upon others' perception of him/her, precisely the perception of family and peers.

Through focus group interviews, the study captures the complexity of smoking behavior while being conscientious of social, cultural and psychological factors affecting it. Finally the study proposes the themes that are found to be most effective in encouraging smoking cessation among young Egyptians.

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### **List of Abbreviations**

Centers for Disease Control and Prevention (CDCP)

Central Agency for Public Mobilization and Statistics (CAPMAS)

Framework Convention on Tobacco Control (FCTC)

Global Adult Tobacco Survey (GATS)

Global Youth Tobacco Survey (GYTS)

Middle East and North Africa (MENA)

Protection Motivation Theory (PMT)

Theories of Normative Influence (TNI)

Tobacco Advertising, Promotion and Sponsorship (TAPS)

Tobacco Health Toll (THT) World Health Organization (WHO)

## **Chapter 1: Introduction**

This thesis will study the effect of visual warnings on cigarette packs, and how they are perceived by young Egyptian students between the ages of eighteen and twenty four years. Through focus group interviews, the study attempts to capture the complexities of the smoking behavior and the underlying conflict between the cognitive perception of the dangerous health hazards of smoking, and the continuing pursuit of its pleasures. To achieve this, two theories are reconciled, namely the Fear Appeal and the Protection Motivation Theories (PMT).

Smoking health hazards are becoming well known, both smokers and non-smokers are threatened; a smoker inhales by choice a lethal cocktail of chemicals and toxins and imposes it on the surrounding non-smokers. In his article “The Cigarette Catastrophe Continues”, Dr. Robert Proctor of Stanford University states that during the last two years, Ebola has killed ten thousand people. However, during the same time period smoking has killed over ten million people. He points out that the number of deaths caused by smoking is equivalent to four full Boeing 747s crashing daily in the U.S. alone (Proctor, 2015).

According to The World Health Organization (WHO), smoking has become an epidemic worldwide in general, and in the Arab World in particular. A study by Dr. Fatimah El Awa, a regional advisor on tobacco control for the WHO, states that Egypt has the highest rate of tobacco consumption in the Arab world (Al Awa et al. 2010). Such a rise in the number of smokers especially in developing countries has been attributed to the

widespread illiteracy and a culture that associates smoking to a masculine image (Ghouri et al., 2006), (Sitrin and Bishay 2010). Moreover, the region has been at the center of vigorous advertising aiming to compensate for the losses in profit in Western countries after banning advertising for cigarettes on television and mainstream media. As the 2013 WHO Report on the Global Tobacco Epidemic states, tobacco advertising, promotion and sponsorship (TAPS) activities are expanding particularly in lower-income countries: “to capture the many potential new users in lower-income countries, the tobacco industry is rapidly expanding TAPS activities in these countries, using tactics refined and perfected over decades in high-income countries.” In 1981, Egypt took its first steps towards implementing laws and legislations following signing international initiatives proposed by the WHO aiming at reducing tobacco consumption, such as the banning of smoking in public areas, banning tobacco advertising in radio and television, increasing taxes on cigarettes, prohibiting selling to minors, and warning messages on cigarette packs (GATS report 2011).

The focus of this study is on the visual warnings on cigarette packs and how young Egyptians perceive them. Those warnings are pictures showing extreme health risks as consequences of smoking such as mouth cancer and throat cancer, other pictures depict black lungs, a smoker on a ventilator or a dead fetus and others are illustrations of gangrene or early aging. This study employs the Theories of Normative Influence, Fear Appeal and the Protection Motivation Model to shed light on factors affecting young

people in relation to their attitudes or behaviors affected by smoking advertisements. To have a better understanding of the topic, global and regional statistics, social and psychological factors that contribute to smoking behavior and attitudes are studied. A history of cigarette manufacturing, social associations, and advertising from the twentieth century is applied to gain insight into the transfer from old to new. This topic has attracted a lot of scholarly attention in recent years because of the restrictive laws implemented, advertisers shifted to other channels or indirect advertising methods that were facilitated by the new emerging social media.

In Egypt however, it was found that those laws are unfortunately loosely enforced where it is common to see people smoking in non-smoking areas. Paradoxically, it is also common sight to see minors selling cigarettes themselves on the streets, where the laws clearly state that it is illegal to sell to minors. Disturbing evidence was found in a study by Ghada Radwan et al. at the Department of Public Health, Cairo University, Egypt, where she found that in Egyptian hospitals, many medical personnel are in violation of the laws prohibiting smoking in medical facilities (Radwan et al. 2012).

The thesis uses a qualitative method in order to investigate in-depth data and employs a series of five focus group studies. Each group consists of both male and female participants between the ages of nineteen and twenty-five years old, of medium and high socio-economic standards due to the convenience of the sample. Two groups of smokers, two of non-smokers and the fifth group is a pilot study and a combination of both smokers and non-smokers. Participants were asked to express their views and feelings towards the graphic visual warnings on the cigarette packs in Egypt and how

they perceive them. They were presented with cigarette packs to give their thoughts on both the images and text warnings that cover both front and back. Also they were presented with images of pictorial warnings in Egyptian campaigns alongside others with graphic images from other countries to study if they have a stronger impact than the images they are used to seeing and the reason behind it. The data was analyzed with the findings used to identify which warnings have the intended impact and effect.

Although there are significant studies addressing tobacco use in general, the literature addressing this topic is sparse in the Arab World. A report by the Surgeon General U.S. Department of Health and Human Services, states that smoking is the number one cause of preventable death worldwide. For public awareness to be effective, the reasons why the current advertisements do not work require study and research. Previous research such as a study by Dr. Sondos Islam and Dr. Carl Johnson from the University of Southern California, suggests that there are a number of factors that affect smoking habits. The most prominent are the influence that close family members and peers who smoke have on young people around them. They postulate a positive appeal to smoking that is believed to incite smoking (Islam and Johnson 2005). The findings of such studies project that there are different social, economic and cultural factors that may negatively impact on the effectiveness of the visual warnings on cigarette packs. Academic research documents and psychology theories were employed to analyze the data collected from the focus group interviews.

## **Chapter 2: Theoretical Framework; the Image**

The definition and characteristics of a picture is a subject that brings about a lot of controversy, however, its capability to influence the human behavior is irrefutable. The idiom “a picture is worth a thousand words”—which is relatively modern, strongly implies the power of what an image can communicate in symbols and signs and its ability to affect a person’s behavior and emotions. A picture, however, is only part of the ‘greater picture’, namely the image.

According to W.J.T. Mitchell in his article “What is an Image” (1984), the word “image” embraces a large range of objects that do not essentially have the same characteristics. To make some distinction, he classifies them into different groups, each belonging to the discipline that pertains to it: pictures, statues and designs, Mitchell classifies as graphic images and designates to art history. Mirrors and projections are optical and designated to physics. Sense data and appearances are perceptual and the intellectual disciplines related include psychologists, physiologists, art historians, philosophers, literary critics and neurologists. Dreams, memories, ideas and fantasmata are mental, while metaphors, descriptions and writing are verbal images. (According to Aristotle, sense data are the “sensible forms” that “emanate from objects and imprint themselves” on our senses. Appearances are “images from the image projected by a skilled actor to those created for products and personages by experts in advertising and propaganda.” Fantasma are the “revived versions of those impressions called up by the imagination in the absence of the objects that originally stimulated them” (Mitchell, 1984).

Mitchell argues that certain special cases can only be identified as an image that falls beneath its different categories such as abstract, nonrepresentational, ornamental, diagrams or graphs if the proper understanding of the image is provided. Given that, it seems we have a rough notion of the literal sense of the word 'image', and along with that we find "a sense that other uses of the word are figurative and improper." For instance, the mental and verbal forms of an image would only appear to be questionable and metaphoric. This happens when people experience images in their heads while reading and dreaming; and thus "there is no way (so the argument goes) to check up on this objectively." Mitchell adds that even in situations where we trust others' reports of mental imagery; they are inevitably different from the real, material images and, hence, are not stable and vary from one individual to another, "if I say "green," for instance, some of you may see green in your mind's eye, but some of you will see a word, or nothing at all." Moreover, verbal images can involve either all the senses or no sensory component at all; as sometime suggesting nothing more than "a recurrent abstract idea like justice or grace or evil" (Mitchell 1984).

In his elaboration on the mental image, Mitchell claims that both the mental representation and the mental imagery, being related, stand as one of the main battlefields of the modern theories of the mind. Wittgenstein however, while attacking the mental imagery, admits that we may have "mental images associated with thought or speech," however, he believes that those images should not be deemed as more private, metaphysical, spiritual forms than real images are. His approach is to "demystify" the mental image by making it public:

"Mental images of colours, shapes, sounds, etc., etc., which play a role in communication by means of language we put in the same category with patches of color actually seen, sounds heard" (Wittgenstein, 1958).

However, because it is hard to include mental images in the same category with the physical images by getting into someone's mind to compare their mental images with the real ones, it would be a better plan to study the ways those images are put into people's heads by picturing a world in which a move of the sort would make sense. Mitchell argues that humans tend to believe the physical world would continue to exist if our consciousness ceased to be:

"Mind-that is, my mind, yours, all human consciousness-were to be annihilated, we tend to assume that the physical world would continue to exist quite nicely without us. But the reverse would not be the case: if the world were annihilated, consciousness would not go on" (Mitchell, 1958).

Yet, even though the world does not depend on our consciousness, images of the world certainly do. Thus, neither mental nor material images can exist without the human mind. If "real, material" images can only be recognized in the world by our ability to say "there" and "not there", we can then question why mental images should be considered more or less mysterious than the physical images.

"It is because an image cannot be seen as such without a paradoxical trick of consciousness, an ability to see something as "there" and "not there" at the same time" (Mitchell, 1958).

Verbal images, unlike mental images, seem to be immutable, Mitchell continues. Text and speech acts are public expressions that belong with all the different forms of representations we create, such as pictures, statues, graphs, maps, etc. Ironically,



Wittgenstein made the strongest claim yet on the propriety of the notion of verbal imagery: "a proposition is a picture of reality . . . a model of reality as we imagine it," which is a matter of ordinary sense,

"At first sight a proposition-one set out on the printed page, for example-does not seem to be a picture of the reality with which it is concerned. But neither do written notes seem at first sight to be a picture of a piece of music, nor our phonetic notation (the alphabet) to be a picture of our speech. And yet these sign languages prove to be pictures, even in the ordinary sense, of what they represent" (Wittgenstein, 1922).

Mitchell argues that the question of whether verbal images can be called images is what Wittgenstein calls "mental cramp" because, in literary discourse, the distinction suggested between figurative and actual literal expressions is entwined with the concept we wish to explicate, namely the verbal image. Literary critics define the literal language as "straight, unadorned, unpicturesque expression, free of verbal images and figures of speech" (Mitchell, 1958). Figurative language however, is what is meant by verbal images. In other words, the phrase "verbal image" can be said to be "a metaphor for metaphor itself" (Mitchell, 1958).

Addison and other eighteenth-century critics consider the verbal image (or description) as "neither a metaphorical concept nor a term for (literally) designating metaphors, figures, or other 'ornaments' of ordinary language," but as the "keystone of all language". Accurate descriptions generated from verbal expressions produce more vivid images than those produced by the objects themselves. The verbal image in the romantic and modern poetry managed to maintain its grip over the comprehension of the literary language, and the confused use of the term to literal and figurative expressions resumed to "encourage a lumping of notions such as description, concrete nouns, tropes,

"sensory" terms, and even recurrent semantic, syntactic, or phonemic motifs under the rubric of "imagery." So, the idea of imagery had to be "sublimated" and "mystified" (Mitchell, 1958).

Now, the question is not "What is an image?" rather how to transform images and the imagination that creates them into illustrious, reliable power. One way to answer such a question is to dispose the idea of the mental representation as a "Cartesian mirage." Richard Rorty argues that the concept of mental and verbal images, with all their fashions, is to be abandoned as outdated. He further elaborates that this is the "confusion of philosophy with psychology that has controlled thoughts in the West under the name of 'epistemology' for the last three centuries (Rorty, 1979). Mitchell agrees this, as a principal thrust of behaviorism, opposes the idea of knowledge being a copy of reality that remains imprinted on the human mind. Mitchell further explains that knowledge is better perceived as "a matter of social practices, disputes, and agreements," and not propriety of a specific kind of natural or mediated representation. However, there's a modern attack on the idea of mental imagery as "privileged representations" while the modern studies' main thrust is to rid the material imagery of these privileges. If we can understand how the image managed to gain its current power over humans, we may be able to retain the imagination that creates it.

Following the assumption that "the literal sense of the word *image* is a graphic, pictorial representation, a concrete, material object" (Mitchell, 1958), and that the ideas of verbal, mental and perceptual images are nothing more than improper derivations from that literal sense—it can now be the time to observe the story from a traditional point of view. Needless to say, a tradition begins with the story of man's creation "in the image

and likeness" of God. As the commentators keep on telling us, the words now translated as *image* (the Hebrew *tselem*, the Greek *eikona*, and the Latin *imagine*) are not understood in the sense of any material picture, but as "an abstract, general, spiritual 'likeness'" (Clarke, 1811). In regards to the addition of "and likeness" to "image" (the Hebrew *demuth*, the Greek *homoioosin*, and the Latin *similitudinem*) which is not understood as an addition, but rather to prevent a potential confusion between the understanding of "image" as a picture, and the intended meaning of the word which is "likeness," that carries a notion of spiritual similarity.

Maimonides, the Talmudic scholar, provides a commentary that helps us grasp the spiritual sense intended:

"The term *image* is applied to the natural form, I mean to the notion in virtue of which a thing is constituted as a substance and becomes what it is. It is the true reality of the thing in so far as the latter is that particular being" (Maimonides, 1963).

Mitchell then asks an important question: "what is spiritual likeness that's not confused with any material image" Assuming there is a difference between the two entities, for example to say that one tree or one species of trees is like another is not saying they're identical, only similar in a number of aspects and different in others. However, we can call every likeness an image; because, one tree is like another doesn't make it the image of the other. The definition of the word *image*, then, can be applied to the kind of likeness as we attempt to construct a theory about the way we see a likeness between one tree and another. This elaboration will eventually resort to some transitional or transcendental point, a mental image, an idea or even a form, providing a technique to categorize such terms. "The "origin of species" is not just a matter of biological

evolution, then, but of the mechanisms of consciousness as they are described in representational models of the mind" (Mitchell, 1958).

This is an invention of "artificial perspective" that was made to convince an entire civilization it has an erring method of representation, Mitchell believes; a mechanical and automatic system that produces truths about the mental and the material world, and claims it is only a natural representation of the way things appear to be. All supported by the Western Europe political and economic ascendance, this artificial perspective reigned over the world of representation in the name of reason, science and objectivity. Mitchell, nonetheless, claims he does not call for "facile relativism that abandons "standards of truth" or the possibility of valid knowledge," but rather a kind of relativism that uses knowledge as "a social product, a matter of dialogue between different versions of the world, including different languages, ideologies, and modes of representation" (Mitchell, 1958).

Counter-induction, meaning ignoring visible facts, as Mitchell suggests, has affected greatly the art of image making. The pictorial artist is now as much concerned with the invisible aspect as well as the visible aspect to an image. Thus, we can now never understand an image until we see what cannot be seen. As Wittgenstein puts it: "A picture cannot . . . depict its pictorial form: it displays it" and this notion of "picturing the invisible" may seem a bit less paradoxical if we remind ourselves that painters have always claimed to present us with "more than meets the eye" (Wittgenstein, 1922). And, as seen in the ancient perspective of an image as "spiritual likeness", so there has to be a primary sense in which images are understood through its invisible significance.

On the image and its relation to the word, Mitchell explains: "the dialectic of word and image seems to be a constant in the fabric of signs that a culture weaves around itself" (Mitchell, 1958). However, it is the nature of the weave and the relation of the warp and woof that vary. Culture's history lies in part in the long struggle over dominance between the picture and the language; each claims rights to a nature to which it only has access, although for a moment there, this struggle seems to ease within free exchange and open borders. Among all versions of this struggle, one has preoccupied philosophers since the origin of 'empiricism':

"the suspicion that beneath words, beneath ideas, the ultimate reference in the mind is the image, the impression of outward experience printed, painted, or reflected in the surface of consciousness" (Mitchell, 1958).

Mitchell asks why we tend to think of the relationship between images and words as a struggle for dominance. The answer he proceeds to explain is because in the world of representation, the relationship between words and the images reflects signification and communication, which is, the relation between symbols and the world, signs and their meanings. The image is a sign that pretends not to be a sign, rather as "natural immediacy and presence." The word, on the other hand, is its artificial "other" that annoys this natural presence by introducing unnatural elements into our world.

What we make out of this contest of interests between the pictorial and the verbal representation is that we historicize it and treat it as a struggle carrying the fundamental contradictions in our culture, instead of treating it as a matter of peaceful settlement under all-embracing theory of signs. The idea now is not to fix the crack between words and images, but to know the powers and interests it serves.

Mitchell points out that other philosophers like Aristotle, Freud and Marx have been intrigued by the “image” too. They mused about its depths and dimensions. In the eighth and ninth century Byzantine era, the image has been the center of controversy in the church. Disputes stemmed from the conflict between traditional idolatry practices ‘iconophile’ and reformation views ‘iconoclast’ with the latter group striving to minimize the idolization of icons and undermine its significance (Mitchell, 1984). The conflict still presides in our modern world, rendering it a subject that should not be taken at face value just as any image or icon. In his article “What do Pictures Really Want”, Mitchell says:

“Pictures are things that have been marked with all the stigmata of personhood: they exhibit both physical and virtual bodies; they speak to us, sometimes literally, sometimes figuratively” (Mitchell 1996).

A picture, he further explains, is not just the surface we see but a “face” that faces us back. Although regarded as mere objects of colors and shapes, Mitchell considers that images have the capacity to talk, “as if pictures had will, consciousness, agency and desire” (Mitchell 1996). They have a great social and psychological capability to produce new dimensions and directions when used in advertising campaigns, as if they have “intelligence” and “purposiveness” of their own, a notion that is currently considered the leading cliché of present-day visual culture (Mitchell 1996). A culture that leads us to understand the notion of “personhood” of pictures from traditional societies to contemporary. An image in traditional society embodied the human experience involved in interacting with the image. Freud, for example, personified the image and interrelated it to fetish fixation while Marx also subjectivized the image but iconized it. Both regarded it with suspicion while stipulating how human experience

dictates the manner objects in images are subjectified. This traditional stipulation still prevails in the modern-day, however the arguments raised by visual culture critics is focused on how attitudes towards them are re-functioned in contemporary societies. In his study, Mitchell displays traditional philosophy that idolizes the image, rendering it an entity with will. He compares it to views of modern-day cultural critics who regard the image as a mystery or an “enigma,” a problem that needs to be explained. Michael Fried, author of *Absorption and Theatricality*, describes how traditional culture portrays an image or a painting as almost seductive:

“a painting had first to attract the beholder, then to arrest and finally to enthrall the beholder, that is a painting had to call to someone, bring him to a halt in front of itself and hold him there as if spellbound and unable to move” (Fried 1980).

Fried’s critique is in agreement with Mitchell’s in considering an image to be feminine by default, thus not only personifying it but giving it a specific gender that concurs with the philosophy underlying it; a woman can “transfix” a beholder, so can a picture, creating what Mitchell calls “the Medusa effect.” This effect can be only temporary if the picture wants to ‘say’ more, for example the famous Uncle Sam image on U.S. army recruiting posters that has an immediate transfixing effect with the direct gaze followed by the beckoning effect of a pointing finger which urged young men to join the army in World War I. The pointing finger implies singling out, accusation and finally command after designating a duty (Mitchell 1996).

Subsequently in his critique, Mitchell attempts at tuning down the rhetoric overrating the power of the image. He ascertains that an image is indubitably not devoid of power, it is the magnitude of that power that he doubts likening it to the “power of the weak.” He

argues that critics want pictures to be “stronger than they actually are in order to give (ourselves) a sense of power in opposing, exposing or praising them” (Mitchell 1996). Mitchell proposes a different angle to the same question: “what does a picture want in terms of lack?” Meaning that what a picture wants to convey actually lies in what it lacks; using the same example of the Uncle Sam poster, Mitchell points out that the connection between him and beholders/viewers is indirect. Firstly, he is not the same age as the young men he urges to register in the army. Secondly, he is not a father but an “uncle”, the underlying message relayed is that neither him nor the sons he does not have shall fight the war he is asking others to fight and probably die in. The ‘lack’ that Mitchell denotes is the answer to his question; the picture wants to express a notion on a different level. The remoteness of the subject in the image therefore plays a role; the distant stance of the subject in the image mirrors the distant stance of the nation’s ideology from its subjects. It symbolizes a country in which a group of older men, particularly of European origin, send young men to fight the wars they choose regardless of race or color. In this case as Mitchell particularizes, the picture wants to:

“take us deep into the political unconsciousness of a nation that is nominally imagined as a disembodied abstraction, an enlightenment polity of laws and not men, principles and not blood relationships, and actually embodied as a place where old white men send young men of all races to fight their wars” (Mitchell 1996).

In a nutshell, in Mitchell’s words, “sometimes the explicit signs of desire already signify lack rather than power to command” (Mitchell 1996). In other words, what we cannot see in a picture because it ‘lacks’, is precisely what provokes our desire to pursue it giving the image certain power over us in the process. The analysis and projection of



meanings behind images is a fundamental feature of modern or contemporary cultural criticism; images should be comprehended as a sort of language (Mitchell, 1984).

Conversely, researches such as Jan Westerhoff attribute the comprehension of the informational element of a picture to two separate senses of comprehension or understanding: the picture and the perceiver. The picture gives objective information meaning that if the same picture were duplicated, the objective information would be identical in all copies. The perceiver, on the other hand, is responsible for the subjective information that differs from one individual to another depending on personal cognitive and sensory capacities (Westerhoff, 2005).

### **Chapter 3: Literature Review**

In 2008, the World Health Organization (WHO) estimated that approximately five million people died every year from tobacco related diseases worldwide, which is one death in every ten adult deaths. It has been estimated that in the next twenty to thirty years, the “tobacco epidemic” may kill up to 10 million people per year globally. This would translate to one in every six adult deaths, with an alarming 70% to 80% in developing countries alone (WHO report 2008). This takes a toll on the finances of families and governments with health plans providing treatment that could last for years to patients with smoke related diseases.

#### **3.1. Tobacco Use in Egypt**

Statistics show that the rate of cigarette smoking in Egypt has been consistently on the rise, and is now the highest in tobacco consumption in the Middle East and North Africa, indeed one of the highest worldwide (Al Awa et al. 2010). According to the WHO, half of the people who smoke tobacco die from this addictive habit. WHO studies have shown that most of those deaths are in developing countries. According to the WHO’s Global Adult Tobacco Survey (GATS), out of all deaths caused by cancer, one third are caused by smoking (GATS report 2011). The life expectancy of smokers being twenty to twenty-five years less than non-smokers (GATS report 2009). It is thus considered the number one avoidable cause of death in the world. The GATS report shows that 97.6% of Egyptian smokers understood the serious health risks and illness associated with smoking (GATS report 2009). The report states that 19.4% of the adult population smokes in Egypt, of whom 97.9% are men and 2.1% women. The Population

Council of Egypt interprets those low numbers of female smokers as a “sign of under-reporting, given the social stigma associated with female smoking” (GATS 2009). Another valid interpretation is that smoking is culturally accepted for men, they are therefore more inclined to smoke than women since it is considered a cultural taboo for them to smoke in the Arab and Muslim world (Islam & Johnson, 2005).

Judith Mackay from the Asian Consultancy on Tobacco Control, and Amanda Amos at the University of Edinburgh Medical School state that:

“Smoking prevalence is lower among women than men in most countries, yet there are about 200 million women in the world who smoke”. “Approximately 22% of women in developed countries and 9% of women in developing countries smoke, but because most women live in developing countries, there are numerically more women smokers in developing countries” (Mackay & Amos 2003).

According to Mackay & Amos, the 9% prevalence rate of women smokers worldwide is expected to reach 20% by the year 2025 unless “effective, comprehensive and sustained initiatives are implemented to reduce smoking uptake among young women and increase cessation rates” (Mackay & Amos 2003). They found this increase alarming; in numbers it would mean that there would be five hundred and thirty two million women who smoke globally by 2025.

“By 2025 there could be five hundred and thirty two million women smokers. Even if prevalence levels do not rise, the number of women who smoke will increase because the population of women in the world is predicted to rise from the current 3.1 billion to 4.2 billion by 2025. Thus, while the epidemic of tobacco use among men is in slow decline, the epidemic among women will not reach its peak until well into the 21st century” (Mackay & Amos 2003).

According to the researchers, the consequences of smoking for women are more serious than for men since it negatively impacts their children and the whole family. The international report concludes:

“The health effects of smoking for women are more serious than for men. In addition to the general health problems common to both genders, women face additional hazards in pregnancy, female-specific cancers such as cancer of the cervix, and exposure to passive smoking” (Mackay & Amos 2003).

Young people and old people are less likely to smoke than people in their prime years. The percentage of male cigarette smokers in the age group of fifteen to twenty-four years old was 20.2%, which increased to 40% for age group twenty-five to forty six. This percentage decreased significantly to 26.8% for age sixty-five and above. Individuals who have only a primary education or less were far more likely to smoke, with a rate reaching nearly 40%. This seems to suggest no difference across the Middle East and North Africa (MENA) regions in cigarette smoking. The same report found that 57.6% of ‘ever daily’ smokers (those who have smoked at any given time even if they have quit) between the ages eighteen and thirty-four years started smoking before the age of eighteen years in spite of laws and legislations banning the sale of cigarettes to minors. The percentage of under age smokers was found to be higher in Upper Egypt reaching over 60% (GATS 2009).

