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Findings for Tobacco Packaging Study (Theme 1)

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CAVEAT: QUALITATIVE STUDY

This qualitative study is intended to provide insights and directions and not a quantitative, precise assessment. The comments made pertaining to the qualitative phase in this report are based on information gathered from a small sample of participants and may not be representative of the overall population. Conclusions pertaining to the qualitative phase should be viewed as hypotheses requiring further quantitative substantiation. We shall not have any responsibility or liability for any business decision made in reliance on the information contained in this report.

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Executive Summary

In order to determine an optimal cigarette packaging that deters smoking, a study was commissioned to investigate four elements of a cigarette pack: (i) pack type; (ii) pack colour; (iii) background and font colour of the health warning message at the side of the cigarette pack (i.e. "side text warning background"); and (iv) letter case style used for side text warning.

For smokers and ex-smokers, peer pressure and stress were cited as predominant factors that made them smoke. Majority of them began smoking either while they were in schools or during National Service (for males), or when they just entered the workforce.

For non-smokers, the smell of cigarette smoke was cited as the primary reason that deterred them from smoking, followed by health and addiction concerns. Some of them had family members who smoked, and this exposure further led to their dislike of the smell of cigarette smoke. In addition, education in schools on the harmful health effects of cigarette dispelled any temptation to try cigarettes, even when offered.

The prominent display at the back of the cashier counter in a 7-Eleven convenience store was frequently cited as the place where participants have seen cigarette packs. On a shelf, participants noticed the price of cigarette pack, and remarked on its exorbitant pricing. Smokers were also aware of pricing differences between 7-Eleven and NTUC outlets against neighbourhood convenience stores. When looking at cigarette packs, participants noted the brand name, pack colour and graphic health warning labels (GHWLs). Smokers mostly paid attention to the brand and colour of cigarette packs. Some smokers remarked that they ignored the GHWLs although they admitted being aware of it, because they had already chosen to smoke at that point. Pack colour was noted as an indicator of the cigarette's flavour.

Non-smokers tended to notice GHWLs first followed by the colours and brands. They were generally more disturbed by the GHWLs, describing it as gory and disgusting. GHWLs noticed on current packs in the market were related to babies or body parts such as the eyes, teeth, throat, and lungs.

When evaluating the attractiveness of **cigarette pack types**, the aesthetics of the packaging was not as significant to smokers as compared to non-smokers. Instead, smokers were more concerned with the functional aspects of the cigarette pack, such as it being a hard pack, having a cover to seal the cigarettes, and bevelled edges that would not protrude uncomfortably when kept in their pockets. On the other hand, non-smokers looked at the visual appeal of the cigarette packs, and focused more on the colours and aesthetics of the cigarette pack. Overall, out of the four pack types that were tested, participants felt that the soft pack was the least appealing due to its cheap look, association with old uncles, and impractical packaging in terms of having an easily crushed packaging without any way to seal the cigarettes after opening.

In terms of the **cigarette pack colour**, some participants ranked packs based on brightness, where brighter colours were more appealing. Brighter colours were also

more likely to attract attention, so more people were likely to buy it. Some participants commented that brighter colours seem to be healthier, while darker colours looked poisonous due to the perceived higher level of tobacco content. Another way of ranking was based on the perceived flavour of cigarettes inside a cigarette pack of such colours. Non-smokers without any prior exposure to cigarettes were not able to do this while those who were more familiar, provided different views based on their experiences. Generally, darker colours were associated with stronger flavours such as the 'reds' and resembled typical, commonly seen cigarette pack colours more. Some participants commented that brighter coloured packs made the cigarettes seemed dirty, fake, inferior and of low quality.

While ranking the three proposed **background and text colours of the side text warning** against the six pack colours, participants ranked the yellow and white backgrounds as more noticeable. Some participants ranked the background colour of the side text warning according to its contrast against the pack colour. For instance, if the pack colour was dark, lighter backgrounds such as yellow and white were better suited while a black background was better suited for lighter pack colours. Nonetheless, some participants felt that there was sufficient space provided for the side text warning, and as a result, the noticeability of the background colour was not compromised by the pack colour. As long as the pack colour is not the same as the background colour of the side text warning, the background colour would still be noticeable.

When considering which text colour of the side text warning was easier to read, participants generally did not vary their selections by pack colours. Most participants found that black text against white background was easier to read, given that it was commonly used in documents. Nevertheless, the yellow and black backgrounds were also highlighted by some participants for their abilities to bring out the words due to the contrast with the different pack colours. Black text against a yellow background was described as a pleasant combination that is easy on the eyes, while white text against a black background accentuated the words.

Lastly, for the **letter case style used for the side text warning message**, majority of participants felt that sentence case was easier to read because it resembled how a normal document, such as a storybook or newspaper, would be written. Some participants felt that capital letters was easier to read because the words were more uniformed and looked enlarged due to the capitalised letters. In terms of noticeability, almost all participants agreed that capital letters was more noticeable, as capital letters were seen to carry an important and serious message, thus drawing attention to the side text warning message.

Research Background and Introduction

The usage of tobacco products has always been a widespread concern worldwide. Singapore adopts a multipronged strategy comprising taxation, legislation, public education, collaborative partnerships and provision of smoking cessation services to reduce smoking prevalence in Singapore.

In March 2015, Ministry of Health (MOH) announced that a public consultation on standardised packaging will be carried out by the end of the year to seek public views on this measure. In addition, Health Promotion Board (HPB) has commissioned *Consulting Group - Asia Insight* to carry out a research project to gather local evidence on the technical specifications for standardised packaging of tobacco products. Findings from the research study will be used to determine the optimal layout for standardised packaging suited for local settings.

The research study will explore four themes of investigation:

- Specific elements of cigarette packaging
- Graphic Health Warning Labels (GHWLs)
- Overall layout of a cigarette pack
- Extension to other tobacco products

This report focuses on Theme 1 of the study and will cover the following elements of cigarette packaging:

- Cigarette pack type
- Cigarette pack colour
- Background and text colour of side text warning
- Letter case style used for side text warning message

The objective of Theme 1 is to determine the most effective elements of cigarette packs that would reduce the attractiveness and appeal of tobacco products to smokers and non-smokers.

The four elements were evaluated through 16 focus group discussions and two in-depth interviews, with participants from various demographic/ behavioural backgrounds, respectively:

- Smoking status (Smokers/ Non-smokers)
- Age
- Gender
- Race
- Social economic status (Household income)

The report will share the findings from the focus group discussions and in-depth interviews and present the shortlisted options for consideration.

Research Methodology

The four identified elements of a cigarette pack were evaluated over 16 focus group discussions (FGDs) and two in-depth interviews (IDIs). The duration of each session was two and a half hours.

Detailed breakdown of group profile:

Group	Profile	Number of Participants	Date / Time of FGDs/ IDIs
T1-1	Cigarette smokers, aged 18-20, Male	9	29th June, 1600 to 1830
T1-3	Cigarette smokers, aged 18-20, Female	8	10th July, 1600 to 1830
T1-2	Cigarette smokers, aged 21-29, Male	9	9th July, 1900 to 2130
T1-4	Cigarette smokers, aged 21-29, Female	9	10th July, 1900 to 2130
T1-5	Cigarette smokers, aged 30-49, Male	9	26th June, 1900 to 2130
T1-6	Cigarette smokers, aged 30-49, Female	8	27th June, 1000 to 1230
T1-7	Cigarette smokers, aged 50-69, Male	7	4th July, 1000 to 1230
T1-7	Cigarette smokers, aged 50-69, Male (In-depth interview)	1	5th July, 1600 to 1830
T1-8	Cigarette smokers, aged 50-69, Female	8	15th July, 1900 to 2130
T1-8	Cigarette smokers, aged 50-69, Female (In-depth interview)	1	15th July, 1000 to 1230
T1-9	Non-smokers, aged 18-20, Male	9	22nd July, 1900 to 2130
T1-10	Non-smokers, aged 18-20, Female	9	14th July, 1600 to 1830
T1-11	Non-smokers, aged 21-29, Male	9	12th July, 1000 to 1230
T1-12	Non-smokers, aged 21-29, Female	10	12th July, 1300 to 1530
T1-13	Non-smokers, aged 30-49, Male	10	28th June, 1000 to 1230
T1-14	Non-smokers, aged 30-49, Female	10	28th June, 1300 to 1530
T1-15	Non-smokers, aged 50-69, Male	9	28th June, 1600 to 1830
T1-16	Non-smokers, aged 50-69, Female	10	4th July, 1600 to 1830

All discussions took place in English, covering the research scope as defined in the discussion guide (Appendix A). Participants were also asked to complete worksheets at various stages of the discussion to determine their personal ratings on the various elements of cigarette packaging. The worksheets used can be found in Appendix B.

To prevent any bias in the order of exposure to the stimulus, or primacy/ recency effects, the stimuli for 3 of the elements were rotated in the order below [Please refer to Appendix C for the stimulus materials used]:

Cigarette Pack Colour

Rotation #	Sequence of labels shown	Groups used
A	A,B,C,D,E,F	T1-1, T1-5, T1-6, T1-7, T1-13, T1-14, T1-15 and T1-16
D	D,E,F,A,B,C	T1-2, T1-3, T1-4, T1-8, T1-9, T1-10, T1-11 and T1-12

Side Text Warning Background-Text Colour

Rotation #	Order within label	Groups used
Top	Yellow background, black background, white background	T1-2, T1-5, T1-7, T1-10, T1-11, and T1-14
Middle	White background, yellow background, black background	T1-3, T1-6, T1-8, T1-12, and T1-15
Bottom	Black background, white background, yellow background	T1-1, T1-4, T1-9, T1-13, and T1-16

**With reference to yellow background*

Side Text Warning Letter Case Style

Rotation #	Sequence of labels shown	Groups used
A	A,B	T1-1, T1-3, T1-5, T1-6, T1-7, T1-9, T1-11, T1-13, T1-14, T1-15, and T1-16
B	B,A	T1-2, T1-4, T1-8, T1-10, and T1-12

**Rotation was added midway after a number of groups have been completed, hence it was not balanced*

Notes on Analysis

Please note that all quantitative analyses in this report are based on a small sample size, hence should only be taken as indicative and not conclusive.

Usage and Attitude towards Smoking

Current smoking habits

Participants categorised themselves mainly as a regular, heavy, or social smoker. An average regular smoker would smoke around 2 to 3 packs a week while a heavy smoker smoked at least 1 pack a day. Most of the smokers identified themselves as regular smokers. Social smokers were those who would not likely purchase their own cigarettes but would instead smoke cigarettes when they were offered by other smokers. As such, the number of cigarettes smoked by social smokers usually varied.

Smokers aged 50 to 69 years commented on the restrictions put into place by the government over the years, such as allowing smoking in designated areas only, which made it difficult for them to smoke freely and resulted in them smoking less.

"Because after drinking, you don't feel like going to the smoking room. Very inconvenient. Last time, in a pub, you just light up a cigarette and smoke. Now you got to go into the room or go outside the building. Last time, when I went for pub, I think 2 packets just for 4, 5 hours."

- Cigarette smoker, aged 50-69, male

"You can't smoke in the corridor, you can't smoke in your bed, you can't smoke at the bus stop, everywhere cannot."

- Cigarette smoker, aged 50-69, female

Some participants also smoked out of habit; some were used to the action of smoking while others were accustomed to having a smoke at regular timings. Certain occasions encouraged smokers to smoke more, such as clubbing, drinking, commuting, or having nothing to do.

"Now I think it (smoking)'s becoming a habit."

- Cigarette smoker, aged 50-69, female

"Normally I smoke to pass time, like walking and smoke ah, that one shiok."

- Cigarette smoker, aged 18-20, male

"If I go parties, I'll definitely smoke. It's a must."

- Cigarette smoker, aged 18-20, female

"Drink. Brother and sister what, cigarette and drinks."

- Cigarette smoker, aged 30-49, male

"You're free the whole day, at least two packets. But if you are busy, less than one packet."

- Cigarette smoker, aged 50-69, female

Depending on the occasion, smokers would either smoke with their friends, colleagues or by themselves. Smokers who smoked more regularly spent more time smoking alone, whenever they get the chance. Female smokers aged 18 to 20 years tended to smoke less, and mentioned that they were only social smokers.

"I just had a few puffs for fun. But I really started on one night. Just took 7 cigarettes from a box. I'm not serious. I'm just social."

- Cigarette smoker, aged 18-20, female

Across all ages, smokers tended not to smoke in front of their family members. Smokers aged 18 to 29 years practised caution to avoid smoking in front of their parents as a sign of respect, because their parents would not like it.

"Because I respect them. If your mother have you out from the womb and until you grow up, then after that she starts to think that you have bad habits, that will make her feel very uncomfortable."
- Cigarette smoker, aged 21-29, female

This involved smoking in their own room, in the toilet or at the staircase. After smoking, they would use air fresheners and also wash their hands with soap to remove the smell. However, they also mentioned that their parents were aware or at least suspected them of smoking.

"Somehow, because when you come home, you will definitely smell of something, so they actually know, they did ask, but I just brush it off. Just continue do my things."
- Cigarette smoker, aged 21-29, female

"I smoke at home. My mum knows. My dad also knows. But he pretends like he don't know but then he will tell my mum that, 'he's smoking.'"
- Cigarette smoker, aged 18-20, male

Smokers aged 30 years and above would also avoid smoking in front of their family members. The reasons frequently cited were because they did not want to affect the health of their family members due to second-hand smoke, or because they did not want to influence them to pick up smoking. Those with young children would also take extra precautions to ensure that the children were not breathing in second-hand smoke. On the contrary, if the children were not at home, they will smoke freely at home.

"Usually when my kids are home, we avoid smoking in front of them."
- Cigarette smoker, aged 30-49, female

"So I go to the kitchen and smoke. When I take the shower you know, that spray, at least that way she (the child)'s not in the environment where she's breathing in smoke"
- Cigarette smoker, aged 50-69, female

"I smoke inside the house. My house nobody already. My wife (also a smoker) and me."
- Cigarette smoker, aged 50-69, male

Attitude towards smoking (Smokers and ex-smokers)

Most smokers picked up smoking during one of these three main phases of life:

- School
- National Service
- Work

For those who mentioned that they picked up during school years, usually the timing was between Primary 6 to Secondary 3. Three main factors that have prompted smokers to start smoking, in order of importance, are:

- Peer pressure
- Stress
- Curiosity

Peer pressure seemed to be a huge contributor in smoking initiation. Smokers of all ages often mentioned that they were influenced by their school mates or platoon

mates during NS to pick up smoking. Such pressure was usually given in the form of a dare, wanting to belong in the group or wanting to be seen as "cool" amongst their friends.

"So we sit under the playground then my friend started take the thing out. Say you all smoke? Then I look at him, he look at me. Then for like one minute, then after he say, I say okay."
- Cigarette smoker, aged 18-20, male

"My friends influenced me. Normally after we come back from outfield (during NS), my friends would have a small gathering to smoke, I take it as a bonding session."
- Cigarette smoker, aged 21-29, male

"Those days in young days, smoking was being cool."
- Cigarette smoker, aged 50-69, male

"When they smoke, if you refuse to smoke, they will ask you don't dare? So I smoked."
- Cigarette smoker, aged 21-29, female

"NS, peers, friends you know...want to look, you know, wah, like in the company... like all your friends are smoking then you...alamak...you feel a bit pressured la."
- Non-smoker, aged 30-49, male

Stress was frequently cited by smokers who started smoking while in National Service or at work. National Service (NS) was often associated with very rigorous training and most had negative and poor feedback of their experiences. Hence, to those serving NS, smoking provided a comforting respite. Those who picked up smoking at work were those that worked in the night shifts or in environments where most of their peers or business associates were smokers. Such sudden lifestyle changes contributed to stress for many, hence they resorted to smoking.

"Because NS is very stress. I feel like a dog in NS. I got no say, whatever they say I just say yes, yes, yes, whatever unreasonable shit they say, right still must do. Then stress, also smoke."
- Cigarette smoker, aged 18-20, male

"I went into NS without smoking at all, but after that, because of the sheer craziness of the training routine."
- Non-smoker, aged 50-69, male

"During that time, I worked at shipyard. We worked late night, stress and cold. So we smoked."
- Cigarette smoker, aged 50-69, male

For many female smokers who puffed their first cigarette, curiosity of what cigarettes were like was usually cited as the reason.

"They encouraged. "Why not, just try." Curious."
- Cigarette smoker, aged 18-20, female

"I only tried because I was curious."
- Cigarette smoker, aged 21-29, female

"So I was looking at the way she smoked. Very funny. She's always blowing blowing, blowing. One day I said I want to try out. So I did."
- Cigarette smoker, aged 50-69, female

For female smokers, smoking was also a stress reliever from relationship problems or a major hurdle in their lives.

"I was very overwhelmed. Because I was having problems at that time. I was looking for alternative. Smoking is a hobby to me. At the same time, it helps me."
- Cigarette smoker, aged 18-20, female

"I started because I was a bit depressed because I was being mistreated by a friend, a friend from childhood."

- Cigarette smoker, aged 50-69, female

"I started smoking when I got a divorce"

- Cigarette smoker, aged 50-69, female

Across the various age groups amongst female smokers, there appeared to be a social stigma attached to women who smoked. This prompted many to hide their smoking habits away from family members.

"My family was very conservative, so I cannot smoke at home. So this is partially disallowed."

- Cigarette smoker, aged 50-69, female

"My parents feel that women don't look good when they smoke, so I can't do it at home."

- Cigarette smoker, aged 18-20, female

"My parents are a bit conservative, so they are not open to a girl smoking."

- Cigarette smoker, aged 21-29, female

Smokers were generally aware of the detrimental effects of smoking on their health. Smokers aged 18 to 29 years felt that they are fully aware of the negative health effects from smoking, and continued iterations were unnecessary. Health talks in school and health advertisements on the dangers of smoking were commonly cited as sources of information.

"If you tell somebody who smokes that smoking is unhealthy. I think he already know is unhealthy then there is no point telling him again."

- Cigarette smoker, aged 18-20, male

"We all know it's bad, but we still go for it."

- Cigarette smoker, aged 18-20, female

"Definitely everybody knows smoking is not good one, but we still do it day by day."

- Cigarette smoker, aged 21-29, female

"Since young, there are advertisements on the television. Then when you go to school, we were told smoking will give you lung cancer."

- Non-smoker, aged 18-20, female

Being aware of the harmful health effects of secondhand smoke, some smokers have attempted to quit. Quitting attempts may also be triggered by personal experience that reminded them of smoking's bad health effects.

"I quit for a short while, like maybe one month, (because) there was once I had a lump here, so I went for operation, so it's now ok."

