

“Smoking is Worth the Risk”: Understanding Adolescents’ Rationalisation of Their Smoking Behaviour

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ABSTRACT

Adolescents are aware of the health risks of cigarette smoking yet still they continue to smoke. This article reports on how Malaysian adolescents rationalised their smoking behaviour despite knowing its danger. In this qualitative study, 26 adolescents (23 smokers and 3 former smokers) were interviewed through 3 focus group interviews and 3 in-depth interviews. The interviews were guided by a semi-structured interview protocol and recorded using audio recorders. This study highlights that the adolescents continued to smoke despite knowing the risks of smoking. They rationalised their smoking by disengaging themselves from the risks through: (1) disregarding the immediate effects of smoking, (2) ignoring the risk information, (3) normalising the mortality risk of smoking, (4) emotionally detaching themselves from relating to the threat, (5) regarding smoking as the lesser evil than other risky behaviour, and (6) discounting the actual risks by citing the exceptional cases. In conclusion, the adolescents

might have made a calculated decision after weighing the risks and benefits of smoking but they chose smoking over quitting. This study provides meaningful insights for clinicians and policy makers to understand adolescents’ reasoning for smoking, which then may result in the development of better strategies for challenging the rationalisations of adolescents.

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INTRODUCTION

Adolescents who smoke are at risk of having various deleterious consequences. They have poorer lung function compared to non-smoking adolescents (American Cancer Society (ACS), 2013; Centers for Disease Control and Prevention (CDC). Correspondingly, they are more likely to have cough, shortness of breath, wheezing, phlegm, reduced physical fitness and acute respiratory illness (ACS, 2013). They are predisposed to nicotine addiction, thus expected to become lifetime smokers and have increased risk for long-term health complications (CDC, 1994; ACS, 2013). Adolescent smoking has also been associated with risky behaviours such as illicit drug use, high-risk sexual activities, fights and suicidal attempts (ACS, 2013).

Adolescent smokers are informed about the risks of smoking but many of them continue to smoke despite knowing the risks (Nichter *et al.*, 1997; Moffat & Johnson, 2001; Plano Clark *et al.*, 2002; Lee *et al.*, 2003; Lundborg & Lindgren, 2004; Balch *et al.*, 2004; Dijk *et al.*, 2007; Gough *et al.*, 2009; McVea *et al.*, 2009; Hoek *et al.*, 2013). Risk-minimising, self-exempting, risk denial, as well as avoiding and distorting the smoking-related information allow adolescent smokers to disengage from the threat of smoking (Nichter *et al.*, 1997; Zulkifli *et al.*, 2001; Plano Clark *et al.*, 2002; Lee *et al.*, 2003; Balch *et al.*, 2004; Dijk *et al.*, 2007; Gough *et al.*, 2009; McVea *et al.*, 2009; Hoek *et al.*, 2013). These methods protect them against their own guilt, self-blaming, and cognitive dissonance (Kleinjan *et al.*, 2009).

Young adult smokers also justify their smoking by endorsing the putative benefits of smoking such as relieving stress, enjoyment, and improved coping (Gough *et al.*, 2009). They regard their smoking as a temporary phenomenon (Gough *et al.*, 2009). Due to these reasons, they have poor intention and low motivation to quit (Kleinjan *et al.*, 2009; McVea *et al.*, 2009). They are also less likely to engage in quit attempts and be successful in quitting (Kleinjan *et al.*, 2009; McVea *et al.*, 2009). As a result, they continue to smoke (Gough *et al.*, 2009). This manuscript reports how Malaysian adolescents rationalised their smoking behaviour in the presence of various anti-tobacco strategies. 26 adolescents (smokers and ex-smokers) on the effectiveness of anti-smoking strategies in making them to stop smoking were explored (Tohid *et al.*, 2011; Tohid *et al.*, 2012). However, during the interviews, the participants explained their reasons for continuing smoking despite knowing its danger. Their justification provided insights into how they rationalised their risky behaviour. This knowledge could be used to help us develop ways to improve adolescents' decision making which could lead to their smoking cessation.