Manufactured cigarettes are the most popular of all types of tobacco, its consumption amounting to 16.3% of adult smokers, eight million male smokers (31.7%) and fifty-six thousand female smokers (0.2%) (GATS 2009). The Egyptian cigarette brand Cleopatra is the most popular among manufactured cigarettes reaching 84.5% while all other

brands had a share of less than 5% each. The popularity of Cleopatra brand is highest among those sixty-five years of age and above reaching 91%, and among smokers in rural areas. It is also reported to be preferred more by smokers of lower education and socio economic status. Survey results by GATS in Egypt show that 81.5% of those who smoke cigarettes on a daily basis consume from sixteen to twenty cigarettes daily. Moreover, 11.8% smoke less than eleven cigarettes while 4.8% smoke more than twenty. A habit noted for daily smokers was their inclination to smoke within thirty minutes of waking up (32.2%). Only 8.7% were reported to smoke within five minutes of waking up. No differences were found between genders, age groups, educational level or region in this category.

### **3.2. Theories of Normative Influence and Smoking**

Theories of Normative Influence (TNI) investigate factors affecting young people and their attitude or behavior where smoking is concerned. A TNI 2003 report states: “group identity based codes of conduct that are understood and disseminated through social interaction” (Rimal & Real 2003). Researchers, such as Rimal, Real, and Harbour, state that an individual develops a perception of what others believe or think of them and self. This self-perception becomes more important than what others actually think, as they argue, “Those who perceive that a behavior is common among members of their group may be more likely to practice the behavior themselves” (Rimal & Real, 2003, 2005), (Harbour 2012).

In light of this, a study was conducted with a large group of young men in the rural governorate of Minya, Egypt, relating the descriptive norms and male youth smoking.

Findings suggested that normative influence of both household and neighborhood is directly linked to their smoking. Results indicated that young males living in households with at least one adult smoker were twice as much inclined to smoke, regardless of age, wealth, employment, or education. (Harbour 2012). A study in Syria yielded similar outcomes to suggest that students who had parents or siblings who smoked were 4.4 times more inclined to become smokers than those from families who did not smoke (Maziak 2002).

A survey conducted in Alexandria on students in school years seven, nine and twelve found that adolescent smoking behavior was directly affected by family and peers. However, the influence of sibling smoking and “perceived adult smoking norms” were greater than those of peers. This is understandable in a country like Egypt that is a “traditional collective society” (Islam & Johnson, 2005), where family has more importance than individuals and their peers. Once an adolescent has started smoking, the influence of both family and peers becomes even stronger. Smoking habits are further reinforced by perception of social norms where an adolescent doubts his/her ability to refuse a cigarette offered by members of family, friends or peers (Islam & Johnson, 2005).

The results of a study that surveyed secondary school students in Qalyoubeya governorate, Egypt, showed that students in co-educational schools were more likely to smoke compared to those attending boys only schools. The authors suggested that this is due to boys attempting to look more appealing to their female schoolmates (Gadalla et al., 2003).

Another study on students at the University of Cairo showed that those who had attended public or private Egyptian schools were more inclined to smoke than those who had attended foreign language schools. This was attributed to the fact that those who came from families of a higher social class who were wealthy enough to afford the foreign language schools naturally enjoyed more health awareness (Nassar, 2003).

Cigarette smoking for males in Islamic Arab countries is a social trend. It has been associated with a 'macho image' that is derived from movies, or sport event sponsorships. This presents a form of social pressure on young people, pushing them to fit to that image (Ghouri et al., 2006). Social pressures are also applied to women but differently, especially among Muslim women where smoking is not only considered inappropriate behavior, but in some cases may be considered a vice that could demean the whole family (Ghouri et al., 2006).

“The striking difference between the sexes reflects strong social pressures. In many of these countries, men are regularly confronted with macho images of smoking-for example, through the Bollywood film industry and sponsorship of sporting events-whereas smoking by women is often constructed as a vice that undermines the social standing of a family” (Ghouri et al., 2006).

Islam and Johnson also shared the same view attributing the disapproval of smoking among women to cultural factors in patriarchal societies where smoking is acceptable for males but it is considered a taboo for females (Islam & Johnson 2005).

It must be noted however that the number of female smokers is increasing among Arab countries since social norms and customs are changing. More women live independent lives through employment, and smoking becomes a sign of personal autonomy. Therefore, smoking is related to higher education and social status for Arab women unlike men where this is inverted. Accordingly, smoking rates in women differ depending on the geographical area. For example in Morocco, women living in high income neighborhoods were reported to smoke three times more than the average smoking rate of women in rural areas. The same perspective is evident in a Syrian study titled “Smoking Habits in the Middle East and North Africa”. The research found that smoking for women is directly related to the extent of “social liberation” where Lebanese women held the highest percentage in the region in part due to the perception that they are the “most Westernized” Arab country (Khattab et al., 2012). A study on Lebanese university students from both private and public universities also came up with the same results relating cigarette smoking among women to upper middle social classes. (Tamim et al., 2003). An earlier study (Nassar, 2003), projected the same findings, proving that 30.1% of female smokers attended private schools as opposed to only 12.3% of males. This evidence further supports the concept that female smokers tend to be of higher socio-economic backgrounds than male counterparts, thus the liberal attitude that does not regard smoking as a taboo for women. Another factor that helps explain this concept was developed by A. Shavazi and W. Jones of the Australian National University:

“Mass education and development of mass communications in most of these countries (Arab countries) is weakening the traditional values and norms and leading to inroads by Western culture, although in many cases there is strong resistance to these influences” (Shavez & Jalal 2001).



### **3.3. Significant Differences between Smoker Sub-Groups**

One study in rural Egypt by Diana A. Boulos titled “Nondaily, Light Daily, and Moderate-to-Heavy Cigarette Smokers in A Rural Area of Egypt”, categorized adult smokers into three groups: Non-daily or occasional, light-daily (smoked maximum of ten cigarettes per day), and moderate to heavy cigarette smokers (smoked at least eleven cigarettes per day) (Boulos et al., 2009). The aim of the research is to understand each group and the differences between them in order to find adequate preventive methods for smoking. Significant differences were noted between the three groups investigated on a number of levels. Out of all cigarette smokers, non-daily constituted 6.2% while light smokers constituted 26.8% and moderate to heavy smokers made up the majority with 67%. Each group was found to have some defining characteristics: The non-daily tended to have higher educational attainment, or were professionals. They were younger and mostly unmarried. However, if married, smokers in this group and the light-daily smokers tended not to smoke in the presence of their children or spouses and were more inclined to quit than the moderate to heavy smokers ((Boulos et al., 2009)

Light and moderate-to-heavy smokers were statistically the same in both education and marital status. The researchers found significant characteristics that moderate-to-heavy smokers shared: They reported finding no difficulty in reducing cigarette consumption to fifteen per day, however, they reported having difficulty in reducing consumption to 10 cigarettes per day (Boulos et al., 2009).

The same patterns were mirrored with other forms of tobacco smoking, such as the water pipe (WP), also known in the region as shisha, argileh or goza. Accumulating evidence suggests the increasing popularity of water pipe particularly in the Eastern

Mediterranean Region and Arab countries. Its popularity emerges from a cultural and social background as Watad et al. explain “WP smoking is associated with social activity; it is often done within social groups and frequently perceived as bringing people together” (Watad et al., 2009). Although its prevalence is becoming a major health issue, it is a common misconception that water pipe is safer to smoke than cigarettes because the toxic components are purified by water in its beacon. Research however shows that because water pipe takes a longer time to smoke, smokers inhale more of the nicotine dose than cigarette smokers (GATS Report 2009). Moreover, cigarette smokers are almost four times more likely to be WP smokers than nonsmokers (Watad et al., 2009).

#### **3.4. Religion and Attitude towards Smoking**

In Egypt, Islam is the religion of the vast majority of the population, about 90%, with legislation inflected by Islamic theology; rules and laws are derived from the Qur’an. The general guiding principle underlying Islamic law is that anything that is harmful to oneself or others is prohibited by the Qur’an (Radwan et al. 2003), (Ghoury et al., 2006).

“Islam is both a spiritual and legal tradition and impacts extensively on Muslim thinking and social customs. The central aims of the Islamic legal framework are to minimize the risk of harm to society and individuals, and simultaneously, maximize the opportunities of collective and individual well-being” (Ghoury et al., 2006).

Tobacco is not directly mentioned in the Qur’an since it was not known in the region in the early days of Islam. However, Islamic theologians decided upon its impropriety by drawing from rules related to health in the Qur’an (Toda & Morimoto 2001). With the emergence of new medical and scientific evidence, people became aware of the serious

and potentially fatal smoking related diseases caused by the chemicals that tobacco contains which are--among others--carcinogenic, toxic and addictive (Tobacco Health Toll THT). This made cigarettes religiously prohibited by Al Azhar, the highest religious ruling authority in Egypt, since Islam prohibits any practice that may endanger or harm people. With the realization of the risks that passive smokers are subjected to, Islamic jurists cited the “obligation to avoid causing willful annoyance, distress or harm to other people” (Ghouri et al., 2006).

An extensive research in Turkey was done by surveying six hundred and forty one religious officials including Imams and Qur'an course instructors. The study concluded that opinions about how Islam views smoking were divided between “haram”, which means strictly prohibited or forbidden by Islam (43.6%) and “*makruh*” which means reprehensible or unfavorable (56.2%). In total, 99.8% of the religious officials believed that smoking was harmful and was therefore not acceptable under Islamic doctrine. Just one participant in the study found smoking to be “*halal*” (permissible) under Islamic jurisprudence (Sucakli et al., 2011).

Moreover, the mere financial strain on the family caused by spending on smoking is also considered harmful and consequently sinful (Ghouri et al., 2006). One study suggests that an average of 5% of the family income may be spent on cigarettes, compared to only 4% spent on health and 2% on education (Anwar, 2003).

Another study found that in some developing countries in Asia and Africa, the price of 20 imported cigarettes are more than 50% of the average daily pay. Moreover, there is

no health care provided by the state or in case provided, it is minimal. Many of those countries provide no unemployment allowances, welfare, or disability allowances that could partly compensate for the strain on poor families' income where one or both parents are smokers (Mackay & Amos 2003).

According to Pieri and colleagues, some Muslim sects such as the Salafis, Sufis and Wahhabis, consider smoking to be a waste of Muslim money and resources, which makes it sinful (Pieri et al., 2013). Some people in European countries such as Britain, France and Scandinavia have even taken Islamic doctrines a step further by enforcing Sharia law illegally. They think they have the authority to anti constitutionally impose Sharia law since the governments in those countries would not. They therefore declared some areas with heavy Muslim population "Sharia controlled zones" where they banned smoking among other vices prohibited by Islam including drugs, gambling and indecent attire, dealing severely with whoever broke their imposed rules (Pieri et al., 2013).

"Territorial claims are declared by Islamists in large urban areas where the Muslim community is granted majority status". "The so called 'Sharia Zones', respectively 'Sharia Controlled Zones' are claimed, where only the Muslim law should be valid under the governance of Muslim religious authorities" (Botticher & Mares 2013).

Other researchers addressing the same issue in a study of the male population from rural Egypt (Singh et al., 2010) found that 99% of smokers believed that smoking is harmful both to their health and to their families'. Among smokers of different kinds of tobacco, cigarette smokers were more inclined to consider smoking a sin since it is harmful. Such beliefs were found to help in cessation but there are no solid statistics to show the actual number or percentage of people affected by such influence (Singh et al., 2010). One

study in Japan by Dr. Toda Masahiro and Dr. Kanehisa Morimoto of Osaka University, also found such religious considerations to be a motive for non-smokers not to smoke, and for smokers to quit smoking (Toda & Morimoto 2001). A different view is voiced by Dr. Nazim Ghouri, a senior lecturer at the University of Glasgow, whose findings suggest that those religious rulings have little effect on smokers since they are addicted to nicotine and such rulings are unlikely to change the smoking habits alone (Ghouri et al, 2006).

However, mixed-users, who smoked both cigarettes and Shisha or water-pipe, were much less likely to believe that water-pipe smoking is a sin or forbidden. This is because of the common conception that Shisha is not harmful to health because the tobacco is “purified” by passing through the water (Singh et al., 2010).

### **3.5. History of Cigarette Advertising In Egypt**

Little academic research on the history of cigarette production and advertising in Egypt has been conducted. Most of the literature available is provided by Relli Shechter of Ben Gurion University in two academic articles in 2003 and 2005. Shechter traces how Egyptian cigarettes were exported to the United States, Europe and Far East colonies in the 1880s.

“Luxury cigarettes were being exported around the world. Indeed, Egyptian and Turkish brands played a significant role in introducing cigarettes to different parts of the globe and thus in shaping world cigarette production” (Shechter 2003).

As Shechter states, tobacco was cultivated in Greece and the Balkans that were both part of the Ottoman Empire. After signing a commercial agreement with Egypt in 1884,

Greece became the main supplier of tobacco to Egypt. In 1888, another treaty was signed between Egypt and Greece, where Egypt agreed to limit cultivation of tobacco in return for increasing taxes on imported Greek Tobacco. In 1890, Egypt completely banned any cultivation of tobacco. Greek merchants were therefore empowered and took control of the tobacco trade. They went on from running tobacco shops to establishing large cigarette factories (Shechter 2003).

“Because Egypt did not have a state monopoly on tobacco or any other restrictions on its manufacture, immigrant ‘tobaccommen’ who ran tobacco shops could expand into manufacturing without any official constraints, as demand increased. Because the production of handmade cigarettes did not require large initial capital investment and the relatively small risk involved in initial manufacturing made cigarette production ideal for small entrepreneurs. In fact, the development of the cigarette industry provides a good illustration of how artisans turned into industrials when opportunity came their way” (Shechter 2003).

The first age of cigarette advertising was oriented toward the export market (Shechter 2003). The main method employed to advertise for cigarettes back then was by presenting at international fairs, where Egyptian manufacturers won medals and awards in the nineteenth and twentieth centuries (Shechter 2003). Next, they targeted traders and distributors through advertising in tobacco trade publications or magazines such as ‘Tobacco Year Book’ and ‘Tobacco’. Egyptian companies promoted their brands by providing cigarettes to elite customers all over the world, reaching them in prominent social clubs and high-end places of interest. Banners and names of celebrity customers were used for advertising both on cigarette packs and in advertisements (Shechter 2003). According to Shechter, at the turn of the twentieth century, tobacco companies did not economically need to advertise in Egyptian publications, instead they depended on shop

displays that were decorated in ways that made them in themselves act as advertisements that attracted the attention of any passerby with their big flashy signs and abundant displays. The target customers were from the elite, educated class. They were already established customers who lived in cities and were already familiar with different tobacco products and cigarette brands. One should note that in the nineteenth century, there were no graphics or images to increase the appeal and effect of the message (Shechter 2003). However, *Al Muquattam* and *Al Ahram*, the two leading newspapers of the period, did run some cigarette advertisements to this small market niche. The advertisements were mainly to familiarize smoking customers with small vendors and perhaps to introduce new tobacco and cigarette producers and products in the market. Some companies used advertising to relay certain messages as price lists or warning against counterfeit cigarettes. Cigarette advertising was also limited in foreign language papers and magazines such as the *Egyptian Gazette* (Shechter 2003).

Other forms of advertisement included books and travel guides mainly targeting foreign readers in Egypt. Shechter also described how cigarette companies would supply details regarding their operations for publishers to incorporate into books on contemporary Egypt (Shechter 2005).

Advertisers also employed a number of relatively novel forms. For example, by placing cigarette advertising as free postcards, advertisers could hope to reach foreigners in Egypt and reach potential clients abroad where Egyptian cigarettes were becoming popular and in vogue in Europe and America, this prompted the American manufacturers of the iconic cigarette brand Camel to choose its name and packaging

(camels, palm trees, and an oriental building) to give an impression that it is manufactured in Egypt “in an attempt to impart an eastern aura to this more humble American brand” (Shechter 2005), Egyptian cigarettes being perceived as glamorous and luxurious.

“When promoting the luxurious Egyptian cigarette, advertisers played on the oriental art and tourist imagery of Egypt- its ‘natives’ set in a Pharaonic past, Islamic present, the Nile, and the desert. Such voyeuristic scenes went down well with the international crowd and the local minorities, colonial officials, and foreign businessmen” (Shechter 2005).

Another form of advertisement was playing cards with pictures printed on them in the pack. Smokers were thus encouraged to buy the same brand to collect the whole series. An indication of the target market at the time was that many of those pictures were of women in sexual attire and pose to appeal to the predominantly male clients. Shechter described the package itself as a “mobile advertisement,” so manufacturers took extra care in designing their cigarette box or packets. Egyptian cigarette brands stood out among competition for their colorfulness (Shechter 2005).

Egypt became familiar with advertising on a small scale before World War I (1914-1918), however, it only started to expand after the war. The main form of advertising was through print media such as newspapers or magazines. A high rate of illiteracy meant that those messages reached only a very limited sector of the society (8.5% of males and 0.3% of females). As literacy rates increased, advertising evolved. There was a surge of advertising associated with the introduction of illustrated magazines that



became the “hotbed of novel advertisements” (Shechter 2005). The newly introduced illustrations and pictures in magazine advertising made images appealing and attractive to both readers and the advertisers (Shechter 2005). By 1937, a total of two hundred and fifty Arabic publications and sixty-five foreign language publications were circulating in Egypt (Ayalon 1995). As Shechter mentions, cigarettes were among the most advertised commodities at this time (Shechter 2003). Cigarettes started gaining popularity in Egypt in the mid 19th century and soon became a fashion trend as the predominant form of tobacco. Different brands emerged and all were advertised and marketed in different ways. Some advertisers simply promoted their products by praising or by simply drawing readers’ attention to it, while other brands employed more sophisticated symbolic advertising strategies. The cigarette became a symbol of modernism and Westernization. In 1906, Cairo alone had (fifty-five to sixty) cigarette factories. One advertisement employed a different approach playing on the patriotic sentiments of males by associating their purchase of cigarettes to helping factories, the industry and consequently the economy.

According to Shechter, the target market was made up of Egyptian elite society, foreigners living in Egypt and tourists (Shechter 2003). Cashing on this, advertisers used to relate their merchandise to social status, hinting that cigarette brand of choice would place the person in a certain social category (Shechter 2005).

By the 1930s, advertisers started addressing middle class males, called the ‘effendis’. The same tone of “you are what you smoke” was echoed again, as Shechter put it:

“Male effendi smoking etiquette in advertisements well demonstrated the middle ground between a desire to appear modern and a strong need for authenticity and belonging” (Shechter 2005).

Cigarettes were portrayed as a means of connecting with others, with advertisements showing people offering cigarettes to one another, all while hinting at the high social status through the setting of these advertisements, which tended to be in elite clubs, bars, coffee shops or hotels, all lavishly decorated glamorously in European style. Moreover, by locating smoking in public spaces, the advertisements suggested that it was important to smoke an elegant brand for self-image, which shows how cigarettes work as status symbols.

In the patriarchal society of those days, advertisements of cigarettes targeting female customers took two strategies; a woman had to be either smoking alone, or in the company of a male who offers the cigarette and lights it. This was a compliance with the social norms of the times where women were submissive to men.

The second strategy followed was to avoid portraying women smoking in public. When portrayed alone, they were never at home, there was usually no background. Such advertisements may have been simultaneously targeting men by using the sexual appeal of the woman’s presence. Women were always portrayed as actresses, dancers or singers but not as career women (Shechter 2005). As Dr. Barbara Stern, a professor at the State University of New Jersey explains, the advertisements promoted stereotyping women in ways that disempower them as commodities sexually available. Stern also sees women’s

absence from Marlboro advertisements for example, as lessening their importance in the male macho world (Stern 1993).

### **3.6. Restrictions on Cigarette Advertising in Egypt (Legal)**

According to the WHO, the two most dangerous health hazards caused by smoking are lung cancer and heart diseases (The Tobacco Health Toll 2005 WHO). In an attempt to reduce tobacco consumption, the United States started implementing tobacco control laws and bans that would restrict advertising. The United States was the first country to take this initiative that was followed by many governments in both the developed and underdeveloped worlds (Bletcher 2008).

A landmark in the history of tobacco control is the WHO Tobacco Free Initiative that took off in 2003 with one hundred and seventy one members agreed on reduction of tobacco consumption among young generations from early adolescents to young adults (Nelson 2003). Egypt is considered an early signatory having joined the initiative in 2003 and ratified it two years later in 2005. An earlier initiative was taken by Egypt in 2002 through which a ban on cigarette advertising in television, radio and cinema was enforced (WHO report). Moreover, in compliance with the rising awareness of cigarette dangers in 2007, the Global Adult Tobacco Survey, GATS, was initiated by the Egyptian Ministry of Health and the Central Agency for Public Mobilization and Statistics (CAPMAS), in collaboration with the WHO. Technical support was provided by The Centers for Disease Control and Prevention (CDC) in Atlanta. This survey was to provide smoking related statistics on the population 15 years of age and above. In the same year 2007, laws enforcing tobacco free public places were issued for the first time

in the country. Furthermore, cigarette companies were forced to put graphic warning pictures on the packs along with written warnings that should cover 50% of the front area.

As mentioned above, laws banning tobacco advertising in television, radio and cinemas preceded the cigarette pack warnings in 2002. There is no ban however on depicting smoking in movies which is an alternative advertising means that cigarette companies referred to (WHO EMRO).

There is a complete and effectively implemented ban on cigarette advertising in all local newspapers and magazines ([global.tobaccofreekids.org](http://global.tobaccofreekids.org)). The same applies to outdoor advertising including different kinds of billboards ([global.tobaccofreekids.org](http://global.tobaccofreekids.org)). Also advertising at point of sale is prohibited by Egyptian law.

Although by law smoking is prohibited in public and workplaces, including educational and governmental facilities and public transportation but excluding restaurants, pubs and bars. The challenge remains in properly enforcing such laws, for example a recent study on hospitals in Egypt shows that instead of implementing and complying with tobacco control policies where staff has an obligation and a role towards society, health facilities staff is clearly in violation of the ban (Radwan et al 2012).

A study, by Kostova & Blecher, yielded findings that cigarette prices are considered a significant determinant of demand even stronger than restricting advertising (Kostova & Blecher 2013). This supports the notion that increasing taxes would help decrease

consumption as an effective method adopted by governments in their tobacco control policies. (Kostova & Blecher 2013). Since 2010, the Egyptian government has raised cigarette prices three times. It is estimated that this shall reduce one fifth of consumption rate (Burki, 2012).

Egypt is one of only a few Islamic countries prohibiting by law the sale of cigarettes to minors with a limit of 18 years. However, it is not known if such laws are actually being enforced or not since there is little national data to support any solid information (Ghouri et al, 2006).

### **3.7. Themes Used In Cigarette Advertising**

Cigarette companies and advertisers have long studied the psychological needs of their different target markets in order to cater for those needs through both manufacturing and advertising.

According to marketing theories, there are two approaches that tobacco companies can use to promote their products, either by adapting their themes and ideas to fit the local markets they are operating in, or to follow a standardized promotional approach unifying the same strategies and advertisements worldwide (Hafez and Ling 2005). One study traced the research that one of the leading tobacco companies in the world Philip Morris conducted. The research was on young adult smokers (ages eighteen to twenty nine) in different countries and markets, on different continents. It was conducted in order to understand their needs and consequently cater for them through advertising and promotions, with the Marlboro brand as their focus. After extensive surveys covering

many countries, results showed that young adults worldwide more or less share the same experiences, and buy the same products (Hafez and Ling 2005). Regarding this age group as a “global community with similar characteristics”, along with the spreading of Western values among the mentioned age group, is what drove the company to adopt the standardized method in its promotions and advertising campaigns (Hafez and Ling 2005). There is consistency in their theme: Marlboro represents masculinity, male ruggedness, self-confidence, heroism and independence. The backgrounds in their advertisements also hint at the sense of adventure (Anderson et al. 2006). The same themes of masculinity and independence are implied by other cigarettes campaigns as Player’s, with a background of nature suggesting a relaxed mood (Anderson et al 2006). In her case study on Marlboro, Dr. Pooja Anil Hemdev at the University of Strathclyde, Glasgow, attributes the great success of Marlboro man and Marlboro country to the fact that they have something for everyone, they may be simplistic on the surface, but underneath there is a significant mixture of ideas (Hemdev 2005).

“A Western landscape, a rugged cowboy and the color red have come to embody years of advertising tag lines for Philip Morris's Marlboro cigarettes. These three elements, combined or separate, are recognizable as the American call to Marlboro Country even without the brand name, sales pitch or slogan. Consumers know where the flavor is - and that it can be found in Marlboro Country” (Hemdev 2005).

The cowboy is an icon of Americana with a mysterious appeal and perceived stoic machoism. In advertisements, the cowboy is shown enjoying a campfire with friends, a theme that smokers can relate to and identify with since many smokers tend to enjoy smoking socially (Hemdev 2005). Hemdev also points to the use of colors, smells, flavors and textures that the campfire, the cooking and the landscape bring out, a rich combination that appeals to the senses (Hemdev 2005).

However a company like Philip Morris did sometimes resort to the adaptive method to make use of its strengths in certain cultures, all while keeping the core message universal, targeting the shared values of its global clientele (Hafez and Ling 2005). An example of this is employing nightlife and black models for commercials of certain cigarette kinds that are preferred by African Americans, in line with their cultural role in the American life (Rising and Alexander 2011).

Another study based on confidential documents from the tobacco companies themselves made public by a court order, stated that the company researchers and managers have identified some major psychological motivations that include:

“Promoting pleasure, easing social interaction and raising social confidence, aiding relaxation and reducing anxiety, nervousness and stress, reducing aggressive behavior and irritability, substituting for nervous habits, increasing concentration, and promoting obesity reduction” (Le Cook et al. 2003).

As their documents show, cigarette companies segmented the consumer population according to those psychological and psychosocial needs, and tailored product design and specific marketing strategies for each group (Le Cook et al. 2003).