- Cigarette smoker, aged 21-29, male

"I have a pain inside here also. I just caught it 1.5 years ago. I quit immediately for 6 months."

- Cigarette smoker, aged 50-69, male

Female smokers were more conscious of their smoking habits and would quit when they were pregnant. They were also more affected by health warning images that showed a baby.

"Ugly. The baby one. Unborn child, or the baby has a cut on the face. I will say I don't want this picture. Just choose a better picture."

- Cigarette smoker, aged 21-29, female

"When I was pregnant with my second boy, I stopped."
- Cigarette smoker, aged 50-69, female

Smokers aged 18 to 29 years mentioned that they have contemplated quitting and would consider quitting in the future, should they get married and start a family. However, female smokers aged 18 to 29 years did not think they were addicted, and felt they were in control of their smoking habits, and hence did not need to be told when to quit smoking.

"I only socially smoke. So I'm not addicted."
- Cigarette smoker, aged 18-20, female

"Actually for me, it's like temptation rather than hooked. I can control not to smoke."
- Cigarette smoker, aged 21-29, female

Cost of cigarettes was also another trigger for some to consider reducing the amount of cigarettes smoked. Smokers, especially males aged 50-69 years, mentioned that cigarettes used to be a lot cheaper than they are now, and hence represented a financial burden for some. However, ultimately, this did not stop them from smoking

"But now expensive, control a bit."
- Cigarette smoker, aged 50-69, male

"Last time we smoke is 2 dollar plus now is 13 dollars. We still smoking."
- Cigarette smoker, aged 30-49, female

Smokers usually ended up either rationalising their smoking habits or reducing the number of cigarettes that they smoked. They usually dismissed the health concerns, citing examples of people who fell sick after quitting and that everyone will die eventually. Majority of those above 50 years old felt that they should be free to do what they liked given that they may not have much time left.

"So, no matter what I'm still harming myself, so I rather smoke, I die later."
- Cigarette smoker, aged 18-20, male

"Life is short. You stop smoking, what guarantee does it mean that you can live longer? You smoke for 40 years already."
- Cigarette smoker, aged 50-69, male

"I started getting hot tempered if I don't smoke."
- Cigarette smoker, aged 18-20, female

"After I quit. Then I find out I got high blood (pressure). It goes until 170."
- Cigarette smoker, aged 50-69, female

"That's the thing, it's (the GHWL) not proof. We see it, and we all know that it's not a proven case."
- Cigarette smoker, aged 21-29, female

Ex-smokers' experience:

For those who managed to quit, one reason was because the initial trigger for smoking was gone, such as NS or work. However, this could also mean that there was a chance for relapse if these ex-smokers were exposed to similar triggers again.

(In response to why he did not continue to smoke) "No more guard duty."

- Non-smoker, aged 50-69, male

"When I joined as a postwoman, I started again."

- Cigarette smoker, aged 50-69, female

Other reasons for stopping were due to health scares. One ex-smoker mentioned that he saw a documentary on throat cancer and the sufferings the person had to endure, which struck a fear in him. Thus, the health scare tactic would only work if it could resonate with the person.

"I saw this one particular advertisement about throat. Someone who suffered from throat cancer and the moment he got this cancer he said he cannot eat. So something strike me lah. So apparently I don't want to be like that, right."

- Non-smoker, aged 30-49, male

"About a year back, he (husband) met with an accident which was quite serious. After that, he kicked off the habit."

- Non-smoker, aged 30-49, female

"Last year, he (husband) quit smoking due to one of his friends who had tongue cancer. He was shocked. And he had a gum infection at the same time. Then he decided to quit."

- Non-smoker, aged 30-49, female

Family members, especially children, were often important motivating factors for ex-smokers to quit smoking.

"Those programme created awareness you know, and when you get married, got kids already, you become more conscious for your family members so that's why you stop."

- Non-smoker, aged 30-49, male

"I decided to stop smoking one and a half years ago. As my kids were growing up, they said it's not good for your health, your tongue will go black."

- Non-smoker, aged 30-49, female

An aversion to smoking could also be developed by cigarette overdose, which made the person feel nauseated and dislike the cigarette smell.

"I chain smoked until to a point where I feel like puking. After that the shiok-ness, it's no more there."

- Non-smoker, aged 30-49, male

Attitude towards smoking (Non-smokers)

For many non-smokers, the following factors were deterrents to picking up the smoking habit:

- Dislike cigarette smell
- Do not see any reason to
- Health concerns
- Living in an environment without smokers

In particular, cigarette smell typically evoked strong negative reaction from non-smokers, such as walking faster and covering their nose. This was frequently mentioned by non-smokers who have never tried smoking before.

"I will walk faster because very smelly."
- Non-smoker, aged 30-49, female

"They would cover the nose, and get angry, especially at a coffee shop."
- Cigarette smoker, aged 50-69, male

"I will go somewhere when they smoke because I cannot bear the smell, I will start coughing."
- Non-smoker, aged 18-20, male

Some non-smokers have also taken a puff of smoke before, and the negative personal experience prevented them from picking up smoking after that.

"That is also a factor, I already tried it and I don't like it so I won't take it anytime soon."
- Non-smoker, aged 18-20, male

However, non-smokers mentioned that they would still hang out with their smoker friends while they smoked. As such, they would still be exposed to second-hand smoke, even if their friends avoided blowing the smoke at them. Most non-smokers felt that they managed to keep away from smoking due to their personal willpower. They were convinced of the harms of smoking and were not tempted to try it.

Non-smokers did not perceive any benefit from smoking; instead they saw smoking as undesirable.

"I don't think I look cool doing it."
- Non-smoker, aged 21-29, female

"By smoking what do I benefit? Do I get any vitamins or minerals? No."
- Non-smoker, aged 50-69, male

Health and addiction concerns also kept non-smokers aged 18 to 29 years away from smoking. Some participants had asthma, or family members who suffered from it, because of smoking.

"I kind of have childhood asthma last time, so I don't want it, and it kind of affects your ability to run if you smoke."
- Non-smoker, aged 21-29, male

"My mother also cannot take the smoke ... she's asthmatic." "It has the addictive nature, you don't want to get hooked on it."
- Non-smoker, aged 21-29, female

"My late grandfather smokes, and he got 2 strokes and lung cancer, so..."
- Non-smoker, aged 18-20, male

Non-smokers were generally aware of the exorbitant cost of cigarettes. Hence, any long-term addiction to cigarettes could be a financial burden in the long run. This deterred non-smokers who wished to try smoking out of curiosity, as it would incur a heavy financial cost in the long term.

Some non-smokers aged 30 years and above mentioned that they came from a strict family background and nobody around them smoked, so they did not smoke as well.

"The cohort I'm in, very highly educated, some of them are like scholars, so none of them smoke."
- Non-smoker, aged 50-69, male

"Never try. Because family members never smoke. Family members, none of them smoke."
- Non-smoker, aged 50-69, female

"For me, maybe because I was born in a very strict family."
- Non-smoker, aged 30-49, female

Exposure to Cigarette Brands and Packs

Cigarette brands

Smokers and ex-smokers typically had higher awareness of cigarette brands than non-smokers. Older non-smoking participants aged 50 to 69 years were also quite knowledgeable about the different brands available, though they were only able to mention older brands that were around when they were younger.

Participants mostly gained awareness of cigarette brands through friends who were smokers. Some non-smokers became aware of cigarette brands after being asked by their smoker friends to help purchase cigarettes on their behalf. Male non-smokers aged 21 years and above mentioned Marlboro's sponsorships of F1, and those aged 30 years and above have also seen Marlboro's advertisements.

"... how do we know about Marlboro is because of the advertisements ... Marlboro country, F1 club. Because they put so much into advertisements, you know Marlboro is a cigarette."
- Non-smoker, aged 50-69, male

"... advertisement. They also introduce about their activities ... last time everyone use Marlboro, F1."
- Non-smoker, aged 30-49, male

"Marlboro. F1. They sponsor."
- Non-smoker, aged 21-29, male

Participants, including non-smokers, recorded a high awareness of Marlboro brand, followed by Winston and Next. Smokers could easily name other brands, such as LD, Dunhill, Gudang Garam, Viceroy, Lucky Strike, Pall Mall, and Salem. These brands were lesser known amongst non-smokers as they had no prior exposure.

Marlboro was described by participants as an international brand easily available all over the world. It was easily recognisable due to its red-white arrow logo shape, even without a clear brand name at the front of the cigarette pack.

"Marlboro is an international brand what. Every country also sure have one."
- Cigarette smoker, aged 18-20, male

"But from this logo, it's Marlboro."
- Cigarette smoker, aged 18-20, female

"How do we differentiate between Winston and Marlboro, it's because Marlboro has this arrow. Winston will be like one banner."
- Cigarette smoker, aged 21-29, male

Smokers' brand choice:

A major source of information for smokers when it comes to cigarette brands and flavours was through peer recommendations and suggestions. Smokers who picked up smoking through friends will usually start off with the cigarette brand that was introduced to them by their friends.

"Friends smoke what brand we follow."
- Cigarette smoker, aged 30-49, male

When trying out new cigarettes, peer recommendations were usually considered as well. Smokers would also try their peers' cigarettes if they had something new. They would also consider buying a pack to share for trial.

"Got lah friend got offer some other different types then just try lor."
- Cigarette smoker, aged 18-20, male

"Go out, see these new packs then buy and everyone try. Some of them like it some don't like. It usually tries on a Friday night."
- Cigarette smoker, aged 30-49, male

Female smokers aged 18 to 29 years were more likely to try out new cigarette packs based on its packaging, by how different it was from the usual offerings.

"I just saw it and this looks interesting, then I just buy. The packaging is very pretty. It usually attracts girls. I like purple."
- Cigarette smoker, aged 18-20, female

"It's more like those cigarettes that you can't find in Singapore, then you will try."
- Cigarette smoker, aged 21-29, female

Smokers would also ask the shop staff for recommendations, based on popularity.

"Sellable means a lot of people smoke, so you try. Popular brands. They'll recommend one."
- Cigarette smoker, aged 50-69, male

"I asked the assistant which ones are popular with girls, so I try."
- Cigarette smoker, aged 21-29, female

However, there were certain brands of cigarettes that smokers tended to avoid. These were cigarette brands associated with perceived poor tobacco quality, from countries such as China and India. Dubious cigarette packaging with an unrelated logo and colours, such as football logo and red-yellow (Chinese New Year) or gold-brown (dirty) colour combination, would also put smokers off.

Cigarette packs

Sources of exposure to cigarette packs

Most participants saw cigarette packs at shops like NTUC, 7-Eleven, convenience stores, "mamak" stores and duty-free shops. Smokers noted the cigarette packs available in duty-free shops had nicer packaging designs without the GHWLs, and sold rarer, unseen brands not found in Singapore, which looked more premium.

Non-smokers would notice the cigarette packs on display as well, as they commented that the cigarette packs were often displayed very prominently, so they will see it regardless of choice.

"Especially when it's right at the counter."
- Non-smoker, aged 18-20, female

"When we are paying, we will see it. Like in 7-Eleven, they are all behind the cashier."
- Non-smoker, aged 21-29, female

"It's in your face when you pay." "It's their trick, want people to see."
- Non-smoker, aged 30-49, female

"Actually these cigarettes, you can see everywhere. When you queue any shopping center, at the cashier, they sure to have cigarettes. So you queue you still got time so you view."
- Non-smoker, aged 50-69, female

"When we pay at the counter." "It's very prominent."
- Non-smoker, aged 18-20, male

"The display is excellent, at one glance you can see, very nice and it's very prominent."
- Non-smoker, aged 50-69, male

However, non-smokers aged 21 to 29 years may choose to ignore the cigarette packs on display even though they may have noticed it.

"It's just there at the background, but you don't focus on it because you don't have the intention to buy it, so it's just in your general view."
- Non-smoker, aged 21-29, male

"Since we don't smoke, I don't really go and explore this. I just say oh, they sell cigarettes here, ok."
- Non-smoker, aged 21-29, female

Apart from the stores, participants have also seen cigarette packs from friends and family members who smoke, and even among discarded litter thrown. Younger participants aged 18 to 20 years were generally more perceptive towards these types of exposure.

"When they are sitting outside smoking, you see people... then the fellow smoking something you never see before."
- Cigarette smoker, aged 18-20, male

"When they litter on the floor."
- Non-smoker, aged 18-20, male

Elements of cigarette packs noticed

On a shelf, participants took note of the prices of cigarette packs; the various pack colours and brands, as well as the GHWLs. Participants remarked on the exorbitant pricing of a cigarette pack. Older participants would comment on the price increment that happened over the years. Smokers were also aware of pricing difference between 7-Eleven and NTUC outlets against neighbourhood convenience stores.

"Young days, cigarettes were cheap ... Last time, 5 cents, you can get 2 sticks."
- Cigarette smoker, aged 50-69, male

"\$9.60 is 7-Eleven. But you go to the probation shop it's different, they can be cheaper about 30 cents or 20 cents."
- Cigarette smoker, aged 50-69, female

"There was a reduction in price in Next Chill also, so my family and my friends all changed to Next Chill."
- Cigarette smoker, aged 21-29, female

In terms of the packaging itself, generally all participants would notice the brand, pack colour and GHWL. However, smokers tended to notice the brands and pack colours before the GHWLs, while non-smokers took notice of the GHWLs and pack colours before the brand.

Graphic Health Warning Labels (GHWLs)

Generally, participants were able to recall the GHWLs that displayed images of babies or body parts such as the eyes, teeth, throat, and lungs.

While the GHWLs were prominently located at the front of the cigarette pack, fewer smokers were aware of the side text warning and its content. They were not even able

to correctly identify the position of the side text warning, its background colour and the fact that it was a warning. Upon further probing, a small minority mentioned that they have read it before when they were bored while smoking.

"Yeah, nothing to do when you take the cigarette box. You'd read everything."
- Cigarette smoker, aged 18-20, female

Even though smokers noticed the GHWLs and described it as gory or disgusting, most felt that the labels were not effective in deterring smoking because they had already chosen to ignore any health warnings when they decided to smoke. In addition, seeing the same labels over the years had caused a desensitisation effects as smokers were used to seeing the same images every time they bought a cigarette pack.

"Have, choose to ignore. Because I already am holding it, just smoke la."
- Cigarette smoker, aged 30-49, male

"Trust me, I don't even know what (picture) is on my cigarette pack now."
- Cigarette smoker, aged 30-49, female

"The disgusting picture. Buy one time you will notice, but it doesn't help lah."
- Cigarette smoker, aged 18-20, male

"The gory pictures. I think I'm quite desensitized to the pictures."
- Cigarette smoker, aged 18-20, female

Non-smokers felt that the GHWLs would put them off from smoking. However, female non-smokers aged 18 to 20 years felt the labels were exaggerated and not real, hence it was not convincing.

"These pictures are not for the smokers but actually more for the non-smokers so that they don't try."
- Non-smoker, aged 30-49, male

"My dad smokes and his teeth are not as bad as the one, it's not even close to the one in the pictures."
- Non-smoker, aged 18-20, female

Some female smokers aged 21 to 49 years would intentionally avoid those that were considered scary such as the ones with babies.

"I don't want to see the picture. I am scared."
- Cigarette smoker, aged 21-29, female

"Make you feel like, oh man, I'm not ever going to do it again..."
- Cigarette smoker, aged 30-49, female

Pack colours

In terms of colours, smokers and older non-smokers were able to associate them to the flavour of the cigarette. Red meant hot, blue meant mint and green meant menthol. For smokers, the colours served as filters in terms of which cigarettes they can smoke. Most smokers generally stuck with one flavour only as they experienced discomfort when switching flavours.

"I only can smoke reds."
- Cigarette smoker, aged 18-20, male

"You will choose based on the thing you like, whether regular cigarette or menthol or light."
- Cigarette smoker, aged 30-49, male

"Cigarette smokers have to divide 2 categories. One is menthol smokers. One is non-menthol smokers."
- Cigarette smoker, aged 50-69, male

For younger non-smokers, the different colours did not mean much to them, but they felt that it was very colourful and eye-catching.

"In primary school, and very colourful, then you will be very curious."
- Non-smoker, aged 18-20, male

"(referring to cigarette packs on display) Colourful packs."
- Non-smoker, aged 18-20, female

Colours, followed by brands were also used to differentiate between the cigarette packs. Smokers would refer to the pack colour when asking the cashier or store assistant to retrieve their brands.

"I will just tell her. I want L&M. The green and white. Because the other brand they are non-menthol, so they have red, blue. Like they have Marlboro Light, which is in white and gold."
- Cigarette smoker, aged 50-69, female

Pack types

Smokers aged 30 to 69 years also noted the pack types, such as soft pack, hard pack and slim pack.

"It's either this or the soft pack. There is a hard pack, there is a soft pack."
- Cigarette smoker, aged 30-49, male

"Last time only have Marlboro soft pack ah"
- Cigarette smoker, aged 30-49, female

"Some packing I like because I like the packing size you know. It's very unique and very tall."
- Cigarette smoker, aged 50-69, female

Some female smokers also preferred using a casing or pouch to hold their cigarettes, instead of the usual cigarette packs. However, they mentioned that this was not motivated by the look of the cigarette pack, but rather more for aesthetics or functional purposes.

"Easier, I don't need to dig for my lighter, I don't need to dig for my cigarette"
- Cigarette smoker, aged 30-49, female

"It can be used to hide the cigarettes ... because mine is from Malaysia." "Because it is nice, isn't it? It goes into my pocket, it's neat."
- Cigarette smoker, aged 50-69, female

Cigarette Pack Types

All participants were given four actual cigarette packs to look at and touch. The four cigarette pack types were:

- Pack A: Regular hard pack
- Pack B: Hard pack with bevelled edges
- Pack C: Soft pack
- Pack D: Slim pack



Pack A



Pack B



Pack C



Pack D

Of the four cigarette packs, pack C appeared to be the least appealing in general. This was true for all groups except for the following:

- Cigarette smoker, aged 30-49, male (2nd least appealing)
- Cigarette smoker, aged 50-69, male (2nd least appealing)
- Non-smoker, aged 21-29, female (2nd least appealing)
- Non-smoker, aged 50-69, male (2nd least appealing)
- Non-smoker, aged 50-69, female (2nd most appealing)

Following pack C, pack A was the second least appealing pack type. However, it should be noted that the following profile groups found it more appealing:

- Cigarette smoker, aged 18-20, male (Most appealing)
- Cigarette smoker, aged 21-29, male (2nd most appealing)
- Cigarette smoker, aged 30-49, male (Most appealing)
- Cigarette smoker, aged 50-69, male (2nd most appealing)
- Cigarette smoker, aged 50-69, female (2nd most appealing)
- Non-smoker, aged 18-20, male (2nd most appealing)
- Non-smoker, aged 50-69, male (Most appealing)

Pack D was the most appealing amongst females, and also the most appealing for two male non-smoker groups, aged 18 to 20 years and 30 to 49 years respectively.

