



GfK bluemoon

Market Research to Determine Effective Plain Packaging of Tobacco Products

Report

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1 EXECUTIVE SUMMARY

1.1 Background

Based on recommendations by the Preventative Health Taskforce, the Australian Government announced on 29 April 2010 that it would introduce legislation to ensure all cigarettes will be sold in plain packaging by 1 July 2012. Australia will be the first country in the world to mandate plain packaging.

The objectives of plain packaging as announced by the Australian Government are to:

- reduce the attractiveness and appeal of tobacco products to consumers, particularly young people;
- reduce the ability of the tobacco product to mislead consumers about the harms of smoking; and
- increase the noticeability and effectiveness of mandated health warnings.

The legislation 'will restrict or prohibit tobacco industry logos, brand imagery, colours and promotional text, other than brand and product names in a standard colour, position, font style and size'.

The Government also announced that it will develop and test package designs that will make cigarettes less appealing, particularly to young people, and graphic warnings will be updated and expanded. An Expert Advisory Group was established to provide advice to the Department of Health and Ageing (the Department) on research that should be undertaken during the development and testing of plain packs. The Group includes behavioural and marketing research experts from Australia, New Zealand and Canada who are published internationally on plain packaging of tobacco products. The group provided the Department with advice that informed the research requirements and design for plain packaging research. GfK Blue Moon was commissioned to undertake the research.

1.2 Research Objectives

The overall aim of the market research was to assess the potential plain packaging design elements to determine which plain packaging options were optimal to achieve the policy objectives. More specifically, the research sought to identify the optimal combination of:

- candidate colours for plain packaging;
- font and font size for brand name; and
- graphic health warning design (size and layout).

In summary, the research sought to identify one plain packaging design (colour, font type, font size) that would minimise appeal and attractiveness, whilst maximising perceived harm and the noticeability of the graphic health warnings.

1.3 Methodology

The Expert Advisory Group suggested conducting five separate studies to address the necessary research requirements. Two extra studies, Study 5 Online and Study 6 Online, were added to address additional objectives that emerged throughout the course of the research program. The overall research program involved an iterative process, with the objectives of the next study reviewed, and if necessary, updated on conclusion of the preceding one. Study 2 was the first study conducted and findings informed Study 3 and 4, which informed Study 5 Face-to-face and Study 5 Online, which in turn informed Study 6 Online. The exception to this was Study 1, as the findings from this research were not needed to inform the subsequent studies. The research program ran from December 2010 to March 2011.

The research design and objectives for each of the studies is outlined in the table below.

Study	Description	Objectives	Methodology	Timing
Study 1	Consumer perceptions of branding appeal, attractiveness and smoking harm	To understand the impact of current brand and packaging design (brand, colour, finish, pack size) on appeal, attractiveness and perceived harm amongst current smokers.	Eighteen face-to-face group clinics including a self-completion questionnaire and group discussion among (n=122) at least weekly smokers aged 18-64 years old.	2nd – 7th February 2011
Study 2	Consumer perceptions of plain pack colour	To identify a shortlist of potential plain packaging colours.	Online survey among (n=409) at least weekly smokers aged 18-65 years old.	13th December to 23rd December 2010
Study 3	Legibility of brand names on plain packs for retailers.	To identify the optimal combination of design elements (font size, font colour) for legibility and ease of identification amongst potential retailers.	Face-to-face interviews among (n=10) respondents aged 40 years old and older.	17th – 21st January 2011
Study 4	Consumer perceptions of plain pack colour with brand elements	To shortlist plain packaging colours that minimised brand impact	Online survey among (n=455) at least weekly smokers aged 18-64 years old.	19th January - 26th January 2011
Study 5 (Face-to-face)	Consumer appraisal of plain packs with new health warnings using prototype packs.	To identify the optimal plain packaging designs in combination with the new front of pack graphic health warnings.	Twenty face-to-face group clinics including a self-completion questionnaire and short group discussion among (n=193) at least weekly smokers aged 16-64 years old.	14th February and 22nd February 2011

Study	Description	Objectives	Methodology	Timing
Study 5 (Online)	Consumer appraisal of different graphic health warning sizes and layouts on pack.	To identify the optimal plain packaging designs in combination with the new front of pack graphic health warnings.	Online survey among (n=409) at least weekly smokers aged 18-64 years old.	18th February to 23rd February 2011
Study 6 (Online)	Consumer appraisal of different graphic health warning sizes and layouts on pack - Testing 75% GHW layout	To identify the optimal plain packaging designs in combination with the new front of pack graphic health warnings.	Online survey among (n=205) at least weekly smokers aged 18-64 years old.	18th March to 23rd March 2011

1.4 Study 1: Consumer perceptions of branding appeal, attractiveness and smoking harm

Study 1 involved a mixed methodological approach of quantitative and qualitative research and was conducted from the 2nd February to 7th February 2011 in Sydney and Melbourne. The research involved group clinics run with n=122 smokers aged 18-64 years old who smoked manufactured cigarettes at least weekly. Respondents were pre-recruited to attend group clinics where they completed a self-completion questionnaire and then participated in a structured group discussion.