The themes used in advertising evolved over the years to encourage women to smoke. Again Marlboro started out originally as a high-quality cigarette for women using the theme “Mild as May” in 1920. All advertisements showed a lady’s hand holding a cigarette or reaching for it. In 1930, the company changed the cigarette filter tip to a red color to hide any lipstick mark, and used the slogan “a cherry tip for your

ruby lips” to advertise it, further emphasizing a feminine product (Hemdev 2005). The brand weakened during World War II (1939 - 1945), and production was stopped completely after publications linking smoking to lung cancer emerged. In early 1950s, Philip Morris reoriented the brand identity to appeal to a masculine smoker with an added advantage as the only ‘safe’ cigarette particularly because of a filtered cigarette, utilizing the iconic cowboy image. After establishing a foothold in the market, the company reverted to employing neutral themes that would target both males and females, as in a group enjoying the outdoors. Cigarette advertisements gradually changed back into tailoring themes targeting women only and emphasizing their emancipation (Mackay & Amos 2003). Alternatively, advertisements targeting women focus on themes such as fashion, independence, sex appeal and slimness (Anderson et al. 2004). Relating smoking to such subjects was found to entice adolescent girls to start smoking (Anderson et al. 2004). One study found that cigarette companies not only manufactured brands especially for women, but they associated them with concepts and themes of female freedom and liberation, with success glamour and slim figures (Carpenter, Wayne & Connolly 2005). A Polish study found the same themes of independence, feminism, weight loss and above all sophistication to be the most popular themes that tobacco companies employ when marketing to women in (Kaleta, Usidame and Polanska 2011). Advertisers intentionally mislead women into believing that smoking would help them lose weight, look more sexually appealing and stylish. In general the message sent would suggest that smoking would make them socially popular. Such themes are relayed through glamorous sophisticated slim models smoking slim cigarettes (Kaleta, Usidame and Polanska 2011).



In parallel, Menthol cigarettes were also advertised with a special theme accompanying them that was almost generalized across different brands. The message the advertisements conveyed was that of health, freshness, coolness, youthfulness, playfulness and fun. Menthol cigarettes were marketed for African Americans in the United States, and the themes of playfulness and fun were emphasized to match the lively outgoing psychological build that characterizes them. Among the marketing techniques utilized was the portrayal of Black models in advertisements to appeal to the target market through identifying with the brand (Rising and Alexander 2011).

“Several tobacco researchers have provided an overview of the marketing of menthol cigarettes to the Black/African American population, noting that the marketing strategy followed a course similar to the social evolution of the Black/African American community”. “Advertisements featured Black/African American models and spokespersons (especially leading athletes and entertainers), Afro hairstyles, popular music (soul, jazz, hip-hop) and other content drawn from Black/African American pop culture (Rising and Alexander 2011).

### **3.8. The Effects of Cigarette Advertising (Media Effects)**

Cigarette advertising is considered very likely to influence or initiate smoking especially among adolescents. As the WHO report on the global tobacco epidemic, 2013 states, cigarette manufacturers spend billions of dollars advertising and marketing their products, targeting all current and potential customers, especially young people and women (WHO report 2013).

“Although TAPS activities are designed to have broad appeal to consumers in all demographic groups, and especially among current smokers, specific efforts are made to persuade non-smokers to start. As a result, key target populations for TAPS include youth, who are at the age when people are most likely to start regular smoking and women, who in most countries are less likely to be current smokers than men.”

In 2003, an estimate of fifteen billion dollars was spent on marketing and advertising. Almost a decade later, the numbers are still increasing in spite of all restrictions on tobacco advertising; a study by the Centers for Disease Control and Prevention (CDCP), estimates the spending by tobacco companies in the United States alone on marketing and advertising by 8.37 billion dollars, i.e. 28 million dollars per day. Direct advertising that is effectively banned in many countries is “only one component of the integrated set of marketing strategies that tobacco companies use to promote their products”. The 2013 WHO report explains that the big expenses are redirected to alternative advertising employing marketing strategies that include promotional discounts, sponsorship of activities and events, and point of sale advertising (WHO report 2013).

Most of the available studies on the effects of cigarette advertising on viewers and their smoking habits have been conducted in the West. Whether the findings of such research can be applied to countries in the Middle East or the developing world in general remains unclear (Kostova 2013).

Moreover, academic research findings on the influence of cigarette advertising on viewers differed. Dr. Evan Blecher from the University of Cape Town, and Director in the International Tobacco Control Research Program, listed eighteen studies suggesting there is no impact, and seventeen other studies suggesting there is a significant impact. The biggest challenge facing such contradictory studies is as Dr. James Heckman, the Professor of Economics at the University of Chicago, and the Nobel Prize winner in

economics, explains: “The endogenous nature of individual advertising exposure” (Heckman et al., 2008).

This means that reactions come from within the individual and therefore each individual reacts differently to the same message (Heckman et al., 2008). Advertising exposure is therefore seldom believed to motivate non-smokers, enticing them to become smokers. In other words, exposure to a non-smoker’s exposure to cigarette advertising does not encourage him/her to start smoking, but exposure to advertising does have an impact on smokers, those who are already in the habit of smoking may be further stimulated or given the chance to choose between different brands “Those advertisements were initially designed to grab smokers’ attention as the target market” (Heckman et al., 2008). This is the same view held by tobacco companies in their ongoing fight against bans on cigarette advertisements. They argue that their advertisements only serve the purpose of getting a larger market share among competitors and to provide adult smokers with information on what is available in the market, but do not influence or encourage non-smokers to start smoking.

To eliminate this bias, Dr. Deliana Kostova of Emory University, Atlanta Georgia, and Dr. Evan Blecher, studied the effect of cigarette advertising on non-smoking young adults in nineteen developing countries. In their study “Does advertising matter? Estimating The Impact Of Cigarette Advertising On Smoking Among Youth In Developing Countries”, they evaluate the influence of advertising from different angles: exposure to advertising on an individual level; on a local aggregate level; and finally the effect of advertising bans. Data on individual characteristics and smoking behavior was collected from the Global Youth Tobacco Survey (GYTS). The sample studied was

between the ages eleven and nineteen from nineteen developing countries. Findings suggest that more than being influenced by advertising, young people were influenced by other factors such as parents who smoke as opposed to being surrounded by “anti-smoking sentiment” (Kostova and Blecher 2013). Also, having access to a lot of cash was believed to be a determinant of smoking behavior since the price of cigarettes, could be a barrier to purchase (Goel 2010), (Kostova and Blecher 2013). Kostova and Blecher suggest that:

“The increased likelihood of smokers to observe advertising is likely to explain the positive association between advertising exposure and cigarette demand, and that cigarette prices are substantially more likely to influence youth demand than advertising exposure or regulation” (Kostova and Blecher 2013).

Dr. Rajeev Goel of Illinois State University, USA, approached the effect of cigarette advertising from a different angle and suggested that different forms of advertising have different impacts on smokers and non-smokers. In his study, he divided the media types into print advertising, Internet advertising, outdoor advertising, entertaining advertising, point of sale advertising, and promotional activities. Results showed that public entertainment advertising is the form with the highest effect on viewers. It includes sports, charitable or political events sponsored by cigarette companies and it also encompasses product placement in movies. With every 10% increase in this type of advertising, cigarette consumption increases by 1.1% to 1.5% (Goel 2010). For comparison, a 10% increase in Internet advertising, the next most effective type, results in only a 0.2% to 0.4% increase in consumption. All other forms of media reported insignificant increases in smoking consumption due to advertising exposure.

Some studies found that higher exposure to smoking scenes in movies predict higher potential of smoking (Cin et al., 2007; Sargent et al., 2005; Hines et al., 2000). The higher the exposure to movies where smoking is shown, the more favorable the attitude towards it (Gibson 2000). A number of factors influence behavior such as the liking of, and identifying with movie stars who smoke, for young people who never smoked before while regarding themselves as similar to their peers who smoke, is directly related to initiating smoking or entertaining intentions to start (Tickle et al., 2006). Smoking status plays a role in the effect of entertainment advertising media and media. In general, smokers tend to be more affected by cigarette advertising than non-smokers, and regard cigarette advertising less negatively (Cin 2004).

That said, one must note that there are variations between the effects of narratives on different individuals. Some may be more inclined to identify with main characters more than others (Cin 2004). An important factor that increases the impact of a media message in cigarette advertising is associating it with a positive person or character. This may have more persuasive effects that have their roots in the association of concepts, meaning that an idea or object is appealing when associating it to something that is already appealing or likeable. In this case, viewers' attitudes, feelings and even brand loyalty are affected by models as those in cigarette advertisements since they associate smoking to them (Gawronski 2006) and (Kelly et al., 2002). Appealing characters arouse positive feelings that can influence behavior and brand loyalty (Yoo and MacIannis, 2005). A study on social influences found that adolescents were significantly influenced by their favorite movie stars:

“Adolescents whose favorite star smoked in films were 3 times more likely to have a higher smoking status than adolescents whose favorite star did not smoke in films. Furthermore, adolescents who had never smoked a cigarette but adolescents whose favorite star smoked were 16 times more likely to have positive attitudes about smoking than those who selected a non-smoking star” (Tickle et al., 2006).

The effects of cigarette advertising on smoking can be categorized into effects on initiation, continuation and brand behavioral effects. According to Gilpin (2001) the initiation phase has two stages. In the first stage, the consumer forms some sort of awareness towards smoking and starts to develop “a self image as a smoker” and “attitudes and beliefs about the utility of smoking” (Gilpin 2001). The next stage within initiation is when the viewer/consumer starts by smoking one cigarette, at which point he or she determines whether to continue smoking or to reject it altogether, noting that not all consumers accept or believe messages in cigarette advertisements even if they are positive (Capella et al., 2011). Therefore, they concluded that the initiation phase might not be influenced by advertising as much as by socio-cultural factors including family or peer smoking (Capella et al., 2011). A different view was expressed by professors of Marketing Dr. Cornelia Pechmann and Dr. Susan J. Knight who suggested that viewers are influenced by advertising especially when some tactics are employed such as priming positive stereotypes of smokers, which could help initiate smoking (Pechman & Knight, 2002). They also suggested that cigarette advertising could provoke those who have quit smoking into a relapse or make their attempts futile (Pechman & Knight, 2002).

Another phase discussed in cigarette advertising effects is continuation, which is again divided into two stages (Mowery et al., 2004) and (Capella et al., 2011). In the first stage, the consumer is becoming a smoker, increasing cigarette consumption gradually. In the second stage, the maintenance stage, smoking is sought to satisfy some purposes such as relaxation or pleasure (Mowery et al., 2004). Dr. Jeffrey Jensen Arnett, professor of psychology at Clark University in Massachusetts, found a correlation between adolescents' positive views of advertisements and smoking. In his study on a group of teenagers, he found that those who smoked were positively impressed by cigarette advertisements and regarded them more favorably than those who did not smoke (Arnette 2001). In their research on the effect of cigarette advertising, Michael Capella, Cynthia Webster and Brian Kinrad displayed mixed findings from previous academic research, however, they built their own hypothesis on the social learning theory which indicates that as consumers become regular users of a product, the effects of advertising start to fade, i.e. although effective in initiating smoking, cigarette advertising has little effect in the continuation phase where individuals have already become smokers with established patterns, and watching advertisements will not make them smoke more or less (Beiner & Albers 2004, & Capella et al., 2011).

The third and last phase that is affected by cigarette advertising is the brand behavior phase, which concerns brand loyalty and influences smokers' buying choices. The authors supported the findings which suggest that brand loyalty and behavior are directly affected by advertising (Capella et al., 2011). This view is also supported by prior research that found that the three most purchased cigarette brands by adolescents were in fact the three most highly advertised ones (Arnette, 2001).

### **3.9. Visual Warnings on Cigarette Packs and Their Effect**

Due to the high mortality rates caused by tobacco smoking, an initiative to lower the number of smokers was taken by the WHO. The Framework Convention on Tobacco Control (FCTC) was proposed with the aim of guiding and helping countries to develop efficient control policies (Roemer & Taylor 2005).

Among the proposed tools were visual warnings through the graphic images on cigarette packs. Fear appeal was utilized in anti-smoking campaigns worldwide; influential messages were designed to frighten people through images showing substantial negative consequences of smoking on health.

Canada was the first country to introduce the alarming pictures in 2001, followed in 2002 by Brazil then Singapore and Thailand in 2004 and 2005 respectively ([www.who.int](http://www.who.int)). In 2008, Egypt Implemented picture warnings, those as studies suggest, were meant to emphasize the risks of smoking (Morvan et al., 2011) (Hammond et al. 2004). Up till 2012, more countries had joined the initiative, reaching a total of 45 (Craig, et al. The International Tobacco Control Policy Evaluation Project: 2012, 2015). The interest in studying the effects of visual graphic warnings on smoking started in early 2000s. Other studies followed suggesting that such pictorial warnings, in comparison to textual warnings, were more effective on behavioral intentions as well as emotional and cognitive reactions. O'Hegarty and colleagues for example, underlined that graphic pictorial warnings are more obvious and are therefore easier to notice than written or text ones (O'Hegarty et al. 2007). The findings of a study by Koval et al.,



suggests that the pictures make smokers, especially youth, consider quitting or start reducing the amount of cigarettes smoked. The effect on smokers was reported to be positive as it encouraged those who have already quit smoking to remain so (Koval et al. 2005). Hammond et al. share the same view, which suggests that the cause underlying this is the feelings that they generate, which include fear, concern, anxiety and even disgust (Hammond et al. 2004). Graphic pictures were also found to affect behavioral intentions of non-smokers where they were discouraged to pick up smoking (Sabanne et al. 2009).

That said, one has to point out that researchers' findings varied where some like Peters et al. (2007) found no significant effect on smokers or non smokers (Peters et al. 2007). Findings of a study by Daniel Romer Professor at the University of Pennsylvania suggest that although those images are believed to prompt "aversive emotional reactions," they do not seem to have an effect in actually altering intentions and they do not necessarily lead to thoughts of quitting smoking (Romer et al. 2013). Researchers have noted various unintentional ramifications to the pictorial warnings, which they attributed to the "adverse effects of fear appeal messages" (Hammond et al. 2004). These adverse effects are natural defensive responses that are part of the fear control development as studies in social marketing and psychology show (Witte and Allen, 2000) (Hammond et al. 2004). In the study, Hammond reports that 1% of smokers said that the threatening pictures made them smoke more. 13% reported dismissing the images as not credible, 36% intentionally avoided looking at the disturbing pictures (Hammond et al. 2004). The Protection Motivation Theory (PMT) should come to effect here by introducing alongside the fear message in the pictorial warnings a positive

message denoting the ability of the smoker to quit smoking or the non-smoker to avoid it (Floyd et al. 2000).

The Threat Appraisal Model in case of smoking is where the person starts to evaluate the seriousness of the consequences of this habit and the threat he/she may be subject to should they continue to smoke, e.g. lung cancer and other health hazards. The model focuses on the cause or source of the threat and the maladaptive responses connected to it such as wishful thinking of smoking cessation, denial of health threats or avoidance of looking at the images. The perception of individuals to the severity of the health threat is one factor that dictates corrective reaction. Another factor is how vulnerable an individual may consider him/herself to being subject to the threat. Therefore the greater the threat is perceived, and the more vulnerable a person perceives himself to be affected, the more the motivation is to take corrective action.

The factors that may cause maladaptive responses are for example pleasure derived from smoking (intrinsic reward) or social approval (extrinsic reward) where the smoker believes that smoking helps in weight loss and consequently approval by society (Norman, et al. 2005). Dr. Erin C. Marshall Professor of Psychology at the University of Vermont, states that:

“Research on reasons people quit smoking indicates that there are both intrinsic (internal factors) and extrinsic (external factors) dimensions of motivation for such behavior change. Intrinsic motivations include factors such as the desire to increase one’s self control over their behaviors, as well as the drive to change one’s habits due to health-related concerns. Extrinsic motivations include factors such as the desire to respond to social pressures to quit smoking, and the desire to quit smoking for

immediate short-term gains, such as saving money previously spent on cigarettes. Past work on motivations to quit smoking suggests that intrinsic motivation is predictive of more successful quit attempts” (Marshall et al. 2009).

Coping appraisal on the other hand highlights the responses that people resort to in their endeavor to cope with the threat. In this case a smoker has to consider two matters: first, by quitting smoking, the smoker is potentially reducing the possibility of having lung cancer. Second, if he/she is actually able to quit smoking. Again some impediments in the way of the adaptive behavior may develop, those are called ‘response costs’ or ‘maladaptive coping responses’, for example when smokers fear that they may face some unwelcome results to quitting such as increased craving (Norman et al. 2005).

While a significant number of studies have come to a conclusion that visual labels like the graphic warning pictures are more effective than written or text warning messages on persuasion, there is no conclusive literature on which of those graphic messages are the most effective, the social messages, or the health hazard warning messages (Morvan et al. 2011). The findings of some researchers like Elinor Delvin at the Cancer Research UK Centre for Tobacco, suggest that there are significant differences in the effectiveness of different themes. ‘Fear Appeal’ messages for example were found to evoke immediate responses in more serious smokers such as stubbing out a cigarette in hand. It made them consider the message and attempt to change their behavior. This change however, tended to be short-term as other factors, such as social pressure were not addressed. Therefore, the lack of a supporting message to the Fear Appeal undermined long-term behavior change (Delvin et al. 2007). Also less serious or less committed

smokers were found to be affected by the Fear Appeal messages but displayed a weaker response than the more committed smokers. As Delvin explains, this group was less likely to identify with the alarming images as they distance themselves from those who are vulnerable to the extreme health hazards and consider them aimed to address heavy smokers (Delvin et al. 2007). Adolescents were also found to be less affected by the Fear Appeal messages. According to Dr. Karen H. Smith, at Southwest Texas State University, this age group has an “attitude of immortality or insusceptibility to physical risk,” and therefore believes that falling victim to cancer or extreme diseases depicted in images, is so far fetched. They therefore find it difficult to relate to (Smith and Stutts 2003). For this age group, short term cosmetic Fear Appeals methods, such as having yellow or tinted teeth, bad breath and a cigarette odor in hair were found to be the most effective (Smith and Stutts 2003).

On the other hand, researchers like Antonio Crespo found that the most effective messages were the wellbeing and health hazard messages (with images of patients with cancer, heart surgery and tumors) and the social messages referring to the risks of secondhand smoking depicting children in danger and one image of a dead fetus (Crespo et al. 2007).

As the above-mentioned researches were all in Western countries, putting into consideration that due to cultural differences, the responses may differ from one region to another. This study sets out to determine the impact of the proposed graphic visual images on Egyptian consumers ages eighteen to twenty-four. This would in turn serve

the purpose of determining how such a media channel could aid in the cessation programs adopted in Egypt.

## **Chapter 4: Theories; Community Influence, Fear factor and Protection**

### **4.1. Theories of Normative Influence**

Theories of Normative Influence (TNI) investigate factors affecting young people and their attitude or behavior where smoking is concerned. A TNI 2003 report states: “group identity based codes of conduct that are understood and disseminated through social interaction” (Rimal & Real 2003). Researchers such as Rimal, Real, and Harbour, state that an individual develops a perception of what others believe or think of them and self. This self-perception becomes more important than what others actually think, as they argue, “Those who perceive that a behavior is common among members of their group may be more likely to practice the behavior themselves” (Rimal & Real, 2003, 2005), (Harbour 2012).

In light of this, a study was conducted with a large group of young men in the rural governorate of Minya, Egypt, relating the descriptive norms and male youth smoking. Findings suggested that normative influence of both household and neighborhood is directly linked to their smoking. Results indicated that young males living in households with at least one adult smoker were twice as much inclined to smoke, regardless of age, wealth, employment, or education (Harbour 2012). A study in Syria yielded similar outcomes to suggest that students who had parents or siblings who smoked were 4.4 times more inclined to become smokers than those from families who did not smoke (Maziak 2002).

A survey conducted in Alexandria on students in school years seven, nine and twelve found that adolescent smoking behavior was directly affected by family and peers. However, the influence of sibling smoking and “perceived adult smoking norms” were greater than those of peers. This is understandable in a country like Egypt that is a “traditional collective society” (Islam & Johnson, 2005), where family has more importance than individuals and their peers. Once an adolescent has started smoking, the influence of both family and peers becomes even stronger. Smoking habits are further reinforced by perception of social norms where an adolescent doubts his/ her ability to refuse a cigarette offered by members of family, friends or peers (Islam & Johnson, 2005).

The results of a study that surveyed students in Qalyoubeya governorate, Egypt, secondary schools showed that students in co-educational schools were more likely to smoke compared to those attending boys only schools. The authors suggested that this is due to boys attempting to look more appealing to their female schoolmates (Gadalla et al., 2003).

Another study on students at the University of Cairo showed that those who had attended public or private Egyptian schools were more inclined to smoke than those who had attended foreign language schools. This was attributed to the fact that those who came from families of a higher social class who were wealthy enough to afford the foreign language schools naturally enjoyed more health awareness (Nassar, 2003).

Cigarette smoking for males in Islamic Arab countries is a social trend. It has been associated with a 'macho image' that is derived from movies, or sport event sponsorships. This presents a form of social pressure on young people, pushing them to fit to that image (Ghouri et al., 2006). Social pressures are also applied to women but differently, especially among Muslim women where smoking is not only considered inappropriate behavior, but in some cases may be considered a vice that could demean the whole family (Ghouri et al., 2006).

“The striking difference between the sexes reflects strong social pressures. In many of these countries, men are regularly confronted with macho images of smoking- for example, through the Bollywood film industry and sponsorship of sporting events- whereas smoking by women is often constructed as a vice that undermines the social standing of a family” (Ghouri et al., 2006).

Islam and Johnson also shared the same view attributing the disapproval of smoking among women to cultural factors in patriarchal societies where smoking is acceptable for males but it is considered a taboo for females (Islam & Johnson 2005).

It must be noted, however, that the number of female smokers is increasing among Arab countries since social norms and customs are changing. More women live independent lives through employment, and smoking becomes a sign of personal autonomy. Therefore, smoking is related to higher education and social status for Arab women unlike men where this is inverted. Accordingly, smoking rates in women differ depending on the geographical area. For example in Morocco, women living in high income neighborhoods were reported to smoke three times more than the average smoking rate of women in rural areas. The same perspective is evident in a Syrian study



titled “Smoking Habits in the Middle East and North Africa”. The research found that smoking for women is directly related to the extent of “social liberation” where Lebanese women held the highest percentage in the region in part due to the perception that they are the “most Westernized” Arab country (Khattab et al., 2012). A study on Lebanese university students from both private and public universities also came up with the same results relating cigarette smoking among women to upper middle social classes. (Tamim et al., 2003). An earlier study (Nassar, 2003), projected the same findings, proving that 30.1% of female smokers attended private schools as opposed to only 12.3% of males. This evidence further supports the concept that female smokers tend to be of higher socio-economic backgrounds than male counterparts, thus the liberal attitude that does not regard smoking as a taboo for women. Another factor that helps explain this concept was developed by A. Shavazi and W. Jones of the Australian National University:

“Mass education and development of mass communications in most of these countries (Arab countries) is weakening the traditional values and norms and leading to inroads by Western culture, although in many cases there is strong resistance to these influences” (Shavez & Jalal 2001).

Anti smoking campaigns are backed by a number of theories that are in many ways entwined; Fear appeal is a significant determinant of behavioral outcomes when utilized in anti-smoking advertising messages.

#### **4.2. Fear Appeal**

Fear appeal as defined by Witte is a “persuasive message designed to scare people by describing the terrible things that will happen to them if they do not do what the message

recommends” (Witte 1992). Effective messages that depend on fear appeal must contain two components: ‘high-threat’ and ‘high-efficacy’. High-threat in this case is considered the negative consequences of smoking that a smoker is susceptible to suffer. The high efficacy on the other hand is when the person receiving the message believes that he or she can avoid the negative effects or correct them by following the adequate corrective actions suggested. The effect of fear appeal may however be counteracted; the obvious reason is nicotine addiction, other less apparent but equally substantial reasons emanate from the perceived benefits of smoking such as feeling accepted in society or group and weight control issues. Thus fear appeal has unintentional repercussions the root of which lie in the “adverse effects of fear appeal messages” (Hammond et al. 2004). These adverse effects are defensive responses that limit the effect of fear messages and are part of the fear control development as studies in social marketing and psychology show (Witte and Allen, 2000) (Hammond et al. 2004). It is worth noting that fearful messages do not have the same impact on all individuals, one study divided people into two categories possessing high and low fearful temperament. Individual temperamental disposition was shown to dictate how graphic pictures were perceived (Bradley and Lang, 1999). The same study showed that different demographics including profession affected the impact of images, for example students of medical schools did not show fear or disgust responses to graphic images of cancer victims on tobacco packs as their counterparts in non-medical schools. Gender also played a role; women were more inclined to be disturbed by fearful images than men. A graphic image was found to have a shorter reaction time and a stronger effect on individuals with high fearful temperament than those with low fearful temperament (Bradley and Lang, 1999). A British study on responses to images approved by the EU reports similar findings

suggesting personal traits affect cognitive processing of warning images and determine both intention and response (Styles, 2013).

Those findings predict the importance of providing diverse images carrying different messages on cigarette packs to target all categories and demographics of both smokers and potential smokers.

Since most anti-smoking adverts depend on health fear appeals, the relevance of short and long-term fear appeals as two of the most significant among the various subcategories of the model are investigated. Long-term fear appeals ruminate serious diseases caused by smoking including cancer, tumors, impotence etc. These appeals are assumed ineffective on adolescents as they underestimate the seriousness of extreme health risks and find difficulty relating to them. This attitude originates from a sense of immortality that is characteristic of this age group (Smith and Stutts 2003).

Short-term fear appeals on the other hand mainly reflect cosmetic concerns that assume negative social repercussions like yellow teeth, bad breath and smelly clothes or hair. These are more relevant to young people and they can easily understand and relate to. Moreover, researchers state fear of addiction as a short-term fear appeal among this age group; young people are constantly surrounded by family and peers who are addicted to smoking, they can therefore process and relate to such a probable threat unlike terminal illness that they easily dismiss as improbable (Meyrick 2001).