For male participants, pack A and pack B were generally more appealing.

Summary

The table below summarises the mean ranking of each pack type's overall appeal, ranging from 1 being the most appealing to 4 being the least appealing. Breakdown of overall appeal mean ranking by each profile group can be seen in Appendix D (Table 17). Dark orange denotes the least appealing pack type while light orange denotes the next best alternative.

Table 1: Overall appeal of pack type

Pack type appeal	Pack A	Pack B	Pack C	Pack D
Mean ranking				
Overall	2.41	2.14	3.30	2.15
Smoking status				
Smokers	2.17	1.97	3.46	2.40
Non-smokers	2.65	2.31	3.13	1.91
Gender				
Male	2.09	1.93	3.26	2.71
Female	2.72	2.34	3.34	1.59
Age				
18 to 20 years	2.27	2.19	3.43	2.10
21 to 29 years	2.55	1.75	3.47	2.23
30 to 49 years	2.34	2.23	3.39	2.04
50 to 69 years	2.47	2.38	2.90	2.24

Quantitative findings on cigarette pack types

The tables below provide a summary of the worksheet findings on cigarette pack types. The full breakdown by each profile group can be found in Appendix D. Mean score is used to evaluate the ranking for better discerning power on minute difference. The first table indicates the mean ranking, from 1 to 4, of each pack type for each profile group, where 1 is the most appealing and 4 is the least appealing. The higher the mean score, the less appealing is the pack. Dark orange denotes the least appealing pack type while light orange denotes the next best alternative.

Table 2: Mean pack type ranking by segment

Pack type appeal	Pack A	Pack B	Pack C	Pack D
Mean ranking				
Gender and Smoking status				
Male smokers	1.84	1.74	3.22	3.20
Female smokers	2.51	2.20	3.70	1.59
Male non-smokers	2.35	2.13	3.29	2.23
Female non-smokers	2.94	2.49	2.98	1.60
Age and Smoking status				
18 to 29 years smokers	2.16	1.86	3.59	2.38
30 to 69 years smokers	2.18	2.08	3.33	2.41
18 to 29 years non-smokers	2.66	2.08	3.30	1.96
30 to 69 years non-smokers	2.63	2.53	2.96	1.87

For clearer magnitude comparison between a few pack types on the ratings, percentage of agreement or disagreement is used. The tables below indicate the percentage of participants who rated either Disagree or Strongly Disagree (bottom 2 box %) to the four statements regarding each pack type. A larger number implies a larger number of participants who disagreed. Dark orange denotes the least appealing/portable pack type while light orange denotes the next best alternative.

Colour of pack type

In general, majority of participants did not find Pack C's colour appealing. For the other packs, majority of participants found it appealing, especially for Pack B.

Table 3: Pack type colour disagreement rating by segment

Pack type colour	Pack A	Pack B	Pack C	Pack D
Bottom 2 box (%)				
Overall	20%	10%	60%	18%
Smoking status				
Smokers	15%	12%	62%	22%
Non-smokers	25%	9%	58%	15%
Gender				
Male	18%	8%	58%	22%
Female	22%	13%	62%	14%
Age				
18 to 20 years	26%	9%	72%	23%

21 to 29 years	24%	3%	73%	11%
30 to 49 years	16%	13%	51%	20%
50 to 69 years	14%	16%	44%	19%
Gender and Smoking status				
Male smokers	12%	6%	50%	25%
Female smokers	18%	18%	73%	18%
Male non-smokers	24%	11%	65%	19%
Female non-smokers	26%	8%	51%	10%
Age and Smoking status				
18 to 29 years smokers	18%	9%	77%	23%
30 to 69 years smokers	12%	14%	47%	20%
18 to 29 years non-smokers	33%	3%	68%	11%
30 to 69 years non-smokers	18%	16%	49%	18%

Size of pack type

In terms of size, Pack C was found to be least appealing, followed by Packs A and D. In particular, non-smokers and participants aged 30 to 49 years found Pack A least appealing according to size, while the rest found Pack C least appealing.

Table 4: Pack type size disagreement rating by segment

Pack type size	Pack A	Pack B	Pack C	Pack D
Bottom 2 box (%)				
Overall	20%	18%	33%	20%
Smoking status				
Smokers	8%	9%	42%	20%
Non-smokers	33%	26%	24%	20%
Gender				
Male	15%	15%	33%	25%
Female	25%	20%	32%	15%
Age				
18 to 20 years	17%	14%	43%	28%
21 to 29 years	21%	13%	38%	25%
30 to 49 years	31%	26%	25%	14%
50 to 69 years	11%	16%	25%	13%
Gender and Smoking status				
Male smokers	3%	3%	39%	25%
Female smokers	13%	15%	44%	15%
Male non-smokers	27%	27%	27%	25%
Female non-smokers	38%	26%	21%	16%
Age and Smoking status				
18 to 29 years smokers	6%	3%	54%	26%
30 to 69 years smokers	9%	15%	29%	14%
18 to 29 years non-smokers	32%	24%	27%	28%
30 to 69 years non-smokers	33%	28%	20%	13%

Shape/ edges of pack type

Pack C's shape / edges were the least appealing amongst the four pack types, followed by Pack A. Non-smokers found Packs A and C similarly unappealing in terms of shape/ edges.

Table 5: Pack type shape/ edges disagreement rating by segment

Pack type shape / edges	Pack A	Pack B	Pack C	Pack D
Bottom 2 box (%)				
Overall	22%	16%	41%	15%
Smoking status				
Smokers	13%	7%	52%	18%
Non-smokers	30%	24%	29%	11%
Gender				
Male	26%	11%	44%	21%
Female	17%	21%	37%	8%
Age				
18 to 20 years	15%	12%	43%	14%
21 to 29 years	24%	8%	44%	22%
30 to 49 years	31%	28%	36%	14%
50 to 69 years	16%	16%	39%	8%
Gender and Smoking status				
Male smokers	14%	3%	48%	25%
Female smokers	12%	12%	56%	12%
Male non-smokers	38%	19%	40%	16%
Female non-smokers	23%	30%	18%	5%
Age and Smoking status				
18 to 29 years smokers	12%	6%	60%	23%
30 to 69 years smokers	15%	9%	44%	14%
18 to 29 years non-smokers	27%	13%	28%	14%
30 to 69 years non-smokers	33%	35%	31%	8%

Portability of pack type

Pack A was the one that participants felt was not easy to carry around, especially for non-smokers and female participants. This is followed by Packs B and C.

Table 6: Pack type portability disagreement rating by segment

Pack type portability	Pack A	Pack B	Pack C	Pack D
Bottom 2 box (%)				
Overall	28%	22%	21%	9%
Smoking status				
Smokers	15%	10%	29%	14%
Non-smokers	40%	34%	14%	4%
Gender				
Male	22%	15%	24%	13%
Female	33%	29%	19%	6%
Age				
18 to 20 years	20%	14%	11%	9%

21 to 29 years	24%	16%	19%	8%
30 to 49 years	34%	34%	24%	9%
50 to 69 years	33%	24%	31%	11%
Gender and Smoking status				
Male smokers	6%	3%	34%	20%
Female smokers	23%	17%	23%	9%
Male non-smokers	38%	27%	13%	6%
Female non-smokers	43%	41%	15%	3%
Age and Smoking status				
18 to 29 years smokers	9%	3%	22%	14%
30 to 69 years smokers	20%	18%	35%	15%
18 to 29 years non-smokers	35%	27%	8%	3%
30 to 69 years non-smokers	46%	40%	20%	5%

Following the quantitative findings, we explore participants' opinions and thought process when evaluating the four pack types.

Cigarette pack A

Cigarette pack A's square look and size was viewed as the default, standard design of a cigarette pack. It was also described as classical, in that cigarette packs were commonly available in this design throughout the years. However, this standard design made the pack look boring as well.

"I think even if you go to other countries, the normal generic brand is like this."

- Cigarette smoker, aged 30-49, male

"Too common already. I've seen it for many years already."

- Non-smoker, aged 50-69, female

Due to its standard look, participants felt that this would be the one to try if they wished to know what smoking is like. It also conveyed a sense of assurance in terms of the cigarette quality, as it would contain normal cigarettes.

"Because it just screams cigarettes in your face. That it's very clear it's a cigarette."

- Non-smoker, aged 18-20, female

"The normal generic brand is like this (packaging). Regular cigarette."

- Cigarette smoker, aged 30-49, male

In terms of the packaging, the sharp edges were less appealing because it would protrude uncomfortably from their pockets when compared to cigarette pack B. The red colour of the pack was also associated with danger, and accentuated by the neck injury on the GHWL.

"When you reach for your pocket, you touch already, you will feel like irritated."

- Non-smoker, aged 21-29, male

"Red also means something like danger."

- Cigarette smoker, aged 21-29, male

"Because of the colour. Usually blood is red colour right, so when you see it immediately bring a shock to your mind, reaction. It might have some sort of psychological effect."

- Non-smoker, aged 50-69, male

The embossed design of the brand logo meant that participants were not able to tell what brand it was unless they looked closely. However, smokers were still able to recognise Marlboro easily based on the red-white colour pattern. For smokers, the red colour was often associated to its hot flavour instead of being dangerous.

"I don't think it stands out, I can't really see the words. Can't see the brand."
- Non-smoker, aged 21-29, female

"But how do we differentiate between Winston and Marlboro, it's because Marlboro has this arrow."
- Cigarette smoker, aged 21-29, male

Cigarette pack B

Cigarette pack B was most well-liked for its metallic blue colour design, which gave it a more modern, professional look that most guys preferred. Non-smokers aged 18 to 20 years also described the grey banner across and the crest gave a feel of a branded car. The gloss finishing left a positive impression on the participants.

"Stylish, trendy"
- Non-smoker, aged 30-49, male

"Shiny is business." "Very professional."
- Non-smoker, aged 21-29, female

"It actually reminds me of a car, branded car because of the colour metallic blue, there is a grey banner over and the crest looks like a car crest."
- Non-smoker, aged 18-20, male

Compared to pack A, pack B gave participants the feeling that the design has been improvised. The size of the pack was slightly smaller than pack A, and the bevelled edges meant that the cigarette pack would fit much better in the hand. The bevelled edges would also feel better in the pocket, without protruding as much as in Pack A. Its plastic wrapping and finishing was of a better quality, giving the pack a more premium feel.

"Its rounded edges..later stage one rounded edges"
- Cigarette smoker, aged 30-49, female

"You know what, because it is tapered and it is a little bit slimmer. Just nice for the hand."
- Cigarette smoker, aged 50-69, female

"Yes, because it is outstanding, the way the company has packed also very professional."
- Cigarette smoker, aged 21-29, male

As a brand, Dunhill was often associated with the class and style of distinguished gentlemen, according to male non-smokers aged 30 to 49 years. Male participants were also aware of Dunhill through its diversification to clothing and other luxury products.

"Dunhill used to be what we call, the English gentlemen kind of, you know, style."
- Non-smoker, aged 30-49, male

"Dunhill, they don't only produce cigarettes. They have suits and clothing."
- Non-smoker, aged 21-29, male

"Dunhill, all the apparel all that."
- Cigarette smoker, aged 50-69, male

Smokers were also aware of the pack having a re-sealable inner wrapper that protect the cigarettes from explosion to air and thus maintains the cigarettes quality even after the pack has been opened.

"They have this sticker thing. It sticks back, retain the freshness."
- Cigarette smoker, aged 30-49, female

"And also, inside the flap. It can stick back. It won't expose to air."
- Cigarette smoker, aged 50-69, male

Overall, pack B retained the standard cigarette pack look but was an improved version of pack A in terms of design and user-friendliness.

Cigarette pack C

The dull, yellow colour of the pack was the main reason participants disliked it. The pack colour looked like it had been left on the shelf for very long, hence the dull yellow colour.

"It's very old-school, retro kind of, yellow, off white, ancient colour." "A piece of paper that you kept for 30 years."
- Cigarette smoker, aged 21-29, male

The majority also had a rather negative image of the cigarette brand. This particular cigarette brand was commonly associated with smokers of older age group.

"This one a lot ah pek smoke this one."
- Cigarette smoker, aged 18-20, male

"Camel is ah pek cigarette then you will not go and buy when you are young."
- Cigarette smoker, aged 21-29, male

The brand logo, a camel, was felt to be out of place, and did not belonged to a cigarette pack.

"No, just feel that camel doesn't link to any cigarette at all."
- Cigarette smoker, aged 30-49, male

In terms of the packaging, participants commented that the pack looks very cheaply made, and deduced it most likely contained low quality cigarette. Many felt that the manufacturers had not put in the effort to make a good product.

"It looks very poorly designed, like the company has no money ... this plastic wrap is tight and nicely done. This felt like it's just being wrapped."
- Non-smoker, aged 18-20, male

The small size of pack C was frequently described as resembling tissue paper.

"Feels like tissue paper"
- Cigarette smoker, aged 21-29, male

Most participants also noted that the packaging of pack C was soft, hence it would be easily crushed and crumpled if they put it in their pocket or bag.

"The packaging is also soft one, (so) crush easily."
- Cigarette smoker, aged 30-49, female

All smokers and the older non-smokers also noted that the cigarette had no filter hence they will have tobacco inside their mouth if they smoked it. Non-smokers were less aware of this and instead felt that it was not value for money due to its smaller size.

"It's uncomfortable. Because all the tobacco inside your mouth."
- Cigarette smoker, aged 18-20, female

"Not value for money, because shorter."
- Non-smoker, aged 30-49, male

Smokers were also more likely to comment on pack C's lack of a cover or flap, which meant that they would not be able to seal the pack after opening it, and the cigarette will slowly lose its taste after prolonged exposure to air.

"Soft pack, no cover for it. It's like potato chips, air comes in it goes soft."
- Cigarette smoker, aged 30-49, male

There were some non-smokers aged 21 to 29 years who found the vintage look appealing, and the small size and camel logo made the cigarette pack look cute.

"Because the text and the way they package, the design also... quite cute."
- Non-smoker, aged 21-29, female

"It looks old, like retro. Vintage."
- Non-smokers, aged 21-29, male

Male smokers aged 30 to 69 years also described pack C as more classic and manly, and hence more appealing than pack D.

"This one is more classical. This one is more like man."
- Cigarette smoker, aged 50-69, male

The colour, the size and the branding of pack C appealed to female non-smokers aged 50 to 69 years. They commented that the brand had maintained its colour and design of the pack all this time and had been able to stand through the test of time. The small size of the cigarette pack was handy to carry and more convenient for a quick smoke.

"This one is old man cigarette. This one from last time until now still the same never change. They maintain." "Small, so short can finish faster. Maybe powerful one." "Handy."
- Non-smoker, aged 50-69, female

Cigarette pack D

Pack D stood out from the other four cigarette packs, and piqued mostly female non-smokers' interest with its unique design. Pack D was described as having an elegant, classy look due to its glossy design. The white colour of the pack with the silver wordings, also contributed to its elegance, and gave it a pure, clean and refreshing feel. The letters VS for Virginia Slims, which covered the entire pack reminded participants of branded bags like LV, adding to its nice and elegant look.

"The colour. Compared to the rest. Looks classier, clean." "This VS, like those bag, expensive kind, like it looks nice and elegant."
- Non-smoker, aged 18-20, male

"The wording is silver colour looks so nice."
- Non-smoker, aged 30-49, female

"Classy. Expensive."
- Cigarette smoker, aged 30-49, female

The brand name of pack D and the product description also helped to elevate the status of pack D, giving it a classier and more prestigious feel. The brand name, Uno, meaning one [in Spanish], hence it was interpreted as being the number one brand. The product description mentioned about pleasant aroma.

"Looks expensive, prestigious. Even the name, Uno, means number 1."
- Non-smoker, aged 30-49, male

"It's Swiss made precision. High class. Pleasant aroma. They put there."
- Non-smoker, aged 50-69, female

"Uno means one in Spanish."
- Cigarette smoker, aged 50-69, female

The slim design was also appealing, which made it look more like a lipstick or perfume, rather than a cigarette pack. The product name 'Snow' also further enhanced this perception due to its association with some beauty products. The slim look and smaller volume gave it a branded feel, with the emphasis of quality over quantity.

"It looks very sleek. It looks like can hold very little cigarettes, gives the feeling of quality over quantity."
- Non-smoker, aged 18-20, male

"Looks not bad. Looks like some perfume... branded stuff."
- Non-smoker, aged 21-29, male

"Very clean." "Neat."
- Cigarette smoker, aged 50-69, female

The slim design also meant that it was easier to fit it into their bags, as it would take up less space. The design was also described as sleek, and likened to an iPhone.

"If you have a very small wallet right, say just carry a wristlet. That one doesn't fit." "This is sleek, like iPhone."
- Cigarette smoker, aged 30-49, female

Female participants also liked that it did not resemble a cigarette pack, and they would be able to conceal their smoking habit from other people. For some with kids, their kids would be less likely to ask about it if seen in their bags. Thus, this fitted in well with their need to somewhat disguise their smoking habits from others.

"No, this one looks like you want to spray your mouth and people thought you really have bad breathe. Hygienic. Don't take up space also. Doesn't look like cigarette box."
- Non-smokers, aged 50-69, female

Many, even for the non-smokers, were also curious as to how it was able to contain 20 cigarette sticks.

"I would like to see what's inside. Because it's different from the rest."
- Non-smoker, aged 18-20, female

"No, I'm just curious. How can I have 20 sticks in this?"
- Non-smoker, aged 50-69, female

Due to its smaller size, participants deduced that the cigarettes' tobacco content would be lower. For smokers, this meant that the cigarettes were more suited for light-flavour smokers or those who wished to quit smoking. Considering that lower tobacco content could be considered healthier, this posed a risk for non-smokers to try out smoking.

"It's like smoking nothing. You must smoke 5 of this to equal 1 of this."
- Cigarette smoker, aged 21-29, female

However, some participants felt that it was not value for money, as they would be getting less content over the same price.

"No, it's like I said, 2 sticks of this, is 1 stick of this. But you are paying the same price."
- Cigarette smoker, aged 21-29, male

"Yes, if I smoke a lot then I have go to the store many times. I wouldn't want to keep buying it. But others can last me longer."
- Non-smoker, aged 18-20, female

As the pack was slim, the health warning label was also smaller; hence it was not as disturbing as compared to pack A and pack B.