The objective of the research was to confirm research findings about the impact of tobacco branding among an Australian sample. There exists a wealth of research and literature that evidences the impact of tobacco branding on smokers which have guided the plain packaging initiative.¹ As such, this study serves to provide additional evidence in an Australian context. More specifically the research explored the different perceptions of the common cigarette brands and the impact of these perceptions on brand appeal among Australian smokers. The methodology sought to understand the impact of current brand and packaging design (brand, colour, finish, pack size) on appeal, attractiveness and perceived harm among current Australian smokers.

The research confirms the hypothesis that Australian smokers do have differing perceptions of the common cigarette brands. These perceptions are influenced by broad social and cultural factors, branding and pack design. Peer influence, previous advertising and social norms are factors that contribute to a social and cultural context for smokers' perceptions of different cigarette brands. However, consumers also have strong associations regarding brand appeal, attractiveness and perceived harm due to brand name and packaging. Pack design, size and cigarette type further contribute to smokers' perceptions of cigarette quality, nicotine content, and cigarettes being 'foreign' or 'local', premium or budget, masculine or feminine. These associations are commonly used by smokers to differentiate between brands and variants.

Brands which were seen to be more 'masculine', such as Winfield Red and Camel (soft pack) were also seen to be more 'tough' and 'serious' and closer aligned to heavy or stronger cigarettes. They

¹ Existing research includes that found in the reports of the Preventative Health Taskforce at <http://www.preventativehealth.org.au/>

were also perceived as even more harmful to health and harder to quit. The reverse was true for cigarettes perceived to be more 'feminine', such as Alpine Original or Longbeach. That said, there was evidence that although different brands can be perceived as 'more harmful to health', generally smokers see all cigarettes as being 'harmful'. Brands which were seen to be smoked by 'budget' smokers, such as Longbeach were considered less socially appealing and to be lower quality cigarettes. Brands associated with smokers who are 'well off' or 'sophisticated' like Benson & Hedges were seen to be more socially appealing, to have a more attractive pack and to be higher quality cigarettes. The evidence also suggests that when a smoker considered a brand to be more socially appealing (a brand they would like to be seen smoking), the brand was also seen to have more attractive packaging and contain higher quality cigarettes.

Pack design also created strong associations relating to levels of appeal. The two strongest associations were in relation to the colours and specific branding used across cigarette brands and specific variants, as well as the pack style in relation to size and opening mechanism. As with responses to the specific cigarette brands tested, selection criteria emerged by which respondents formed their associations with various cigarette packs. These included associations with masculine and feminine smokers, 'practicality', and 'novelty'.

There were high levels of differentiation between the various cigarette stick types. White tipped cigarettes were seen to have a degree of sophistication and were linked to premium brands such as Davidoff or Cartier. At the same time, personal experience and observed smoking behaviours of others led respondents to also associate white tips with menthol, cheap foreign versions of local brands, and budget cigarettes, as well as with female or effeminate smokers. Cork tips, though not necessarily attractive in terms of design, were more appealing as these were the most commonly smoked cigarette sticks. As such, smokers were more familiar with these types of stick which were seen as 'everyday' or 'standard'. Slim stick cigarettes were considered niche, highly feminine or effeminate, and were only desirable for a minority of young female respondents.

1.5 **Study 2: Consumer perceptions of plain pack colour**

Study 2 comprised quantitative research conducted from the 13th December to 23rd December 2010. Online surveys were conducted among n=409 Australians aged 18-65 years old who were current smokers of manufactured cigarettes, smoking at least every week.

The objective of the research was to identify a shortlist of potential plain packaging colours. More specifically the research sought to identify a pack colour that was the least appealing, contained cigarettes that were lowest quality, was perceived to be most harmful to health and perceived as being the hardest to quit. The Department recommended eight different colours for testing. Eight different mock up pack images were developed for testing in the online survey. Pack images were identical except for colour and all featured a mock brand name 'Mayfair' to remove brand influence from colour evaluations.

In the survey, a technique referred to as Maximum Difference Scaling or 'Best - Worst' was used to administer the pack testing. Respondents were shown four different pack images at a time and asked

to select the pack they thought performed 'best' or 'worst' on a key dimension, such as appeal. This was repeated for a different subset of packs until data was collected to evaluate all eight packs for that dimension. This process was repeated for all key dimensions of appeal, quality of cigarettes, perceived harm to health and ease of quitting.

The research found that darker colours were seen to contain cigarettes which were more 'harmful to health' and 'harder to quit'. Conversely, lighter colours were seen to be less 'harmful to health' and 'easier to quit'.

The results from the pack evaluation comparison suggested that the Dark Brown colour be taken through to the next stage of research as it best met the plain packaging selection criteria. The Dark Brown colour pack was considered:

- the least appealing pack overall;
- the pack which looked like it contained the lowest quality cigarettes;
- the pack which looked like it contained cigarettes which were most harmful to health; and
- the pack which looked like it contained cigarettes which were the hardest to quit.