The adverse effects of Fear Appeal mentioned above are addressed through The Protection Motivation Theory (PMT), which proposes the introduction of a positive message that would encourage adopting corrective behavior. Needless to say, there are numerous variables that affect individual responses like self-efficacy, which predicts an individual's faith in his/her ability to achieve a certain accomplishment; smoking cessation in the case of this study. The Protection Motivation Theory (PMT) also outlines the factors involved in processing a message conveyed through pictorial warnings on cigarette packs.

#### **4.3. Protection Motivation Theory**

The Protection Motivation Theory (PMT) is a theory of behavioral change, which belongs to the 'social cognition models'. It proposes introducing alongside the fear message, a message of self-efficacy, i.e. a message carrying the positive response expected and implying in the case of this study the ability of the smoker to quit smoking or the non-smoker to avoid it (Floyd et al. 2000). The PMT was introduced by Rogers in 1975 and was further developed in 1983 to include two main cognitive responses that are stimulated by fear appeals; those are the Threat Appraisal and the Coping Appraisal. These two appraisals basically lead to protection motivation or in other words determine people's intention to adopt healthy behavior (Norman et al. 2005 and Thrul et al. 2013).

##### **4.3.1. Threat Appraisal Model:**

The model illustrates how individuals evaluate the seriousness of the consequences of a habit or action and the danger they may be subject to. It focuses on the cause or source of the threat and the maladaptive responses connected to it such as wishful thinking, denial or avoidance. The perception of individuals to the severity of the threat is one

factor that dictates corrective reaction. Another factor is how vulnerable an individual may consider him/herself to being subject to the threat. Therefore the greater the threat is perceived, and the more vulnerable a person sees himself to be affected, the more the motivation is to take corrective action.

“Threat appraisal focuses on the source of the threat and factors that increase or decrease the probability of maladaptive responses (e.g. avoidance, denial, wishful thinking). Individuals’ perceptions of the severity of, and their vulnerability to, the threat are seen to inhibit maladaptive responses” (Norman et al. 2005).

The factors that may cause maladaptive responses are for example pleasure derived from the habit (intrinsic reward) or social approval (extrinsic reward). In this study on smoking behavior the intrinsic reward is the pleasure a smoke gets from smoking while the extrinsic reward is where the smoker believes that smoking helps in weight loss and consequently approval by society (Norman, et al. 2005). Although the message of self-efficacy may be effective in encouraging healthy behavior, it has been noted that actual accomplishment may be delayed; in some cases where the images induce thoughts of quitting, smokers tend to postpone hence reducing the perceived effectiveness of pictorial warnings.

#### **4.3.2. Coping Appraisal Model**

Coping appraisal focuses on the responses that an individual may resort to, in order to cope with the threat and the factors that affect increasing or decreasing the possibility of an adaptive response for example by following advice concerning change of behavior. This possibility is increased by both believing in the effectiveness of the

behavior in decreasing the threat (response efficacy), and in the ability of the individual to perform that behavior (self efficacy).

Some barriers however are noted to come in the way of the adaptive behavior; those are called 'response costs' or 'maladaptive coping responses'. Norman et al. give an example of the fear that some smokers demonstrate from some undesirable consequences to quitting such as increased craving. Therefore response costs work against response and self- efficacy, as they are predicted to reduce coping appraisal in opposition to the latter that are likely to promote it. In other words rather than avoiding the threat or its cause (adaptive coping), maladaptive coping behavior is adopted to reduce anxiety by denying or ignoring the threat (Norman et al. 2005).

“When individuals perceive a threat to their well-being in the absence of an effective coping response, they may engage in activities that reduce the fear associated with the threat without dealing with the threat itself” (Norman et al. 2005).

According to Tanner et al., the adaptive coping behavior is induced by an emotional response and drives an individual to take positive action to deal with danger and remove its cause. This is the outcome that health communicators aim at reaching when conveying messages through anti-smoking campaigns and advertisements. In this case smokers will recognize the threat that smoking causes to their health which will motivate them to take corrective action by quitting or seeking help in the form of counseling or treatment as an initial step towards quitting.

## **Chapter 5: Methodology**

This study attempts to address the use of graphic pictorial warnings and their effects on smoking cessation. The aim of the study is to identify what could affect Egyptian young people between the ages nineteen to twenty-five.

The qualitative method used in this study to collect data is through focus group discussions. Focus groups were initially used in research studying reactions to radio programming, the method was later applied in the field of social sciences especially where marketing is concerned (Belzile & Oberg 2012), (Ryan et al. 2014).

This method was chosen in this paper because focus groups are efficient in getting feedback, exploring opinions, individual perceptions and attitudes (Ryan et al. 2014). They offer both content and expression. A researcher is bound to get “rich and valuable data” through group dynamics and participant interaction (Massey, 2011). According to Belzile & Oberg 2012, the focus group “emerged from a positivist paradigm that valued above all the rationality of the individual” (Belzile & Oberg 2012, p. 461). The founder of this method is Robert Merton, who studied the perception of his participants from a social psychology perspective that contributed to the early development of this method (Merton & Kendall 1946), (Belzile & Oberg 2012). In one study, Markova and colleagues, consider what takes place in focus groups as an active social process where all respondents participate in forming a narrative about the topic discussed. Thus they found that it is important to analyze the data while taking into consideration the interaction within the group and not just the content (Markova et al. 2007 p. 133). They furthermore outlined three levels on which focus group interaction occurs; first between

the participants and the researchers, second is between ‘thoughts, ideas and arguments’, and the third interaction is with cultural and social traditions. All three interactions should be taken into consideration while analyzing focus group data (Markova et al. 2007). The benefits of focus groups therefore are their ability to provide richness, context and new insights to the subject of the interview (Belzile & Oberg 2012).

Belzile & Oberg also offer guidelines for research design that help in enhancing interaction. First, they emphasize the importance of a pilot testing before conducting the main focus group stating that its outcome helps in refining and adjusting questions or materials (Belzile & Oberg 2012). This step is applied in this research and a pilot study was conducted which helped modify the initial questions and formulate new questions using the terms that were most voiced by participants to describe the pictorial warnings on cigarette packs such as ‘shocking’, ‘disturbing’, ‘disgusting’, ‘scary’ or ‘exaggerated’. The next step is for the researcher to ask him/herself a few basic yet general questions; for example what is the main objective of the research? What are the human and financial resources available? (Belzile & Oberg 2012). As for the questions posed to the participants, those should be formulated in a way that stimulates them to elaborate and explain or clarify their viewpoints.

The non-random purposive sample chosen for the study is primarily for convenience. Ease of use is the obvious advantage as students were able to recruit participants for the focus groups through their network of friends and colleagues.

In this study, focus groups are a preferred choice for qualitative approach because before the session, the researcher or the moderator forms the questions with the intention of directing the argument towards some contradiction to get different perspectives



(Wibeck, Dahlgren & Oberg, 2007). Moreover, during the session, the researcher is responsible of steering the discussion and directing when it is open for all participants to express views and opinions, and when they would take turns in answering a chosen question (Ryan et al. 2013).

In order to reach the goal of this study, graphic images are tested on Egyptian students to identify the effects of being exposed to such warnings and their consequences. The qualitative method is used for the rich in-depth data it derives. It is therefore appropriate for studying attitudes, reactions and perceptions. It is also suitable for evaluating complicated phenomena, for example how individuals make sense of the message relayed. Four focus groups have been conducted. Two of the focus groups are of International university students namely the American University in Cairo (AUC) and The German University in Cairo (GUC); The grounds for choosing the sample was mainly convenience. One of those two groups is of smokers and the other non-smokers. The remaining two groups are of students of Future Academy and Ain-Shams University, which are national universities affordable by lower socio- economic standard students. The languages used in interviewing international university students were English and Arabic, while communication was in Arabic only in the national university focus groups.

Focus groups with participants from international universities were held at the AUC New Cairo campus on 17 and 19 April 2015. Focus groups with participants from national universities were held at Smash Club on 10 November 2015 and at Al Rehab on 31 January 2016. A study room was booked at the AUC library for the international university focus group sessions. Participants were seated around the table as the

discussion took place. For convenience, participants from national universities met at the lounges in both Smash and Al Rehab clubs, which contributed to a relaxed atmosphere during the discussions.

Non-smokers are included in the sample for two reasons. First they may have a positive influence on smokers by warning them of the hazards of smoking or by encouraging them to stop smoking by taking non-smokers as a positive example as the Social Cognitive Theory suggests. Another reason for including them is because they are potential smokers themselves, liable to be affected by peer or social pressure as suggested by theories of normative influence. As Biener and Albers suggest, young adults stand in what the researchers consider an “initiation phase of smoking”. They are therefore expected to follow one of two paths from this transitional point; either heavier smoking, or no smoking (Biener and Albers, 2004). Previous research moreover suggests that the increase in exposure to health warnings made the hazards of smoking more salient to this group in particular thus preventing smoking onset (Munafo et al. 2011). Non-smokers may therefore give an insight into how they perceive the graphic warnings and if they find them effective in discouraging them from starting smoking. The age group of the sample is between nineteen and twenty-five, which is the range of university students in Egypt. Moreover, the interaction between smokers and non-smokers may help the moderator to gain more valuable information or data.

Participants are recruited using the Network Sampling Technique. All respondents are volunteers; individuals, who are willing to participate, approach their friends and invite them to participate in the study. Participants were informed upon arrival that their participation is voluntary and they are free to leave if and whenever they choose to.

Their identities shall be anonymous, and they are free to refrain from answering any questions that makes them uncomfortable. The duration of the group discussion was approximately one and a half hours per focus group. The aggregate total of session time was approximately seven hours. Refreshments were offered upon arrival. Confidentiality was ensured and respondents were asked to sign consent forms with the promise of being destroyed after defending the dissertation. The materials presented to the students for the study are images of pictorial warnings that are divided into four graphic anti smoking image types:

The first group includes the images that are currently on cigarette packs, those are extremely graphic depicting extreme smoking related health hazards such as tumors, cancer of the mouth, face and throat.

The second group contains images that depict health hazards but are less graphic such as the smoker on a ventilator, a child with an oxygen mask as a result of second hand smoking, a pregnant woman with emphasis on the fetus, and a curved cigarette insinuating impotence.

The third includes pictures that have not been used in Egypt. One a comparison between the lungs of a smoker and a non-smoker, and the other an impaired eye with a text warning saying smoking causes blindness. Those are meant to test if less familiar images have a stronger effect.

The fourth consists of two types of symbolic images, one is of a cigarette pack in the shape of a casket, and another image showing a hand cuffed and chained to a bunch of cigarettes.

The fifth is the purely scientific, with two images, one labeling all the chemicals in a cigarette, the other showing a diagram of a human body and labeling all the organs and the potential harm that smoking can cause to each.

The focus group discussion is divided into a number of different points: Respondents are initially asked to express their opinions regarding each group with the written or text warnings. Secondly they are asked to say how they felt regarding the 12 graphic visual warnings as well as the cessation support messages. The whole process and discussion is audio recorded. All accounts of the focus group (verbatim accounts) are transcribed and then analyzed.

Questions investigated in the focus groups were slightly modified without violating the spirit of the questions provided to the CAPMAS and IRB. Questions asked were the following:

- 1- How did you start smoking?** This question was addressed to smokers to test whether family, peers or society in general are the reason behind smoking initiation.
- 2- Do you find it embarrassing to say no to peers who offer you cigarettes?** This question was aimed at non-smokers to examine if peer pressure was a direct reason for initiating smoking, and to find if non-smokers felt socially alienated for refusing to join in smoking.

- 3- **Which graphic images do you remember the most** (they do not have to be among the ones I provided) remembering a certain image is an indication of its effectiveness.
- 4- **Can you express your opinion regarding the graphic pictures?** This is an open-ended question that provides understanding of how graphic images are perceived by young people.
- 5- **Do you find the graphic images: a) Believable b) Not believable c) Exaggerated.**
- 6- **How do you describe the graphic images?** This question builds up on question # 4 in an attempt to probe more into how the graphic images are perceived and offer participants space to express their feelings and thoughts.
- 7- **Which pictures were most believable?** Questions 7 and 8 are key questions to the research where a precise answer is expected. they are designed to test if certain images have greater effect on young people than others and if so which ones prove more effective on smoking intentions and behavior.
- 8- **Which pictures would most encourage you to quit or discourage you from smoking?**
- 9- **How do you find the graphic images?** (one word to describe) The intent of forming this question is to get a precise answer that is used in further questions.
- 10- **Were you ever scared for your health because of the images?** Question to test the effect of images and the numbers of those affected in the sample to give an insight into how the fear message is cognitively processed.
- 11- **Would religious messages be effective?**

**12- Do you consider a novel picture (e.g. blindness) more effective as it has not**

**been seen a lot and therefore not dismissed?** This question is to examine if maladaptive responses are developed towards unfamiliar images as they are with familiar ones.

**13- Can you rate images from most effective to least: graphic, scientific, symbolic.**

**14- Do you remember any of the text warnings?** This is to test the theory suggesting the predominance of images over text in raising awareness and influencing behavior.

**15- Have you ever discussed health hazards on pictures with anyone?**

Finally respondents were asked to give any recommendations on what they believe may be effective pictorial warnings.

**Research Questions:**

1- Do young Egyptians perceive the graphic warnings on cigarette packs to be effective in influencing their rational and emotional process regarding smoking?

2- Do young Egyptians perceive graphic warnings on cigarette packs to be more effective than textual labels in terms of influencing their smoking behavioral intentions?

3- Do young Egyptians believe that graphic warning labels increase awareness of the health hazards of smoking?

4- Which of the themes of cigarette packs are perceived by young Egyptians to be the most persuasive in terms of encouraging smoking cessation?

## **Chapter 6: Findings; Impact of Exposure to Pictorial Warnings**

The literature review research suggests that despite attempts by the WHO, and certain governments, the initiative to raise awareness on the hazards of smoking, and to limit the number of smokers has failed. The numbers of smokers are rising worldwide, and consequently the number of smoking related diseases and deaths are rising too. Statistics show that the rate of cigarette smoking in Egypt has been consistently escalating and it is now the highest in tobacco consumption in the Middle East and North Africa region, and one of the highest worldwide (Al Awa et al. 2010). Such numbers only suggest that the measures taken do not achieve the intended effect.

A non-random purposive sample was chosen for the study. Groups of smokers and non-smokers were interviewed separately from both national and international universities.

As Markova and colleagues suggest, focus groups provide an active social process where all respondents participate in forming a narrative about the topic discussed (Markova et al. 2007 p. 133). Thus the data was analyzed while taking into consideration the interaction within the group and not just the content. Also taken into consideration were the three levels on which focus group interaction occurs; first between the participants and the researchers, second between thoughts, ideas and arguments, and finally with cultural and social traditions. (Markova et al. 2007). All points participating to the benefits of focus groups and their ability to provide richness, context and new insights to the subject of the interview (Belzile & Oberg 2012).

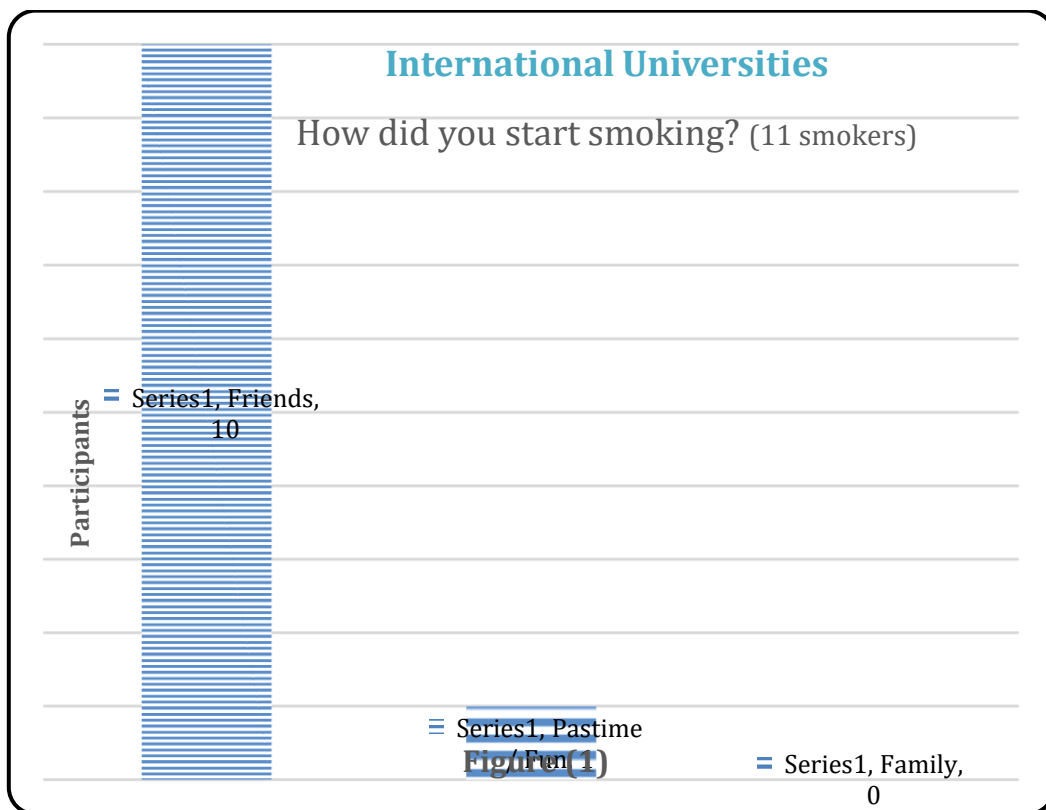
A pilot study focus group was conducted prior to the main focus group interviews, the number of participants were 8 university students from the American University in Cairo (AUC) and The German University in Cairo (GUC). Participants were five males and three females. It was observed that participants in this group repeated three terms to describe the graphic images. Those terms were “disgusting”, “disturbing” and “scary”. This outcome was used to modify questions posed to the following focus groups. Participants were asked how many thought they were disgusting, how many disturbing and how many scary in order to set a primary base for measuring image effect. Another point brought up in the pilot study was how most participants found the graphic pictures extreme if not unbelievable. Questions were posed to the smoker and non-smoker groups to examine this issue as well.

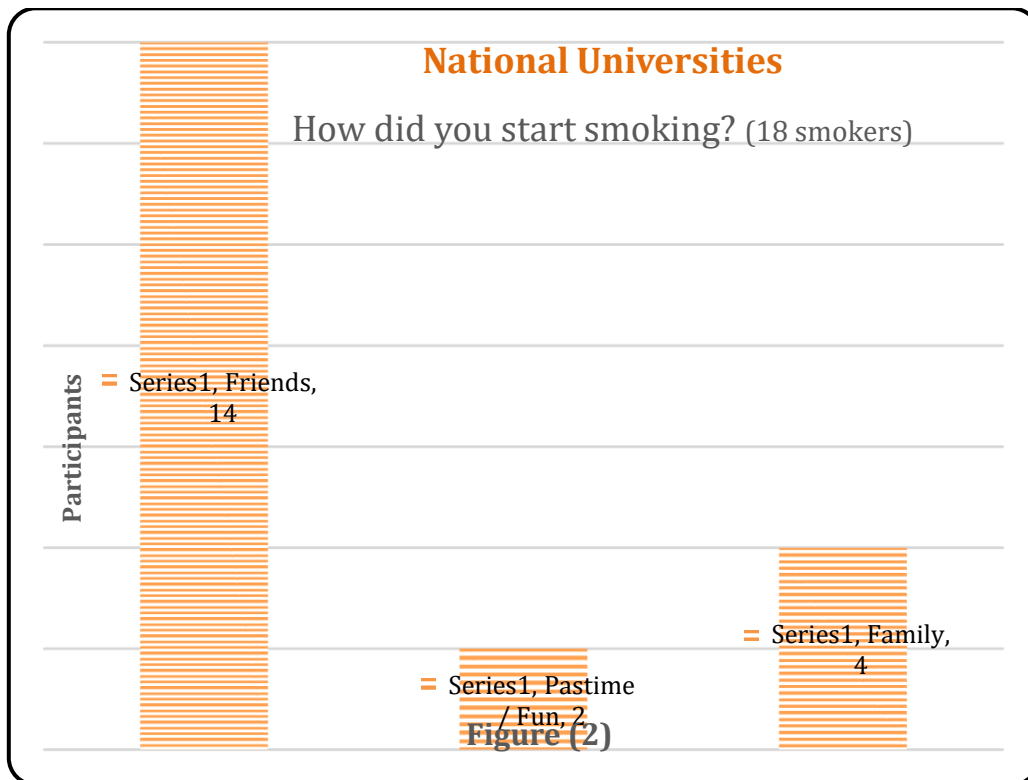
It is worth noting that only twelve participants in the smoking group from national universities completely fulfilled the requirements of the research. The original number of respondents was eighteen, a number of them left before concluding the interview and a few revealed that they were smokers but nonetheless joined their friends in the focus group.

The first question posed to smokers from both national and international universities was how they started smoking, this was meant to establish if a likeness between their responses and findings of previous studies emphasizing the influence of family and peers exists. Ten respondents out of eleven from international universities agreed that they started at gatherings with friends. Only one respondent answered that it was just for fun, as a pastime. None of the respondents attributed the habit to a family member even though some of the parents were reported to be smokers (Fig 1). Fourteen respondents



from national university students revealed that friends came first, four indicated family next and two said the reason was pastime (Fig 2). The responses of participants in the two groups are partly in agreement with the theories of normative behavior, which explain that individuals develop a perception of what others believe or think of them. If a behavior like smoking is common among members of one group, an individual is likely to believe that he/she would be more accepted in the group as a smoker. As the theory asserts, this self-perception becomes more important than what others actually think.





It is worth noting that the results of both international and national groups partly differ from those of some earlier studies, which suggest that family followed by peers have the highest impact. Those studies suggest that normative influence of both household and neighborhood is directly linked to youth smoking. Results indicated that youth living in households with at least one adult smoker were twice as much inclined to smoke regardless of age, wealth, employment, or education. (Harbour 2012). A study in Alexandria found that adolescent smoking behavior is directly affected by family and peers. However, the influence of adult and sibling smoking behavior were greater than those of peer (Islam & Johnson, 2005). Many of the non-smokers interviewed in the

focus groups come from families with at least one parent who smokes. Although some studies suggest that students who had parents or siblings who smoked were 4.4 times more inclined to become smokers than those from families who do not smoke (Maziak 2002), participants reported that they were not tempted and have no intention to smoke. Moreover, they expressed fear for the health of loved ones and their attempts to convince them to quit.

On the other hand when non-smokers from both international and local universities were asked why they think friends or people their age start smoking, several said they believe it is mainly to socialize. One respondent said:

“You socialize through it; you have a cigarette, a lighter, and the conversation goes on”

Another respondent said that some may start smoking after a trauma, as in the case of her relative who started smoking after losing her father at the age of 16. Again none of them attributed the habit to family members. However, most respondents of both international and national universities said they are not embarrassed to openly say they do not smoke. They also expressed not feeling left out in a group of smokers. In this case peer pressure has minimal significance. One student said:

“People respect me more for who I am and there is less pressure”.

Another’s opinion was:

“We are different and distinctive. It is a good quality (i.e. not smoking)”.

Most respondents in the non-smoking group admitted having tried a “puff” at some point but do not wish to make a habit of it.

The responses of this group are contradictory to findings of studies suggesting that influence of peer pressure is directly linked to smoking (Harbour 2012). Responses are also inconsistent with findings of Islam and Johnson who suggest that smoking habits

are further reinforced by perception of social norms where a young person doubts his/her ability to refuse a cigarette offered by members of family, friends or peers (Islam & Johnson, 2005). On the contrary, respondents were proud of demonstrating character and determination in refusing what they thought is harmful irrespective of how they may be socially perceived. Furthermore, most students in the sample displayed confidence in their decision and expressed that they find themselves positively distinctive by not being influenced by smokers even if subjected to pressure.

On discussing the pictorial graphic warnings and which ones participants remembered the most, smokers in the four groups unanimously recalled the images depicting cancer of the mouth/tongue followed by leg gangrene images. Black lungs came next in the smoker groups while the image of the man on a ventilator was recollected mostly by non-smokers. Having mentioned that, it is worth stating that those images were merely the most recollected but when shown a set of different images including the ones mentioned, their responses showed that those recollected do not mean they are the most effective in relaying a cessation of smoking message. The non-smoker groups however initially found some difficulty remembering any images at all although they did remember anti-smoking commercials. Interestingly the responses of this sample are in line with the responses in a British study where participants found the image with cancer of the throat to be the most disturbing (Styles 2013).

Regarding the extreme graphic images, smokers in both national and international universities conveyed that extensive exposure to graphic images has led to desensitization. Young people have gotten used to the pictorial warnings although they found them initially disturbing. Some said they bought cigarette pack covers, or covered them with the paper foil inside. A number of respondents agreed that when buying, they

chose packs that had what they considered the least disturbing images to them which interestingly have been given names, for example inside smoker culture language has dubbed the image with throat cancer “cherry”, another image is called “cake”.

Smokers also asserted that although they covered the packs at some point, they have stopped covering them after a while. All four groups involved in the study said they have relatively gotten used to the images. A student in the smoking group said:

“Looking constantly at them (images) makes us dismiss them by time”.

One smoking respondent said:

“We’ve reached a point where our minds are programmed not to even notice them”.

Another respondent said:

“It is so disgusting and repulsive that my brain blocks it”.