"The more pictures, the more threatening. It's very irritating."
- Cigarette smoker, aged 50-69, male

Cigarette pack D carried with it a strong connotation that it is meant for women only. As such, most male participants did not find it appealing.

"Gu niang one. Like for girls."
- Non-smoker, aged 21-29, male

"This is a girl's cigarette."
- Cigarette smoker, aged 30-49, male

Male smokers also felt that the slim packing was harder to carry in their pocket and would be easily dented, and it would be uncomfortable to hold in their hands as well. Some non-smokers were also not aware that the pack was already available in the market.

"Because normally like we carry this kind. Like this kind. Then you see this one like one stick like that. Then how you put? I also don't know."
- Cigarette smoker, aged 18-20, male

"If I smoker then you put like this like, the size from this one is still the same...but to me, is very odd. I think will be easily dented."
- Cigarette smoker, aged 50-69, male

"The packing is small, uncomfortable (to hold)."
- Cigarette smoker, aged 30-49, male

Cigarette Pack Colour

Each participant was presented with a set of six cards showcasing cigarette packs that differed by their pack colours.



**Pack colour A
Pantone 448C**



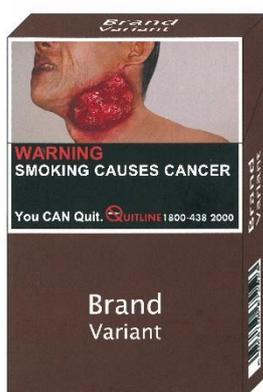
**Pack colour B
Pantone 456C**



**Pack colour C
Pantone 411C**



**Pack colour D
Pantone 581C**



**Pack colour E
Pantone 4625C**



**Pack colour F
Pantone 159C**

Participants generally evaluated the colours based on the level of brightness, perceived flavour of the cigarettes and personal preference of the colours.

At first glance, participants felt that Pack colour F was the most eye-catching and outstanding amongst the six colours. In terms of brightness, Pack F was the brightest, followed by Pack colour B and Pack colour D. Pack colours A, C, and E were considered the dark, dull colours.

In consideration of flavours, Pack colours A, C, and E were perceived to be stronger, and generally of higher quality cigarettes. For non-smokers aged 18 to 29 years, darker colours also looked more appropriate for cigarette pack colours than bright colours.

*"The darker ones look atas. The brighter ones look like made from China, looks fake."
- Non-smoker, aged 18-20, male*

*"Bright colours are associated with candies, darker colours should be associated with cigarettes."
- Non-smoker, aged 21-29, female*

For smokers, colours were usually an indication of the flavour. Given that these were new and unfamiliar colours, determining the flavours had to be done based on speculation of the different colours.

*"Doesn't represent the flavour, it doesn't represent what kind of cigarettes, so quite confused there."
- Cigarette smoker, aged 21-29, male*

*"If we see this colour, we don't know what flavour they are."
- Cigarette smoker, aged 30-49, male*

As participants were aware of the detrimental health effects of cigarettes, as well as its nicotine and tar content, they felt that all cigarettes were harmful to health and not easy to quit. Participants reasoned that a cigarette's harm and ease of quitting would not be affected by a cigarette pack's colour.

*"All cigarettes are harmful."
- Cigarette smoker, aged 21-29, male*

*"If you are smoking it is going to be harmful in whatever colour it can be."
- Non-smoker, aged 50-69, female*

Pack colour A and Pack colour B were very close in terms of the ranking for least appealing colour, but Pack colour A was considered slightly less appealing by more participants overall. Pack colour F was generally the most appealing.

The table below lists the profile groups that considered Pack colour A and Pack colour B as least appealing, respectively. The summary mean ranking of pack colour can be seen in Table 9.

Table 7: Least appealing colour by profile group

Pack colour A	Pack colour B
Non-smoker aged 30-49, male	Smoker aged 18-20, female
Non-smoker aged 30-49, female	Smoker aged 21-29, female
Non-smoker aged 30-49, male	Smoker aged 30-49, female
Non-smoker aged 30-49, female	Non-smoker aged 21-29, female
Non-smoker aged 50-69, female	

Summary perception of each pack colour:

Table 8: Summary of pack colour perceptions

Pack colour A	Pack colour B
<ul style="list-style-type: none"> ▪ Amongst the six colours, perceived as the darkest and dullest colour ▪ Khaki or dark greenish brown <p><u>Ranked by brightness</u></p> <ul style="list-style-type: none"> ▪ Dull colour does not attract attention ▪ Dark colour associated with toxic, poison and death <p><u>Ranked by perceived flavour</u></p> <ul style="list-style-type: none"> ▪ Dark colour seen as strong and manly flavour 	<ul style="list-style-type: none"> ▪ Second brightest colour ▪ Colour can be seen as gold, which elevated its class ▪ Colour perceived to be similar to Camel brand, which brought down its appeal <p><u>Ranked by brightness</u></p> <ul style="list-style-type: none"> ▪ Seen as soft, soothing and natural <p><u>Ranked by perceived flavour</u></p> <ul style="list-style-type: none"> ▪ Brighter colour seen as cheap, childish and generally inferior and lower quality cigarettes ▪ Colour more often associated with diarrhoea and poop, so it was more disgusting to smoke cigarettes from such a pack
Pack colour C	Pack colour D
<ul style="list-style-type: none"> ▪ Grey, light brown or light purple ▪ Lighter version of colours A and E <p><u>Ranked by brightness</u></p> <ul style="list-style-type: none"> ▪ Dull colour, but not too dark ▪ Does not attract attention, but generally felt neutral <p><u>Ranked by perceived flavour</u></p> <ul style="list-style-type: none"> ▪ Similar to steel or metal, so has a cool factor to it ▪ Perceived as a limited edition cigarette pack ▪ Neutral colour that fits a cigarette pack 	<ul style="list-style-type: none"> ▪ Dark green <p><u>Ranked by brightness</u></p> <ul style="list-style-type: none"> ▪ Considered as a lighter colour ▪ Earthly, fruity or greenery associations <p><u>Ranked by perceived flavour</u></p> <ul style="list-style-type: none"> ▪ Green colour can be seen as menthol flavour, which appeals to menthol smokers ▪ Colour associated with garbage bins, so it was more disgusting to smoke cigarettes from such a pack
Pack colour E	Pack colour F
<ul style="list-style-type: none"> ▪ Dark brown or chocolate <p><u>Ranked by brightness</u></p> <ul style="list-style-type: none"> ▪ Dull colour does not attract attention ▪ Dark colour associated with toxic, poison and death <p><u>Ranked by perceived flavour</u></p> <ul style="list-style-type: none"> ▪ Dark colour seen as strong and manly flavour ▪ Chocolate association makes it seem less harmful ▪ Brown colour associated with cigar, which elevated its class 	<ul style="list-style-type: none"> ▪ Orange or amber ▪ Colour that attracts attention the most ▪ Brightest colour <p><u>Ranked by brightness</u></p> <ul style="list-style-type: none"> ▪ Funky, lively and refreshing ▪ Too striking for a cigarette pack <p><u>Ranked by perceived flavour</u></p> <ul style="list-style-type: none"> ▪ Orange flavour ▪ Brighter colour seen as cheap, childish and generally inferior and lower quality cigarettes

Besides these colours, participants felt that colours that would appeal to them were:

- Gold
- Silver
- Black and another colour
- Metallic
- Turquoise

Colours that would not appeal to them were:

- Overwhelming bright colours
- Neon colours
- Hot pink

For male smokers aged 30 to 49 years and female smokers aged 50 to 69 years, they felt that the pack colours did not matter much, as their choice of cigarettes was based on the brand and flavour. Some mentioned that they could use a cigarette case to store their cigarettes as an alternative.

"when smoker buy cigarettes, we don't even look at the packaging, we just tell the fellow I want Marlboro or Viceroy. So he just pick for us."
- Cigarette smoker, aged 30-49, male

"We are asking for cigarettes, we are not interested in the box. If you give me a ziploc bag, I also buy."
- Cigarette smoker, aged 50-69, female

The brand was also heavily relied upon to differentiate between the various cigarette offerings. Standardising the pack colours would generate unwanted attention in the beginning, due to the drastic difference on the cigarette display. Smokers would then rely simply on the brand names and flavours to select the cigarette packs to buy, thus they would not experience too much difficulty.

(If all packs are about the same) "Tell the uncle Dunhill Red lor."
- Cigarette smoker, aged 21-29, male

(How do you get the cigarettes if all pack are the same) "The brand and flavour."
- Cigarette smoker, aged 21-29, female

On the other hand, for non-smokers, the standardised colour would remove any distraction and bring the focus on the GHWLs alone at first glance, given that they noticed pack colours and GHWLs first.

Quantitative findings on cigarette pack colours

The tables below provide a summary of the worksheet findings on cigarette pack colours. The full breakdown by each profile group can be found in Appendix D. Mean score is used to evaluate the ranking for better discerning power on minute difference. The first table shows the mean ranking, from 1 to 6, of each pack colour for each profile group, where 1 is the most appealing and 6 is the least appealing. The higher the mean score, the less appealing is the pack colour.

As mentioned above, Pack colours A and B were generally the two least appealing colours, though Pack colour A was slightly less appealing than Pack colour B overall. Pack colour A was the least appealing amongst non-smokers and participants aged 30 to 69 years, as well as both male and female participants alike, though the gender effect is weaker than the difference between smoking statuses. Pack colour B, on the other hand, was the least appealing amongst smokers and participants aged 18 to 29 years.

Table 9: Mean pack colour ranking by segment

Pack colour appeal	Colour A	Colour B	Colour C	Colour D	Colour E	Colour F
Mean ranking						
Overall	3.99	3.68	3.39	3.50	3.54	2.90
Smoking status						
Smokers	3.55	3.94	3.38	3.63	3.33	3.17
Non-smokers	4.43	3.42	3.40	3.37	3.75	2.64
Gender						
Male	3.75	3.52	3.56	3.74	3.51	2.92
Female	4.23	3.84	3.22	3.25	3.57	2.89
Age						
18 to 20 years	3.93	4.17	2.59	4.06	3.05	3.21
21 to 29 years	3.59	4.34	3.02	3.63	3.26	3.16
30 to 49 years	3.80	3.71	3.37	3.30	3.79	3.04
50 to 69 years	4.64	2.50	4.60	3.00	4.05	2.21
Gender and Smoking status						
Male smokers	3.25	3.78	3.59	3.72	3.11	3.55
Female smokers	3.85	4.10	3.17	3.53	3.55	2.80
Male non-smokers	4.24	3.26	3.54	3.76	3.90	2.29
Female non-smokers	4.61	3.58	3.27	2.97	3.59	2.98
Age and Smoking status						
18 to 29 years smokers	3.46	4.36	2.89	4.17	2.83	3.29
30 to 69 years smokers	3.65	3.52	3.87	3.08	3.83	3.05
18 to 29 years non-smokers	4.06	4.15	2.71	3.52	3.48	3.08
30 to 69 years non-smokers	4.80	2.68	4.10	3.21	4.01	2.20

For clearer magnitude comparison between a few pack types on the ratings, percentage of agreement or disagreement is used. The tables below indicate the percentage of participants who rated either Disagree or Strongly Disagree (bottom 2 box %) to the four statements regarding each pack colour. A larger number implies larger number of participants who disagreed. Dark orange denotes the most recommended pack colour while light orange denotes the next best alternative.

Likelihood to smoke

Overall, likelihood to smoke did not vary much by the pack colours. Smokers were less likely to smoke the brighter colours such as Pack colours B and F, while non-smokers were less likely to smoke the darker colours, Pack colours A, C, and E.

Table 10: Likelihood to smoke disagreement rating by segment

Pack colour likelihood to smoke	Colour A	Colour B	Colour C	Colour D	Colour E	Colour F
Bottom 2 box (%)						
Overall	37%	39%	38%	38%	39%	37%
Smoking status						
Smokers	30%	47%	32%	40%	38%	42%
Non-smokers	45%	32%	45%	36%	41%	31%
Gender						
Male	30%	29%	40%	36%	37%	35%
Female	45%	49%	36%	40%	41%	38%
Age						
18 to 20 years	29%	46%	20%	52%	40%	40%
21 to 29 years	46%	53%	41%	62%	44%	46%
30 to 49 years	32%	37%	36%	25%	32%	38%
50 to 69 years	44%	20%	55%	14%	42%	23%
Gender and Smoking status						
Male smokers	17%	37%	26%	34%	32%	45%
Female smokers	43%	57%	38%	47%	43%	39%
Male non-smokers	43%	22%	54%	39%	43%	25%
Female non-smokers	46%	41%	35%	33%	38%	38%
Age and Smoking status						
18 to 29 years smokers	32%	52%	31%	57%	45%	51%
30 to 69 years smokers	29%	42%	32%	24%	30%	33%
18 to 29 years non-smokers	43%	48%	30%	57%	38%	35%
30 to 69 years non-smokers	46%	15%	59%	15%	44%	28%

Quality of cigarettes

In terms of quality, again we see no real difference in quality of cigarettes between the pack colours. Smokers felt that brighter colours had lower quality cigarettes, while non-smokers felt that darker colours had lower quality cigarettes.

Table 11: Quality of cigarettes disagreement rating by segment

Pack colour quality of cigarettes	Colour A	Colour B	Colour C	Colour D	Colour E	Colour F
Bottom 2 box (%)						
Overall	31%	32%	32%	34%	34%	35%
Smoking status						
Smokers	23%	35%	29%	42%	30%	40%
Non-smokers	39%	29%	35%	27%	37%	29%
Gender						
Male	29%	24%	34%	35%	33%	32%
Female	34%	41%	30%	34%	34%	37%
Age						
18 to 20 years	20%	43%	14%	43%	37%	34%
21 to 29 years	29%	43%	30%	49%	35%	51%
30 to 49 years	26%	34%	31%	28%	21%	39%
50 to 69 years	49%	9%	53%	17%	42%	15%
Gender and Smoking status						
Male smokers	15%	23%	24%	40%	26%	45%
Female smokers	32%	48%	34%	44%	34%	35%
Male non-smokers	43%	24%	45%	31%	41%	19%
Female non-smokers	35%	34%	25%	23%	33%	39%
Age and Smoking status						
18 to 29 years smokers	20%	40%	23%	48%	31%	45%
30 to 69 years smokers	27%	30%	35%	35%	29%	36%
18 to 29 years non-smokers	29%	46%	22%	44%	41%	40%
30 to 69 years non-smokers	49%	13%	49%	10%	33%	18%

Ease of quitting

The table below indicates the percentage of participants who rated either Disagree or Strongly Disagree (bottom 2 box %) to the four statements regarding each pack colour. A larger number implies larger number of participants who disagreed. Dark orange denotes the hardest to quit pack colour while light orange denotes the next best alternative.

As mentioned earlier, participants felt that pack colours generally do not influence how easy it is to quit smoking, though Pack colour B was perceived to be easier to quit than the other pack colours. However, overall, majority of participants did not think that any of these packs are easy to quit.

Table 12: Ease of quitting disagreement rating by segment

Pack colour ease of quitting	Colour A	Colour B	Colour C	Colour D	Colour E	Colour F
Bottom 2 box (%)						
Overall	40%	30%	38%	37%	37%	38%
Smoking status						
Smokers	36%	36%	36%	39%	42%	40%
Non-smokers	45%	24%	40%	34%	33%	36%
Gender						
Male	36%	38%	42%	38%	35%	40%
Female	44%	22%	34%	35%	39%	35%
Age						
18 to 20 years	47%	31%	44%	39%	42%	31%
21 to 29 years	48%	33%	41%	41%	38%	38%
30 to 49 years	33%	22%	30%	39%	35%	38%
50 to 69 years	33%	34%	37%	28%	34%	46%
Gender and Smoking status						
Male smokers	34%	43%	41%	41%	41%	38%
Female smokers	37%	28%	32%	38%	43%	43%
Male non-smokers	38%	33%	44%	35%	30%	43%
Female non-smokers	51%	16%	36%	33%	36%	28%
Age and Smoking status						
18 to 29 years smokers	37%	28%	37%	34%	40%	31%
30 to 69 years smokers	35%	43%	36%	44%	44%	50%
18 to 29 years non-smokers	59%	35%	48%	46%	40%	38%
30 to 69 years non-smokers	31%	13%	31%	23%	25%	34%

Harm to health

The table below indicates the percentage of participants who rated either Agree or Strongly Agree (top 2 box %) to the harmful to health statement. A larger number implies larger number of participants who agreed.

Participants felt that Pack colours A and E would be most harmful to health, followed by Pack colour D. Non-smokers felt that Pack colour A was most harmful to health.

Table 13: Harm to health agreement rating by segment

Pack colour harm to health	Colour A	Colour B	Colour C	Colour D	Colour E	Colour F
Top 2 box (%)						
Overall	39%	28%	33%	34%	39%	26%
Smoking status						
Smokers	20%	16%	26%	22%	27%	15%
Non-smokers	58%	41%	41%	46%	50%	38%
Gender						
Male	40%	31%	31%	31%	39%	28%
Female	38%	26%	36%	37%	38%	25%
Age						
18 to 20 years	28%	22%	25%	25%	25%	25%
21 to 29 years	45%	29%	43%	34%	46%	29%
30 to 49 years	42%	27%	35%	34%	45%	26%
50 to 69 years	40%	35%	30%	41%	39%	25%
Gender and Smoking status						
Male smokers	28%	20%	28%	23%	34%	17%
Female smokers	11%	12%	23%	20%	20%	12%
Male non-smokers	52%	41%	33%	38%	44%	38%
Female non-smokers	64%	41%	48%	54%	56%	38%
Age and Smoking status						
18 to 29 years smokers	14%	8%	20%	14%	19%	11%
30 to 69 years smokers	26%	24%	32%	30%	35%	18%
18 to 29 years non-smokers	59%	43%	48%	46%	51%	43%
30 to 69 years non-smokers	56%	39%	33%	46%	49%	33%

Following the quantitative findings, we explore participants' opinions and thought process when evaluating the six pack colours.

Pack colour A

Pack colour A was seen as a dark and dull green colour by all participants in general. For some, the dark colour was described as a strong and manly colour. This made it more appealing to smokers in the 21 to 49 years age groups.

"Maybe to show it is a burnt strong feeling, strong kind of principle of colours, to show that...very straight, very simple, very strong."

- Cigarette smoker, aged 21-29, male

"A is stronger, darker. Mostly men."

- Cigarette smoker, aged 21-29, female

"Strong in flavour." "Generally a darker colour means the tobacco is richer"

- Cigarette smoker, aged 30-49, male

"Manly, mature." "Old school branded like no change ... like LV like that lor."

- Cigarette smoker, aged 30-49, female

However, for all the other participants, the dark colour was considered dull and unattractive, as well as being toxic and a sign of death.