Although the Caramel Brown and Lime Green packs also performed strongly on the selection criteria in terms of being lower in appeal, they did not perform consistently in meeting all the desired objectives and as such were not appropriate candidates.

Based on the findings from Study 2, the Dark Brown colour was taken into the next stages of research. The Department also requested that a lighter brown colour on which a black coloured font could be used for brand name be included in subsequent rounds of testing. This would also address a secondary objective of understanding the impact of a dark background pack colour in terms of graphic health warning noticeability.

1.6 Study 3: Legibility of brand names on plain packs for retailers

Study 3 comprised quantitative research conducted from the 17th January to 21st January 2011 in Sydney. Face-to-face administered surveys, involving a series of readability tests and short discussions were conducted among n=10 respondents aged 40 years old and above. Of these, seven worked in a retail environment and the others in a customer facing environment. Four respondents from culturally and linguistically diverse (CALD) backgrounds were included within the sample to ensure representation of retailers from different cultural backgrounds.

The objective of Study 3 was to determine what font style and font size would be legible to potential retailers on two different pack colour candidates.

To test legibility, different stimuli were used including 'eyeboards' (boards with brand names in decreasing font sizes) and mock up packs (packs featuring potential brand names in different font

sizes). Tests were conducted with each respondent to identify the smallest font size they could read at a one metre distance. The stimulus tested Dark Brown and Mustard (a lighter brown).

Taking into account both legibility tests (eyeboard tests and mock up pack tests), it was determined that a font size of at least 14pt font (based on an Arial or Lucida Sans font style) should be considered for the brand name on plain packaging. Observations and spontaneous comments by respondents suggested that they were more comfortable when reading a font size larger than the smallest one they 'could read'. However, in actual stores, retailers will most likely organise their shelves or drawers containing cigarettes in a systematic way so they can locate the different brands. Shelves and drawers are also likely to have price and product ticketing information that will aid location.

Although the results of the tests do not necessarily show a substantial difference between legibility of the different font type styles, there was a general perception among respondents that the Lucida Sans font style was slightly more readable and as such could be the font style used on the final test packs.

The varying preference and perceptions of the pack colours tested suggested that there may be a further need to test the final colour candidates for perceptions, associations and brand similarity.

Based on the findings and recommendations from Study 3, the Department used 14pt font size in Lucida Sans font style for the mock up packs tested in Study 5 Face-to-face. It was also decided that consumer perceptions of the final plain packaging colours should be investigated further in terms of colour associations and brand similarity to understand what people associate with each of the plain packaging colours. This would be explored in Study 5 Face-to-face.

1.7 **Study 4: Consumer perceptions of plain pack colour with brand elements**

Study 4 comprised quantitative research conducted from the 19th January to 26th January 2011. Online surveys were conducted among n=455 Australians aged 18-64 years old who were currently smoking manufactured cigarettes at least every week.

The overriding objectives of Study 4 were to:

- identify the pack colour which was most unappealing in terms of the plain packaging objectives (between Dark Brown and Mustard (a lighter brown)) on key dimensions of appeal, harm to health, ease of quitting, quality of cigarettes and likelihood to smoke; and
- measure the impact of brand on perceptions of plain pack colour.

As there were also some concerns raised by both the GfK Blue Moon research team and the Department that the Dark Brown colour appeared to be more 'olive' when viewed on a computer screen, an additional objective was added to Study 4. This was to identify what colour respondents actually saw when shown the pack colours online. Another objective that emerged was a need to understand if there was any difference in noticeability of the graphic health warning (GHW) when using a darker pack background, such as the Dark Brown.



The survey tested two plain packaging candidates, the Dark Brown colour and the Mustard colour. For each dimension, respondents were asked to select the pack they felt performed 'best' and 'worst' on the key dimensions. Mock up pack images were created for each colour featuring five different brands. This was required to identify whether the appeal of the colour tested could be generalised across known brands. However, each respondent was asked to evaluate two brands only to reduce the potential for respondent fatigue.

Overall, the Dark Brown colour best met the criteria of the research objectives as it was the pack colour that was seen to be least appealing overall, contain cigarettes that are harder to quit, contain cigarettes that have the highest harm to health, contain lower quality cigarettes and contain cigarettes that smokers would be less likely to consider smoking. There was also no evidence to suggest that brand name had any significant impact on the perceptions of the plain packaging colour. The Dark Brown colour performed best in meeting the desired criteria, regardless of which brand was on the pack. There was also no evidence to suggest that the darker plain packaging colour was distracting from the noticeability of the GHW.

The research also found that the majority of respondents perceived that they were actually viewing a 'Dark Olive' colour on screen with only a minority viewing, and therefore evaluating, a 'Dark Brown' colour. There was further support to exclude the Mustard colour from further testing in that it could be perceived as being 'Gold' in colour which not only carries positive perceptions of being premium (as seen in Study 1) but also a similarity to existing cigarette variants on the market, such as Benson & Hedges and Dunhill.