Respondents were subsequently asked if they consider the novel image shown (blindness) to be more effective as it has not been seen a lot and therefore shall not be easily dismissed. This question is meant to examine if being presented with new pictures may help overcome the natural tendency for desensitization. Most smokers from international universities found the picture stating that smoking causes blindness unrealistic and unbelievable. They expressed that such pictures negatively affect the credibility of all others. In those two focus groups, the question did not solicit the anticipated response. One participant from the smoker group said:

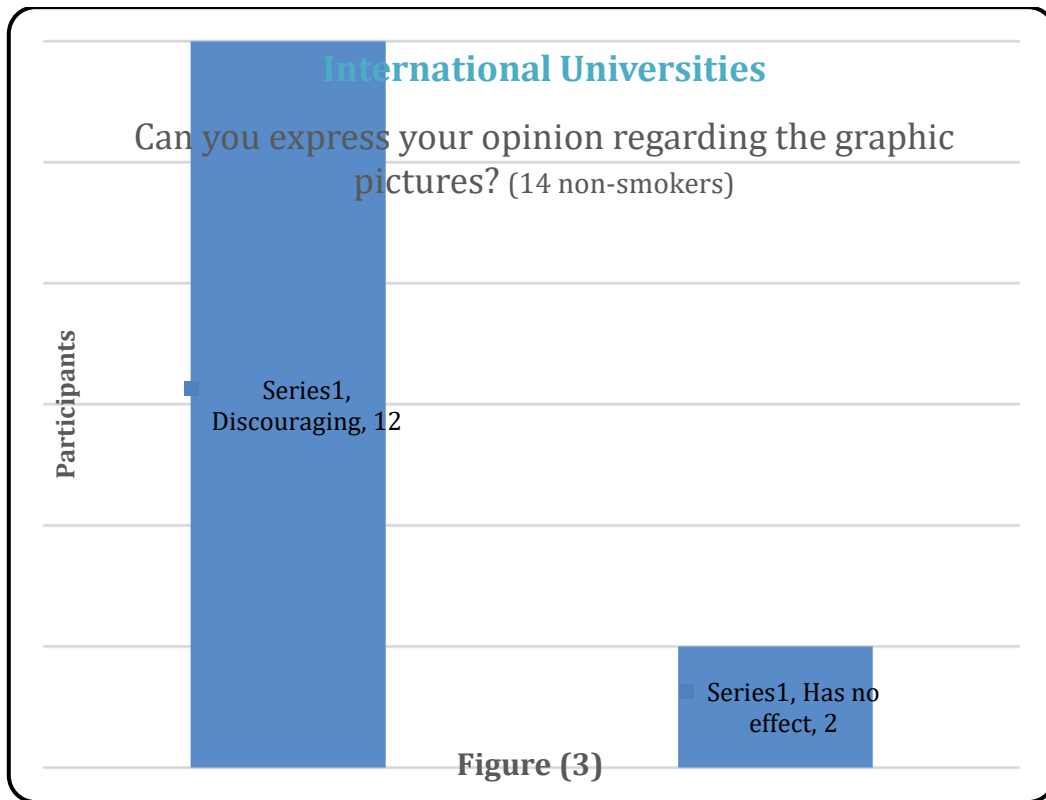
“I find it scary, but it still won’t make me stop smoking”.

As for national university students, most said that images in general do not affect them, therefore new ones will be dismissed too. One student said:

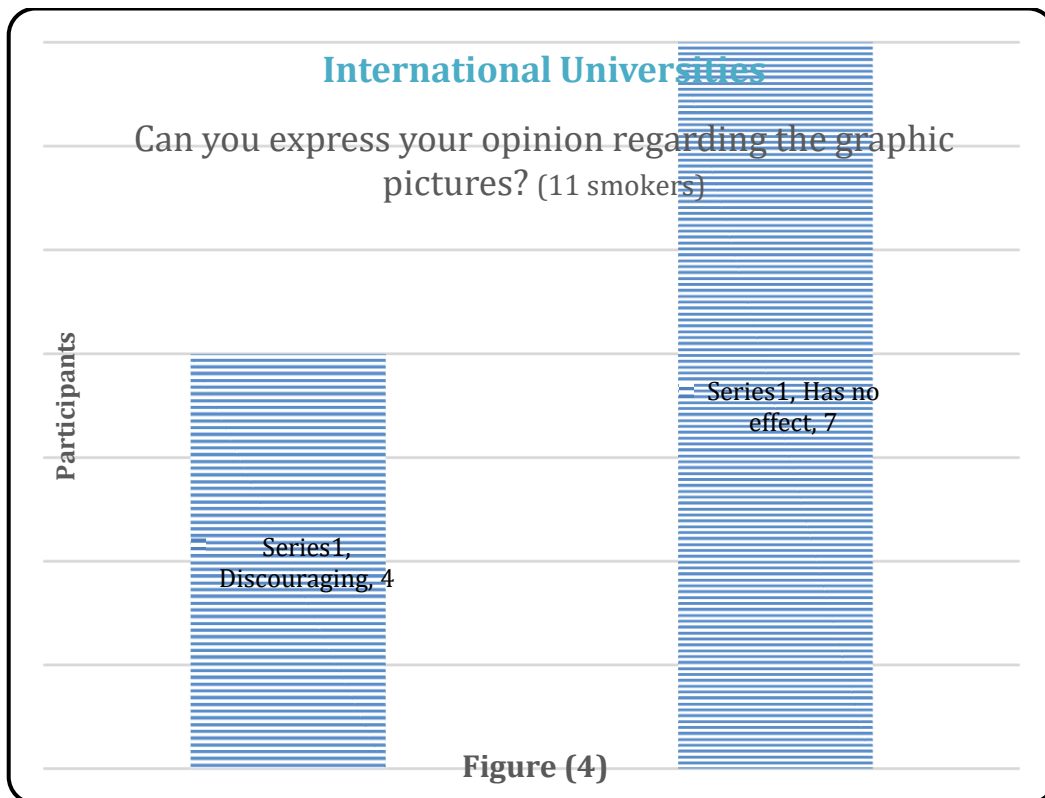
“If I see a picture that is not common, I assume that the disease itself is not common and therefore I will not be affected”.

Concerning the image of blindness that was used as an example for this question, some said that it is not convincing because they assumed that direct smoke is the cause of blindness. The intended message was misunderstood although participants are all well educated individuals. Previous studies however found that new pictures have a positive impact on cessation intentions (Cameron, 2015). The image (of blindness) shown to participants in the focus groups representing this category may have diverted their attention and impacted their response to the question thus explaining the discrepancies. If the images are covered or dismissed by time, then this means that their effect is constrained whether intentionally or unintentionally. This might explain the proposal preferred by many participants in both groups to eliminate the extreme graphic images and replace them by less graphic ones that cannot induce such protective reactions. Attempting to avoid the images indicates that respondents find them uncomfortable to look at even when they try to make light of them as in giving the images street jargon labels as “cake” or “cherry”. This is in compliance with the Threat Appraisal Model, which proposes that individuals adopt certain responses when faced by a threat, one of which is avoidance as stated by Norman et al. (2005). Other maladaptive responses as denial are demonstrated in the same action as if by hiding the picture the harm would be hidden as well. The mere naming of pictures mentioned above as “cherry” and “cake” suggests that smokers initially find the images uncomfortable and therefore attempt at neutralizing their effect. This account engulfs several of the major maladaptive responses including wishful thinking, denial and avoidance. The intrinsic and/or extrinsic rewards derived from smoking may be at this point stronger than the will to quit and therefore the maladaptive responses develop.

Out of fourteen non-smokers in international universities, twelve said -as potential smokers- the pictures would put them off or discourage them from smoking, two said they would have no effect whatsoever on them (fig. 3).

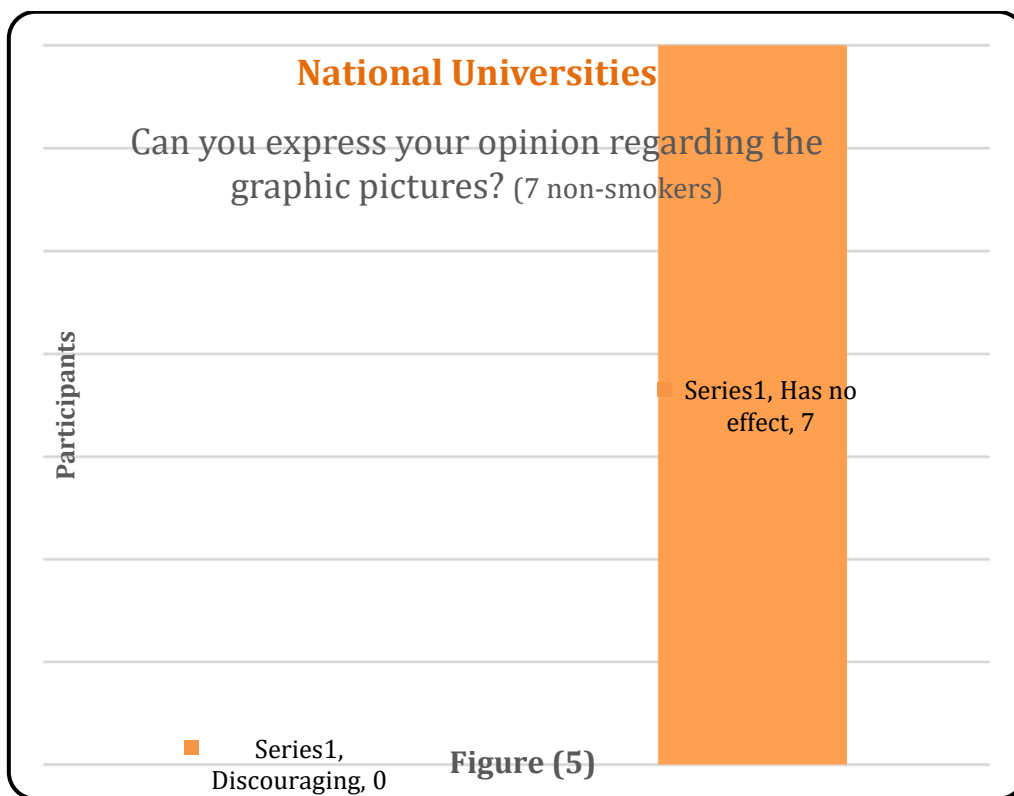


Out of eleven smokers from international universities, four said the images would discourage them and seven said they have no effect (fig.4).

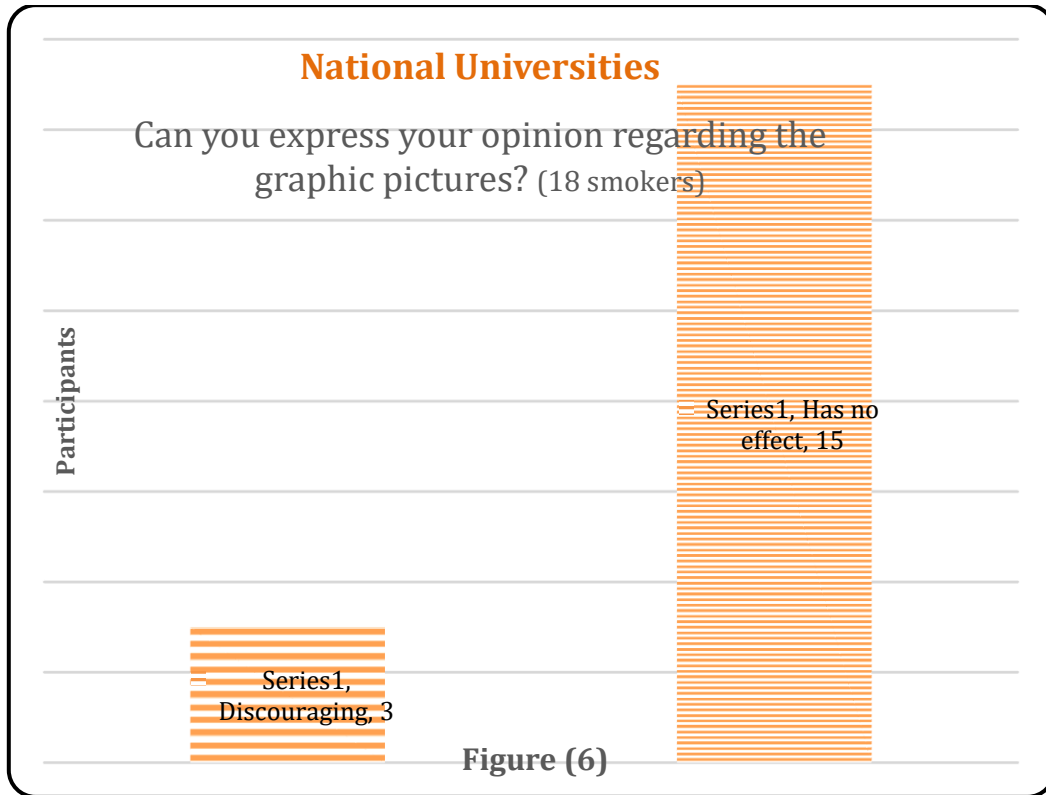




The group of non-smokers from national universities however unanimously expressed that the images on cigarette packs have no effect on them i.e. would not discourage them from smoking (fig. 5).



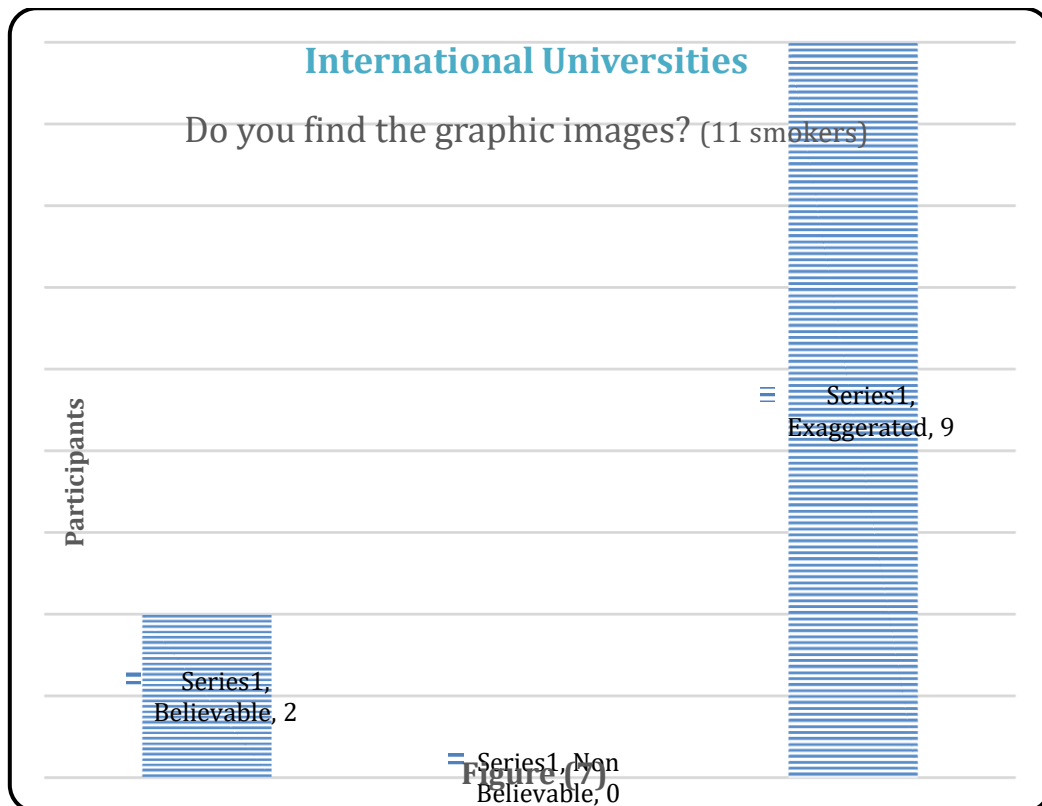
Fifteen of the participants who smoke from national universities expressed that the images have no effect on their smoking behavior while only five said they may find them discouraging (fig. 6).



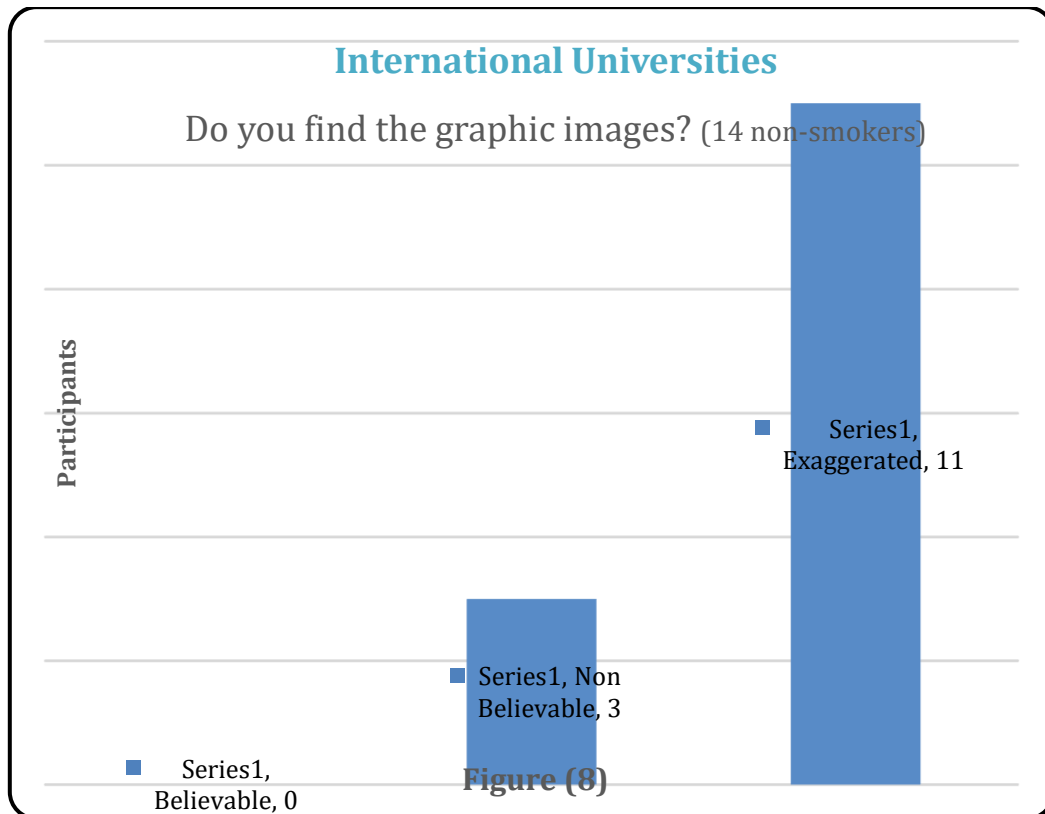
When comparing the responses of students from international and national universities, it is noticed that the first group is more affected and discouraged from smoking than the latter group. This outcome is in agreement with the findings of a study on students from Cairo University, which suggests that students attending language schools in general come from higher social class than those attending public schools. They are therefore more exposed to awareness campaigns and information on health

issues (Nassar 2003). Consequently, they are more inclined to be affected by the messages on cigarette packs than their counterparts who attended public schools.

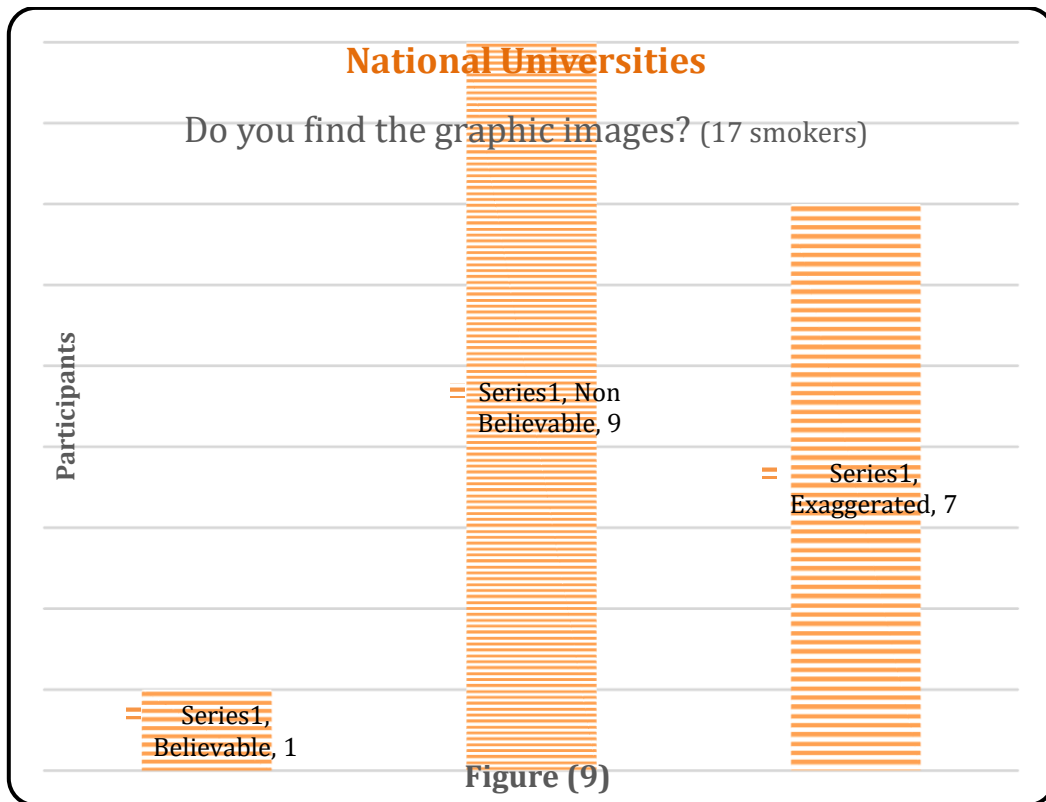
When asked if they found the graphic images believable, only two participants out of eleven in the smoker group from international universities found them believable although they said they believed they only happened in extremely rare cases. Nine respondents considered them exaggerated; meaning the diseases depicted may not be caused by smoking or the images may even have had some photo-shop enhancements (fig. 7).



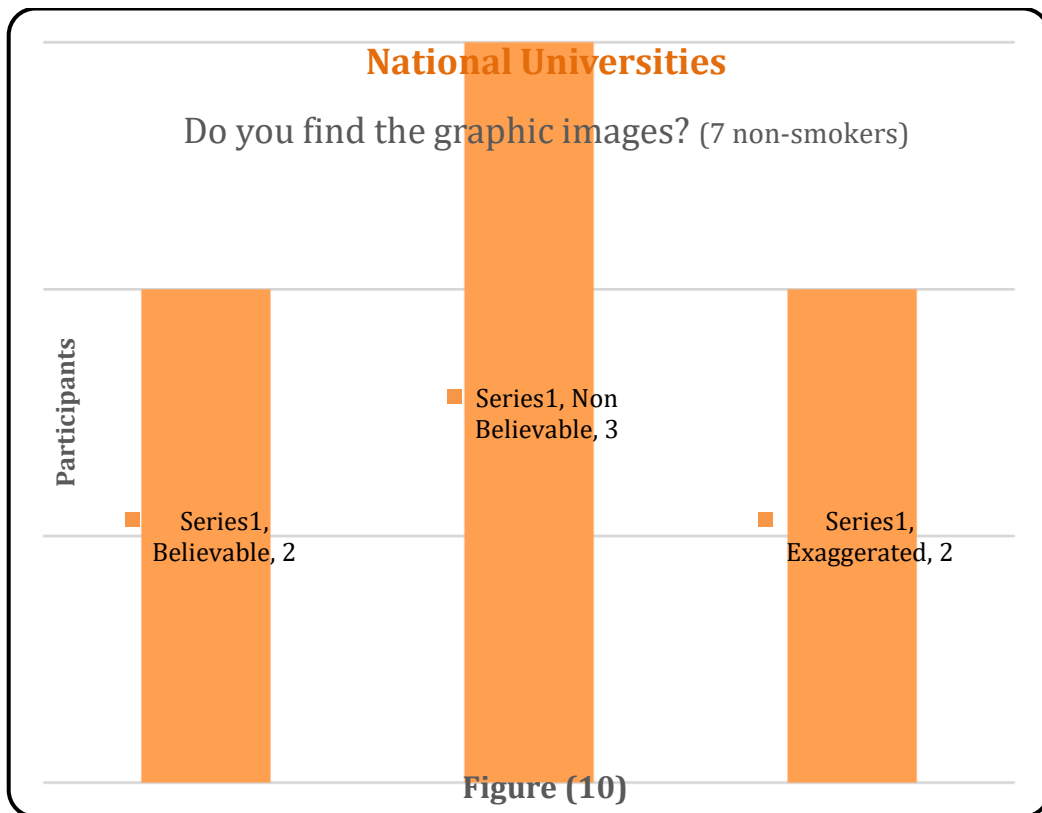
As for the fourteen non-smokers from international universities, none of the participants found the graphic images believable, three found them not believable and eleven found them exaggerated (fig. 8).



Out of seventeen smokers from national universities, only one respondent found the images believable, nine found them not believable, and seven found them exaggerated (fig 9).



As for the seven smokers from national universities, two found the images believable, three found them not believable and two found them exaggerated (fig. 10).