"But this dark colour very messed up." "A is the colour of death."

- Non-smoker, aged 18-20, female

"It just looks dull, not very appealing at all."

- Non-smoker, aged 21-29, male

"It looks very poisonous. Looks very strong, like Camel brand, Dunhill brand. The older generation will use. The content is very strong and heavy."

- Non-smokers, aged 30-49, female

"To me, it's very dull colour. Cheap."

- Cigarette smoker, aged 50-69, male

As such, overall, Pack colour A was considered unappealing by a majority of participants, particularly amongst non-smokers.

Pack colour B

Pack B received mixed responses, though more participants gave negative responses than positive. Smokers aged 18 to 49 years and non-smokers aged 18 to 29 years frequently described it as disgusting, and saw the colour as that of diarrhoea and bird poop. This made the colour unappealing, and participants did not feel like putting a cigarette from this pack colour into their mouths. The colour was also perceived as inferior (cheap), and thus would not likely contain high quality cigarettes.

"Lau Sai (diarrhoea). Looks a bit toxic, like cheap."

- Cigarette smoker, aged 21-29, male

"Very cheap and dirty. I'll die from smoking."

- Cigarette smoker, aged 21-29, female

"Like shit, very cheapo."

- Cigarette smoker, aged 30-49, female

"It's more toxic or dirty. Because it's something I put in my mouth. Shouldn't have that kind of association."

- Non-smoker, aged 21-29, female

Pack colour B was also similar to Camel brand, which was often associated with cigarettes for older people.

"It's like Camel. It reminds me of Camel. Old man colour. So I think old men would like it."

- Cigarette smoker, aged 18-20, female

"Looks like Camel, those ah pek hoon, London, those kind of..."

- Cigarette smoker, aged 21-29, male

Participants aged 50 to 69 years felt that Pack colour B was softer, giving a strong yet neutral feeling to it, and it was the next brightest after Pack colour F.

"Soft approach. Looks strong but more neutral."

- Non-smoker, aged 50-69, male

"you wear this colour dress is very nice. So cigarette also nice." "very sweet colour. Very soothing. Very unassuming."

- Non-smoker, aged 50-69, female

On the other hand, some participants, mostly male participants aged 30 years and above, saw Pack colour B to be like gold, hence it was more appealing to them.

"Dirty yellow looks a bit like gold."

- Cigarette smoker, aged 18-20, male

"Marlboro gold/ light. Because of the gold colour."

- Cigarette smoker, aged 30-49, male

"This one looks more executive. The colour. Is it gold, turquoise or green or metallic? Metallic gold? This could be metallic."

- Cigarette smoker, aged 50-69, male

"I think it's okay, quite cool. It makes me feel calm, look good, gold colour. A bit gold."

- Non-smoker, aged 21-29, male

"Gold colour. It's appealing, it's different from the rest you know."

- Non-smoker, aged 30-49, male

Pack colour C

Pack colour C was described as a grey colour. Some considered it to be lighter version of Pack colours A and E, while others saw it to contain a tinge of purple.

Amongst all the colours, Pack colour C received relatively neutral to slightly more positive responses.

"Cool." "Classic." "Non-threatening. It just looks very innocent."

- Cigarette smoker, aged 18-20, female

"Looks acceptable." "Normal cigarette pack."

- Cigarette smoker, aged 21-29, female

Non-smokers aged 18 to 20 years saw Pack colour C to be more like silver and steel, which was perceived to be cool and classy. It was also described as looking more like a normal cigarette pack.

"Greyish brown, looks classy. I think there is a wood looks like this colour, quite expensive." "I prefer this colour, looks more suitable for the cigarette pack compared to others."
- Non-smoker, aged 18-20, male

"Classic, it is just classic black." "Like steel." "Like strong nice colour."
- Non-smoker, aged 18-20, female

The silver outlook reminded male smokers aged 21 to 29 years of a limited edition cigarette pack.

"Silver, metallic silver, something like that." "Limited edition of Light."
- Cigarette smoker, aged 21-29, male

For participants aged 50 to 69 years, Pack colour C was more dull and boring, hence they did not find it appealing at all.

"C don't show the confidence."
- Cigarette smoker, aged 50-69, male

"The box is so old already." "Very boring. It has been placed in the counter for too long and it is faded. I will not buy it."
- Cigarette smoker, aged 50-69, female

"Charcoal." "Dull, very dark." "Brings down the quality of the product."
- Non-smoker, aged 50-69, male

"Boring colour. Dull. Ashy. Old stock. Expired."
- Non-smoker, aged 50-69, female

Pack colour D

Pack colour D could be seen as a dirty green, one often associated with garbage, an army colour, an earthy or fruity colour. Some male smokers also associated it to the menthol flavour, because of its green association. However, Pack colour D was most frequently described to be of a dirty colour.

"Garbage green. Looks very dirty."
- Cigarette smoker, aged 18-20, male

"You know the juice from all the rubbish?" Disgusting, like moss."
- Cigarette smoker, aged 18-20, female

The grouping of Pack colour D amongst the six colours was varied amongst the groups. It was either grouped under the brighter colours, or it would stand alone in between the brighter colours (Pack colours B and F) and the darker colours (Pack colours A, C, and E).

Male smokers who described it as menthol were likely menthol smokers or were ranking the colours based on its association to taste.

"Because I like to smoke menthol. So green colour stands for menthol."
- Cigarette smoker, aged 18-20, male

"This is like menthol because it's green."
- Cigarette smoker, aged 30-49, male

Non-smokers aged 18 to 20 years described the colour to be calming and natural.

"Very calming colour." "Looks healthier to me. Vegetables...natural stuff."
- Non-smoker, aged 18-20, female

All in all, Pack colour D received a mix of positive and negative responses from participants, depending on the perception and association of the pack colour.

Pack colour E

Pack colour E was usually described as brown or chocolate, with a tinge of red.

Pack colour E was thought to be similar to dark colours like Pack colours A and C, but more brownish. Its association with chocolate made it slightly more appealing.

"The dark chocolate is nicer because very good healthy." "It's like a refreshing box. Very striking brown. Like McDonald's chocolate."
- Non-smoker, aged 50-69, female

"Like Hersheys. Chocolate flavor."
- Non-smoker, aged 18-20, female

The dark colour could be seen as masculine, stronger and more solid.

"It gives you a macho feeling, this colour. International colour, international price."
- Cigarette smoker, aged 21-29, male

"Woody, musky" "Those strong steady stuff. Non-menthol."
- Cigarette smoker, aged 30-49, female

"I like E because dark brown is 'more class'. I feel I will buy this colour."
- Non-smoker, aged 30-49, female

Pack colour E was also described to be similar to a cigar by female smokers aged 21 to 29 years, and aged 50 to 69 years, and the association made it more prestigious.

"Like cigar packaging."
- Cigarette smoker, aged 21-29, female

"It can become a cigar. For cigar it will be a very good packaging. Higher price. Better quality. Prestige."
- Cigarette smoker, aged 50-69, female

Otherwise, Pack colour E was generally considered a dull colour like Pack colours A and C, which was not appealing.

"I feel like if I smoke now it will taste like charcoal."
- Cigarette smoker, aged 18-20, male

"Smelly. Really strong taste."
- Non-smoker, aged 21-29, male

Pack colour F

Among all the six colours, Pack colour F captured participants' attention the most. However, reactions towards colour F had been mostly from two extremes, though participants who found it appealing outnumbered those who did not.

In terms of brightness, some felt that it was too striking, flashy and outstanding!

"Bright colours on cigarettes look weird. It can be pretentious looking."
- Cigarette smoker, aged 18-20, female

"Don't appeal. Too vibrant. Doesn't look expensive to me."
- Cigarette smoker, aged 30-49, female

"The colour, I don't like. The colour too obvious. When you see this colour, too stand out."
- Cigarette smoker, aged 50-69, male

"Attracts unnecessary attention. Because it is too striking."
- Non-smoker, aged 21-29, female

For others, its striking colour was perceived to be positive, as it felt more vibrant, lively, funky and refreshing. Most participants thought of it as being orange flavoured, and it would pique smokers' interest to give it a try. Non-smokers would still not try it because the smell would not smell like orange.

"This is very bright and I like orange." "If put on the shelves will definitely stand out, people will buy."
- Cigarette smoker, aged 18-20, male

"It looks younger." "Looks very healthy. Like Vitamin C."
- Cigarette smoker, aged 21-29, female

"To me, it don't look very poisonous. Maybe it is a lighter colour, not as strong compared to the rest."
- Non-smoker, aged 30-49, female

"More presentable." "More attracting." "Energetic." "Vivid, fresh."
- Non-smoker, aged 50-69, male

While the bright colour stood out, some associated it with having weird flavours, and would contain chemicals inside. It also did not look like a cigarette box, or it looked like a cheap cigarette pack. A handful, those in the younger age groups, also mentioned that it looked not like cigarettes but something like kids' candy.

": And then a lot of chemicals pumped inside to get this kind of...the flavour that is going to reflect by using this colour."
- Cigarette smoker, aged 21-29, male

"Normally the weird colours are like low quality, and not taste that good."
-Cigarette smoker, aged 21-29, female

"I just feel cigarette pack cannot be orange."
- Cigarette smoker, aged 30-49, male

"Seems auntie, China brand."
-Cigarette smoker, aged 30-49, female

"Doesn't look like a cigarette pack. Like kid's candy."
- Non-smoker, aged 18-20, female

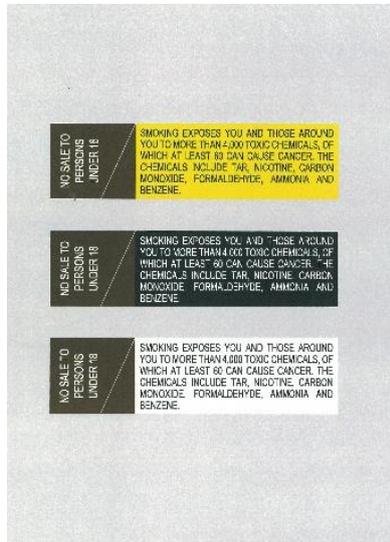
"It feels like the cheapest, which is not good. Cut cost, cut the quality and nicotine content. Poor quality."
- Non-smoker, aged 30-49, female

Lastly, the orange colour was liked by some, and disliked by others, as a matter of personal preference.

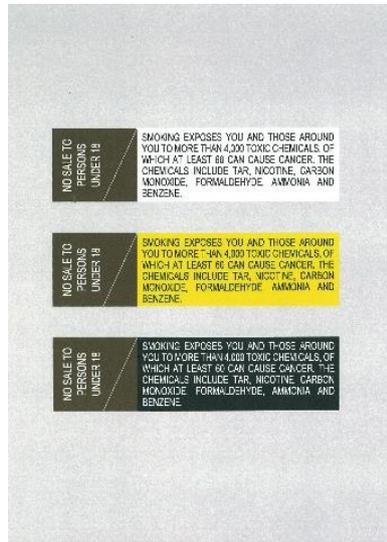
"Doesn't suit me. I don't like orange."
- Cigarette smoker, aged 30-49, male

Side Text Warning Background and Text Colour

Each participant was shown six show cards, one after another. Different groups were given different rotations of the three background colour arrangements on the show card.



**Pack colour A
Pantone 448C
Top rotation**



**Pack colour A
Pantone 448C
Middle rotation**



**Pack colour A
Pantone 448C
Bottom rotation**

Within one group, each show card had the pack colour changed on the left side of the side text warning. Please find the full set available in Appendix C.



**Pack colour B
Pantone 456C
Top rotation**



**Pack colour B
Pantone 4625C
Top rotation**



**Pack colour F
Pantone 159C
Top rotation**

Participants were then asked to rank each of the side text warning in terms of how easy it was for them to read the warning, as well as to rank them from the one that is most noticeable, to the one that is least noticeable.

In general, the yellow background was the most noticeable, followed by white background, while black background was the least noticeable. However, when paired with pack colour B and F, the yellow background was less noticeable, and the black background would be more noticeable. Participants aged 18 to 29 years were more likely to rank yellow and white backgrounds similarly noticeable while black background was less noticeable. On the other hand, participants aged 30 to 69 years ranked yellow background as the most noticeable, followed by white background and then black background as the least noticeable.

In terms of readability, the white background fared better than the yellow and black backgrounds on most occasions.

Summary of quantitative findings on side text warning background colour

The table below summarises the mean noticeability ranking of side text warning background colour, reverse-coded such that 3 is the most noticeable and 1 is the least noticeable. Dark orange denotes the most noticeable side text warning while light orange denotes the next best alternative. A full breakdown can be seen in Appendix D (Table 28).

Table 14: Overall noticeability of side text warning background colour

Side text warning background colour	Yellow background	Black background	White background
Mean ranking			
Overall	2.43	1.51	2.06
Smoking status			
Smokers	2.38	1.53	2.09
Non-smokers	2.49	1.49	2.03
Gender			
Male	2.45	1.52	2.03
Female	2.42	1.50	2.08
Age			
18 to 20 years	2.22	1.56	2.23
21 to 29 years	2.23	1.59	2.19
30 to 49 years	2.65	1.49	1.86
50 to 69 years	2.65	1.40	1.95
Pack colour			
Pack colour A	2.60	1.30	2.10
Pack colour B	2.07	1.84	2.09
Pack colour C	2.63	1.30	2.07
Pack colour D	2.70	1.40	1.90
Pack colour E	2.60	1.29	2.12
Pack colour F	2.01	1.94	2.05

Yellow background

Yellow background was considered the most noticeable because it was considered to be the most striking. Black text on yellow background has existing associations with warning signs of caution and danger, road signages, hazard signs, hence it attracted more of the participants' attention.

"It's a striking colour. It's a warning colour."
- Non-smoker, aged 30-49, male

"This is warning you know. Warning of course is different. Warning is yellow."
- Cigarette smoker, aged 50-69, female

"Like highlighter. Must read first ... Usually in the office they highlight words cause urgent."
- Non-smoker, aged 50-69, female

Generally, participants felt that the yellow background was always noticeable, except when the pack colour was also bright, such as for pack colour B and F. In those instances, the yellow background was selected less due to the lack of contrast. However, some participants felt that as long as the pack colour was not yellow, the side text warning background will still stand out.

Participants aged 30 years and above were also more likely to find that the yellow background was always noticeable, regardless of the change in pack colours.

"Actually, the side doesn't make any difference. Nobody would bother the side."
- Cigarette smoker, aged 50-69, male

In terms of readability, the yellow background could also be readable, as the yellow-black combination was a pleasant colour combination and provided contrast for the words.

"Yellow draw attention, it is like a light to the words ... It lights up the wording."
- Non-smoker, aged 50-69, female

For some participants, the yellow background was too striking, so reading the warning was harder on the eyes.

"Yellow looks painful."
- Cigarette smoker, aged 18-20, female

Black background

Black background was generally the least noticeable, unless the pack colour was bright, such as pack colour B and F. In those instances, participants aged 18 to 29 years varied their selections between black and white backgrounds.

As the current side text warning background is black, male smokers aged 30 to 49 years and female smokers aged 18 to 20 years felt that it had become the norm, so they would not normally notice it.

"Usually it's black colour on the thing. Like white colour feels like something different."
- Cigarette smoker, aged 18-20, female

"Black, don't really notice. It's norm already, normal for us already, black box, ok black box."
- Cigarette smoker, aged 30-49, male

In terms of readability, most participants felt it took more effort to read the text in white font colour against a black background. However, some participants also felt that the inverted nature made the words stand out to them, making it easier to read.

"Black background, the white words will stand out. Easier to read."
- Cigarette smoker, aged 21-29, female

White background

White background was considered by participants aged 18 to 29 years to be a bright colour as well. For many, it was a tough decision between the yellow and white background in terms of noticeability.

"Actually, can I change to white? Because I think for brown background, white is actually more contrasting. More noticeable."
- Non-smoker, aged 18-20, male

Compared to the yellow background, however, the white background was considered to be more appealing as it was more comfortable to look at.

"It is more appealing for white, because of the contrast, dark box and white... so it is more appealing compared to just now."
- Cigarette smoker, aged 21-29, female

White background was also considered to be the most readable, providing greater contrast between the background and the words. White background was also cited as the typical colour in which documents were printed on; hence participants felt it was more familiar and comfortable to read.

"It's like paper, the background is white, the words are black colour, so it's like, in the computer format, the Microsoft Word."
- Cigarette smoker, aged 21-29, male

"Newspaper also white background and black words"
- Non-smoker, aged 18-20, male

Side Text Warning Letter Case Style

Each participant was given two paragraphs, one at a time, to read. The order in which the paragraph was given was rotated.

Participants were generally not affected by the content of the paragraph, commenting that it was too lengthy and the information given was too scientific and foreign to them. Participants felt that the length of the paragraph was too long to be fitted at the side of a cigarette pack, and will deter people from reading it. Furthermore, the information given also had no impact on them, because the numbers were not impressive to them, and the scientific terms were not relatable.

"Lengthy and who knows about all these chemicals name."
- Non-smokers, aged 30-49, male

"If it were me I would put more than 60. I would put a higher number."
-Non-smoker, aged 50-69, female

Participants suggested to reduce the length of the paragraph and changed the topic to be about the number of people who died from smoking cigarettes.