MATERIALS AND METHODS

This qualitative study used a multiple-case study design (Yin, 1993). The study's theoretical framework and detailed methodology was elaborated in Tohid *et al.* (2012). In summary, the study was

carried out in two phases (Tohid *et al.*, 2011; Tohid *et al.*, 2012). During the first phase, 12 adolescents (9 current smokers and 3 former smokers) from an urban school (School 1; Table 1) were interviewed. Subsequently, 14 other adolescent smokers from 2 different schools (School 2 and 3) were interviewed (7 adolescents from each school). In total, 26 adolescents (23 boys and 3 girls) were selected via purposive and

snowball sampling. All participants were Malays aged 16 years.

In this study, current smokers and ex-smokers were invited because it is crucial to involve those with smoking experience to generate rich and explicit data in order to explain the phenomenon that was understudied. Three focus group interviews (FGI) and three in-depth interviews (IDI) were carried out at the schools between 2008 and 2010.

TABLE 1
Participants' gender, status of smoking and types of interviews

VARAIABLES	SCHOOL 1 (URBAN)		SCHOOL 2 (SEMI-URBAN)		SCHOOL 3 (RURAL)	
	FGI	IDI	FGI	IDI	FGI	IDI
GENDER						
Male	9	-	7	-	7	-
Female	-	3	-	-	-	-
STATUS OF SMOKING						
Smokers	7	2	7	-	7	-
Former smokers	2	1	-	-	-	-

Data Collection

Assistance from counsellors from each school was sought in recruiting the participants. Informal briefings about the study were held with potential participants before the interviews. During the briefings, each student was given an acknowledgment letter, an information sheet and a parental consent form for their parents. After obtaining the consent, the interviews were carried out by the main researcher (School 1) and the counsellors (School 2 and 3). These counsellors were informed about the study and had received training in qualitative research by attending

qualitative research classes at the Universiti Kebangsaan Malaysia over six months.

Prior to the interviews, all participants completed self-administered questionnaires that examined their socio-demography and smoking status. The interviews were conducted in Bahasa Malaysia and guided by a semi-structured interview protocol (Tohid *et al.*, 2012). Each interview lasted approximately two hours. The sessions were recorded by using audio-recorders and a video-recorder. The audio recordings were then transcribed into text. However, the video recordings were only used to help the researcher to identify interviewee in the audio-recordings.

Data Analysis

The accuracy of the transcription was assured by examining the text against the corresponding audio recording on a number of occasions. Subsequently, the transcripts were imported into NVIVO 7. Thematic analysis was then carried out to identify themes and categories that would explain teenagers' rationalisation to continue smoking. The codes and its verbatim were reviewed by two co-researchers (a family medicine specialist and a psychologist who had received training in child and adolescence health) to ensure reliability of the coding. The agreement in coding (Cohen kappa) between the main researcher and the two experts was maintained above 0.8.

Ethical Issues and Study Rigour

The researchers obtained approval from the Research and Ethics Committee of Universiti Kebangsaan Malaysia, the Ministry of Education Malaysia, and the school principals. All participants and their parents provided written consent, and their smoking status was kept confidential from their parents and other school staff.

The rigour of the study was ensured through a number of strategies. Firstly, the main researcher had undergone qualitative training by attending classes and workshops on qualitative research to improve the reliability of the 'human tool' (Merriam, 2009). She had continuous guidance from her supervisor, who is a qualitative research expert and a QSR Nvivo trainer. As a family medicine postgraduate, she had

also been trained in performing interviews that use active listening techniques by rephrasing questions, clarifying participants' responses, and providing minimal prompting during the interviews. This interview technique allows in-depth and rich data to be collected (Flick, 2009; Merriam, 2009). In addition, self-reflexivity played an important role in maintaining the rigour of this study (Flick, 2009; Merriam, 2009). As a medical doctor, the main researcher had to critically reflect her own assumptions, biases and experiences with regards to cigarette smoking, especially among teenagers. For example, her personal disapproval of smoking by teenagers may influence how she obtained and interpreted the data. To minimise this effects, self-reflexivity had helped her to differentiate her role as a researcher and a medical doctor when performing the interviews and analysing the data. Writing memos on her own reflections, ideas, questions and decisions had also aided the main researcher to self-reflect and keep the trail of the study (Merriam, 2009). Apart from that, this study used multiple investigators to collect the data as a means to triangulate the findings (Flick, 2009; Merriam, 2009).

RESULTS AND DISCUSSION

Smoking Adolescents were Aware of the Health Risks

Many participants were informed about the health risks of smoking, as one of them said:

"If you just want to say 'Smoking is dangerous for your health'. everybody knows that."

Some of them could even name a few of the dangerous ingredients of cigarettes. The participants also reported their encounters with people who had smoking-related illnesses such as chronic lung disease, stroke, heart attack and cancers. A few of them disclosed having smoking-related symptoms which they believed to be a consequence of their smoking such as breathlessness, recurrent cough and reduced athletic performance (Tohid *et al.*, 2011). For example:

“I always have cough (after I start smoking), but it is just a cough”

Nevertheless, the participants generally agreed that their awareness about the health risks and their experience of having the actual adverse effects of smoking were not enough to make them quit smoking. However, it briefly triggered their intention to quit, as one stated:

“When (I) saw the advertisement that showed diseased lungs, sometimes it makes me think, ‘This may be how my lungs look like’..... At that time it made me feel like to quit but only for a while...”

This study highlights that the adolescents were aware of the dangers of smoking, but they still continued to smoke. Some of them even experienced the immediate effects of smoking, which have been reported by many studies undertaken over the past two decades. (Nichter *et al.*, 1997; Moffat & Johnson, 2001; Plano Clark *et al.*, 2002; Lee *et al.*, 2003; Lundborg & Lindgren, 2004; Balch *et al.*, 2004; Dijk *et al.*, 2007; Gough *et al.*, 2009; McVea *et al.*, 2009; Hoek *et*

al., 2013). The fact that they continued smoking, despite knowing the risks, raises questions about their decision making.

Poor Appreciation of Smoking-Related Health Risks

These teenagers demonstrated the following responses with regards to issues about smoking-related health risks:

- (a) disregarding the advertised or observed risks because they were unable to relate to them, unless they suffered the immediate adverse effects of smoking.

“(I) cannot remember at all (the adverse effects of smoking as advertised in the campaigns when I smoke). Unless when I fell ill, I feel regrets.”
- (b) ignoring information about the risks.

“Even if you put up big posters, people will not read”
- (c) normalising the risk of death by emphasising ‘**everyone** will die one day’ regardless of the cause.

“Having said that, everyone will die one day, sis. So why should I stop (smoking)?”
- (d) feeling impervious to the threats, thus they had no fear or guilt of smoking even though they saw the anti-smoking advertisement.

“When we read posters, lung cancer, breast cancer. It’s the same. No remorse”
- (e) trivialising seriousness of the risks by citing other chronic smokers who continued to smoke even though they had a smoking-related illness.

“For example, people who have heart disease, they still smoke...”

- (f) normalising the danger of smoking by regarding it as the lesser evil compared to other risky behaviour.

“Cigarette smoking, it is like normal (not dangerous). If drugs, it is dangerous if we use them”

- (g) discounting the actual risks by citing the exceptional cases, suggesting smoking has no effect on life expectancy.

“the elderly, they still smoke, very cool. Still strong, they don’t die (because of smoking)”

These responses indicated that the adolescents denied, discounted and disengaged from the danger of smoking learned from the anti-smoking campaigns, their own experiences and observations. The respondents’ poor appreciation of the actual risks of smoking made them regard the risks as insignificant and irrelevant (Nichter *et al.*, 1997; Zulkiffi *et al.*, 2001; Plano Clark *et al.*, 2002; Lee *et al.*, 2003; Balch *et al.*, 2004; Dijk *et al.*, 2007; Gough *et al.*, 2009; McVea *et al.*, 2009; Hoek *et al.*, 2013). However, they could still appreciate some vulnerability towards adverse effects of smoking.

Ignoring and disregarding the risks of smoking is the simplest act of disengagement. They just refused to read the risk information in campaign advertisements or remember what they had learned. They personally relate to the long-term adverse effects, thus they had a lack of fear or guilt. This may be because

they considered smoking-related effects as distant and intangible, thus they had no immediate concern (Plano Clark *et al.*, 2002; Lee *et al.*, 2003; Balch *et al.*, 2004; Gough *et al.*, 2009; McVea *et al.*, 2009; Hoek *et al.*, 2013). Although some of the adolescents experienced immediate effects of smoking, they might disregard them as insignificant, manageable, and minor because they were intermittent (Balch *et al.*, 2004; Gough *et al.*, 2009; McVea *et al.*, 2009; Hoek *et al.*, 2013). According to Balch *et al.* (2004), the adolescent smokers particularly ignored the immediate effects of smoking when they engaged in fun social activities. This self-deception could deflect them from having any significant health concern (Gough *et al.*, 2009; McVea *et al.*, 2009). Furthermore, they probably had confidence to quit at any time and thought it was all right to smoke while still young (Moffat & Johnson, 2001; Plano Clark *et al.*, 2002; Crawford *et al.*, 2002; Dijk *et al.*, 2007; Gough *et al.*, 2009; Hoek *et al.*, 2013). For them, to quit smoking might be considered is easy by just using their own willpower. Thus, they believed that professional help was unnecessary (Nichter *et al.*, 1997; Plano Clark *et al.*, 2002; Balch *et al.*, 2004; Amos *et al.*, 2006). This unrealistic optimism would be harder to challenge as they might inaccurately perceive themselves as being less addicted, undermining their actual addiction (Nichter *et al.*, 1997; Moffat & Johnson, 2001; Plano Clark *et al.*, 2002; Lee *et al.*, 2003; Amos *et al.*, 2006; Dijk *et al.*, 2007).

The participants in this study emphasised the presence of chronic smokers who had suffered from smoking-related illness but still continued smoking. This indicates that they normalised the seriousness of the risks, thinking that the negative effects were trivial and bearable. They also normalised smoking as the lesser evil when compared illicit drug use. This is their way of legalising their smoking (Nichter *et al.*, 1997; Gough *et al.*, 2009). They discounted the actual risk of smoking by citing other chronic smokers who were still alive and healthy. The finding was also reported in previous studies (Lee *et al.*, 2003; Gough *et al.*, 2009). This may indicate two things: they were optimistic that they could live as long as these smokers or they perceived the advertised risks as invalid (Lee *et al.*, 2003; Gough *et al.*, 2009; Hoek *et al.*, 2013). This sense of optimism could reduce their perception of vulnerability and susceptibility, whereas the sense of invalid risks of smoking could reinforce their self-exemption (Hoek *et al.*, 2013).

The various ways of rationalising the health risks of smoking described by the adolescents in the present study are referred to as disengagement belief (Kleinjan *et al.*, 2009). This belief was shown to be significantly associated with low levels of motivation to quit and actual cessation (Kleinjan *et al.*, 2009; McVea *et al.*, 2009). This may explain why anti-smoking campaigns are perceived to be ineffective by adolescents in making them quit smoking (Tohid *et al.*, 2012).

Values of Smoking

Apart from minimising the risks of smoking, the participants rationalised their smoking behaviour through believing that: (a) smoking is beneficial, (b) smoking is a norm and (c) quitting smoking is disadvantageous.

(a) Smoking is beneficial

The participants agreed that smoking was beneficial for them. They perceived smoking:

- i. as a symbol of masculinity, maturity and modernisation that provided them elegance.

"Looks like you are a real man."

- ii as fun.

"It's fun to smoke"

- iii improved their athletic performance.

"I compete in runs. If I smoke I win. If I don't I'll lose."

- iv. maintained friendship and group belonging.

"we hang around with our gang and we smoke together"

- v. helped them cope with stressful situations.

"Dreaming, floating, calming.."

(b) Smoking is a norm

They also believed that smoking is a norm.

"smoking, people say, is normal in our society. Normal, it's nothing."

(c) Quitting smoking is disadvantageous

Concurrently, they considered quitting smoking is bad as they suffered from the withdrawal symptoms (Tohid *et al.*, 2011); it outweighed the benefits of quitting.

“It’s different, if you don’t get it, you feel weak. When you get it, you get your energy back.”

The participants in this study appeared to enjoy the perceived rewards of smoking. They believed smoking was beneficial to them. It helped them to form the popular identity, relieve stress, maintain friendship and group belonging and be involved in fun activities surrounding smoking. Through smoking they could be a part of a secret group which members looked after each other when they smoked (Vuckovic *et al.*, 2003; McVea *et al.*, 2009). As members, they could also obtain their cigarettes easily (Crawford *et al.*, 2002). Generally, they might perceive smoking as a mediator for their popularity, a membership insignia of a group, and a coping strategy to relieve their stress (Nichter *et al.*, 1997; Moffat & Johnson, 2001; Crawford *et al.*, 2002; Plano Clark *et al.*, 2002; Lee *et al.*, 2003; Amos *et al.*, 2006; Dijk *et al.*, 2007; Hoek *et al.*, 2013). Since adolescence is a challenging period for them to obtain independence and develop their own identity, they believed these benefits were very crucial. Furthermore, smoking against school regulations was considered sensational, exciting and an act of rebellion; smoking was viewed as a ‘forbidden fruit’ (Crawford *et al.*, 2002; Plano Clark *et al.*, 2002; Lee *et al.*, 2003; Reyna & Farley, 2006; Banarjee & Green, 2009).

Rationalisation of Their Smoking Behaviour: Smoking is Worth the Risk

As they believed smoking was beneficial to them, they were inclined to take any

risks associated with their smoking behaviour, including the risk of being caught by the school authority. They even considered their risk-taking actions as exciting and sensational.

“It’s fun to smoke... the more people try to restrict us (from smoking)... the more the thrill.”

The participants admitted that they would always find ways to smoke even when laws restricting tobacco use was strongly enforced:

“There are always ways for us to smoke, even at school. Usually, we have a group of members guarding our smoking ‘port’ while the others are smoking.”

Other means described by the adolescents include sharing cigarettes with friends, asking older friends to buy cigarettes for them and even stealing cigarettes from stores, friends, parents and other people (Tohid *et al.*, 2012). Their defiance was also apparent when issues about the tobacco law or parental aversion were discussed (Tohid *et al.*, 2012). They said that they would still continue to smoke even if they received punishments for getting caught smoking by school authority or their parents.

In addition, the adolescents’ risk-taking, sensation seeking, and defying regulation appeared to expose them to other risky situations such as loitering, free socialisation, and social functions that could promote their smoking behaviour even more. The participants confessed that these situations made quitting smoking more difficult.

It appears that the adolescents' focus was on the immediate rewards of smoking and enjoyment of life (Nichter *et al.*, 1997; Moffat & Johnson, 2001; Crawford *et al.*, 2002; Plano Clark *et al.*, 2002; Amos *et al.*, 2006; Dijk *et al.*, 2007; Gough *et al.*, 2009). Some of the previous studies highlighted that the adolescents consciously prioritised the smoking benefits over its risks, and they chose to maintain smoking to enjoy the rewards (Nichter *et al.*, 1997; Hutchenson *et al.*, 2008). They considered smoking as 'worth the risk', thus prevented them from quitting (Nichter *et al.*, 1997; Oakes *et al.*, 2004; Hutchenson *et al.*, 2008).

Adolescents' Focus of Life Influenced Their Smoking Behaviour

The importance of adolescents' focus of life in determining their smoking behaviour was also seen in our former smokers (Tohid *et al.*, 2011). These adolescents managed to change their focus of life from enjoying immediate rewards of smoking to obtaining the immediate benefits of quitting, such as maintaining athletic performance, saving money, and gaining parental approval (Tohid *et al.*, 2011). These immediate motivators must be compelling enough to make quitting more important than smoking (Plano Clark *et al.*, 2002; McVea *et al.*, 2009). This further supports our postulation that adolescents are able to make calculative risk assessments and decide which outcomes are their priorities. It is their personal decision to smoke or to quit (Plano Clark *et al.*, 2002; Vuckovic *et al.*, 2003).

Choosing to enjoy the rewards of smoking over the costs of their risky behaviour indicates that adolescents are unable to engage in rational reasoning and that their decision making is mainly influenced by emotions (Nicher *et al.*, 1997; McVea *et al.*, 2009). Cognitive immaturity is believed to play a very crucial role in preventing them from making a sound decision (Casey *et al.*, 2008). This cognitive immaturity also renders them to become impulsive (Galavan *et al.*, 2007; Strang *et al.*, 2013); they react rather than decide. However, recent literature has suggested that the adolescents could have engaged in deliberate calculations of benefits and risks when they make their decision (Reyna & Farley, 2006; Reyna & Rivers, 2008; Rivers *et al.*, 2008). Thus, it is not that they make impulsive decisions without considering the benefits and risks; it is not that they believe they are invulnerable; they actually weigh the magnitudes of risks and benefits of their smoking, but subsequently they choose to make a trade-off of the risks for the benefits (Reyna & Farley, 2006; Rivers *et al.*, 2008). This is called verbatim process of decision making, which is detailed, analytical and quantitative reasoning that is posited by the 'fuzzy-trace theory' (Reyna & Farley, 2006; Reyna & Rivers, 2008; Rivers *et al.*, 2008).

According to the 'fuzzy-trace theory', adolescents tend to focus on the details of information and experiences such as the quantitative outcomes of smoking (Reyna & Farley, 2006; Reyna & Rivers, 2008; Rivers *et al.*, 2008). For example, the

adolescents in this study might rationalise their odds of having adverse effects from smoking as small, insignificant, distant or irrelevant (as a result of their disengagement belief) but the magnitude of the rewards of their smoking was perceived to be great. This quantitative process of thinking might lead them to rationalise that smoking is worth the risk. This encoded meaning of smoking could be the gist for their future reasoning to continue smoking. Since they were in their adolescence, their gist-based reasoning (“smoking could bring big rewards in the presence of some possible risks”) is still immature (Rivers *et al.*, 2008). It has ordinal distinctions, thus some quantitative element of reasoning might still be prominent (Rivers *et al.*, 2008). Unfortunately, this quantitative reasoning could increase their risk-taking behaviour (Rivers *et al.*, 2008).

When one uses the general meaning as a mental representation in deciding whether or not to carry out a risky behaviour, it is called gist-based reasoning or known as intuition (Reyna & Rivers, 2008; Rivers *et al.*, 2008). According to the ‘fuzzy-trace theory’, it is the simplest mental representation of options or situations and it is usually preferred by adults (Reyna & Rivers, 2008; Rivers *et al.*, 2008). It also increases with age (from childhood to adulthood) and is influenced by emotion (Reyna & Rivers, 2008; Rivers *et al.*, 2008). The gist of a situation or experience that adults encode is stored in long term memory together with their values and principles (Reyna & Rivers, 2008; Rivers

et al., 2008). In the presence of cues or stimuli, they could retrieve this gist and apply it in their decision making (Rivers *et al.*, 2008). This vague gist-based reasoning could result in ‘all-or-none’ or ‘black and white’ categorical thinking that allows them to avoid risks (Reyna & Rivers, 2008; Rivers *et al.*, 2008). For example, if an adult considers ‘nothing is worth risking their own health’, he or she may think that smoking is risky regardless of the rewards of smoking (Rivers *et al.*, 2008).

This study also found that the adolescents’ rationalisation of their smoking was not far different to that used by adolescents in other countries. Perhaps it is because smoking has been considered as a part of normal adolescent development, whether or not adolescent smoking is illegal or disapproved by the community (Seguire & Chalmer, 2000). The similar rationalisation of smoking behaviour among adolescents across geographical boundaries may also be influenced by smoking advertised in the media (Lee *et al.*, 2002).

Many studies have recommended the provision of relevant information, emphasising the immediate benefits of quitting and immediate health effects of smoking (Lee *et al.*, 2002; Dijk *et al.*, 2007; Gough *et al.*, 2009; Kleinjan *et al.*, 2009; Hoek *et al.*, 2013). Counselling that makes smoking risks more personal, relevant and credible to the adolescents could challenge their disengagement belief (Dijk *et al.*, 2007; Gough *et al.*, 2009; Hoek *et al.*, 2013). However, as

adolescents' focus of life is having fun, forming a popular identity, and affiliating with others, alternative activities that could fulfil these needs in healthier ways should be provided. Perhaps such activities could encourage them to quit smoking and set them free from their smoking behaviour. Nonetheless, more studies are needed to explore strategies that are effective in correcting their perceptions of smoking and quitting.

This study was a qualitative study and the sample size was small. Due to these limitations, generalisation of its findings to all adolescent smokers is not possible and the specific context should be considered in making such inference.

CONCLUSION

Overall, the adolescent smokers were aware of the risks of smoking but they still continued smoking. They appeared to rationalise their smoking by disengaging themselves from the risks and rendering the risks insignificant and irrelevant. Most importantly, their decision to smoke was due to their prioritisation of smoking rewards over the distorted risks; they regarded smoking as worth the risk. This suggests that they made a calculative decision after weighing up the risks and benefits of smoking. As gaining the rewards of smoking was their focus of life, they decided to choose smoking over quitting. This study provides useful information in understanding the smoking behaviour of the adolescents in the sample. Thus, smoking cessation strategies including

effective counselling that could challenge their rationalisation of smoking could be developed. Hopefully the implementation of these strategies can enhance adolescents' willingness to quit smoking and enhance their chances of success.

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