As the Dark Brown best met the selection criteria, both in comparison to the lighter Mustard pack and across the brands tested, the research supported taking the Dark Brown colour to final testing. However, as this study indicated that respondents were evaluating a 'Dark Olive' pack rather than a 'Dark Brown' pack, further testing of different shades of brown in a print format was recommended.

Based on the findings and recommendations from Study 4 and Study 3, for Study 5 Face-to-face the Department decided to test mock up packs featuring three different variations of brown:

- the original Dark Brown;
- a Dark Olive to match the screen rendering; and
- a Medium Olive.

The packs would be printed using off-set printing to ensure the colour quality was close to final prototype quality and appearance.

1.8 Study 5 Face-to-face: Consumer appraisal of plain packs with new health warnings using prototype packs

Study 5 Face-to-face (F2F) involved a mixed methodological approach of quantitative and qualitative research conducted from the 14th February to 22nd February 2011 in Sydney and Melbourne. The research involved group clinics run with n=193 smokers aged 16-64 years old who smoked manufactured cigarettes at least weekly. Respondents were pre-recruited to attend group clinics where they completed a self-completion questionnaire lead by a moderator, and then participated in a short qualitative group discussion.

There were two key objectives to Study 5 Face-to-Face - Consumer appraisal of plain packs with new health warnings using prototype packs:

- to identify the exact shade of background pack colour to be used for plain packs (in terms of being less appealing, low quality of cigarettes, cigarettes that would be harder to quit, minimal positive associations or similarity to other brands and minimal detractor from GHW noticeability); and
- to identify the graphic health warning (GHW) size on front of pack that would maximise message effectiveness and reduce appeal (in terms of standout of GHW, ease of understanding message, ability to prompt a reaction to 'stop and think', convey seriousness of health risks, overall pack appeal and social appeal).

The Department commissioned a commercial print company to create nine mock up pack prototypes for testing. There were packs made in Medium Olive, Dark Olive (colour perceived from Online testing) and Dark Brown (original Dark Brown). For each colour, a pack with a 30% GHW, 60% GHW and 75% GHW was developed. Each pack featured the 'Lung Cancer' GHW.

The qualitative research found that all three colours tested were seen to be unappealing. That said, there were some positive associations in the way the Medium Olive and Dark Brown were described. The only colour which did not carry any positive associations from the qualitative research was the Dark Olive colour. In the quantitative research, the Medium Olive did not meet the selection criteria as it was seen to be more appealing, less harmful to health and contain higher quality cigarettes. Although the Dark Brown colour best met the selection criteria when tested quantitatively, the qualitative research found that the colour carried some positive connotations of being 'classy', 'upmarket' and some describing the colour as 'chocolate' and 'rich'.

Compared to the two other colours tested, the Dark Olive was not perceived to be the most appealing nor the least appealing colour. The qualitative research found that it did not elicit any positive associations. There was no quantitative evidence to suggest that the different colours made the GHW more, or less noticeable.

As such, the Dark Olive colour was recommended as the final plain packaging colour. It was seen to be the least appealing, have the lowest quality cigarettes and highest perceived harm to health for all earlier rounds of online testing (under the label 'Dark Brown'). The Dark Olive colour also carries

negative connotations of 'death', 'dirty' and 'tar', albeit to a lower degree than when directly compared to the Dark Brown. It was not seen as having any similarity to any current brands on the market and was perceived as a difficult colour to define and name, thus it did not elicit any positive associations and has limited potential to do so.

The results from the quantitative and qualitative research components demonstrated that increasing the size of the GHW on front of pack increased stand-out and impact whilst decreasing appeal.

The 75% GHW pack performed the best in terms of the research objectives of this study. Although a 60% GHW scored more strongly than the 30% on the key measures, there were larger (statistically significant) shifts observed for the 75% GHW.

1.9 Study 5 Online: Consumer appraisal of different graphic health warning sizes and layouts on pack

Study 5 Online comprised quantitative research conducted from the 18th February to 23rd February 2011. Online surveys were conducted among n=409 Australians aged 18-64 years old who were current smokers, smoking manufactured cigarettes at least every week.

The objective of Study 5 Online was to identify one graphic health warning size and layout on the front of pack that would maximise the noticeability and impact of the GHW on cigarette packaging. More specifically, to identify the GHW that was most noticeable, easiest to understand, had the strongest ability to prompt a reaction to 'stop and think' and the strongest ability to convey the seriousness of health risks.

A total of eight different pack images were developed for testing using two GHWs, 'Lung Cancer' ("Smoking causes Lung Cancer") and 'Baby' ("Smoking harms unborn babies").² Respondents were shown four different front of pack designs in a Dark Olive featuring a 30% GHW, a 60% GHW, a 75% GHW and a split 60% GHW.³ Respondents' pack images featured either the 'Lung Cancer' GHW or the 'Baby' GHW.