"You know if they do something more personal than scientific terms, it works actually. Something like if you smoke you might not live very long."
- Cigarette smoker, aged 21-29, male

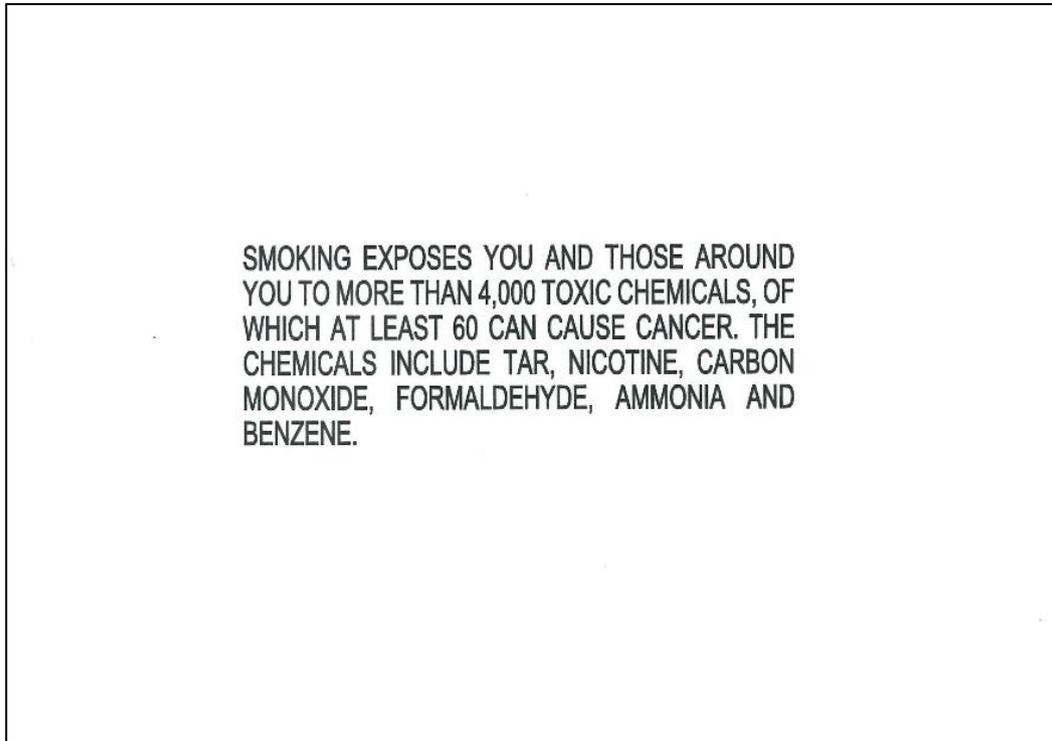
Quantitative findings from side text warning letter case style

The table below indicates the percentage of participants who selected one case style over the other in terms of readability for each of the profiles groups. Generally, sentence case is more readable than capital letters. Majority of those aged 18 to 29 years found sentence case to be easier to read.

Table 15: Side text warning readability rating by profile group

Side text warning letter case style	Capital letters	Sentence case
Percentage (%)		
Cigarette smokers, aged 18-20, Male	67%	33%
Cigarette smokers, aged 18-20, Female	25%	75%
Cigarette smokers, aged 21-29, Male	22%	78%
Cigarette smokers, aged 21-29, Female	11%	89%
Cigarette smokers, aged 30-49, Male	56%	33%
Cigarette smokers, aged 30-49, Female	63%	38%
Cigarette smokers, aged 50-69, Male	13%	88%
Cigarette smokers, aged 50-69, Female	56%	44%
Non-smokers, aged 18-20, Male	44%	56%
Non-smokers, aged 18-20, Female	0%	100%
Non-smokers, aged 21-29, Male	33%	67%
Non-smokers, aged 21-29, Female	50%	50%
Non-smokers, aged 30-49, Male	20%	80%
Non-smokers, aged 30-49, Female	40%	60%
Non-smokers, aged 50-69, Male	33%	67%
Non-smokers, aged 50-69, Female	0%	100%

Capital Letters



Paragraph with all capital letters was generally agreed to be more noticeable. The upper case of the paragraph conveyed the idea that the message was serious and important, like a warning.

"I think B is like story-telling whereas A is more like warning."
- Non-smoker, aged 21-29, female

"because it's a warning, capitalizing the sentence makes you more cautious."
- Cigarette smoker, aged 50-69, male

Some participants felt that all capital letters were also easier to read, as it was more uniform and compact. The words also looked larger as a result of the capitalised letters.

"Because it's bigger."
- Non-smoker, aged 18-20, male

"Because it's uniform. Because the text is quite straight. It's easy to read."
- Cigarette smoker, aged 30-49, male

However, the compact lettering also made the words too cluttered together, and thus harder to read. Some participants disliked the capital letters as it felt like the paragraph was shouting at them.

"I feel like you're shouting at me, I think it's the uppercase."
- Cigarette smoker, aged 30-49, female

"So if you put all caps right, the caps take out the bigger space so it tends to cram up."
- Non-smoker, aged 30-49, male

Sentence Case

Smoking exposes you and those around you to more than 4,000 toxic chemicals, of which at least 60 can cause cancer. The chemicals include tar, nicotine, carbon monoxide, formaldehyde, ammonia and benzene.

Sentence casing paragraph was described as normal reading, used in most documents. As it was what the participants were used to reading, it was considered easy to read. Some also mentioned that the different letter casing can create a high-low pitch, thus grabbing their attention to read it.

"Because it (sentence case paragraph)'s not caps. It (capital letters paragraph)'s not like our usual texts..."

- Cigarette smoker, aged 21-29, female

"Normal one is B, so people can read easily."

- Cigarette smoker, aged 50-69, male

"We are train to read books like that last time"

- Non-smoker, aged 50-69, female

"If you have like what B is, you'll have a pitch, so when you have the pitch, you'll pay full attention to what message is there."

- Cigarette smoker, aged 50-69, female

However, it being normal reading also meant that participants would not notice it as easily, and they would tend to dismiss it.

"if you have like what B is, you'll have a pitch, so when you have the pitch, you'll pay full attention to what message is there."

- Cigarette smoker, aged 50-69, male

Even then, a minority of participants felt that sentence casing were more noticeable because it was more spaced out and less cluttered.

"For me I feel it's more striking, the contrast with the wordings itself, more spaced out. To me it's like one whole piece of black."

- Cigarette smoker, aged 30-49, male

Conclusion and Recommendations

When looking at a cigarette pack, participants took note of the brand name, pack colour and GHWLs. The colour of a cigarette pack served a primary purpose to identify the brand and flavour of a cigarette. GHWLs that formed stronger impressions to the participants were the ones with gory images, such as the eyes, throat cancer, lung cancer, teeth and babies. Side text warnings were usually ignored by smokers, though some did read it when they were bored with nothing to do while smoking.

Cigarette pack type

In deciding the pack that would be the least appealing, a few key points should be noted:

- Gloss and shine conveyed the idea of elegance and class. Plain paper-like quality was deemed as cheap and inferior.
- Smaller packs mean smaller GHWLs, which would reduce its noticeability and readability.
- Younger smokers dislike being associated with cigarette packs smoked by the older generation.
- Plastic wrapping that is not air-tight is deemed as shoddy craftsmanship, hence lower perceived quality of the cigarette.

In consideration of the above, Pack C was ranked as the least appealing. Unlike the other pack colours, majority were put off by the dull and boring colour of Pack C, as well as the impractical design of a soft pack that is easily crushed when carrying around and does not help keep the cigarettes fresh. In addition, the material used for Pack C also gave an inferior feel of the product. The brand was associated with being old and therefore garnered low interest especially amongst the younger smokers. A larger-sized Pack C, with plain paper finishing could dissuade possible interest in the pack. After Pack C, Pack A was the second least appealing due to its overly used pack design, which made it boring to the respondents, especially for non-smokers unaffected by Pack A's Marlboro brand.

Cigarette pack colour

Colour A was considered the darkest of the six colours, so in general, it was considered to be the one of the least appealing colours by smokers aged 50 to 69 years and all non-smokers.

Colours A, C, and E were considered to be the darker colours, which was associated with being more harmful to health but also having higher quality cigarettes. Smokers aged 18 to 49 years were inclined to take up cigarette packs of these colours as it felt safer and the pack colour resembled closer to other cigarette packs available in the market. In particular, colour C was seen as classy even for non-smokers aged 18 to 20 years.

For colour B, participants aged 50 to 69 years considered it pleasant as the colour was one of the brighter ones amongst the six colours. Some male participants aged 30 years and above would also associate the colour with gold colour, which would make it look classier. However, for the most part, smokers aged 18 to 49 years and non-smokers aged 18 to 29 years felt that colour B was disgusting and similar to the colour of diarrhoea.

In terms of negative appeal, pack colour F capture participants' attention. However, reactions were split between finding it attractive or finding it unattractive. More participants found it appealing than unappealing.

Overall, participants felt that all cigarettes are harmful to health and not easy to quit, and this perception was hardly affected by the cigarette pack colour. Having said that, there was a slight tendency for participants to perceive the brighter colours, especially colour F, to be healthier, while colour B was perceived to be slightly easier to quit.

Colours to consider for adoption should take into consideration the unappealing nature of duller colours and the aversion generated from colours that resembled excrements. A possible colour would be somewhat like colour B with a slighter darker, more brownish tinge to it. While some bright colours such as pink and neon colours may turn people off, they tended to generate some interest first as they do not appear to be cigarettes. Hence, these colours should also be avoided.

Side text warning background and text colour

In terms of noticeability, the black background was generally the least noticeable. For participants aged 30 years and above, most generally felt that the yellow background was the most noticeable amongst the six pack colours, while for participants aged 18 to 29 years, it varied between the yellow and white backgrounds.

Across the pack colours, yellow background was most noticeable for colours A, C, D, and E, while yellow and white background were equally noticeable for colours B and F. Within colours B and F, participants aged 18 to 29 years felt white background was more noticeable than yellow, while participants aged 30 to 69 years felt yellow background was more noticeable than white.

In terms of readability, the white background with black text was usually the most readable, as it coincides with most normal reading. However, the yellow background with black text might make people read it due to its warning connotation, while the black background could show the contrast of words better, making it easier to read.

Side text warning letter case style

While one can make an argument about the importance of the paragraph being noticeable in order for people to read it, participants felt that noticeability was taken care of by the side text warning background colour. As such, it is recommended to

use sentence case for the side text warning to promote readability. Capital letters can be considered to draw attention to key points of the paragraph.

Overall summary

The table below summarises the conclusion and recommendations for each of the elements in a cigarette packaging that were tested.

Table 16: Overall summary of findings

Elements of a cigarette packaging	Summary
Cigarette pack type	<p>Least appealing pack: Pack C (i.e. soft pack)</p> <ul style="list-style-type: none"> ▪ Worn and aged colour ▪ Easily crushed pack, harder to carry around ▪ No cover to keep the cigarettes fresh ▪ Small size, not value for money ▪ Cheap-looking design gives the feeling of low quality cigarettes <p>Second least appealing pack: Pack A (regular hard pack)</p> <ul style="list-style-type: none"> ▪ Most commonly seen cigarette packaging looks boring ▪ Sharp edges and pack size was not as well designed to be ergonomic and pleasant to carry around
Cigarette pack colour	<p><u>Least appealing colour</u></p> <p>Non-smokers: Colour A (448C)</p> <ul style="list-style-type: none"> ▪ Dull colour does not attract attention ▪ Dark colour associated with toxic, poison and death ▪ Amongst the six colours, perceived as the darkest and dullest colour <p>Smokers: Colour B (456C)</p> <ul style="list-style-type: none"> ▪ Brighter colour seen as cheap, childish and generally inferior and lower quality cigarettes ▪ Colour more often associated with diarrhoea and poop, so it was more disgusting to smoke cigarettes from such a pack

<p>Side text warning background and text colour</p>	<p><u>Most noticeable background colour</u></p> <p>Colour A: Yellow background</p> <ul style="list-style-type: none"> ▪ Yellow colour carries a warning connotation, so it naturally attracts attention to look at it ▪ Against darker pack colours, the bright yellow background creates a good contrast to stand out in the pack <p>Colour B: White background (for participants aged 18 to 29 years)</p> <ul style="list-style-type: none"> ▪ Against a brighter pack colour, yellow background becomes less outstanding ▪ White background is more pleasing on the eyes, so more willing to look at it <p>Colour B: Yellow background (for participants aged 30 to 69 years)</p> <ul style="list-style-type: none"> ▪ As the side text warning took up a significantly large amount of space, the contrast effect from pack colour mattered less ▪ Therefore, yellow background remained noticeable even against bright pack colours, unless the pack colour is also yellow <p>Easiest to read background and text colour: White background</p> <ul style="list-style-type: none"> ▪ Black text against white background was normal reading, seen in everyday lives
<p>Side text warning letter case style</p>	<p>Easiest to read letter case style: Sentence case</p> <ul style="list-style-type: none"> ▪ Sentence case style is the normal style used in most writings ▪ More spacing between the words ▪ Up and downs provide intonation <p>Most noticeable letter case style: Capital letters</p> <ul style="list-style-type: none"> ▪ Capital letters indicate a serious and important message, so it would draw attention

Appendix

Appendix A – Discussion Guide

STUDY ON PERCEPTION TOWARDS TOBACCO PACKAGING (THEME 1)

DISCUSSION GUIDE

26th June to 19th July 2015

Note: This discussion guide is intended as a “checklist” for the moderator. Our moderator will be driven by the research objectives and is not likely to follow the script strictly. Participants’ responses may often lead the discussion in new directions or change the order of the topics.

1. Introduction & Warmup

10 MIN/ 10 MIN

Thank respondents for taking time to participate in focus group discussion.

Explain FGD procedures:

- Discussion will take up to 2.5 hours.
- The information collected would be reported collectively without identifying any individual. These collective results may be shared with other government agencies for planning and/ or educational purposes.
- Please note that this discussion is not meant to test your knowledge therefore there is no right or wrong answer as we may have different opinions and thoughts on the topic of discussion.
- We will be doing Audio recording for note-taking purpose. Do be assured that these recordings will only be used for research purpose only.
- Reminder to switch phone to silent mode. If there are any urgent calls that you must take, please let me know and step outside.

Introduce research objectives:

In today’s focus group, we will talk about tobacco packaging. However, before we begin, can you tell me some information about yourself?

- Name
- Marital status
- Family composition (married with/ without kids, age of kids)
- Occupation

2. Understand their current smoking habits

10 MIN/ 20 MIN

- Smokers: To understand the current smoking behaviour
- Non Smokers: To understand their perception towards smoking

ASK SMOKERS:

- o How long have you been smoking?
- o How many packs in a day/ week do you smoke?
- o Do you have immediate family or close friends who smoke?
- o Is there someone that you usually smoke with? Who do you smoke with?
When do you usually smoke?

ASK NON-SMOKERS:

- o Have you ever smoked / thought of smoking? Why/ why not? (Where time permits, to obtain experiences from 1-2 non-smokers)
- o Do you have immediate family or close friends who smoke? Do they smoke around you? How do you feel? Have they ever asked you to smoke before? What did they say?
- o For ex-smokers,
 - o What prompted you to stop smoking?

3. Reactions to current cigarette packs

20 MIN/ 40 MIN

- To understand their current knowledge and perception of cigarette packs
- To understand the features of a cigarette pack that people notice

ASK ALL (10 mins):

- What are some of the different brands and flavours of cigarettes that you are aware of/ remember/ recall seeing?
 - How are you able to tell different cigarettes apart? **[Probe: What is different about the packs? Listen out for colour, material, pack design etc]**

ASK SMOKERS ONLY:

- What is your usual brand of cigarettes?

- Why did you choose this brand? / How did you start using that brand?
- Have you ever changed the brand/ flavour of the cigarettes you smoked? What are the reason(s) for the change? **[Probe for reasons apart from Cost and Taste]**
- What was it about the brand that convinced you to try and continue to use it? **[NOTE IF PACKAGING RELATED REASONS ARE MENTIONED]**
 - **[IF PACKAGING IS NOT MENTIONED]** What do you think about cigarette packaging? How does it affect your brand selection?
- What do you usually notice when you pick up a cigarette pack? **[LISTEN FOR PACK TYPE, COLOUR, GHWL, SIDE TEXT WARNING, BRAND, FONT, MATERIAL, ETC.]**
 - **[IF COLOUR IS MENTIONED]** What colour do you find attractive? Why?
 - **[IF GHWL IS MENTIONED]** Does the image discourage you from smoking? Why?
 - **[IF SIZE OF PACK IS MENTIONED]** What pack size do you prefer? **[Listen for females who may prefer slim pack]**
- In your opinion, to what extent do you think the design of a cigarette pack had influenced you/ would influence someone to try smoking?

ASK NON-SMOKERS ONLY:

- Where do you usually see cigarette packs?
- When you think of a cigarette pack, what are the things that you notice on the pack?
 - How would you describe any seen cigarette pack that you have seen? **[LISTEN FOR PACK TYPE, COLOUR, GHWL, SIDE TEXT WARNING, BRAND, FONT, MATERIAL, ETC.]**
 - **[IF COLOUR IS MENTIONED]** What colour do you find attractive? Why?
 - **[IF GHWL IS MENTIONED]** Does the image discourage you from smoking? Why?
 - **[IF SIZE OF PACK IS MENTIONED]** What pack size do you prefer? **[Listen for females who may prefer slim pack]**
- What are the cigarette packs which you remember more than the others? **[LISTEN FOR PACK TYPE, COLOUR, GHWL, SIDE TEXT WARNING, BRAND, FONT, MATERIAL, ETC.]**
- How did the packaging make you feel?
- In your opinion, to what extent do you think the design of a cigarette pack would influence you/ someone to try smoking?

- To obtain their reactions towards various pack types
- To obtain their reactions towards various pack colours
- To obtain their reactions towards side warning colours
- To obtain their reactions towards case style of side warning

ASK ALL:**A) Testing of pack types (25 min)**

To begin, let's have a look at these cigarette packs that are currently available in the market. There are 4 different pack types here.

[PHYSICAL PRODUCT: PACK TYPES]

Moderator to direct everyone to look at the different pack types. Moderator not to describe the packs but refer to them as A, B, C and D.

- a. Regular: Common rectangular-shaped
- b. Bevel: Similar to regular, but with a curved edge
- c. Soft: Soft packet, can squeeze
- d. Slim: Slimmer version of regular pack type

[Moderator to distribute worksheet A]

- Without discussing, please rank the packs in order of overall appeal, where 1 is the pack that is most appealing to you, and 4 is the pack that is least appealing to you.
 - Please also rate the following statements for each of the pack: The colour appeals to me
 - The size of the pack appeals to me
 - The shape/ edges of the pack appeals to me
 - The pack is one that I can easily carry around
- For each pack,
 - Why did you rank it this way? What did you consider or not consider? How did you come to your ranking decision?
 - Do you see yourself using this type of pack? Why/ why not?
 - What type of person might use this type of pack?
 - What are your first thoughts on the pack design/ type? Why?
 - What did you notice first about the pack? What else?
 - What do you think about **[If not discussed]**:
 - the colour of the pack?

- the size of the pack?
- the shape/ edges of the pack?
- the functionality of the pack (i.e. whether it is easy to carry around)?

REPEAT FOR NEXT PACK TYPE

B) Testing of colour (30 min)

Next, we would like you to hear your views about different colours.

[Moderator to distribute worksheet B]

[SHOWCARD: PACK COLOUR]

- Without discussing, please rank the colours in order of overall appeal, where 1 is the colour that is most appealing to you, and 6 is colour that is least appealing to you.
- Please also rate the following statements:
 - Contains cigarettes that you would most likely smoke
 - Looks like it contains high quality cigarettes
 - Is a pack which contains cigarettes that are easy to quit
 - Is a pack which looks harmful to health **[For those who ranked it high]** Why is this colour ranked high in terms of appeal? **[For those who ranked it low]** Why is this colour ranked low in terms of appeal?
- For individual colours,
 - What are your first thoughts about the colour?
 - What emotions did it make you feel? Why? **[Listen for perceived harm to health]**
 - Moderator to probe on perceived ease of quitting and perceived harm to health
 - Do you see yourself using a pack of this colour? Why/ why not?
 - Beside these colours, are there any other colours that you feel would be pleasing to the eye? Why? **[Note: try to understand what colours we should avoid in a cigarette pack]**
 - Does the colour you mentioned affect your perception of the quality of cigarettes, ease of quitting, and whether the pack contains cigarettes that you are likely to smoke?
 - Beside these colours, are there any other colours that you feel would drive you away? Why? **[Note: try to understand what colours would put them off in a cigarette pack]**

C) Testing of side text warnings colour (35 min)

Let's take a closer look at the side of the cigarette pack, specifically the warning at the side of the pack.

[Moderator to distribute worksheet C, one for each pack colour]

[SHOWCARD: SIDE TEXT WARNING COLOUR] [Rotate showcard set]

Please rank each warning at the side of the pack in terms of noticeability/ whether it catches your attention, where 1 is the most noticeable and 3 is the least noticeable.

For each pack colour & side warning combination:

- Which warning at the side of the pack catches your attention the most? Why?
- Which warning at the side of the pack catches your attention the least? Why?
- Which warning at the side of the pack is easiest to read? Why?
- Which warning at the side of the pack is hardest to read? Why?
- Would they make you think about quitting/stay as a quitter/ not take up smoking? If yes, how?
- If not, why not?

Repeat for each of the 6 pack colours

D) Testing of side text warning ALL CAPS vs Sentence case (10 min)

Finally, we would like you to read two versions of text for the warnings at the side of the pack.

[Moderator to distribute worksheet D]

[SHOWCARD ALL CAPS VS Sentence case] [ROTATE SHOWCARD]

Without discussing, please select the paragraph that is easier to read for you.

- Comparing the two paragraphs, what differences do you notice?
- Does the difference help or hinder your ability to read and understand the paragraph's content?
- Which one are you more likely to read? Why?
- Which one would be more likely to catch your eye?
- Would they make you think about quitting/ not take up smoking? If yes, how?
- What changes would you suggest to make the paragraph:
 - Easier to read?

- Easier to understand?

5. Summary and Closing

10 MIN/ 150 MIN

Before I end this session, do you have any other suggestion or opinion to share with us? If not, this is the end of our discussion. Thank you very much for your time and we value your ideas and feedback.

Moderator to ask before group closure,

Ask casually the importance of brand in their decision to purchase a particular cigarette pack.

- **If all cigarette packs available in the market are all changed the same colour, how will you choose which cigarette pack to buy? How will one pack differ from another?**
 - **How will that make you feel?**

WRAP UP THE DISCUSSION

Appendix B – Worksheets

WORKSHEET A

Group: _____

Based on the cigarette packs that you see, please rank the packs in order of overall appeal, where 1 is the pack that is most appealing to you, and 4 is the pack that is least appealing to you.

Rank 1 for the most appealing overall and 4 for the least appealing overall

	Ranking
Pack A	
Pack B	
Pack C	
Pack D	

Group: _____

Based on each cigarette pack that you see, please rate the extent to which you agree/ disagree to each of the following statements on a scale ranging from 1 to 5, with 1 being Strongly Disagree and 5 being Strongly Agree.

Pack A	Strongly Disagree	Disagree	Neither disagree nor agree	Agree	Strongly Agree
The colour appeals to me	1	2	3	4	5
The size of the pack appeals to me	1	2	3	4	5
The shape/ edges of the pack appeals to me	1	2	3	4	5
The pack is one that I can easily carry around	1	2	3	4	5

Pack B	Strongly Disagree	Disagree	Neither disagree nor agree	Agree	Strongly Agree
The colour appeals to me	1	2	3	4	5
The size of the pack appeals to me	1	2	3	4	5
The shape/ edges of the pack appeals to me	1	2	3	4	5
The pack is one that I can easily carry around	1	2	3	4	5

Please rate the extent to which you agree/ disagree to each of the following statements.

Pack C	Strongly Disagree	Disagree	Neither disagree nor agree	Agree	Strongly Agree
The colour appeals to me	1	2	3	4	5
The size of the pack appeals to me	1	2	3	4	5
The shape/ edges of the pack appeals to me	1	2	3	4	5
The pack is one that I can easily carry around	1	2	3	4	5

Pack D	Strongly Disagree	Disagree	Neither disagree nor agree	Agree	Strongly Agree
The colour appeals to me	1	2	3	4	5
The size of the pack appeals to me	1	2	3	4	5
The shape/ edges of the pack appeals to me	1	2	3	4	5
The pack is one that I can easily carry around	1	2	3	4	5

**END OF
WORKSHEET A**

WORKSHEET B

Group: _____

Based on the show cards that you have with you, please rank the colours in order of overall appeal, where 1 is the colour that is most appealing to you, and 6 is colour that is least appealing to you.

Rank 1 for the one that is the most appealing overall and 6 for the one that is the least appealing overall

Colour	Ranking
Colour A	
Colour B	
Colour C	
Colour D	
Colour E	
Colour F	

Group: _____

Based on the show cards that you have with you, please rate the extent to which you agree/ disagree to each of the following statements on a scale ranging from 1 to 5, with 1 being Strongly Disagree and 5 being Strongly Agree.

Colour A	Strongly Disagree	Disagree	Neither disagree nor agree	Agree	Strongly Agree
Contains cigarettes that I would most likely smoke	1	2	3	4	5
Looks like it contains high quality cigarettes	1	2	3	4	5
Is a pack which contains cigarettes that are easy to quit	1	2	3	4	5
Is a pack which looks harmful to health	1	2	3	4	5

Colour B	Strongly Disagree	Disagree	Neither disagree nor agree	Agree	Strongly Agree
Contains cigarettes that I would most likely smoke	1	2	3	4	5
Looks like it contains high quality cigarettes	1	2	3	4	5
Is a pack which contains cigarettes that are easy to quit	1	2	3	4	5
Is a pack which looks harmful to health	1	2	3	4	5

Please rate the extent to which you agree/ disagree to each of the following statements.

Colour C	Strongly Disagree	Disagree	Neither disagree nor agree	Agree	Strongly Agree
Contains cigarettes that I would most likely smoke	1	2	3	4	5
Looks like it contains high quality cigarettes	1	2	3	4	5
Is a pack which contains cigarettes that are easy to quit	1	2	3	4	5
Is a pack which looks harmful to health	1	2	3	4	5

Colour D	Strongly Disagree	Disagree	Neither disagree nor agree	Agree	Strongly Agree
Contains cigarettes that I would most likely smoke	1	2	3	4	5
Looks like it contains high quality cigarettes	1	2	3	4	5
Is a pack which contains cigarettes that are easy to quit	1	2	3	4	5
Is a pack which looks harmful to health	1	2	3	4	5

Please rate the extent to which you agree/ disagree to each of the following statements.

Colour E	Strongly Disagree	Disagree	Neither disagree nor agree	Agree	Strongly Agree
Contains cigarettes that I would most likely smoke	1	2	3	4	5
Looks like it contains high quality cigarettes	1	2	3	4	5
Is a pack which contains cigarettes that are easy to quit	1	2	3	4	5
Is a pack which looks harmful to health	1	2	3	4	5

Colour F	Strongly Disagree	Disagree	Neither disagree nor agree	Agree	Strongly Agree
Contains cigarettes that I would most likely smoke	1	2	3	4	5
Looks like it contains high quality cigarettes	1	2	3	4	5
Is a pack which contains cigarettes that are easy to quit	1	2	3	4	5
Is a pack which looks harmful to health	1	2	3	4	5

**END OF
WORKSHEET B**

WORKSHEET C

Group: _____

Based on the show cards that you have with you, please rank each warning at the side of the pack in terms of noticeability/ whether it catches your attention, where 1 is the most noticeable and 3 is the least noticeable.

Pack Colour A

Rank 1 for the most noticeable and 3 for the least noticeable

Warning at the side of pack	Ranking
Warning A	
Warning B	
Warning C	

WORKSHEET C

Group: _____

Based on the show cards that you have with you, please rank each warning at the side of the pack in terms of noticeability/ whether it catches your attention, where 1 is the most noticeable and 3 is the least noticeable.

Pack Colour B

Rank 1 for the most noticeable and 3 for the least noticeable

Warning at the side of pack	Ranking
Warning A	
Warning B	
Warning C	

WORKSHEET C

Group: _____

Based on the show cards that you have with you, please rank each warning at the side of the pack in terms of noticeability/ whether it catches your attention, where 1 is the most noticeable and 3 is the least noticeable.

Pack Colour C

Rank 1 for the most noticeable and 3 for the least noticeable

Warning at the side of pack	Ranking
Warning A	
Warning B	
Warning C	

WORKSHEET C

Group: _____

Based on the show cards that you have with you, please rank each warning at the side of the pack in terms of noticeability/ whether it catches your attention, where 1 is the most noticeable and 3 is the least noticeable.

Pack Colour D

Rank 1 for the most noticeable and 3 for the least noticeable

Warning at the side of pack	Ranking
Warning A	
Warning B	
Warning C	

WORKSHEET C

Group: _____

Based on the show cards that you have with you, please rank each warning at the side of the pack in terms of noticeability/ whether it catches your attention, where 1 is the most noticeable and 3 is the least noticeable.

Pack Colour E

Rank 1 for the most noticeable and 3 for the least noticeable

Warning at the side of pack	Ranking
Warning A	
Warning B	
Warning C	

WORKSHEET C

Group: _____

Based on the show cards that you have with you, please rank each warning at the side of the pack in terms of noticeability/ whether it catches your attention, where 1 is the most noticeable and 3 is the least noticeable.

Pack Colour F

Rank 1 for the most noticeable and 3 for the least noticeable

Warning at the side of pack	Ranking
Warning A	
Warning B	
Warning C	

WORKSHEET D

Group: _____

Based on the show cards that you have with you, please circle the paragraph that is easier to read for you. *Please select one answer only.*

Please circle the paragraph that is easier to read for you. <i>Please select one answer only.</i>	
Paragraph A	1
Paragraph B	2

Appendix C – Stimulus Materials

Cigarette Pack Types



Pack A
Regular hard pack



Pack B
Hard pack with bevelled edges



Pack C
Soft pack

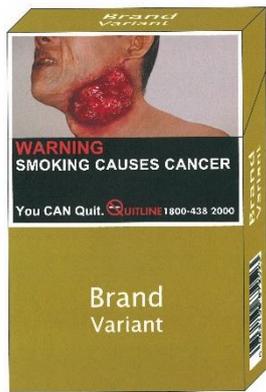


Pack D
Slim pack

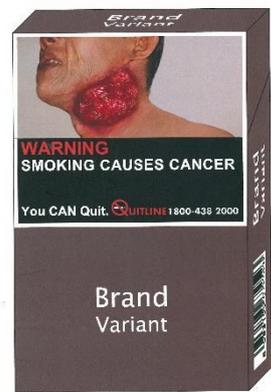
Pack Colour



**Pack colour A
Pantone 448C**



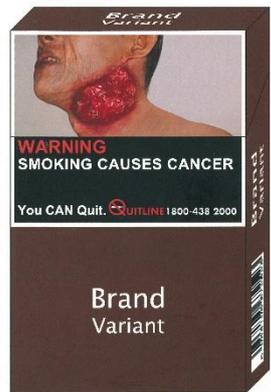
**Pack colour B
Pantone 456C**



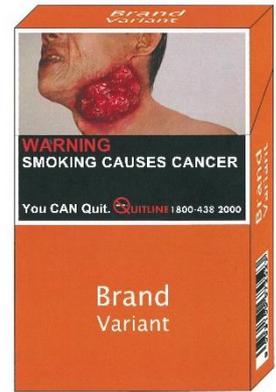
**Pack colour C
Pantone 411C**



**Pack colour D
Pantone 581C**



**Pack colour E
Pantone 4625C**



**Pack colour F
Pantone 159C**

Side Text Warning Label

Top rotation



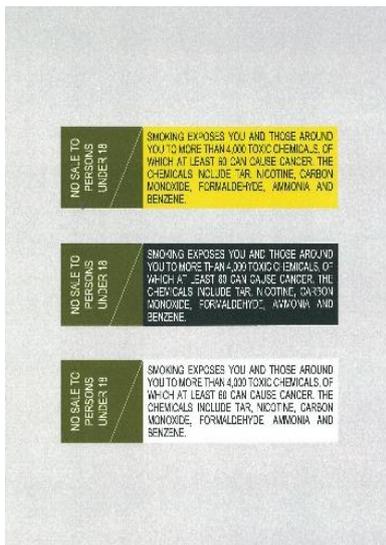
**Pack colour A
Pantone 448C**



**Pack colour B
Pantone 456C**



**Pack colour C
Pantone 411C**



**Pack colour D
Pantone 581C**



**Pack colour E
Pantone 4625C**

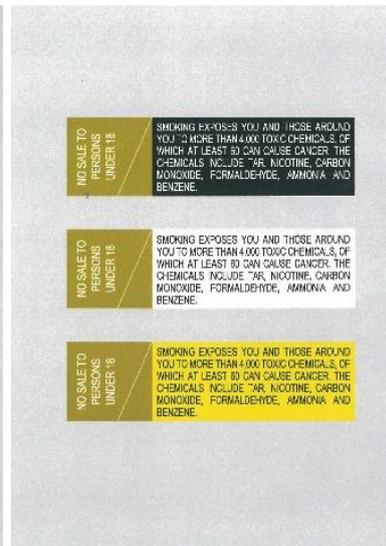


**Pack colour F
Pantone 159C**

Bottom rotation



**Pack colour A
Pantone 448C**



**Pack colour B
Pantone 456C**



**Pack colour C
Pantone 411C**



**Pack colour D
Pantone 581C**



**Pack colour E
Pantone 4625C**



**Pack colour F
Pantone 159C**

Side Text Warning Letter Case Style

SMOKING EXPOSES YOU AND THOSE AROUND YOU TO MORE THAN 4,000 TOXIC CHEMICALS, OF WHICH AT LEAST 60 CAN CAUSE CANCER. THE CHEMICALS INCLUDE TAR, NICOTINE, CARBON MONOXIDE, FORMALDEHYDE, AMMONIA AND BENZENE.

Paragraph A: Capital letters

Smoking exposes you and those around you to more than 4,000 toxic chemicals, of which at least 60 can cause cancer. The chemicals include tar, nicotine, carbon monoxide, formaldehyde, ammonia and benzene.

Paragraph B: Sentence case

Appendix D – Data Table

Dark orange denotes the most recommended pack while light orange denotes the next best alternative.

Pack type

Table 17: Mean pack type ranking by profile group

Pack type	Pack A	Pack B	Pack C	Pack D
Mean ranking				
Cigarette smokers, aged 18-20, Male	1.56	1.89	3.67	2.89
Cigarette smokers, aged 18-20, Female	2.88	2.00	3.38	1.75
Cigarette smokers, aged 21-29, Male	1.89	1.67	3.33	3.11
Cigarette smokers, aged 21-29, Female	2.33	1.89	4.00	1.78
Cigarette smokers, aged 30-49, Male	1.78	1.78	2.89	3.56
Cigarette smokers, aged 30-49, Female	2.50	2.13	3.88	1.50
Cigarette smokers, aged 50-69, Male	2.13	1.63	3.00	3.25
Cigarette smokers, aged 50-69, Female	2.33	2.78	3.56	1.33
Non-smokers, aged 18-20, Male	2.11	2.33	3.67	1.89
Non-smokers, aged 18-20, Female	2.56	2.56	3.00	1.89
Non-smokers, aged 21-29, Male	2.67	1.44	3.44	2.44
Non-smokers, aged 21-29, Female	3.30	2.00	3.10	1.60
Non-smokers, aged 30-49, Male	2.30	2.40	3.50	1.80
Non-smokers, aged 30-49, Female	2.80	2.60	3.30	1.30
Non-smokers, aged 50-69, Male	2.33	2.33	2.56	2.78
Non-smokers, aged 50-69, Female	3.10	2.80	2.50	1.60

Table 18: Pack type colour disagreement rating by profile group

Pack type	Pack A	Pack B	Pack C	Pack D
The colour appeals to me				
Bottom 2 box (%)				
Cigarette smokers, aged 18-20, Male	11%	11%	78%	44%
Cigarette smokers, aged 18-20, Female	38%	25%	75%	25%
Cigarette smokers, aged 21-29, Male	11%	0%	78%	22%
Cigarette smokers, aged 21-29, Female	11%	0%	78%	0%
Cigarette smokers, aged 30-49, Male	0%	11%	33%	33%
Cigarette smokers, aged 30-49, Female	13%	13%	63%	25%
Cigarette smokers, aged 50-69, Male	25%	0%	13%	0%
Cigarette smokers, aged 50-69, Female	11%	33%	78%	22%
Non-smokers, aged 18-20, Male	11%	0%	78%	11%
Non-smokers, aged 18-20, Female	44%	0%	56%	11%
Non-smokers, aged 21-29, Male	44%	0%	78%	11%
Non-smokers, aged 21-29, Female	30%	10%	60%	10%
Non-smokers, aged 30-49, Male	30%	20%	60%	20%
Non-smokers, aged 30-49, Female	20%	10%	50%	0%
Non-smokers, aged 50-69, Male	11%	22%	44%	33%
Non-smokers, aged 50-69, Female	10%	10%	40%	20%

Table 19: Pack type size disagreement rating by profile group

Pack type	Pack A	Pack B	Pack C	Pack D
The size of the pack appeals to me	Bottom 2 box (%)			
Cigarette smokers, aged 18-20, Male	0%	0%	56%	33%
Cigarette smokers, aged 18-20, Female	25%	13%	50%	25%
Cigarette smokers, aged 21-29, Male	0%	0%	78%	33%
Cigarette smokers, aged 21-29, Female	0%	0%	33%	11%
Cigarette smokers, aged 30-49, Male	0%	0%	11%	33%
Cigarette smokers, aged 30-49, Female	25%	25%	38%	13%
Cigarette smokers, aged 50-69, Male	13%	13%	13%	0%
Cigarette smokers, aged 50-69, Female	0%	22%	56%	11%
Non-smokers, aged 18-20, Male	22%	22%	33%	22%
Non-smokers, aged 18-20, Female	22%	22%	33%	33%
Non-smokers, aged 21-29, Male	33%	33%	22%	44%
Non-smokers, aged 21-29, Female	50%	20%	20%	10%
Non-smokers, aged 30-49, Male	30%	40%	40%	10%
Non-smokers, aged 30-49, Female	70%	40%	10%	0%
Non-smokers, aged 50-69, Male	22%	11%	11%	22%
Non-smokers, aged 50-69, Female	10%	20%	20%	20%

Table 20: Pack type shape / edges disagreement rating by profile group

Pack type	Pack A	Pack B	Pack C	Pack D
The shape/ edges of the pack appeals to me	Bottom 2 box (%)			
Cigarette smokers, aged 18-20, Male	0%	0%	56%	22%
Cigarette smokers, aged 18-20, Female	25%	25%	63%	13%
Cigarette smokers, aged 21-29, Male	22%	0%	78%	44%
Cigarette smokers, aged 21-29, Female	0%	0%	44%	11%
Cigarette smokers, aged 30-49, Male	22%	11%	22%	33%
Cigarette smokers, aged 30-49, Female	13%	13%	50%	13%
Cigarette smokers, aged 50-69, Male	13%	0%	38%	0%
Cigarette smokers, aged 50-69, Female	11%	11%	67%	11%
Non-smokers, aged 18-20, Male	22%	22%	44%	22%
Non-smokers, aged 18-20, Female	11%	0%	11%	0%
Non-smokers, aged 21-29, Male	56%	11%	44%	22%
Non-smokers, aged 21-29, Female	20%	20%	10%	10%
Non-smokers, aged 30-49, Male	50%	30%	50%	10%
Non-smokers, aged 30-49, Female	40%	60%	20%	0%
Non-smokers, aged 50-69, Male	22%	11%	22%	11%
Non-smokers, aged 50-69, Female	20%	40%	30%	10%

Table 21: Pack type portability disagreement rating by profile group

Pack type	Pack A	Pack B	Pack C	Pack D
The pack is one that I can easily carry around	Bottom 2 box (%)			
Cigarette smokers, aged 18-20, Male	11%	0%	33%	22%
Cigarette smokers, aged 18-20, Female	13%	0%	0%	13%
Cigarette smokers, aged 21-29, Male	0%	0%	44%	22%
Cigarette smokers, aged 21-29, Female	11%	11%	11%	0%
Cigarette smokers, aged 30-49, Male	0%	0%	22%	22%
Cigarette smokers, aged 30-49, Female	25%	25%	25%	13%
Cigarette smokers, aged 50-69, Male	13%	13%	38%	13%
Cigarette smokers, aged 50-69, Female	44%	33%	56%	11%
Non-smokers, aged 18-20, Male	33%	33%	0%	0%
Non-smokers, aged 18-20, Female	22%	22%	11%	0%
Non-smokers, aged 21-29, Male	44%	22%	11%	11%
Non-smokers, aged 21-29, Female	40%	30%	10%	0%
Non-smokers, aged 30-49, Male	40%	40%	30%	0%
Non-smokers, aged 30-49, Female	70%	70%	20%	0%
Non-smokers, aged 50-69, Male	33%	11%	11%	11%
Non-smokers, aged 50-69, Female	40%	40%	20%	10%

Pack colour

Table 22: Mean pack colour ranking by profile group

Pack colour	Colour A	Colour B	Colour C	Colour D	Colour E	Colour F
Mean ranking						
Cigarette smokers, aged 18-20, Male	3.78	3.56	3.22	4.89	2.67	2.89
Cigarette smokers, aged 18-20, Female	3.50	5.00	2.13	4.13	2.75	3.50
Cigarette smokers, aged 21-29, Male	2.89	4.11	3.78	3.67	2.33	4.22
Cigarette smokers, aged 21-29, Female	3.67	4.78	2.44	4.00	3.56	2.56
Cigarette smokers, aged 30-49, Male	2.33	4.22	3.22	3.44	3.33	4.44
Cigarette smokers, aged 30-49, Female	2.88	5.00	2.75	3.25	3.63	3.50
Cigarette smokers, aged 50-69, Male	4.00	3.25	4.13	2.88	4.13	2.63
Cigarette smokers, aged 50-69, Female	5.38	1.63	5.38	2.75	4.25	1.63
Non-smokers, aged 18-20, Male	3.89	4.11	2.22	4.44	3.22	3.11
Non-smokers, aged 18-20, Female	4.56	4.00	2.78	2.78	3.56	3.33
Non-smokers, aged 21-29, Male	3.89	3.89	3.44	3.56	3.56	2.67
Non-smokers, aged 21-29, Female	3.90	4.60	2.40	3.30	3.60	3.20

Non-smokers, aged 30-49, Male	5.20	2.70	3.60	3.50	4.50	1.50
Non-smokers, aged 30-49, Female	4.80	2.90	3.90	3.00	3.70	2.70
Non-smokers, aged 50-69, Male	4.00	2.33	4.89	3.56	4.33	1.89
Non-smokers, aged 50-69, Female	5.20	2.80	4.00	2.80	3.50	2.70

Table 23: Likelihood to smoke disagreement rating by profile group

Pack colour	Colour A	Colour B	Colour C	Colour D	Colour E	Colour F
Contains cigarettes that I would most likely smoke	Bottom 2 box (%)					
Cigarette smokers, aged 18-20, Male	22%	33%	44%	44%	67%	56%
Cigarette smokers, aged 18-20, Female	38%	63%	25%	63%	38%	50%
Cigarette smokers, aged 21-29, Male	11%	44%	22%	44%	11%	56%
Cigarette smokers, aged 21-29, Female	56%	67%	33%	78%	67%	44%
Cigarette smokers, aged 30-49, Male	11%	44%	0%	33%	11%	33%
Cigarette smokers, aged 30-49, Female	25%	75%	25%	38%	25%	50%
Cigarette smokers, aged 50-69, Male	25%	25%	38%	13%	38%	38%
Cigarette smokers, aged 50-69, Female	56%	22%	67%	11%	44%	11%
Non-smokers, aged 18-20, Male	22%	44%	0%	67%	22%	33%
Non-smokers, aged 18-20, Female	33%	44%	11%	33%	33%	22%
Non-smokers, aged 21-29, Male	67%	22%	78%	67%	67%	33%
Non-smokers, aged 21-29, Female	50%	80%	30%	60%	30%	50%
Non-smokers, aged 30-49, Male	40%	10%	60%	10%	40%	10%
Non-smokers, aged 30-49, Female	50%	20%	60%	20%	50%	60%
Non-smokers, aged 50-69, Male	44%	11%	78%	11%	44%	22%
Non-smokers, aged 50-69, Female	50%	20%	40%	20%	40%	20%

Table 24: Quality of cigarettes disagreement rating by profile group

Pack colour	Colour A	Colour B	Colour C	Colour D	Colour E	Colour F
Looks like it contains high quality cigarettes	Bottom 2 box (%)					
Cigarette smokers, aged 18-20, Male	11%	11%	22%	33%	44%	33%
Cigarette smokers, aged 18-20, Female	25%	50%	13%	38%	25%	25%
Cigarette smokers, aged 21-29, Male	11%	44%	11%	33%	11%	67%
Cigarette smokers, aged 21-29, Female	33%	56%	44%	89%	44%	56%
Cigarette smokers, aged 30-49, Male	0%	22%	11%	56%	11%	44%
Cigarette smokers, aged 30-49, Female	25%	63%	13%	38%	13%	50%
Cigarette smokers, aged 50-69, Male	38%	13%	50%	38%	38%	38%
Cigarette smokers, aged 50-69, Female	44%	22%	67%	11%	56%	11%
Non-smokers, aged 18-20, Male	33%	56%	11%	67%	44%	33%
Non-smokers, aged 18-20, Female	11%	56%	11%	33%	33%	44%
Non-smokers, aged 21-29, Male	33%	22%	44%	44%	56%	22%
Non-smokers, aged 21-29, Female	40%	50%	20%	30%	30%	60%
Non-smokers, aged 30-49, Male	50%	20%	70%	0%	30%	10%
Non-smokers, aged 30-49, Female	30%	30%	30%	20%	30%	50%
Non-smokers, aged 50-69, Male	56%	0%	56%	11%	33%	11%
Non-smokers, aged 50-69, Female	60%	0%	40%	10%	40%	0%

Table 25: Ease of quitting disagreement rating by profile group

Pack colour	Colour A	Colour B	Colour C	Colour D	Colour E	Colour F
Is a pack which contains cigarettes that are easy to quit	Bottom 2 box (%)					
Cigarette smokers, aged 18-20, Male	67%	78%	67%	44%	56%	56%
Cigarette smokers, aged 18-20, Female	25%	13%	25%	25%	25%	13%
Cigarette smokers, aged 21-29, Male	33%	0%	22%	22%	44%	22%

Cigarette smokers, aged 21-29, Female	22%	22%	33%	44%	33%	33%
Cigarette smokers, aged 30-49, Male	33%	44%	22%	56%	44%	33%
Cigarette smokers, aged 30-49, Female	38%	25%	38%	50%	38%	38%
Cigarette smokers, aged 50-69, Male	13%	38%	50%	38%	38%	50%
Cigarette smokers, aged 50-69, Female	56%	67%	33%	33%	56%	78%
Non-smokers, aged 18-20, Male	44%	22%	67%	56%	33%	22%
Non-smokers, aged 18-20, Female	44%	22%	22%	33%	33%	22%
Non-smokers, aged 21-29, Male	67%	56%	44%	33%	44%	56%
Non-smokers, aged 21-29, Female	80%	40%	60%	60%	50%	50%
Non-smokers, aged 30-49, Male	20%	20%	30%	30%	30%	50%
Non-smokers, aged 30-49, Female	40%	0%	30%	20%	30%	30%
Non-smokers, aged 50-69, Male	22%	33%	33%	22%	11%	44%
Non-smokers, aged 50-69, Female	40%	0%	30%	20%	30%	10%

Table 26: Harm to health agreement rating by profile group

Pack colour	Colour A	Colour B	Colour C	Colour D	Colour E	Colour F
Is a pack which looks harmful to health	Top 2 box (%)					
Cigarette smokers, aged 18-20, Male	22%	11%	22%	22%	22%	11%
Cigarette smokers, aged 18-20, Female	0%	0%	13%	13%	0%	13%
Cigarette smokers, aged 21-29, Male	33%	22%	33%	11%	44%	11%
Cigarette smokers, aged 21-29, Female	0%	0%	11%	11%	11%	11%
Cigarette smokers, aged 30-49, Male	44%	22%	33%	22%	33%	22%
Cigarette smokers, aged 30-49, Female	13%	25%	25%	25%	38%	13%
Cigarette smokers, aged 50-69, Male	13%	25%	25%	38%	38%	25%
Cigarette smokers, aged 50-69, Female	33%	22%	44%	33%	33%	11%

Non-smokers, aged 18-20, Male	44%	56%	33%	22%	22%	44%
Non-smokers, aged 18-20, Female	44%	22%	33%	44%	56%	33%
Non-smokers, aged 21-29, Male	78%	44%	67%	56%	78%	44%
Non-smokers, aged 21-29, Female	70%	50%	60%	60%	50%	50%
Non-smokers, aged 30-49, Male	30%	20%	10%	30%	30%	30%
Non-smokers, aged 30-49, Female	80%	40%	70%	60%	80%	40%
Non-smokers, aged 50-69, Male	56%	44%	22%	44%	44%	33%
Non-smokers, aged 50-69, Female	60%	50%	30%	50%	40%	30%

Side text warning background and text colour

Ranking was reverse-coded so that 3 is most noticeable and 1 is least noticeable.

Table 27: Mean side text warning background colour ranking by profile group

Side text warning background colour	Yellow background	Black background	White background
Pack colour A	Mean ranking		
Cigarette smokers, aged 18-20, Male	2.44	2.00	1.56
Cigarette smokers, aged 18-20, Female	2.37	1.00	2.62
Cigarette smokers, aged 21-29, Male	2.44	1.33	2.22
Cigarette smokers, aged 21-29, Female	2.00	1.22	2.78
Cigarette smokers, aged 30-49, Male	2.75	1.37	1.87
Cigarette smokers, aged 30-49, Female	2.87	1.50	1.62
Cigarette smokers, aged 50-69, Male	2.43	1.43	2.14
Cigarette smokers, aged 50-69, Female	2.25	1.37	2.37
Non-smokers, aged 18-20, Male	2.56	1.00	2.44
Non-smokers, aged 18-20, Female	2.78	1.00	2.22
Non-smokers, aged 21-29, Male	2.89	1.00	2.11
Non-smokers, aged 21-29, Female	3.00	1.00	2.00
Non-smokers, aged 30-49, Male	2.20	1.70	2.10
Non-smokers, aged 30-49, Female	3.00	1.22	1.78
Non-smokers, aged 50-69, Male	2.67	1.33	2.00
Non-smokers, aged 50-69, Female	2.90	1.30	1.80
Pack colour B	Mean ranking		
Cigarette smokers, aged 18-20, Male	2.00	2.11	1.89
Cigarette smokers, aged 18-20, Female	1.50	2.00	2.50
Cigarette smokers, aged 21-29, Male	1.67	2.11	2.22
Cigarette smokers, aged 21-29, Female	1.33	2.11	2.56
Cigarette smokers, aged 30-49, Male	2.78	1.44	1.78
Cigarette smokers, aged 30-49, Female	2.87	1.75	1.37
Cigarette smokers, aged 50-69, Male	3.00	1.12	1.87

Cigarette smokers, aged 50-69, Female	2.56	1.44	2.00
Non-smokers, aged 18-20, Male	1.11	2.56	2.33
Non-smokers, aged 18-20, Female	1.22	2.44	2.33
Non-smokers, aged 21-29, Male	1.11	2.22	2.67
Non-smokers, aged 21-29, Female	1.60	2.10	2.30
Non-smokers, aged 30-49, Male	2.20	1.60	2.20
Non-smokers, aged 30-49, Female	2.67	1.44	1.89
Non-smokers, aged 50-69, Male	2.50	1.62	1.87
Non-smokers, aged 50-69, Female	3.00	1.30	1.70
Pack colour C	Mean ranking		
Cigarette smokers, aged 18-20, Male	2.33	1.89	1.78
Cigarette smokers, aged 18-20, Female	2.37	1.00	2.62
Cigarette smokers, aged 21-29, Male	2.67	1.44	1.89
Cigarette smokers, aged 21-29, Female	2.11	1.33	2.56
Cigarette smokers, aged 30-49, Male	2.78	1.33	1.89
Cigarette smokers, aged 30-49, Female	2.62	1.62	1.75
Cigarette smokers, aged 50-69, Male	2.87	1.25	1.87
Cigarette smokers, aged 50-69, Female	2.22	1.33	2.44
Non-smokers, aged 18-20, Male	2.44	1.00	2.56
Non-smokers, aged 18-20, Female	2.89	1.00	2.11
Non-smokers, aged 21-29, Male	2.78	1.00	2.22
Non-smokers, aged 21-29, Female	3.00	1.00	2.00
Non-smokers, aged 30-49, Male	2.50	1.40	2.10
Non-smokers, aged 30-49, Female	2.80	1.50	1.70
Non-smokers, aged 50-69, Male	2.67	1.44	1.89
Non-smokers, aged 50-69, Female	3.00	1.20	1.80
Pack colour D	Mean ranking		
Cigarette smokers, aged 18-20, Male	2.89	1.00	2.11
Cigarette smokers, aged 18-20, Female	2.75	1.25	2.00
Cigarette smokers, aged 21-29, Male	2.67	2.00	1.33
Cigarette smokers, aged 21-29, Female	2.11	1.44	2.44
Cigarette smokers, aged 30-49, Male	2.78	1.33	1.89
Cigarette smokers, aged 30-49, Female	2.62	1.50	1.87
Cigarette smokers, aged 50-69, Male	2.87	1.12	2.00
Cigarette smokers, aged 50-69, Female	2.78	1.22	2.00
Non-smokers, aged 18-20, Male	2.89	1.44	1.67
Non-smokers, aged 18-20, Female	2.56	1.44	2.00
Non-smokers, aged 21-29, Male	2.78	1.11	2.11
Non-smokers, aged 21-29, Female	2.70	1.30	2.00
Non-smokers, aged 30-49, Male	2.70	1.40	1.90
Non-smokers, aged 30-49, Female	2.60	1.80	1.60
Non-smokers, aged 50-69, Male	2.67	1.56	1.78
Non-smokers, aged 50-69, Female	2.90	1.40	1.70
Pack colour E	Mean ranking		
Cigarette smokers, aged 18-20, Male	2.67	1.11	2.22
Cigarette smokers, aged 18-20, Female	2.25	1.25	2.50
Cigarette smokers, aged 21-29, Male	2.67	1.33	2.00
Cigarette smokers, aged 21-29, Female	2.00	1.56	2.44
Cigarette smokers, aged 30-49, Male	2.78	1.33	1.89

Cigarette smokers, aged 30-49, Female	2.87	1.25	1.87
Cigarette smokers, aged 50-69, Male	2.87	1.12	2.00
Cigarette smokers, aged 50-69, Female	2.11	1.44	2.44
Non-smokers, aged 18-20, Male	2.56	1.00	2.44
Non-smokers, aged 18-20, Female	2.22	1.44	2.33
Non-smokers, aged 21-29, Male	2.67	1.11	2.22
Non-smokers, aged 21-29, Female	2.70	1.10	2.20
Non-smokers, aged 30-49, Male	2.70	1.30	2.00
Non-smokers, aged 30-49, Female	2.90	1.30	1.80
Non-smokers, aged 50-69, Male	2.67	1.56	1.78
Non-smokers, aged 50-69, Female	2.90	1.40	1.70
Pack colour F	Mean ranking		
Cigarette smokers, aged 18-20, Male	1.56	2.22	2.22
Cigarette smokers, aged 18-20, Female	1.37	2.12	2.50
Cigarette smokers, aged 21-29, Male	1.78	2.33	1.89
Cigarette smokers, aged 21-29, Female	1.22	2.44	2.33
Cigarette smokers, aged 30-49, Male	2.89	1.33	1.78
Cigarette smokers, aged 30-49, Female	2.12	1.62	2.25
Cigarette smokers, aged 50-69, Male	2.62	1.50	1.87
Cigarette smokers, aged 50-69, Female	1.89	2.00	2.11
Non-smokers, aged 18-20, Male	1.33	2.00	2.67
Non-smokers, aged 18-20, Female	2.11	2.11	1.78
Non-smokers, aged 21-29, Male	1.44	2.56	2.00
Non-smokers, aged 21-29, Female	2.10	1.90	2.00
Non-smokers, aged 30-49, Male	2.20	1.80	2.00
Non-smokers, aged 30-49, Female	2.40	1.90	1.70
Non-smokers, aged 50-69, Male	2.33	1.56	2.11
Non-smokers, aged 50-69, Female	2.80	1.60	1.60