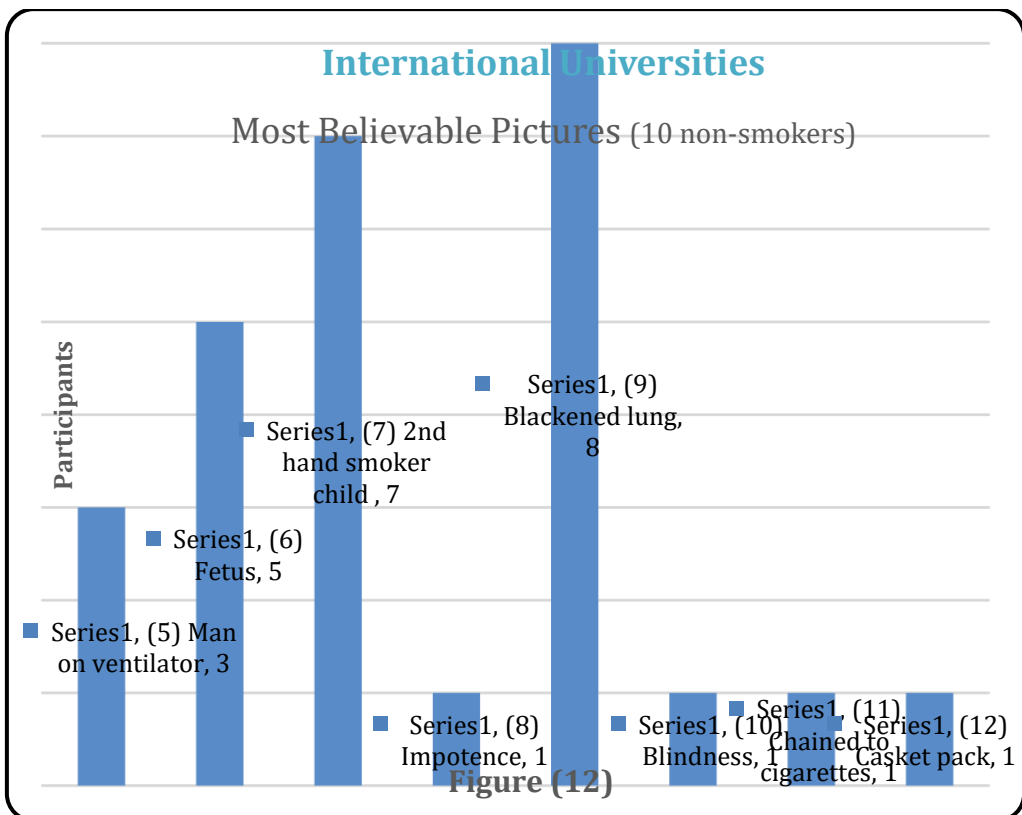
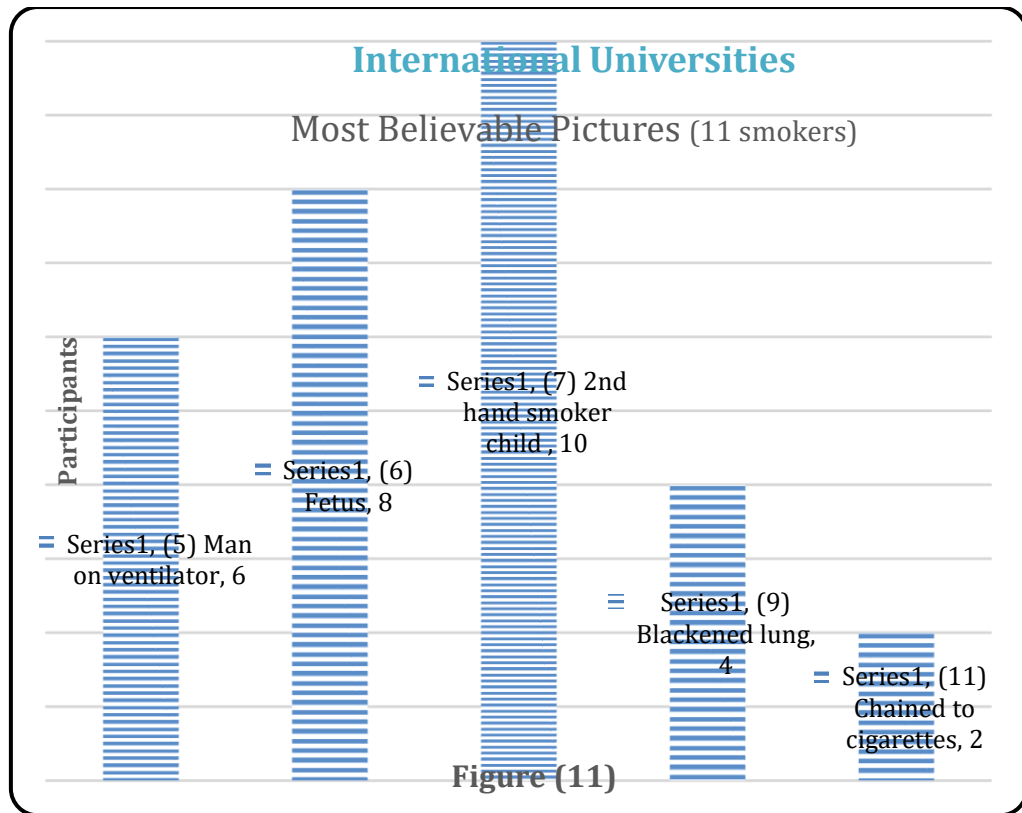
The findings are not in accordance with the 2009 GATS report, stating that 97.6% of Egyptian smokers believed that smoking causes serious health risks and illness (GATS report 2009). The findings however are in line with the Threat Appraisal Model that cites undesirable protective responses adopted by individuals such as denial or wishful thinking to protect themselves from the fear caused by a fear message. One respondent said:

“My father has been smoking for a long time and nothing of this has happened to him”.

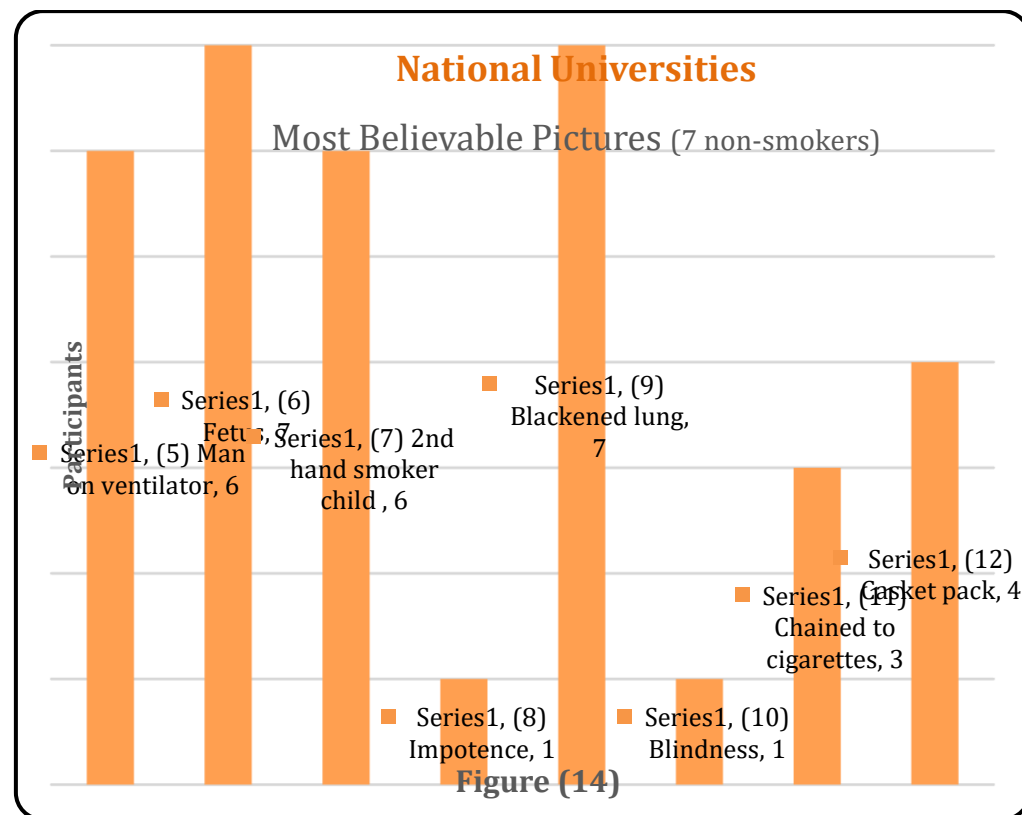
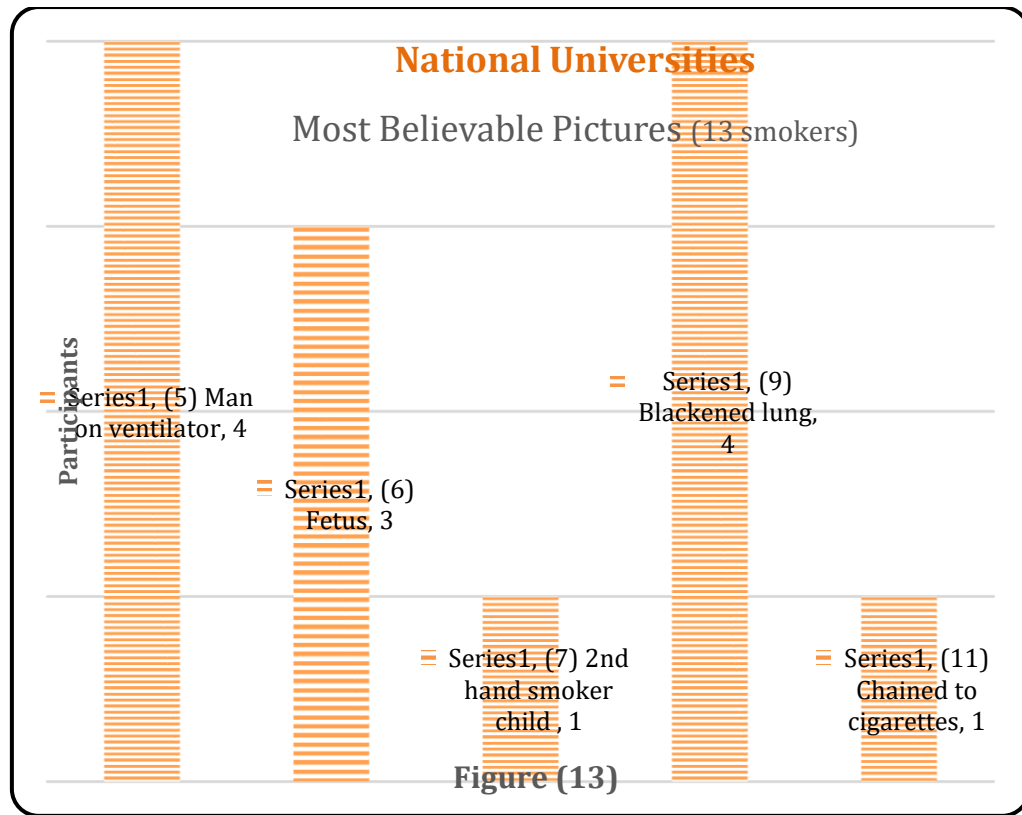
This response is an example that indicates wishful thinking and denial that any harm may befall her father. Similarly one student said “ If a fat girl dies from eating chocolate, I will still eat chocolate”.

Both maladaptive coping responses may well stem from fear as proposed by Fear Appeal and Protection Motivation Theories.

After being given a brief interval to closely study the group of images presented, respondents were asked to identify which pictures they perceived to be the most believable. In both groups, the second hand smoking victim (a child), stood out as the most believable, followed by the fetus image. Most participants expressed concern towards others; harming oneself is a choice they are free to make, but they are not comfortable subjecting others to harm. Female respondents were repulsed and expressed sensitivity to the images of a child or fetus. Such sensitivity was more expressed by females than males. This suggests that gender is a significant variable in determining the efficacy of anti-smoking messages on smoking behavior. Moreover, some participants in the smoking group expressed fear for loved ones, comparing the second hand-smoking category to the extreme graphic images, they said that the graphic shows what will happen to their own bodies, which does not bother them. What harm they may cause to others is what elicits strong reactions (figs 11, 12, 13 and 14).





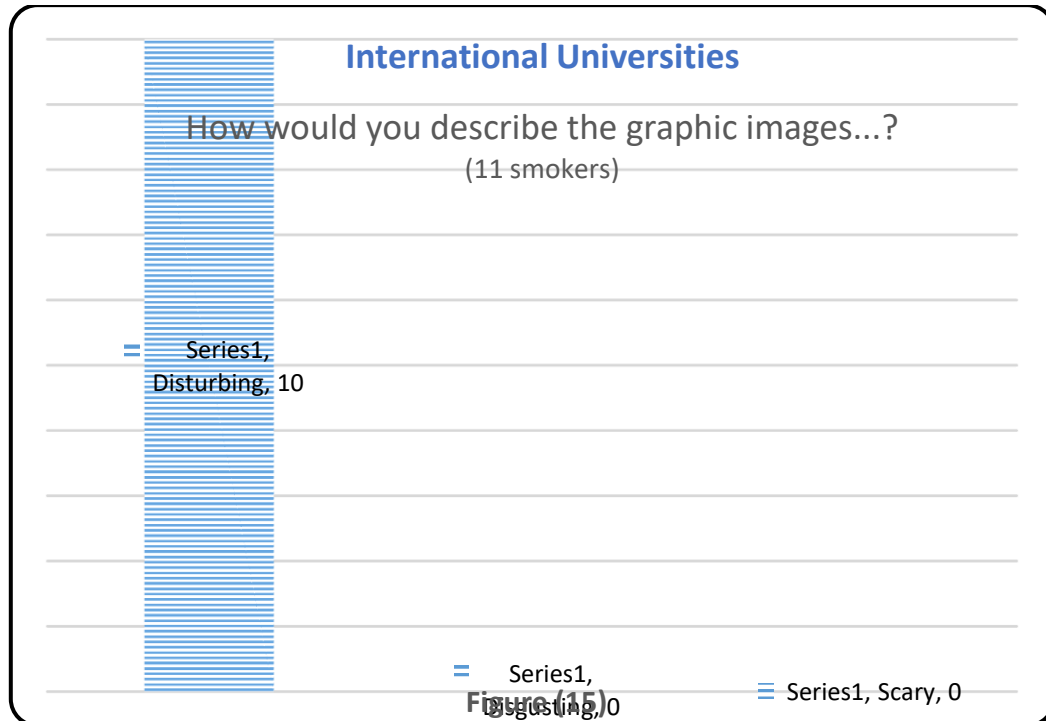
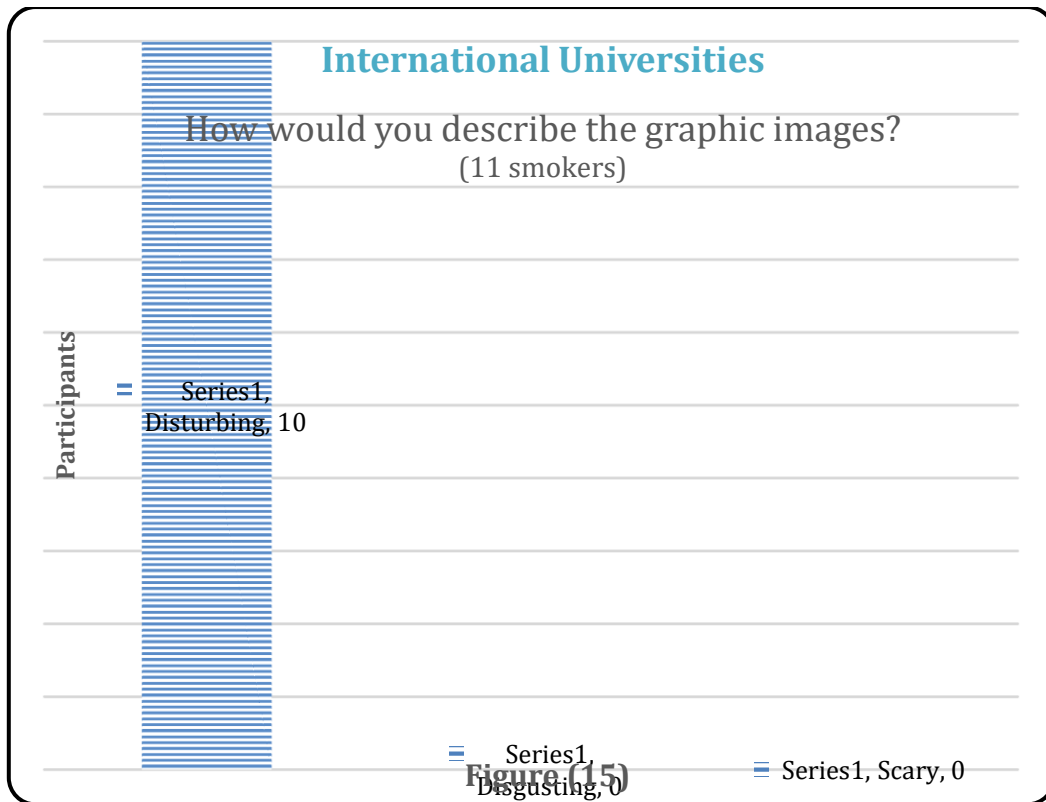


As previously mentioned, the three main words describing the graphic images were: disturbing, disgusting and scary. Only one smoker found them annoying. Participants who smoked in both groups agreed that the more disturbing an image, the more it is either avoided or dismissed as exaggerated. A participant summarizes it in her own words:

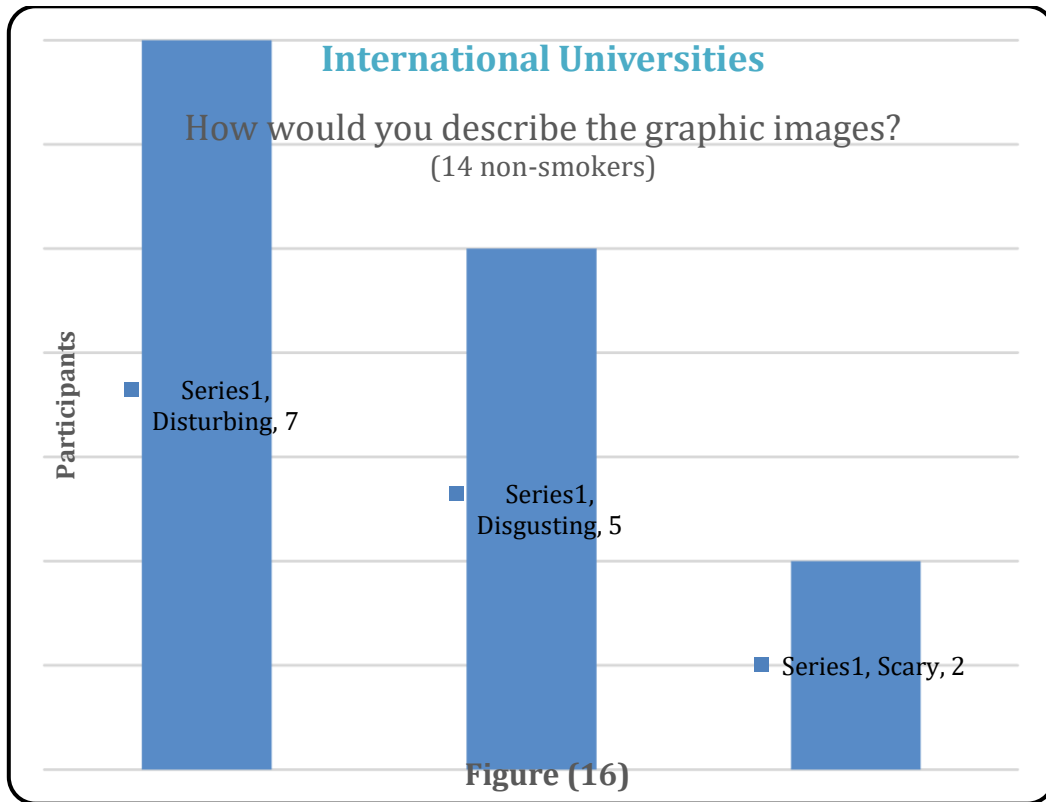
“Had there been less graphic, more convincing images instead of the ones I dismissed as exaggerated before I began smoking, I may have been discouraged”.

Only a four smokers, expressed feeling scared for their health at some point when they started smoking. The rest said they never felt scared and always believed they are not susceptible to such extreme health hazards. A higher number of non-smokers expressed that the pictorial warnings may have scared them at some point although they believed the images were exaggerated.

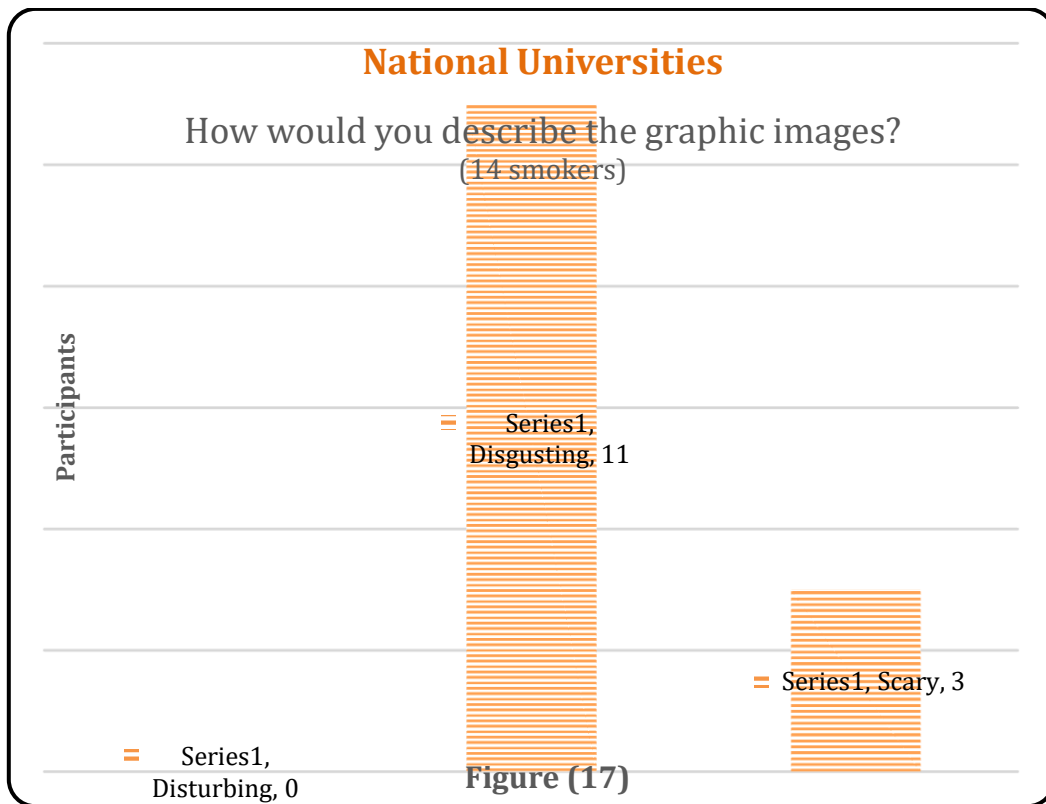
All ten smokers of international university participants found the graphic images disturbing. None of the respondents found them disgusting or scary (fig. 15).



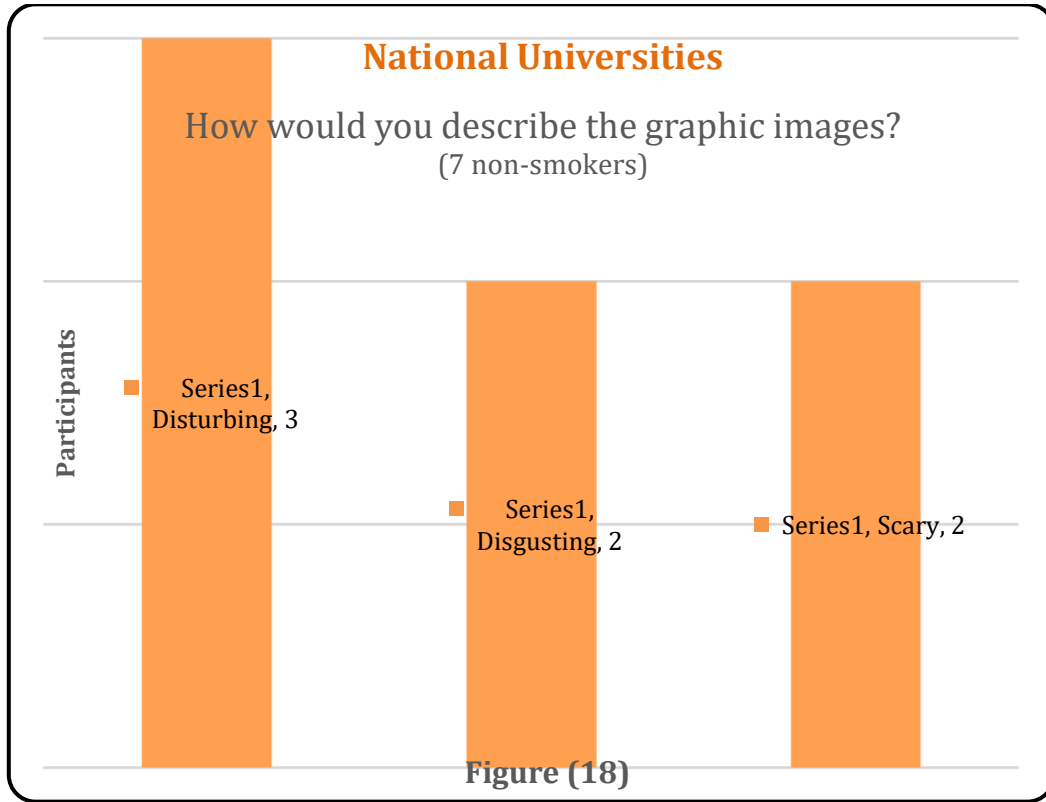
Out of fourteen non-smokers from international universities, seven reported finding the graphic images disturbing, five disgusting and two scary (fig. 16).



Findings from the group of national university smokers suggest that none of the participants found the graphic images to be disturbing. Eleven participants out of all fourteen found the images disgusting, while three found them scary (fig. 17).



Out of the seven non-smokers from national universities, three found the graphic images disturbing, two found them disgusting and two scary ( fig. 18).



Since smoking is considered ‘haram’ or prohibited, (Radwan et al. 2003) (Ghouri et al., 2006), and in Christianity any kind of dependence is not “beneficial”, participants were asked to give their views. Postulating on if images carrying religious messages posted on cigarette packs would affect them they had different stances: Most Muslim students said it is only ‘makrouh’ i.e. not preferred, as opposed to ‘haram i.e. prohibited. One considered reacting to such messages a matter of “individual perception”. It is about “what I think and how I live my life”. It may even backfire if this is not your belief, you may buy your cigarettes without caring. Students of international universities from both

religions thought it would be a weak message, just mildly effective, getting through to a small category of people. Also where religion is concerned, people end to justify themselves; some participants said they do good deeds so God will not punish them. Others said they don't really harm others, as they are keen on smoking outdoors only. Some participants said they know it is wrong but the habit is stronger than any other motive to quit. One participant linked smoking to alcohol:

“People who drink alcohol know it is ‘haram’ (prohibited), and they still do it even when they watch religious programs and read the Koran”.

Out of twenty-two students of national universities, sixteen students thought smoking is wrong from a religious point of view and six thought it was not wrong. In this aspect the perception of national university students differed from that of international university students where most believed it is not religiously acceptable unlike their international university counterparts who did not think it is religiously wrong. This is consistent with the findings of Barber 2011 that suggest religion plays a more significant role in the lives of lower socio-economic standards than higher attributing it to a sense of uncertainty that makes people turn to religion for support to help them cope (Barber, 2011). The non-smoking participants' original attitude towards smoking and their already existing cognitive refusal of the habit is what drove them to make a conscious decision not to smoke. It is not clear if part of this resolution is due to awareness raised by the graphic warnings, or from parents, anti-smoking commercials, the influence of religion or other causes.

In order to get a clearer perspective on which category of images would be the most effective in terms of encouraging smoking cessation for smokers or discouraging non-smokers from smoking, the images they were presented were divided into three categories: a) graphic/realistic b) symbolic c) scientific. Participants were then asked to rate them from the most effective to the least.

It was found that international university students who did not smoke equally found symbolic and scientific images to be more effective than graphic (fig.19).

Preference of images were for various reasons; some respondents expressed their thoughts as follows:

“Graphic images are so bad that we dismiss them, but if we have something that we can relate to, like a symbolic or scientific information image it would click with you”.

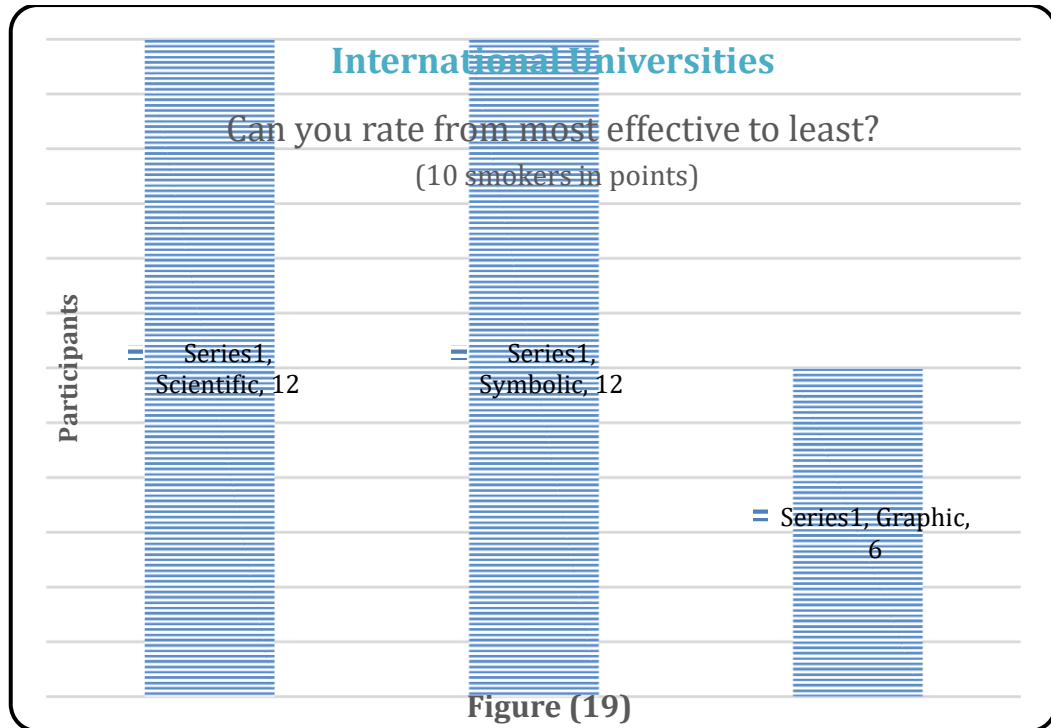
Looking at the cigarette pack in the shape of a casket, one participant commented:

“I think it is funny, it is very powerful, when I hold it, it shall always remind me of the grave”.

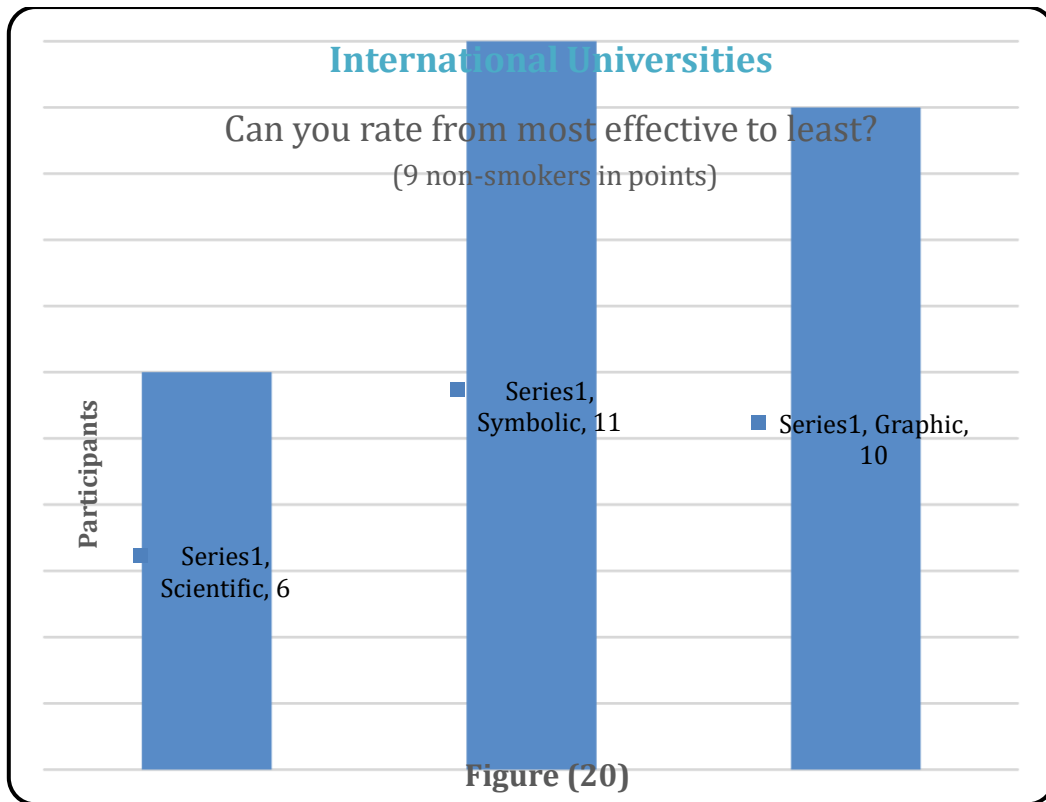
Another students elaborated:

“As a smoker, I am buying (cigarettes) anyway, symbols would make me think, when I think I’ll realize I’m dying”

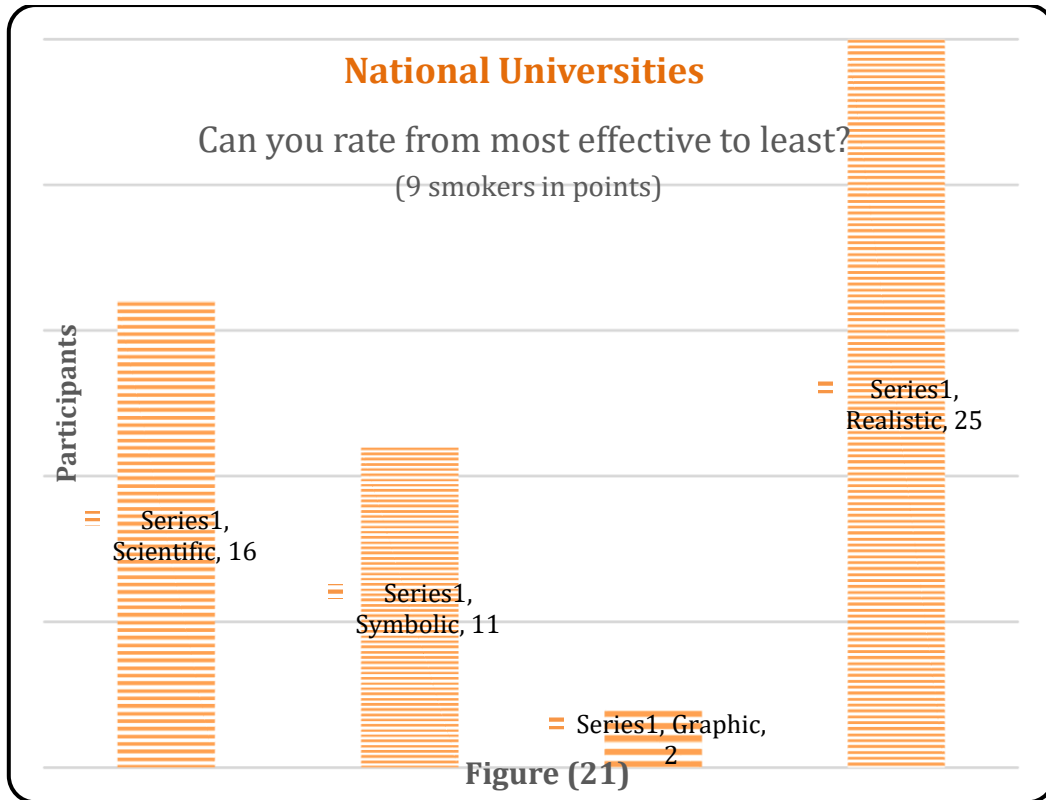


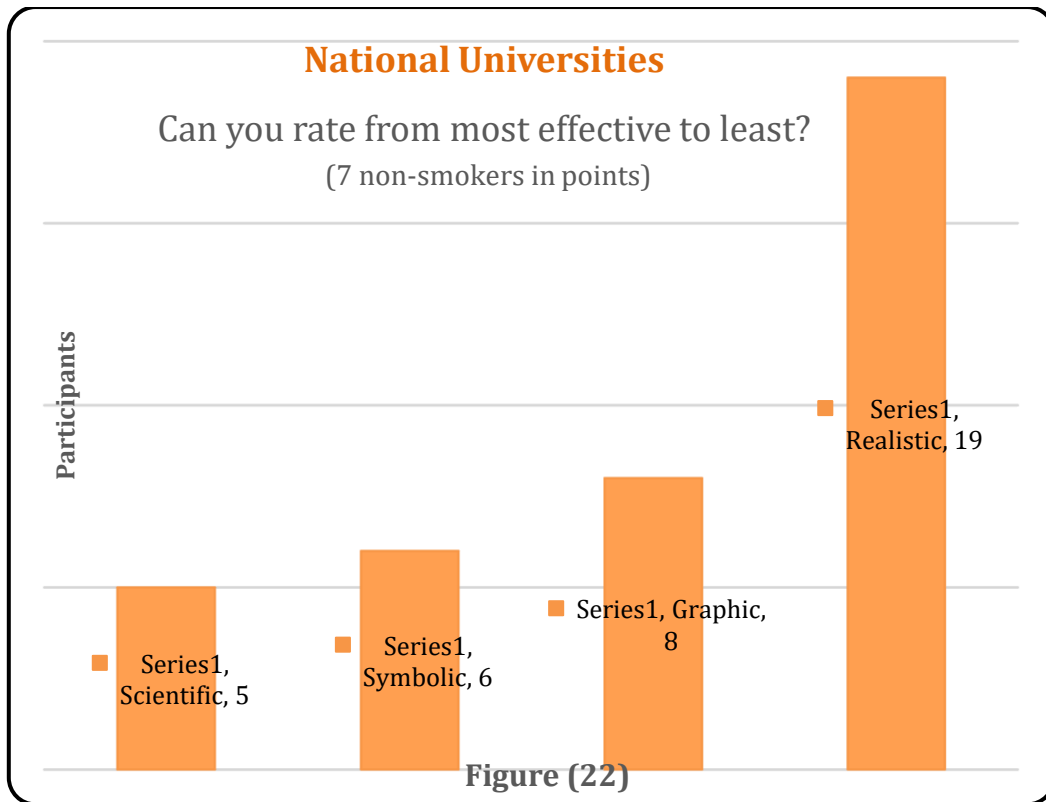


As for non-smokers in international universities, they symbolic images first with eleven respondents followed by graphic images, ten respondents and lastly scientific six respondents (fig 20). As one participant said: When you say ‘smoking kills’, it is not going through a rational process, but when associated with a bullet (like in the ad.), everyone believes that”.



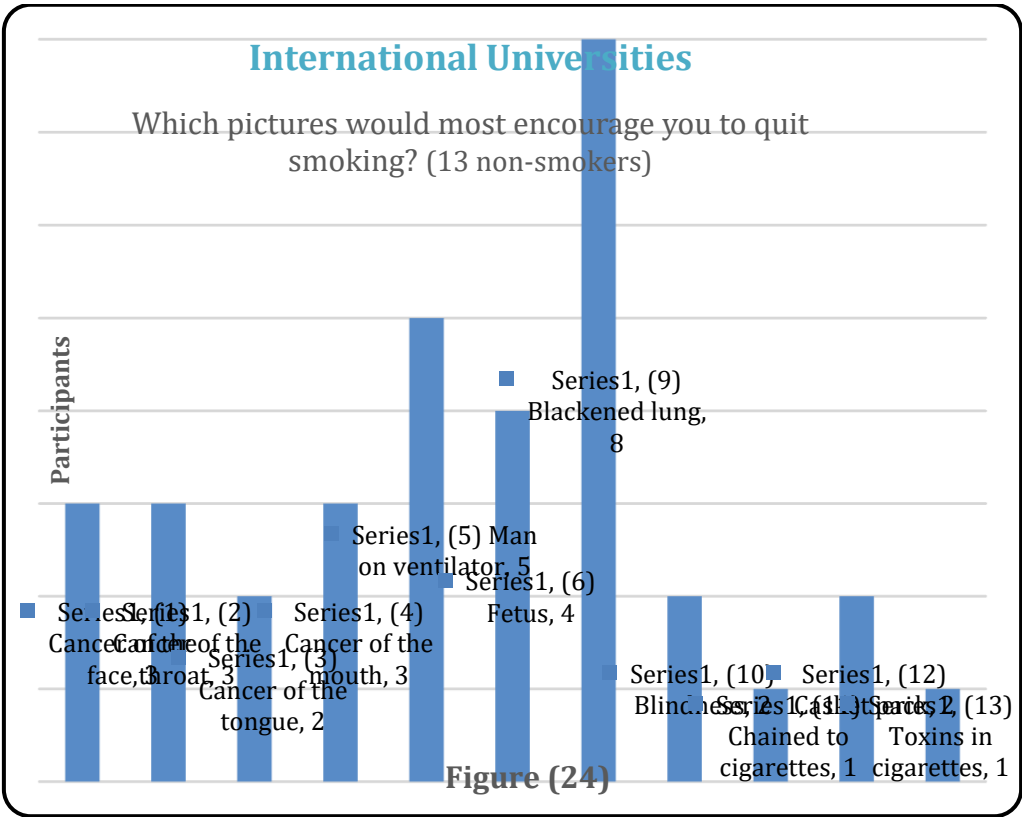
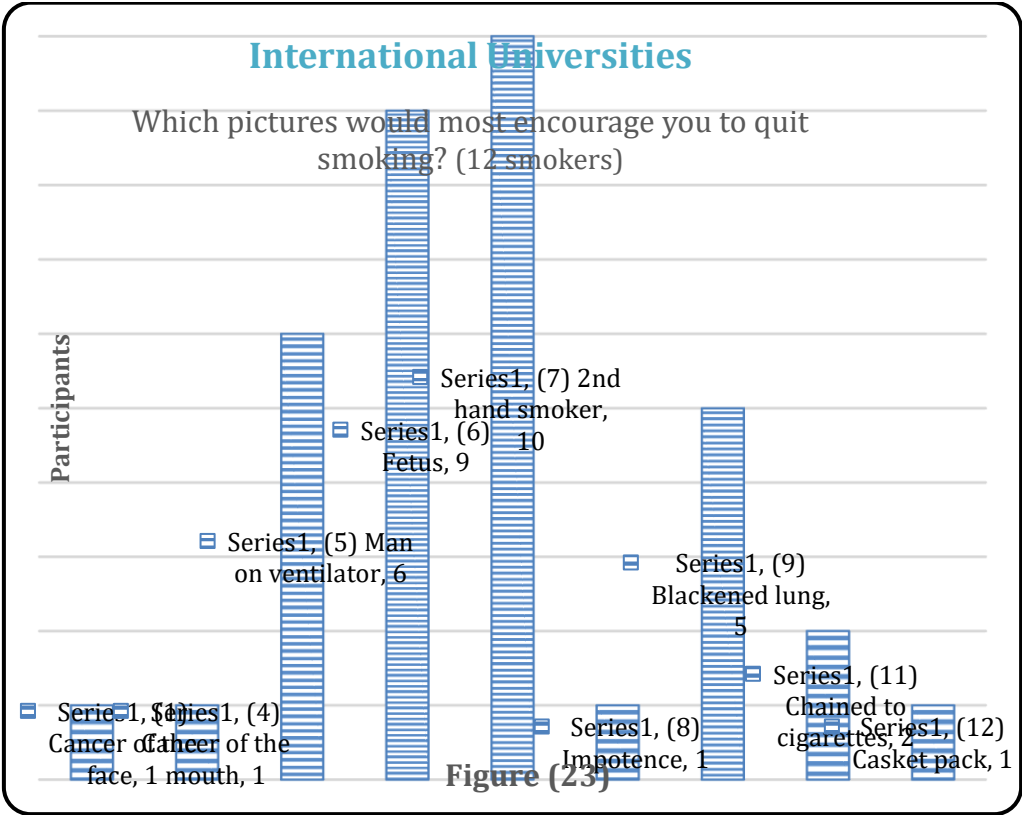
Interestingly, students from national universities found a distinction between the images they were presented. They specified that they found the images of extreme health hazards indicated to be cancer the least motivating. However within the same category, the most motivating were realistic images like those of a sick child affected by second hand smoking, the man with an oxygen mask or the image insinuating impotence. Smokers in this group accordingly rated realistic images most effective, followed by scientific, symbolic and lastly graphic images. On the other hand, non-smokers rated realistic images most effective, followed by graphic, symbolic and lastly scientific images (figs 21, 22).

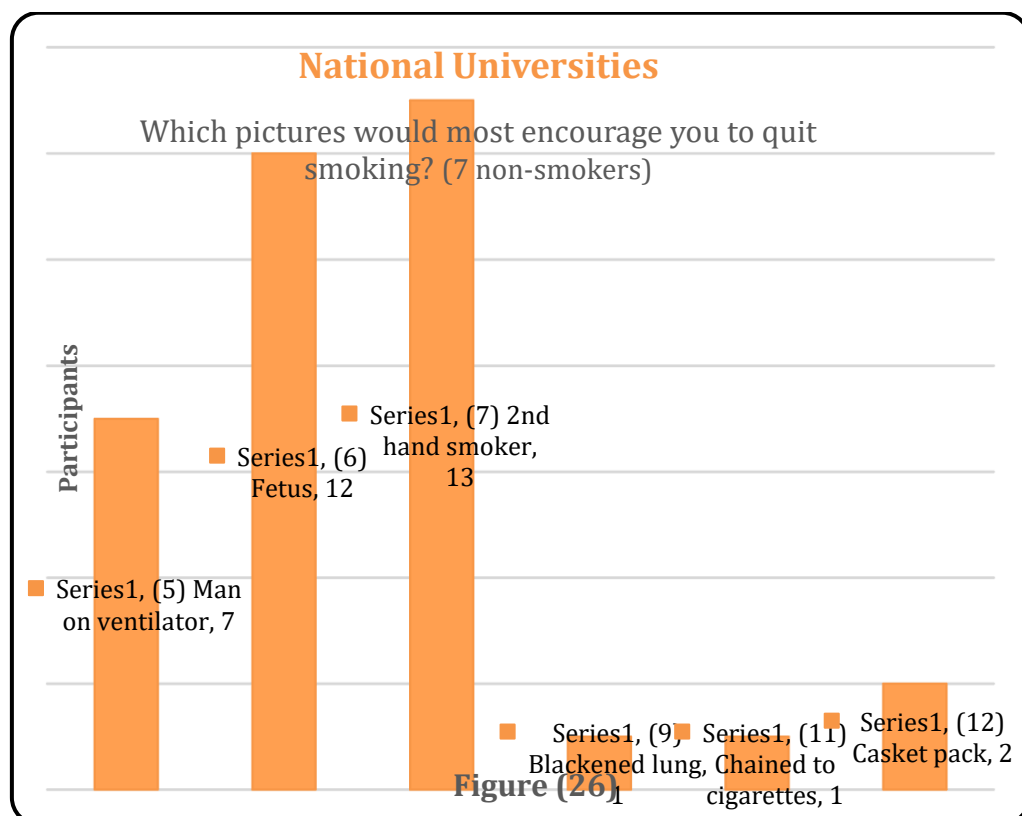
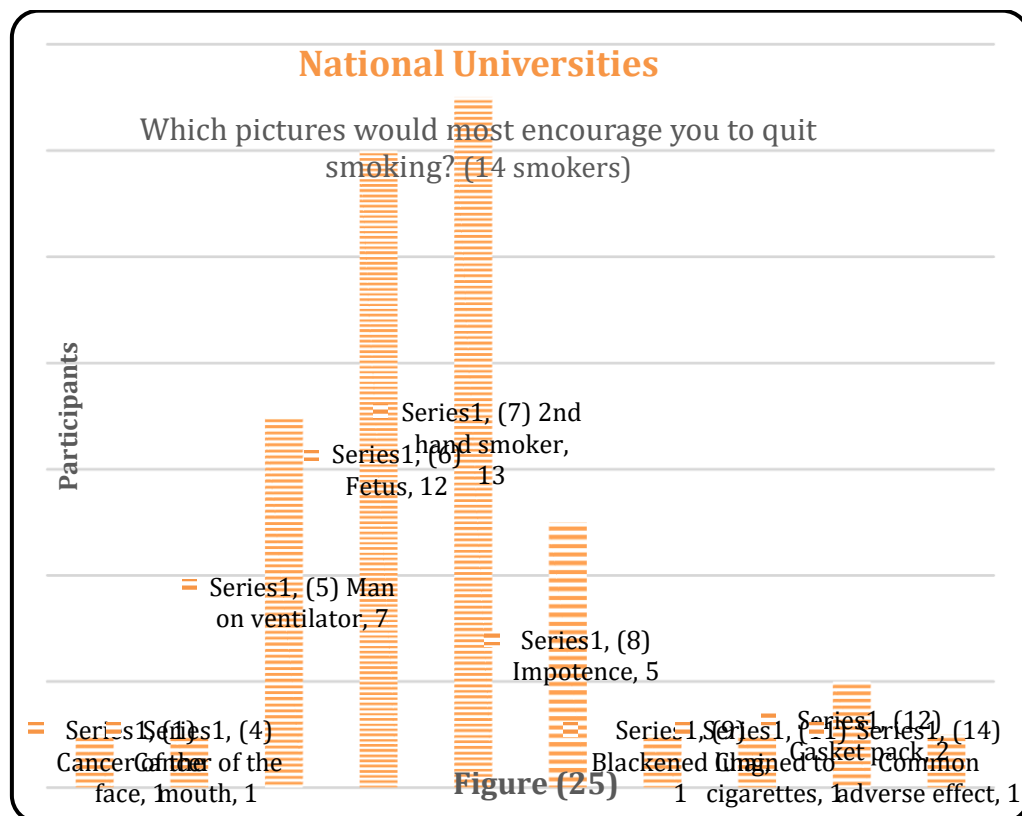




As for textual messages, only a few in the smoking group remembered the text message “smoking kills” and a single non-smoker remembered the different sentences in detail. The remaining respondents were aware of the presence of a textual warning but did not remember any wording.

When asked which of the pictorial warnings would most encourage smoking cessation, the pictures that were repeatedly selected by all groups are the ailing fetus, the second hand smoking child the blackened lung and the man on the ventilator. This shows that the realistic images are the most effective in conveying the message and convincing young people to quit or refrain from smoking. Participants in the study unanimously favored the realistic images as the most influential (figs 23 - 26).





Female participants in all four groups expressed that anti-smoking advertisements or images addressing the negative effects of smoking on beauty would matter to them the most, for example yellowing teeth and aging skin. Some recalled one image that showed two identical twin sisters, where the smoker looked many years older than the non-smoker. All females in the smoking groups agreed that these kinds of images would affect them most. Males were more concerned about being fit; not being able to do some activities or sports may let them consider quitting. Some suggested addressing this aspect on cigarette pack images that may be accompanied by explanatory text. The views expressed reflect the significance of short term gains as extrinsic motivations to quit among this age group, even though intrinsic motivation as Marshall et al. suggest, predict more success in quitting attempts (Marshall et al. 2009). The efficacy of the image recommended showing the two identical twin sisters probably lies in the fear appeal message (aging), and the extrinsic motivation (desire for beauty). Alongside is a message of self- efficacy implied in the picture of the fresh young looking sibling.

All respondents unanimously expressed never thinking of dialing the helpline number provided on the pack nor heard of anyone who has. This may be attributed to the distrust in the competence of the aid provided, a skepticism that encompasses various public services provided by the government.

<b>Warning Images Index</b>	
<b>Cancer of the face</b>	<b>Picture 1</b>
<b>Cancer of the throat</b>	<b>Picture 2</b>
<b>Cancer of the tongue</b>	<b>Picture 3</b>
<b>Cancer of the mouth</b>	<b>Picture 4</b>
<b>Man on ventilator</b>	<b>Picture 5</b>
<b>Fetus</b>	<b>Picture 6</b>
<b>2nd hand smoker</b>	<b>Picture 7</b>
<b>Impotence</b>	<b>Picture 8</b>
<b>Blackened lung</b>	<b>Picture 9</b>
<b>Blindness</b>	<b>Picture 10</b>
<b>Chained to cigarettes</b>	<b>Picture 11</b>
<b>Casket pack</b>	<b>Picture 12</b>
<b>Toxins in cigarettes</b>	<b>Picture 13</b>
<b>Common adverse effect</b>	<b>Picture 14</b>



### **Suggestions for more effective anti smoking images/ advertisements**

One of the suggestions provided by participants is to have a brief true story on the pack with actual pictures of real people. To ensure precision, only one sentence explaining the health problems they suffered due to smoking is to be written on the pack. This view however was debated since some may choose to dismiss it as staged and not real. To avoid skepticism, upon the suggestion of one participant, that stories of famous public figures or celebrities, with a short brief about their illness, demise or both be printed on packs (obviously with consent of the subject). This idea was met with agreement by other participants. One student suggested an interactive approach, where there would be a big campaign, and the pictures on packs would be a big campaign so people can relate to the images. Other opinions were to print success stories where the message is positive instead of focusing on people who got sick.

Several participants agreed on the potential effectiveness of printing actual numbers and statistics on cigarette packs, showing the number of victims to smoking related diseases and deaths.

Also suggested was a novel idea where the average amount of money paid per month and year be printed on the pack. This would show how much money is wasted on smoking, and would show concurrently how much money can be saved by quitting smoking. Increasing cigarette prices through high taxes was one of the measures that the WHO proposed. It has been adopted by many countries including Egypt, yet a significant number of smokers continued to smoke despite the financial strain that this posed on an already tight family income in the country (Anwar, 2003).

A number of participants agreed on the idea suggesting that the pack have a brief true story with actual pictures of real people and only one sentence explaining the health

problems they suffered due to smoking. This view however was debated since some may choose to dismiss it as staged and not real. To avoid skepticism, we suggest that stories of famous public figures or celebrities, with a concise briefing about their illness, demise or both be printed on packs. One student suggested an interactive approach, where there would be a big campaign and the pictures on packs would support or reflect parts of the campaign so people can relate to the images. Other opinions were: “Instead of focusing on people who got sick, why not print quitting success stories”.

Several non-smoking participants agreed on the effectiveness of printing actual numbers and statistics on cigarette packs, showing the number of victims to smoking related diseases and number of deaths annually.

It is also suggested that the brand image be muted on the cigarette packaging, with plain font naming the brand. The findings of one study suggests that eliminating both brand imagery and color -in other words ‘package unbranding’- contributed to increasing noticability of the pictorial warnings, and reducing demand for cigarette purchase (Thrasher et al. 2011).

## **Chapter 7: Analysis and Discussion; Effect of Warning Messages**

As the numbers of smokers among young people increase, it is important to examine if policies implemented by the government have an impact on intentions of smoking cessation among smokers or a discouraging effect on non-smokers. This study particularly addresses the impact of images printed on cigarette packs on smoking behavior and aims to determine the possible linkage between images and cessation of smoking.

### **Research Question 1:**

**Do young Egyptians perceive the graphic warnings on cigarette packs to be effective in influencing their rational and emotional process regarding smoking?**

In line with the Protection Motivation Theory, most smokers in the sample expressed that they are not disturbed by the habit of smoking and do not have the intention to work on quitting anytime in the near future although they all state that they are aware of the dangerous consequences on their health. Moreover, they all agree that only a few years back they did not think they would be smokers at any point in their lives. The responses suggest that before becoming smokers, participants did not regard the habit as appealing and dismissed the notion of ever being addicted to nicotine knowing the harm involved. After becoming smokers, the change in behavior led to a change in perspective through adopting a psychological protective approach convincing themselves that the harm conveyed by anti-smoking campaigns are not true. A significant number of participants from the smoker groups of both national and international universities assert that nothing

they would read or hear would prompt them to quit. Most expressed that the health threats depicted are both rare and exaggerated. The results of this study show that most smokers believe that graphic images have a minimal effect on their intentions to quit. This is in agreement with the findings of a study by Daniel Romer and colleagues, which suggests that although those images are believed to prompt “aversive emotional reactions”, they do not seem to have an effect in actually altering intentions (Romer et al. 2013). Both smokers and non-smokers did not find the images believable; they either find them unbelievable or exaggerated. In both groups, only one third of smokers interviewed found them believable.

Non-smokers on the other hand conveyed that the images may have a positive effect in discouraging them from smoking although they mostly found the images exaggerated or unbelievable.

### **Research Question 2:**

**Do young Egyptians perceive graphic warnings on cigarette packs to be more effective than textual labels in terms of influencing their smoking behavioral intentions?**

Pictorial warnings were found to be more effective than textual warnings. Out of all participants in both smoking and non-smoking groups, only one was able to remember what is written on the packs although they were all aware of the presence of a textual warning and a help line. However all participants were able to recall several warning images. This means that on a certain conscious level, the images were stronger in effect than the text. Obviously, none of the participants in the sample was intrigued to read the text. Also one would assume that if it was ever read, the significance of this kind of

warning messages was minimal to a high extent. These results converge with evidence from previous studies supporting the greater influential power of images over written messages.

### **Research Question 3:**

**Do young Egyptians believe that graphic warning labels increase awareness of the health hazards of smoking?**

Graphic images are divided into two categories; the first depicts the extreme health hazards such as cancer of the throat, cancer of the tongue or gangrene. The second category depicts less extreme images yet implicating equally serious health hazards such as the man on the ventilator or a sick child. Extreme graphic images that fall under long-term fear appeals are assumed ineffective on young people as they underestimate the seriousness of extreme health risks and find difficulty relating to them. This attitude originates from a sense of immortality that is characteristic of young adults. Less graphic images that fall under short-term fear appeals are considered by young adults to be more realistic and believable hence believed more effective in increasing awareness on the health hazards of smoking.

### **Research Question 4:**

**Which of the themes of cigarette packs are perceived by young Egyptians to be the most persuasive in terms of encouraging smoking cessation?**

Within the smoker group of international university students, symbolic and scientific images were perceived as equally persuasive in encouraging smoking cessation while graphic images had the least impact.

Non-smokers from international universities on the other hand found the symbolic images to be most effective followed by the graphic. Least effective for this group were the scientific images.

In general the symbolic themes were favored by both smoker and non-smoker groups of international universities. They are perceived as the most effective with several participants describing them as extremely powerful messages.

Students in national universities were more specific while assessing the graphic images category; they made a distinction between the extreme graphic and the less graphic images designating them to a subcategory, which they called realistic images that included a man on a ventilator, sick child etc. With such distinction established, preference shifted dramatically to realistic images being perceived as the most persuasive in encouraging smoking cessation in both smoker and non-smoker groups. Smokers in this group indicated that symbolic images came next in terms of persuasion, followed by scientific. Interestingly, extreme graphic images were found to be the least effective. As for non-smokers extreme graphic images followed realistic images, symbolic came next while scientific was regarded the least effective. Findings therefore suggest higher perceived effectiveness of realistic images in inciting smoking cessation or discouraging smoking while respondents did not consider the health risks depicted in extreme graphic images to be self relevant although finding them relevant may enhance protection motivation which in turn may lead to subduing the effect of pictorial warnings.

## **Chapter 8: Conclusion and Recommendations on Effective Pictorial Warnings**

### **8.1. Limitations of the Study**

The sample is not representative of the target population as it is a nonprobability, convenience sample where some elements of the population did not have a chance to be included. Moreover, the effect of the graphic warnings has not been measured on actual behavior but rather on the accounts given by the respondents on their perception and behavior. Another limitation lies in statistical precision being short, due to the techniques used and the nature of the open-ended questions usually employed in qualitative research. The sample also represents university students from a limited number of national and international universities in Cairo only. Effect of warning images on other strata of the Egyptian population including university students from rural Egypt has not been covered. Additionally, It is not clear if students from international universities would have selected realistic images as the most effective in terms of persuasion, had the distinction between extreme graphic and realistic warning images been outlined as with their counterparts in national universities. However when directly asked which pictures would most encourage them to quit international university students chose the man on a ventilator, followed by the ailing fetus and the second hand smoking child, this is indicative of a similarity between the preference of this group and the national university students which is the realistic image category.

### **8.2. Conclusion**

Different demographics within the smoker community react to pictorial warnings in different manners according to personality traits, motives to quit, or cognitive information processing abilities; it is therefore fundamental to use various kinds of

messages involving different strategies to ensure reaching the largest audience possible. Adolescents were found to be less affected by the fear appeal messages on cigarette packs; Researchers claim that this age group, has an “attitude of immortality or insusceptibility to physical risk” and therefore believe that falling victim to cancer or extreme diseases depicted in images, is so far fetched (Smith and Stutts 2003). In line with those findings, participants in this study dismissed the graphic images as exaggerated. Yellow or tinted teeth, bad breath, and a cigarette odor in hair were found to be the most effective. Those were negative smoking effects that they found realistic and were able to relate to especially females. Within the already currently running images, the image of the black lungs was found to be both the most believable and the most encouraging to quit. The comparison between healthy lungs and lungs affected by smoking made sense to the participants and thus had more credibility and consequently a positive effect in encouraging cessation. It was also effective in discouraging non-smokers who were convinced by the clear believable message that it relayed. Many of the smokers especially girls tended to be emotional, thus I suggest that addressing their emotions or feelings would potentially yield results in quitting intentions. Examples of this would be posting real stories or emotionally loaded insinuations, pictures, stories or facts without any exaggeration that may lead to dismissal of the message. Some examples would be a child mourning a mother or father, a child standing alone watching other children playing with their dads, or a little girl watching her friends celebrate mother’s day with tears in her eyes. I would also suggest captions like “I miss my mum/dad” to compliment the images. In Arab countries such anti-smoking advertisements may target specific seasons or occasions, like the month of Ramadan showing an empty seat around a Ramadan *iftar* (breaking fast) table, with a caption like



“wish you were here” or “never the same without you” would help smokers make resolutions to quit especially that they may be motivated by the spiritual nature of the month and by already fasting thus not smoking till the evening which would be a convenient starting point. It has also been suggested by young people participating in this study, that different images on cigarette packs should support an ongoing antismoking campaign in different media channels. When looking at the images, both smokers and non-smokers would immediately relate to the story or the idea behind it. The message should trigger emotions or thoughts without evoking fear, repulsion or disgust, emotions that are believed to have various unintended repercussions. These adverse effects as researchers describe them are defensive responses that are part of the fear control development (Hammond et al. 2004).

One idea suggested is what some participants called a strong anti smoking advert, where a mother is smoking, and the smoke from her cigarette takes the shape of a hand and is choking her child. In another advert with a similar idea, the smoke took the shape of a bullet that hit the child as the father smoked. Also recommended was a picture depicting a success story, instead of failure and death. This is in line with the protection motivation model, that proposes introducing a message of self-efficacy in parallel to the fear message i.e. a message carrying the positive response expected and implying in this case the ability of the smoker to quit smoking or the non-smoker to avoid it (Floyd et al. 2000).

Taking the threat appraisal into consideration, it is recommended that the extreme graphic images be removed from cigarette packs. The Threat Appraisal being the point where a smoker starts to evaluate the seriousness of the consequences of this habit and the threat he/she may be subject to should they continue to smoke. Since the model

focuses on the cause or source of the threat and the maladaptive responses connected to it such as wishful thinking denial or avoidance, it is easy to assume that the exaggeration in the images would lead to one of those responses, thus missing the aim they were printed for in the first place (Norman et al. 2005).

### **8.3. Recommendations for Future Studies**

The researcher would recommend that a study be conducted over an extended period of time, which would actually examine the attitudes and behavior of smokers, unlike this study that depends mainly on individuals expressing their opinions and perceptions. The suggested study is to monitor if the behavior of smokers when exposed to different antismoking campaigns with different themes, changes and leads to cessation at any point, and what themes affected what demographic group in particular. For example would smokers with lower incomes respond more to images showing the average sum spent on cigarettes per month/year than those with higher incomes? Or would parents respond to images of children falling victim to diseases due to second hand smoking more than adolescents? The social and psychological implications involved in a study of the like would give an insight into the best way to design anti smoking messages for cigarette packs that would have a positive impact on both smokers and non-smokers. It is also recommended that further studies be conducted on the effect of positive or happy images on cigarette packs with people looking healthy and enjoying a better quality of life; utilizing 'slice of life' appeals as a communication strategy which may be more effective in changing perception, intention and behavior.

## Appendices

A- Figures 27 to 43



1

Figure (27)



2

Figure (28)



3

Figure (29)



4

Figure (30)



5

Figure (31)



6

Figure (32)



7

Figure (33)



8

Figure (34)



9

Figure (35)



10

Figure (36)



11

Figure (37)



12

Figure (38)



13

Figure (39)



14

Figure (40)



James Montgomery Flagg.

U.S. Army recruiting poster

Figure (41)



Figure (42)

Kiriazzi Frères ad for Zenith cigarettes  
1931.



Figure (43)

*Ruz al-Yusuf*, 7 Dec.

Male courtesy and patronage

## B- Index of Warning Images

<b>Warning Images Index</b>	
<b>Cancer of the face</b>	<b>Picture 1</b>
<b>Cancer of the throat</b>	<b>Picture 2</b>
<b>Cancer of the tongue</b>	<b>Picture 3</b>
<b>Cancer of the mouth</b>	<b>Picture 4</b>
<b>Man on ventilator</b>	<b>Picture 5</b>
<b>Fetus</b>	<b>Picture 6</b>
<b>2nd hand smoker</b>	<b>Picture 7</b>
<b>Impotence</b>	<b>Picture 8</b>
<b>Blackened lung</b>	<b>Picture 9</b>
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<b>Chained to cigarettes</b>	<b>Picture 11</b>
<b>Casket pack</b>	<b>Picture 12</b>
<b>Toxins in cigarettes</b>	<b>Picture 13</b>
<b>Common adverse effect</b>	<b>Picture 14</b>



## C- IRB Approval form

CASE #2014-2015-110



To: Hala Touta  
Cc: Nesrine Azmy  
From: Atta Gebril, Chair of the IRB  
Date: April 9 , 2015  
Re: Approval of study

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This is to inform you that I reviewed your research proposal entitled "The use of visual warnings on cigarette packs in Egypt and their effect," and determined that it required consultation with the IRB under the "expedited" heading. The proposal used appropriate procedures to minimize risks to human subjects and that adequate provision was made for confidentiality and data anonymity of participants in any published record. I believe you will also make adequate provision for obtaining informed consent of the participants.

This approval letter was issued under the assumption that you have not started data collection for your research project. Any data collected before receiving this letter could not be used since this is a violation of the IRB policy.


Please note that IRB approval does not automatically ensure approval by CAPMAS, an Egyptian government agency responsible for approving some types of off-campus research. CAPMAS issues are handled at AUC by the office of the University Counsellor, Dr. Amr Salama. The IRB is not in a position to offer any opinion on CAPMAS issues, and takes no responsibility for obtaining CAPMAS approval.

This approval is valid for only one year. In case you have not finished data collection within a year, you need to apply for an extension.

Thank you and good luck.

A handwritten signature in black ink, appearing to read 'Atta Gebril'.

Dr. Atta Gebril  
IRB chair, The American University in Cairo  
2046 HUSS Building  
T: 02-26151919  
Email: [agebril@aucegypt.edu](mailto:agebril@aucegypt.edu)

The logo for the Institutional Review Board, consisting of a yellow square and a dark blue rectangle.

Institutional Review Board  
The American University in Cairo  
AUC Avenue, P.O. Box 74  
New Cairo 11835, Egypt.  
tel 20.2.2615.1000  
fax 20.2.27957565  
Email: [aucirb@aucegypt.edu](mailto:aucirb@aucegypt.edu)

D- Focus Group Questions (English).

**Hala Helmy Hakim Touta**

**The use of visual warnings on cigarette packs in Egypt and their effect.**

Focus Group Questions:

- 1- Why do you smoke cigarettes?
- 2- How many cigarettes do you smoke on average per day?
- 3- Can you identify three of the graphic warnings you see on the packs?
- 4- Can you express your opinion on the pictures you remember the most?
- 5- Can you express your opinion on the warnings in general?
- 6- Do you remember the text warning on the packs?
- 7- Do you believe that the pictures depicted are true?
- 8- How do you feel when you see the pictures?
- 9- Do the pictures scare you?
- 10- Which ones affected you the most?
- 11- Which pictures were the most believable?
- 12- Do you feel that they can discourage you from smoking?
- 13- Do you think about the pictures when you open a pack to get a cigarette or do you dismiss it?
- 14- Did you discuss any of the health hazards depicted on the pack with a friend?
- 15- Do you avoid looking at the pictures?
- 16- If you do avoid them, why?



E- Focus Group Questions (Arabic).

ها له حلمي حكيم توته  
إستخدام التحذيرات المصورة علي علب السجائر بمصر وتأثيرها

الأسئلة التي ستطرح علي العينة:

- ١- لماذا تدخن السجائر؟
- ٢- كم سيجاره تدخن في اليوم؟
- ٣- هل تستطيع ان تذكر ثلاث من الصور المحذرة من الاخطار الناتجة عن التدخين التي تراها علي علب السجائر؟
- ٤- اشرح انطباعك عن اكثر الصور المحذرة التي تتذكرها.
- ٥- ما هو انطباعك عن الصور المحذرة من التدخين عامة؟
- ٦- هل تتذكر اي من الرسائل المحذرة الكتابية علي علب السجائر؟
- ٧- هل تصدق ان الصور حقيقية ام تظن انها مفبركة؟
- ٨- ما هو شعورك عندما تري هذه الصور؟
- ٩- هل تخيفك نتائج التدخين التي تراها في الصور؟
- ١٠- اي الصور اكثر تأثيرا فيك؟
- ١١- اي الصور أحسست انها الأكثر مصداقية؟
- ١٢- هل تظن انها قد تحيدك عن التدخين او أشجعك علي الإقلاع؟
- ١٣- هل تشغل الصور تفكيرك عند شروعه في تناول سيجاره من العلبة؟
- ١٤- هل تحدثت مع صديق او قريب عن أضرار التدخين المشار اليها بالصور؟
- ١٥- هل تتجنب النظر الي الصور؟
- ١٦- اذا كنت تتجنبها ، فلماذا؟



هـ هـ هـ

جمهورية مصر العربية



الجهاز المركزي للتعبئة العامة والإحصاء

قرار رئيس الجهاز المركزي للتعبئة العامة والإحصاء  
بالتفويض

رقم ( ٧٩٩ ) لسنة ٢٠١٥

في شأن قيام الباحثة / هالة حلمي حكيم توتة - المسجلة لدرجة الماجستير - بكلية الصحافة والاعلام - الجامعة الامريكية بالقاهرة - بإجراء دراسة ميدانية بعنوان ( دراسة استخدام التحذيرات المصورة على علب السجائر بمصر وتأثيرها )

رئيس الجهاز

- بعد الإطلاع على القرار الجمهوري رقم ( ٢٩١٥ ) لسنة ١٩٦٤ بشأن إنشاء وتنظيم الجهاز المركزي للتعبئة العامة والإحصاء مادة ( ١٠ ) .
- وعلى قرار رئيس الجهاز رقم ( ٢٣١ ) لسنة ١٩٦٨ في شأن إجراء الإحصاءات والتعدادات والاستفتاءات والاستقصاءات مادة ( ٢ ) .
- وعلى قرار رئيس الجهاز رقم ( ١٣١٤ ) لسنة ٢٠٠٧ بشأن التفويض في بعض الاختصاصات .
- وبعد الإطلاع على مذكرة العرض على رئيس الجهاز وموافقة سيادته على ما ورد بها .
- وعلى كتاب الجامعة الامريكية بالقاهرة الوارد للجهاز في ١٠ / ٥ / ٢٠١٥ .

قصر

- مادة ١: تقسم الباحثة / هالة حلمي حكيم توتة - المسجلة لدرجة الماجستير - بكلية الصحافة والاعلام - الجامعة الامريكية بالقاهرة - بإجراء الدراسة الميدانية المشار إليها عالية .
- مادة ٢: تجري الدراسة على عينه حجمها ( ٢٠ ) عشرون مفردة من طلاب الجامعة الامريكية بالقاهرة بالفئة العمرية من سن ( ١٩ - ٢١ سنة ) موزعة كما يلي :  
١٠ طلاب مدخنين - ١٠ طلاب غير مدخنين .
- مادة ٣: تجمع البيانات اللازمة لهذه الدراسة طبقا للاستمارة المعدة لهذا الغرض والمعتمدة من الجهاز المركزي للتعبئة العامة والإحصاء وعدد صفحاتها (صفحة واحدة) وترجمتها باللغة الانجليزية .
- مادة ٤: تقوم الجامعة الامريكية بالقاهرة وتحت اشراف السيد امين عام الجامعة - بتسيير اجراء الدراسة الميدانية - مع مراعاة الضوابط الخاصة بتقييم درجة سرية البيانات والمعلومات المتداولة مسبقا بمعرفة كل جهة طبقا لما جاء بخطة الأمن بها .
- مادة ٥: يراعى موافقة مفردات العينة - مع مراعاة سرية البيانات الفردية طبقا لإحكام القانون رقم ٣٥ لسنة ١٩٦٠ والمعدل بالقانون رقم ٢٨ لسنة ١٩٨٢ وعدم استخدام البيانات التي يتم جمعها لأغراض أخرى غير أغراض هذه الدراسة .

مادة ٦: يجري العمل الميداني خلال ستة أشهر من تاريخ صدور هذا القرار .

مادة ٧: يوافق الجهاز المركزي للتعبئة العامة والإحصاء بنسخة من النتائج النهائية لهذه الدراسة .

مادة ٨: ينفذ هذا القرار من تاريخ صدوره .

صدر في: ١٣ / ٥ / ٢٠١٥ .

٥/١٣  
٢٠١٥  
محمد عطية محمد  
مدير عام الإدارة العامة للإعلام





قرار رئيس الجهاز المركزي للتعبئة العامة والإحصاء  
بالتفويض

رقم (٢٠١٦) لسنة ٢٠١٦

في شأن قيام الباحثة / هاله حلمي حكيم توتة - المسجلة لدرجة الماجستير / بكلية الصحافة والاعلام  
الجامعة الأمريكية بالقاهرة - بإجراء دراسة ميدانية بعنوان: (دراسة استخدام التحذيرات المصورة على  
علب السجائر بمصر و تأثيرها).

رئيس الجهاز

- بعد الإطلاع على القرار الجمهوري رقم (٢٩١٥) لسنة ١٩٦٤ بشأن إنشاء وتنظيم الجهاز المركزي للتعبئة العامة والإحصاء.
- وعلى قرار رئيس الجهاز رقم (٢٣١) لسنة ١٩٦٨ في شأن إجراء الإحصاءات والتعدادات والاستفتاءات والاستقصاءات.
- وعلى قرار رئيس الجهاز رقم (١٣١٤) لسنة ٢٠٠٧ بشأن التفويض في بعض الاختصاصات.
- وعلى قرار رئيس الجهاز رقم (٧٩٩) لسنة ٢٠١٥.
- وعلى كتاب / الجامعة الأمريكية بالقاهرة الوارد للجهاز في ١٧ / ١ / ٢٠١٦.

قرار

مادة ١: تقوم الباحثة / هاله حلمي حكيم توتة - المسجلة لدرجة الماجستير / بكلية الصحافة والاعلام  
الجامعة الأمريكية بالقاهرة - بإجراء الدراسة الميدانية المشار إليها عالية.

مادة ٢: تجري الدراسة علي عينة حجمها (٥٠) خمسون مفردة من طلاب وطالبات الجامعات  
الحكومية والخاصة بالفئة العمرية (من ١٩ - ٢١ سنة) (عين شمس - الجامعة الأمريكية -  
نيو كايرو أكاديمي - فيوتشر "بالتجمع الخامس").

مادة ٣: تجمع البيانات اللازمة لهذه الدراسة بموجب الاستمارة المعدة لذلك وعدد صفحاتها  
صفحة واحدة و مترجمة الى اللغة الانجليزية ومعتمدة بخاتم الجهاز المركزي للتعبئة العامة  
والإحصاء.

مادة ٤: تقوم الجامعات المستهدفة - وتحت إشراف السادة / امناء عموم تلك الجامعات - بتيسير إجراء هذه  
الدراسة الميدانية - مع مراعاة الضوابط الخاصة بتقييم درجة سرية البيانات والمعلومات المتداولة  
مسبقاً بمعرفة كل جهة طبقاً لما جاء بخطة الامن بها.

مادة ٥: يراعى موافقة مفردات العينة - مع مراعاة سرية البيانات الفردية طبقاً لأحكام القانون رقم ٣٥  
لسنة ١٩٦٠ والمعدل بالقانون رقم ٢٨ لسنة ١٩٨٢ وعدم استخدام البيانات التي يتم جمعها لأغراض  
أخرى غير أغراض هذه الدراسة.

مادة ٦: يجري العمل الميداني خلال ستة أشهر من تاريخ صدور هذا القرار .

مادة ٧: يوافي الجهاز المركزي للتعبئة العامة والإحصاء بنسخة من النتائج النهائية لهذه الدراسة.

مادة ٨: ينفذ هذا القرار من تاريخ صدوره.

صدر في: ٢٠١٦ / ١ / ٢٠

محمد ممدوح محمد  
مدير عام الإدارة العامة للامن

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