The pack with the 75% GHW on the front of pack outperformed all other packs on all measures tested. It was seen to be the pack which had the highest share of GHW component noticeability on pack, the GHW stood out the most, the GHW message was easiest to understand, the strongest impact to make 'you stop and think', and conveyed the health risks to be most serious. The second best performing pack on the above measures was the 60% GHW which performed significantly better than the 30% GHW pack on most selection criteria.

The 30% pack performed the worst on the selection criteria along with the 60% split GHW pack. Although the 60% split GHW was more noticeable than the 30% GHW, there were no observable

² These images for both the GHW are subject to copyright. The 'Baby' image is @ Commonwealth of Australia. The 'Lung Cancer' image (Bryan Lee Curtis image) is copyright owned by V. Jane Windsor / St. Petersburg Times (Fla.), United States.

³ Note at this stage it has been established that the colour 'Dark Brown' used in earlier online studies (Study 2 and 4) is being rendered online as 'Dark Olive'.

differences in measures of message comprehension or engagement. There was qualitative evidence (from Study 5 Face-to-face) that splitting the GHW reduces the overall visual impact and message comprehension of the warning. The split layout design was not recommended. This was because it did not provide further improvement to 'message effectiveness' or 'message impact' when compared to the current 30% GHW design.

The 75% GHW pack lead the other GHW designs by a large margin. There was evidence to suggest that the larger image on the 75% pack dominated the written warning, while the 60% pack more equally shared noticeability of image and written warning. As such, selecting the larger GHW design with the larger image, such as the 75% GHW size on the front of pack, has the greatest potential to maximise noticeability and impact on pack.

1.10 **Study 6 Online: Consumer appraisal of different graphic health warning sizes and layouts on pack - Testing 75% Split GHW layout**

Study 6 Online followed on from the results of Study 5 Online. Based on the results from the Plain packaging research, the Department decided to use a 75% GHW, however, research to date had not tested a split 75% GHW, front of pack. This study was designed to replicate Study 5 Online to ensure comparability with the results from respondents in Study 5 Online that tested the 'Baby' GHW tested in Study 6 Online. Fieldwork was conducted from the 18th March to 23rd March 2011.

Online surveys were conducted among n=205 Australians aged 18-64 years old who were current smokers, smoking manufactured cigarettes at least every week.

The objective of Study 6 Online was primarily to compare the front of pack split 75% GHW to a 75% non-split GHW on the above key measures. However, to ensure consistency and comparability with Study 5 Online results, the overall objectives have been broadened to cover 30%, 60% and the 75% and split 75% GHW. These objectives were to identify the GHW design that maximised noticeability (stand-out), message comprehension and impact.

A total of four different pack images were developed for testing using the 'Baby' ("Smoking harms unborn babies") GHW.⁴ Respondents were shown four different pack designs in a Dark Olive featuring a 30% GHW, a 60% GHW, a 75% GHW and a split 75% GHW.⁵

To provide a more comprehensive evaluation of the different front of pack GHW designs, analysis was conducted on data collected for Study 6 Online and data for the 60% split GHW design by those who evaluated the 'Baby' GHW from Study 5 Online.

⁴ The 'Baby' image is subject to copyright, @Commonwealth of Australia.

⁵ Note at this stage it has been established that the colour 'Dark Brown' used in earlier online studies (Study 2 and 4) is being rendered online as 'Dark Olive' from findings in Study 4 and Study 5 Face-to-face.



The pack with the 75% (non-split) GHW outperformed the other GHW design layouts on all measures tested and resulted in stronger message cut through and impact than the split 75% design. The split 75% GHW performed similarly to the 60% GHW.

Taking into account the results from both the Study 6 Online and the Study 5 Online research, the research provided strong evidence that a larger front of pack GHW results in higher GHW noticeability, message cut through and impact. A non-split GHW results in higher GHW noticeability, message cut through and impact for a given GHW coverage. A split GHW also results in lower GHW image stand-out.

It is recommended if the Department decides to use a GHW with 75% coverage on the front of packs, it should use a non-split GHW as this will maximise the stand-out and message comprehension impact of the GHW.

1.11 Summary of Findings and Recommendations

Candidate Colours for Plain Packaging

The findings from the overall research program suggest that a Dark Olive colour is the best candidate for plain packaging. It is the colour that performed better than other test colours in online testing in terms of being less appealing, containing cigarettes that were perceived to be more harmful to health, lower quality, and harder to quit. Although it did not meet the objectives as well as the 'Dark Brown' pack when comparing actual print prototype packs (in terms of being least appealing, higher perceived harm, lowest quality cigarettes, hardest to quit smoking), it did not elicit any positive associations as did the 'Dark Brown' colour. It does not have any similarity to any existing brands and carries the negative associations of darker colour packaging. As such, we recommend that, if plain packaging is introduced, Dark Olive is used as the plain packaging colour.

Font and Font size for Brand name

The findings from the research program support the use of at least 14pt font (based on an Arial or Lucida Sans font style) for brand name. In regards to font type styles, the Lucida Sans font type was seen to be easier to read than Arial and should be considered for plain packaging design.

Graphic Health Warning Design (size and layout)

The research suggests that a larger front of pack GHW has the potential to deliver a more effective message in that it is more noticeable, easier to understand and has a stronger ability to prompt a reaction to 'stop and think' and convey the seriousness of health risks. In addition, it can reduce the overall appeal and quality perceptions of cigarette packaging. Although a 60% GHW performed better than the 30% GHW on selection criteria, a GHW with 75% front of pack coverage performed strongest on the selection criteria. A split layout has the weakest ability to deliver an effective message and performed similarly to a 30% GHW for a 60% split GHW and to a 60% GHW for a 75% split GHW.



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This research recommends a larger non-split GHW, on front of pack. A 60% GHW improves key dimensions of stand-out, comprehension and impact, This can, however, be further improved using a 75% GHW. Overall a 75% GHW elicits the highest noticeability, message comprehension and dissuasive effect on appeal.



2 BACKGROUND

2.1 Overview

In 2009, the Preventative Health Taskforce – which brought together Australia’s leading tobacco and public health experts – recommended plain packaging for tobacco products. The Taskforce concluded, based on an examination of all the research, that there is sufficient evidence of the public health benefits to implement the measure. Their report, *Australia: The Healthiest Country by 2020* was presented to the Australian Government in June 2009.

The Government announced on 29 April 2010 that it would introduce legislation to ensure all cigarettes will be sold in plain packaging by 1 July 2012. The Government also announced that it will develop and test packaging designs that will make cigarettes less appealing, particularly to young people, and that graphic warnings will be updated and expanded. Australia will be the first country in the world to mandate plain packaging.

Existing Research

There is a body of existing peer-reviewed experimental research on plain packaging of tobacco products. This research was considered by the Preventative Health Taskforce when formulating their recommendation on plain packaging and a list of references can be found in their report. A summary of this report was provided to GfK Blue Moon before developing the approach to the market testing research covered in this document.

Expert Advisory Group

An Expert Advisory Group was established to provide advice to the Department of Health and Ageing (the Department) on research that should be undertaken during the development and testing of plain packaging. The Group includes marketing and behavioural research experts from Australia, New Zealand and Canada, including researchers who are published internationally on plain packaging of tobacco products. The group provided the Department with advice that informed the research requirements and design. This group provided assistance to GfK Blue Moon on research design throughout the research process.

Members of the Expert Advisory Group

Professor Ron Borland PhD
Nigel Gray Distinguished Fellow in Cancer Prevention
VicHealth Centre for Tobacco Control
Cancer Council Victoria



Professor Mike Daube
Professor of Health Policy
Curtin University

Professor Mark Davison
Professor of Intellectual Property
Monash University

Assistant Professor David Hammond
Department of Health Studies
University of Waterloo, Canada

Professor Janet Hoek
Department of Marketing
School of Business, University of Otago, New Zealand

Mr Jonathan Liberman
Senior Adviser, International Legal Policy
Cancer Council Victoria

Ms Caroline Miller
General Manager Cancer Control
Cancer Council South Australia

Associate Professor Andrew D Mitchell
Melbourne Law School
The University of Melbourne

Professor Melanie Wakefield PhD
Director & NHMRC Principal Research Fellow
Centre for Behavioural Research in Cancer
Cancer Council Victoria

The plain packaging research was commissioned under a Deed of Standing Offer (number C197091001) between GfK Blue Moon and the Department. This Deed was entered into to undertake services for market testing of potential new health warnings and information messages for tobacco product packaging, and contained provision for possible commissioning of research to assist in informing plain packaging of tobacco products.

The research on health warnings and information messages was conducted over three distinct phases:

- Phase One (completed) – testing new information messages on tobacco constituents and emissions that could replace the current single message required on the side of tobacco packaging;



- Phase Two – testing new / refined graphic images, warnings statements and more detailed explanatory messages that could be used on the front and back of tobacco packaging. Phase Two was inclusive of the research requirements for consumer reaction to plain packaging; and
- Phase Three – testing prototype tobacco packaging carrying new / refined graphics and health messages from phase one and two that could potentially appear on the front, back and side of tobacco packaging.

This document specifically addresses the plain packaging element of Phase Two of this broader market research program.



3 RESEARCH OBJECTIVES

3.1 Policy Objectives

The objectives of plain packaging as announced by the Australian Government are to:

- reduce the attractiveness and appeal of tobacco products to consumers, particularly young people;
- reduce the ability of the tobacco products to mislead consumers about the harms of smoking; and
- increase the noticeability and effectiveness of mandated health warnings.

The legislation 'will restrict or prohibit tobacco industry logos, brand imagery, colours and promotional text, other than brand and product names in a standard colour, position, font style and size'.

3.2 Research Objectives

The overall aim of the market research was to assess the potential plain packaging design elements to determine which plain packaging options were optimal to achieve the policy objectives. More specifically, the research sought to identify the optimal combination of:

- candidate colours for plain packaging;
- level of glossiness (glossy vs. matt finish) on plain packs; and
- font and font size for brand name.

In summary, the research sought to identify one plain packaging design (colour, font type, font size) that would minimise appeal and attractiveness, whilst maximising perceived harm and the noticeability of the graphic health warnings. During the research, it was decided by the Department that a matt finish would be used for plain packaging. As such, this objective was not covered in the research program.

An additional objective that emerged during the research process was the need to identify an optimal graphic health warning (GHW) in terms of size and layout.



4 METHODOLOGY

4.1 Overview of Research Approach

The research program was designed to identify the optimal combination of design elements for plain packaging. The Expert Advisory Group suggested five separate studies to be conducted to address the necessary research requirements. Two extra studies, Study 5 Online and Study 6 Online, were added to address additional objectives that emerged throughout the course of the research program. The overall research program involved an iterative process, with the objectives of the next study reviewed, and if necessary, updated on conclusion of the preceding one. Study 2 was the first study conducted and findings informed Study 3 and 4, which informed Study 5 Face-to-face and Study 5 Online, which in turn informed Study 6 Online. The exception to this was Study 1, as the findings from this research were not needed to inform the subsequent studies. The research program ran from December 2010 to March 2011.

The research design and objectives for each of the studies is outlined in the table below. This table summarises the final objectives of each study that emerged from the iterative approach adopted through the research program. Details on the objectives and methodology for each study can be found within the relevant specific sections of this document.

Table 1: Summary of Study Approach

Study	Description	Objectives	Methodology
Study 1	Consumer perceptions of branding appeal, attractiveness and smoking harm	To understand the impact of current brand and packaging design (brand, colour, finish, pack size) on appeal, attractiveness and perceived harm amongst current smokers.	Eighteen face-to-face group clinics including a self-completion questionnaire and group discussion among (n=122) at least weekly smokers aged 18-64 years old.
Study 2	Consumer perceptions of plain pack colour	To identify a shortlist of potential plain packaging colours.	Online survey among (n=409) at least weekly smokers aged 18-65 years old.
Study 3	Legibility of brand names on plain packs for retailers.	To identify the optimal combination of design elements (font size, font colour) for legibility and ease of identification amongst potential retailers.	Face-to-face interviews with (n=10) respondents aged 40 years old and older.
Study 4	Consumer perceptions of plain pack colour with brand elements	To shortlist plain packaging colours that minimised brand impact	Online survey among (n=455) at least weekly smokers aged 18-64 years old.

Study	Description	Objectives	Methodology
Study 5 (Face-to-face)	Consumer appraisal of plain packs with new health warnings using prototype packs.	To identify the optimal plain packaging designs in combination with the new front of pack graphic health warnings.	Twenty face-to-face group clinics including a self-completion questionnaire and short group discussion among (n=193) at least weekly smokers aged 16-64 years old.
Study 5 (Online)	Consumer appraisal of different graphic health warning sizes and layouts on pack.	To identify the optimal plain packaging designs in combination with the new front of pack graphic health warnings.	Online survey among (n=409) at least weekly smokers aged 18-64 years old.
Study 6 (Online)	Consumer appraisal of different graphic health warning sizes and layouts on pack - Testing 75% GHW layout	To identify the optimal plain packaging designs in combination with the new front of pack graphic health warnings.	Online survey among (n=205) at least weekly smokers aged 18-64 years old.

4.2 Research Considerations

There were a number of considerations that informed our proposed design and ongoing development of the Phase Two plain packaging research program.

Timing

Due to time considerations, only a short timeframe was available for the conduct of each individual study in order for the results to inform and guide the stimulus materials for the next.⁶ Given that the results from Study 1 were not required to develop the stimulus material for the remaining studies, Study 1 was run in parallel with Study 5 to reduce the overall timeline for the project. The research program commenced with Study 2.

Inclusion of Younger Respondents

Whilst it was recognised that there would be value in including 14-15 year olds in the study, this age group was excluded from the research due to difficulties associated with conducting research with tobacco products among young adults. Previous experiences have shown that despite the objectives of the research, such exercises can be viewed by some market research companies who provide online research panels as ‘promoting’ or ‘marketing’ tobacco products to children. As a result, it was determined in conjunction with the Department and the Expert Advisory Group, that the research not include the age group of 14-15 year olds. Similarly, 16-17 year olds were also excluded from all studies

⁶ The Department required the results and recommendations from all studies within the research program by the first week of March 2011. The research was commissioned in late November 2010.

with the exception of Study 5 Face-to-face due to likely difficulties in recruitment. In addition to this group being a hard-to-reach audience, under the AMSRS ethical guidelines, it is also a requirement that parental approval is obtained when surveying 16-17 year olds about sensitive topics such as those related to tobacco and smoking. This pre-approval process can result in refusals from parents to participate or issues with the honesty of responses (for example, respondents claiming 'not to smoke' even if they are smokers, if parents are present.)

Inclusion of 'Roll your own (RYO)' and other Tobacco Products

Although the research brief requested testing of less common tobacco products such as RYO tobacco and cigars, these were not included in this particular phase of the research. These products would be tested in subsequent stages of the research. As such, in the interests of ensuring the key research pieces were conducted within the timeframe required, the research focused primarily on manufactured cigarette pack testing.

Stimulus

A graphic designer was commissioned to create the artwork and development of image stimulus used in the testing. This included image renders of plain packaging stimulus (Study 2, Study 4, Study 5 Online) and plain packaging pack wraps to create mock up packs for Study 3. The stimulus for Study 3 was printed by a commercial digital printing company using digital printing.

Study 5 Face-to-face required actual prototype packs to be developed. These were created by a printing company commissioned directly by the Department. The prototype packs were printed using offset printing.

Colour Testing

As the research required respondents to evaluate different colours, those who were colour blind or had trouble seeing were screened out from participating in the research.

Colour Matching – Testing colours online

Two possible issues in using an online methodology to test colours were identified during the planning for the research. These were:

- firstly, colours shown online are different from printed colours as colours displayed on a monitor are based on RGB colours whilst print colours use CMYK colours, resulting in colours displayed on a computer monitor not matching print exactly; and
- secondly, the colour, brightness and contrast settings on computer monitors can vary, meaning it is difficult to ensure that respondents are viewing the exact same shades of colour on screen.

To minimise the impact of the first of these issues, the graphic designer matched the colour specifications provided by the Department to the online colours. Although the best attempt was made



to replicate the colours, it was found during the research program that the observed colour was not matching the intended colour due to the fact that colours viewed online require a light source which makes darker colours difficult to replicate. As a result, Study 5 Face-to-face sought to compare prototype packs in different shades of colour which tested the shortlisted intended colours with colours that matched the observed online colour.

Addressing the second issue involved the inclusion of a quick colour check test. This was conducted during the survey screener in Study 2 and Study 4 to identify whether respondents' monitors were accurately representing shades of colour in Study 2 and Study 4. This type of test is commonly used by designers. It was found during testing that there were discrepancies in the quality of screen consistency across respondents.

It was also noted that when Study 4 respondents were asked which colours they observed on screen, they identified colours that differed from the intended colours. Most relevant to this was that the Dark Brown colour was seen as 'Dark Olive'. This finding meant it was necessary to conduct further colour evaluations with both a 'Dark Brown' and 'Dark Olive' colour. This was addressed in Study 5 Face-to-face where actual printed mock up packs were tested in a range of colours including a 'Dark Brown' and 'Dark Olive'.

Please note, calibrating computers was not considered as an option to overcome this issue, as it requires a degree of technical knowledge on the part of the person using the computer. It was determined that it would be impossible to guarantee that respondents would be able to make the necessary changes, even if provided with detailed instructions.

Attitudes to Smoking and Plain Packaging

During the project set up, the GfK research team also considered that respondents may have already formed some opinions about the move to plain packaging, which could influence the way they approached the research. Additional questions were included at the end of surveys to understand respondents' attitudes to quitting, plain packaging and Government health initiatives. This was added as a check in case results from the surveys were not conclusive and required further analysis. During analysis, there was no evidence that results relating to pack colour evaluations differed when comparing respondents of opposing attitudes. As such, information relating to attitudes to smoking and plain packaging has been reported in the 'Respondent Smoking Profiles' in the Appendices.

Sponsor Acknowledgement

During the recruitment process, the Department of Health and Ageing was named as the main sponsor of the research. This helped clarify any potential misunderstandings about the purpose of the research.



5 ANALYSIS AND REPORTING

In each study, quantitative and qualitative analyses were included in the interpretation of results.

5.1 Quantitative Analysis

Significance Testing

Where relevant, statistical analysis has been applied to highlight significant differences in the results. Significant differences have been indicated using the following key:

+ - Significantly higher / lower than the average of other brands at 90% c.i.

^~ Significantly higher / lower than other test variables or subgroups at 95% confidence interval (c.i.) (referred to as hat arrows)

↑↓ Significantly higher / lower than other responses (within a response) at 95% confidence interval (c.i.) (referred to as long arrows)

A / B / C Significantly higher / lower than specified column at 95% c.i

Each result table specifies which comparison group or response has been significance tested.

Statistical differences have been worded as 'significant' or 'statistically significant'.

Weighting

The quantitative data was weighted to population statistics on current smokers in Australia sourced from the ABS - National Health Survey: Summary of Results, 2007–2008 (Reissue).⁷ There were some differences between the sample profiles and the population statistics used in the weighting. These differences are detailed in the table shown below.

⁷ ABS - 43640DO011_20072008 National Health Survey: Summary of Results, 2007–2008 (Reissue) