# "Resilient Young Smokers" - A Proposed Study in Determining Young Adult Smokers' Responses Towards Anti-Smoking Initiatives in Australia

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#### Abstract

Although cigarette smoking rate has declined consistently in the past four decades in Australia, the smoking habit remains popular among some groups. From a marketer's vantage point, this slowed reduction portrays the less effective implementation of anti-smoking campaigns in Australia. Ideally, each anti-smoking intervention ought to break the chain of marginal utility and lead to a sharp or stepped decline of smoking prevalence. This paper explores the inadequacies of fear factored anti-smoking campaigns and some prevailing reasons why young adult smokers continue to smoke. This paper begins with a review and categorisation of the different reasons of why young adults continue to smoke. These reasons draw on addiction, stress, habit, social-economic factors, self-identity and peer pressure. The rationale for studying these anti-smoking initiatives is to evaluate if these initiatives address the issues of smoking amongst young adults. This paper is significant for formulating effective anti-smoking messages and policy developments in Australia.

**Keywords:** Please add 3-5 keywords for this paper

#### 1. Aims and Context of This Paper

Smoking prevalence has declined in many developed nations for a long time and Australia is one of the countries that accomplished such success (Winstanley, Woodward, & Walker, 1995). This change could be ascribed to the implementation of anti-smoking initiatives that caused smoking in Australia to drop from 34.5 per cent to 16.3 per cent in the past four decades (Wipfli, 2012).

Despite these positive trends, smoking remains prevalent and remained stable at 3.3 million since 2007 (Ferguson & Phau, 2013). In Australia, the smoking rate diminishes with increasing age. Specifically, young adults portray higher smoking prevalence compare to older age groups (Mannan et al., 2016). In many cases, young adult smokers were reported to be one of the highest nicotine dependent groups (Darville & Hahn, 2014). They are most likely to become long term and heavy smokers who have the least intention to quit (Nordstrom et al., 2000).

When young adult smokers (18 to 35 years old) continue to smoke, this subpopulation may have higher risk in developing lung diseases, cardiovascular diseases, asthma, shortness of breath, coughing, DNA damage, inflammation, oxidise stress and diminishing health compared to non-smokers (Gough et al., 2009). According to widespread medical consensus, the 1988 US Surgeon General's report (Novello, 1990) confirms that young adults who are heavy smokers and smoke for many years have higher risks of mortality and diseases such as intense myeloid leukaemia, cervical cancer, kidney malignancy, lung cancer, pancreatic cancer and stomach cancer (Moodie, Daube, & Carnell, 2009; Pandeya et al., 2015).

Tobacco smoking is accountable for the greatest disease burden in Australia. The damage caused by tobacco smoking is estimated to bring about 19,000 deaths each year to the Australian community (Siahpush & Carlin, 2006). The Department of Health and Ageing has reported that tobacco use has caused 14,901 deaths for male and female where 14,790 comprised of heavy and long term smokers between 2004 and 2005 (Wipfli, 2012). In

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the context of Australian productivity and workforce, the smokers' and ex-smokers' absenteeism in the workplace were found to be 1.4 and 1.3 times higher than those who never smoked respectively. Recent study reveals that Australian workers' absenteeism has cost \$388 billion in the total financial loss based on gross domestic product generated per worker in 2016 (Owen et al., 2018).

In response to these situations, more severe anti-smoking initiatives have been introduced. For example, cigarette packet health warnings (Brennan et al., 2011), the imposition of higher tobacco tax (Guillaumier, Bonevski & Paul, 2015), marching banned on small cigarette packs, advertising and sponsorships (Moodie, Daube & Carnell, 2009), mass reach anti-smoking campaigns (Germain et al. 2012), and implemented smoke-free workplaces and licensed venues (Cooper et al., 2010).

Despite numerous sustained anti-smoking initiatives that are focused to dissuade young adult smokers from continuing to smoke, the smoking prevalence among this group only declines slowly (Darville & Hahn, 2014; Docherty et al., 2014; Mathews, Hall, & Gartner, 2010; Moodie, Daube, & Carnell, 2009). From a marketer and the tobacco industry vantage point, this slowed reduction could be viewed as less effective (Becker & Murphy, 1988; de Meyrick, 2010; Lupton, 1995). Ideally each anti-smoking intervention ought to break the chain of marginal utility (e.g. the satisfying fulfilment of smoking) and lead to a sharp decline of smoking prevalence (Baker et al., 2004). Recent studies (Cooper et al., 2010; Wakefield et al., 2015; White et al., 2003) reported that young adults recognised and understood that continuous smoking is costly and bad for health, yet this smoking habit continues.

# 2. Tobacco Control Expenditure Between Australia and Other OECD Countries

According to the World Health Organisation (WHO) Framework Convention on Tobacco Control (FCTC), Australia has adopted anti-smoking strategies that are similar to other OECD (Organisation for Economic Co-operation and Development) countries (Who, 2013). However, compared to other OECD countries, Australia recorded major discrepancy on tobacco control spent per capita. For instance, compared to Canada, Australia spent more than double on its tobacco control expenditure per capita despite that Canada has a higher population than Australia. Similarly, the US spent less on tobacco control expenditure than Australia. Ironically, Canada and the US both recorded lower and almost identical levels of smoking prevalence compared to Australia (Who, 2013; Wipfli, 2012).

Economically, it could be argued that Australia's current tobacco smoking rate of decline does not justify the level of expenditure on tobacco control initiatives. It is fair to assume that the intention and motivation rose to discourage smoking by anti-smoking initiatives may not have reached to the optimal effect to dissuade young adult smokers from continuing to smoke. If we assume that the effect of anti-smoking efforts is to reduce continued smoking, then we would expect the prevalence of smoking to reduce fairly sharply (or at least a stepped decline) (Becker & Murphy, 1988; Keeler & Marciniak, 1999) and showing significant health behavioural change among young smokers in different intervention stages (Prochaska, Norcross, & DiClemente, 2013).

This paper explores the question whether the anti- smoking initiatives have addressed the reasons why young adult smokers continue to smoke. This paper begins with a review and categorisation of the different reasons why young adults continue to smoke. The reasons to smoke draw on addiction, stress, habit, social-economic factors, self-identity and peer pressure. This paper will then identify the anti-smoking initiatives, principally those employing the mass media trying to convince young adults to discontinue smoking. The rationale behind anti-smoking initiatives is compared to see if these initiatives address the issues of smoking amongst young adults. This paper adds value for formulating anti-smoking messages and policies development in Australia. The overarching research objectives of this paper aim to identify factors that influence smoking behavior amongst the young adults and as well as the effectiveness of anti-smoking initiatives in Australia.

# 3. Literature Review on the Effectiveness of Anti-Smoking Campaigns in Australia

Anti-smoking Initiatives in Australia

The scene of tobacco control has changed significantly in the past 40 years. As early as 1972, the very first national campaign on smoking was the National Warning against smoking campaign that used posters and slogans with anti-smoking messages requesting smokers not to smoke near each other. Due to lack of formal evaluation at that time, no information is available about its impact on smoking prevalence and the only information known is that the campaign cost \$1.5 million over three years (Winstanley, Woodward, & Walker, 1995).

Another significant anti smoking campaign was the National Campaign against Drug Abuse in 1985, which was

later renamed as The National Drug Strategy by The Ministerial Council on Drug Strategy (MCDS). Quit line telephone support was established in conjunction with a media anti-smoking campaign (Germain et al., 2012). The campaign was launched with the main aim to target females and young adults. The very first smoking rates of 42 per cent and 30 per cent were recorded for male and female respectively.

Smoke free policies were then introduced in 1986 in federal workplaces and successfully reduced male smoking prevalence from 42 per cent to 37 per cent while females recorded a reduction from 30 per cent to 29 per cent. In 1987, smoking on domestic flights was banned. By 1989, tobacco advertising was prohibited in the print media. Smoking prevalence by males and females reduced a further to 31 per cent and 26 per cent respectively.

However, the negative perception on smoking and intention to quit stalled in the early 1990s. As a response to that situation, a \$9 million National Tobacco campaign was launched by the Australian Government to regain the tobacco control momentum (Winstanley, Woodward, & Walker, 1995).

The National Tobacco Campaign was particularly designed to encourage quitting in a more severe way. For instance, the increased from age of sale of cigarette 16 years to 18 years under the amended *Tobacco Act*, increased in Federal Excise Duty (FED) which is a tax on commercial cigarette that increased 18 per cent of the cigarette price. In-store advertising and point-of-sale displays were the only remaining conventional types of tobacco publicity at that time. These vigorous anti smoking programs and policies have led smoking prevalence to achieve the ever-low smoking rates for male and female of 24 per cent and 20 per cent respectively (Moodie, Daube, & Carnell, 2009; Winstanley, Woodward, & Walker, 1995).

In mid-February 2006, another significant tobacco control campaign was launched where the Australian Government committed \$25 million over four years on this new control. Specifically, mass media anti-smoking was employed to spread the negative impact of smoking. This mass anti-smoking campaign was divided into two stages where the first stage focused public attention on the release of graphic health warnings on tobacco product packaging. In particular, all tobacco products manufactured or imported into Australia were required to be printed with the new health warning images. However, some tobacco production countries such as Ukraine, Honduras, Dominican Republic, Cuba and Indonesia consider these actions unfair, judging from the actions to sue Australia for restrictions of trade in the world court - World Trade Organization (WTO) for the efforts to standardise cigarettes (Fooks & Gilmore, 2014; Frankel & Gervais, 2013; von Tigerstrom, 2013; Voon, 2015). After six years of bitter legal proceeding, the WTO panel has recently announced that Australia's plain packaging law has not infringed the trademark rights of tobacco companies (Newswire, 2018). However, the International Trademark Association (INTA) did not support this decision, claiming that WTO has set a dangerous backward precedent of Intelligence Property (IP) that could lead to the so-called 'domino effect' of plain packaging on other goods especially in the alcohol, pharmaceutical and fast food sectors.

The second stage of the new tobacco control was launched at the end of December 2006 which targeting young adults featuring television, cinema, magazines, radio and outdoor advertising, graphically depicted the range of toxic chemicals in cigarette smoke, as well as linking to graphic health warning. According to recent study (Brennan et al., 2011), the campaign has increased young adults' awareness of the health consequences of smoking and motivation to quit.

The most prominent substantial strategy to reduce smoking among the young smokers to date is the implementation of the plain packaging on cigarette (Clarke & Prentice, 2012). The *Tobacco Plain Packaging Bill 2011* was passed on 21 November 2011 and took effect on 1 December 2012 with the aim to replace the standard packaging by having graphic anti-smoking messages, drab dark brown plain package with little name of the product to discourage continue smoking especially the young adult smokers (Brennan et al., 2011; Moodie, AR, Daube & Carnell, 2009).

## 4. Effectiveness of Anti-Smoking Initiatives in Australia

Although smoking prevalence has reduced in the past 40 years, but many young adult smokers (defined between 18-35 years old by the United Nations) continue this habit at a relatively stable rate (Gough et al., 2009). More recently, the number of smokers in Australia has increased from 21,000 to 2.4 million for the ever first time despite the rigorous anti-smoking initiatives since 2013 (Adam, 2017; Colin, 2018). This is consistent to past studies (Daube et al., 2015; Moodie, AR, Daube, & Carnell, 2009; Van De Ven et al., 2010) indicating that Australia smoking rates have been declined slowly and the smoking prevalence of young smokers was still considered high.

Ironically, the expectation on anti-smoking initiatives to reduce smoking rate to drop sharply (or at least stepped decline) was not the case and does not align to the Theory of Rational Addiction (Becker & Murphy, 1988).

According to the theory, even individuals who are dependent on addictive products such as cigarette can be forward looking and utilise accessible information to contrast future advantages and unfavourable present worth. In other words, cigarette smoking can be quit 'in cold turkey' or 'all-in-a-sudden' when the future benefits of quit smoking (e.g. saving money, better health) outweigh the present discounted utility of smoking (e.g. socialising, looks youthful and 'cool'). In the lens of young adult smokers, the benefits of stopping are still far away and the cost of quitting at the present value is high (Sloan & Wang, 2008). Therefore, this group of young adult smokers who continue to smoke is arguably the result of the less effective anti-smoking initiatives and contribute to the slowed rate of smoking cessation. Ideally each anti-smoking intervention ought to break the chain of that marginal utility and lead to sharp or stepped decline of smoking prevalence (Keeler & Marciniak, 1999).

A few researchers have observed mass media based anti-smoking initiatives have had no distinguishable direct impact on smoking pervasiveness in young adult smokers (Bardsley & Olekalns, 1999; Gilbert, 2005; Pechmann & Reibling, 2000; Shevalier, 2000). Others viewed the campaigns in a more positive way, arguing that in spite of the effectiveness in the aspect to reduce the smoking rate, the anti-smoking initiatives had produced short-term positive outcomes. For examples, the development of awareness of health risks, motivation and intention to quit smoking, smoke less number of cigarettes per day (Brennan et al., 2011; Moodie et al., 2014; Neri et al., 2016; Tyrrell, 1998; Wakefield et al., 2015; White et al., 2003). Nevertheless, the effectiveness of the anti smoking initiatives turn out to be far less encouraging, with significant evidence that the number of smokers in Australia has increased from 21,000 to 2.4 million for the ever first time despite the rigorous implementation of anti-smoking initiatives since 2013 (Adam, 2017; Colin, 2018).

This phenomenon perhaps can be clarified by the way the anti-smoking initiatives are developed (Gilbert, 2005). Indeed, the initiatives may not take into consideration for the circumstances, preferences and cultural conditions of the young smoking adults. For instance, the health risks will have less impact on those who view the anti-smoking is unrelated to their everyday life context (Shevalier, 2000). Young smoking adults simply do not 'listen' to the messages convey to them (Shevalier, 2000). Young adult smokers chose their own interpretations of smoking that suit their own ends.

The use of many health scare tactics, fear campaigns and anti-smoking advertisements seeking to shock young adult smokers into quitting (Ferguson & Phau, 2013) warrants little impact to discourage them to quit. Some other factors such as stress, peer pressure, habit, addiction to nicotine, disadvantages of socioeconomic condition, desire to attain social identity have been ignored. These bio-psychosocial dimensions are important factors to be considered while constructing the anti smoking programs and policies (Gilbert, 2005). In contrast, current anti smoking advertisements portray the use of medicine as the supreme power embedded with highest rationality to which young adult smokers should conform.

As young adult smokers do not pay much attention to anti-smoking advertisement that employs health risks factor to deterrent them from continue to smoke, the advertisement is perceived to be irrelevant (Lynch & Bonnie, 1994). It is because the health risks is not absolute (Petersen & Waddell, 1998) and has less ability to practically impact on their present lives. The knowledge about health risks is ambiguous and has not been experienced at the smoking juncture. Thus, the medical effects of smoking are not the priority in their knowledge hierarchy (Guillaumier, Bonevski, & Paul, 2015). Past study by Young and Banwell (1993) showed that young adult smokers usually chose smoking to attain their social identity that is more socially valued.

In view to the problems with the construction of anti-smoking initiatives and their less effectiveness of achievement for many young adult smokers, one could question whether the anti-smoking initiatives have addressed the reasons for young adult smokers continue to smoke? It is arguable that current anti-smoking initiatives continue to be used in favor to show the government is concerned about the general public health and those initiatives are effective to promote good health (Lupton, 1995).

However, the conflict is apparent, those anti-smoking initiatives are funded by the federal and state government to facilitate the objectives of the government and merely to maintain the status quo as "authoritative and active". The consistent to use health risks, fear appeal in anti smoking advertising is just to unable individuals to moderate their own behavior (Gilbert, 2005). In other words, the anti-smoking initiatives are to caution young adults of the adverse impacts of smoking and let them to take up the message for their own sake. The government is just 'releasing its duties in saving public health by finding the cause of ill-health at the level of individual responsibility'. Perhaps, the governmental sponsorship of anti smoking programs and policies may be covertly viewed to support another intention, that is – to continue to allow cigarettes selling while harvesting the taxes levied on the cigarettes sales (Geis, Cartwright, & Houston, 2003).

Therefore, it is necessary to reinvestigate different factors of why young adults continue to smoke. This next

section of this paper shall identify the anti-smoking initiatives, principally those employing mass media trying to convince young adults to discontinue smoking. The rationale behind anti-smoking initiatives is compared to see if these initiatives address the issues of smoking amongst young adults.

### 5. Factors That Influence Smoking Behavior in Young Adults

# (a) Construction of self-identity

In adolescence, young adults normally experience great changes to many aspects of their psychological, physical and social lives. During this time, they tend to search for a secure identity (Lucas & Lloyd, 1999) by imitating their role models (Scheffels & Schou, 2007). The feeling of being glamorous and cool is paramount (Distefan, Pierce, & Gilpin, 2004). For instance, Distefan, Pierce and Gilpin (2004) shows that when young adults expose to scenario such as watching movies where hero or heroine smoke cigarette on their victory against the enemy, it indirectly implies the hero or heroine possesses characteristics of success, courageous, matured, cool and attractive with many positive images associated to cigarette. Young adults also perceive cigarette smoking as they 'control their own life' and 'I am special' (Hamilton & Hassan, 2010). However, this result contradicts to some earlier studies (Denscombe, 2001; Lucas & Lloyd, 1999) where young adult smokers were perceived to portray negative attributes. For example, young adult smokers are viewed to be "laid back" and "lazy" (van den Putte et al., 2009). Nevertheless, smoking continues among young adult smokers despite those negative labelling (Guillaumier, Bonevski, & Paul, 2015).

# (b) Peer pressure

Another prevalence of tobacco consumption among the young adults is due to peer pressure which is quite influential and common during the vulnerable young adulthood (Wayne & Connolly 2002). If the peer exerts negative attitudes among young adults by challenging them to prove their maturity through performing some activities such as smoking and drinking, young adults would have high tendency to embrace such behavior because such behavior is the only way of assuring their acceptance. By doing so, they become accepted to the group (Lakon et al. 2015). However, study by Erlingsdottir et al. (2014) showed that young adults smoking behavior does not due solely to peer pressure but parental influence too. For instance, in some past experiments (Bandura 1977; Chartrand & Bargh 1999), young adults whose parents were smokers tend to follow the smoking habit without being urged to do so. This implies that passive parental influence would also support why young adults continue to smoke rather than mere peer pressure from the social group.

# (c) Social-economic condition

Young smokers who experience disadvantaged in socio-economic tend to smoke more cigarettes and showed little intention to change or cease smoking behaviour (Guillaumier, Bonevski, & Paul, 2015). The financial stress associates with their socio-economic position is viewed to be paramount that restrains the cessation attempts. Often, they use smoking as a medium to cope with stressors of personal circumstances and surrounding environment (Guillaumier, Bonevski, & Paul, 2015). Jones et al. (2009) found that young adult smokers tend to possess shorter planning horizons in cessation, more likely to be present-oriented and impulsive (incapability to resist indulgence) in smoking. These factors help to explain why socio-economic disadvantaged young smokers fail in smoking cessation and thus continue to smoke.

# (d) Coping with stress

As the young adults shift from adolescence to adulthood, it is quite common for some of them to experience stress due to new challenges and overwhelming responsibilities. Unsurprisingly, some will rely on some external supports to alleviate stress. A common remedy is the cigarette (Lawless et al., 2015). The smoking behavior among stressed young adult is supported by the self-medication theory where young adults tend to use cigarettes to improve stress or negative mood (Kumari & Postma, 2005). The properties of the nicotine have the function of altering negative mood to positive. Specifically, nicotine in the cigarette is known to activate human neuronal nicotinic receptors in the mesolimbic dopamine system (Dwoskin et al., 2009). The dopamine system in the human brain that is responsible for the sense of reward and pleasure (Weinberger & Sofuoglu, 2009; Weinstein & Mermelstein, 2013). When the dopamine system is activated, the person begins to feel relaxed and slightly euphoric. This rewarding feelings becomes very welcoming to many stressed young adults and therefore they tend to persist the smoking behavior (de la Peña et al., 2015).

#### (e) Smoking as a habit

Normally, an individual who smokes cigarette would find it extremely hard to stop smoking. Despite being highly motivated to quit, the majority of young adult smokers find it almost impossible to maintain abstinence (Hitsman et al., 2010). In the long run, this continue of smoking behavior becomes a habitual act that must be

performed daily by the young adult smokers. Everitt and Robbins (2005) defines habitual act to behaviors that have been frequently performed in stable situations or contexts. For example, a smoker may always smoke a cigarette in the interim between leaving his office and getting into his car. A stable context is one in which the supporting features of the current environment are similar to those contexts in which the behavior was learned and practiced in the past. In other words, a habitual smoker finds the contexts is not novel in the sense that it does not present new goals or challenges and thus execute the practiced responses such as smoking.

#### (e) Smoking is addictive

Cigarette contains nicotine and nicotine is a substance that stimulates and creates arousal (e.g. feeling of euphoric) and relaxation (Hwang & Yun, 2015; Weinberger & Sofuoglu, 2009). When smoker inhale nicotine through the act of smoking, nicotine is rapidly absorbed by the body but also disappear rapidly, leading to a desire to consume more nicotine (Baker, Brandon, & Chassin, 2004). Baker, Timothy B. et al. (2004) evidenced that people tend to transform from light/ social smoking to heavy and long-term smoking that is due to nicotine addiction. This fosters young adult smokers continue to smoke and causes smoking cessation to be slowed.

# 6. Anti-smoking Initiatives on Smoking Behavior in Young Adults

# (a) Pictorial health images and text warnings on cigarette packets

In Australia, the pictorial health images on the cigarette packet occupy 30% of the front and 90% of the back of the packet. They combine graphic warning images depicting the health effects of smoking with detailed explanatory messages and the number for the Quit line (Brennan et al., 2011). The government employs fear appeal advertising trying to dissuade young adult smokers from the smoking habit and opines that fear appeal advertising will 'terrify' young adult smokers to change their smoking attitude and behavior (Ferguson & Phau, 2013). However Ashok and Michael (2014) argue that anti-smoking advertisement (e.g. the combination of text and graphical images) fail to influence young adults. According to the Terror Management theory (Martin & Kamins, 2010), individuals use various mechanisms to protect themselves particularly when they experience stress or anxiety and not to aware of their own mortality. This behaviour allows individuals to protect and maintain their self-esteem. When this behaviour is placed in the context of smoking, young smokers who derived a strong sense of self-esteem from smoking tend to smoke more and ignore their own mortality (Ashok & Michael, 2014; de Meyrick, 2001; Martin & Kamins, 2010).

## (b) Plain packaging on cigarette packets

The WHO Framework Convention for Tobacco Control (FCTC) outlined guidelines for cigarette package, recommending the use of plain (or standardised) packaging with the aims to: (a) reduce the appeal of tobacco products to consumers; and (b) increase the effectiveness of health warnings on the retail packaging of tobacco products; and (c) reduce the ability of the retail packaging of tobacco products to misled consumers about the harmful effects of smoking or using tobacco products (Roemer, Taylor & Lariviere, 2005). Australia has responded to the signatory to the Convention and requires tobacco companies to adopt standardized brown packaging for cigarette, with large health warning and minimal brand identification to battle with the wrong perception about being 'cool' and glamorous of smoking among young adults. However, recent study Ashok and Michael (2014) reported that plain packaging has had least efficient on smoking prevalence, either among minors or adults. Arguably, the declining straight line of smoking prevalence in Australia is the result of a "pre-existing" continuous and uniform trend, regardless of its 'heavy anti-smoking measures'.

## (c) Imposed of Smoke-free policies

In 1986, the Australian government implemented bans on indoor smoking following reports that passive smoking would impact health threats to the public (Cooper et al., 2010). Although many people accepted this anti-smoking legislation, however some strong industry consultants opposed these bans, argued that smokers would stop visiting some recreational venues such as the licensed and gambling venues and resulting financial lose to the small businesses. These bans also opined to encourage passive smoking to homes (Borland et al., 2006). However, research has demonstrated that these concerns were unwarranted (Scollo et al., 2003). Although many studies show that smoke-free bans would discourage and change smoking behavior, yet the association with quitting remains controversial, particularly to the young adult smokers (Caroline & Stanton, 2002). These young, bar and nightclub patron smokers reported to smoke more at outdoor despite the smoke-free bans (Edwards et al., 2008; Hyland et al., 2009).

# (d) Imposed of Tax policy

Demand for cigarette can be reduced by tax increment. Past studies show that the higher the tax increased, the greater reduction in cigarette sales (Chaloupka et al., 2002; Hsieh & Lee, 2016). This works particularly well to

many young adult smokers who are in a state of socio economic disadvantaged. They appear to be one of the groups that possess the highest smoking prevalence in Australia (Dunlop, Perez, & Cotter, 2011). When the price of cigarette increases, young adult smoker is expected to reduce cigarette consumption, more motivated to quit smoking and have an increased likelihood of actual quitting (Ross et al., 2011). However, this ideal scenario is contrary to the reality. According to Becker and Murphy (1988) not all smokers would intend to quit, even at very high tobacco prices. The social, cultural context of smoking as well as individual factors play pivotal roles in keeping low socio economic disadvantaged young smokes from quitting. In reality, they use price minimisation strategies to cope with high priced of cigarette (Siahpush & Carlin, 2006). For instance, they switch to cheaper brands, products or sources (including illicit sources) of tobacco or purchase in bulk (for instance, the hand-rolled cigarette), less likely to spend money in restaurant and health insurance (Guillaumier, Bonevski, & Paul, 2015). They normally experience financial stress, less likely to make quit attempt and less likely to succeed in quitting (Siahpush & Carlin, 2006).

#### 7. Conclusion

This paper proposes a novel concept. It is argued that using fear factor in advertising should not be the sole method to stop young adults from smoking. Rather, anti-smoking initiatives should be tailored to fit to different segments that have different needs and behaviours. Specifically, this paper attempts to fill a research gap of anti-smoking effectiveness between the smoking rates against the tobacco control spent per capita in Australia. By determining the selected factors of smoking, this paper is significant for formulating and developing anti-smoking messages and policies that are more effective and comprehensive.

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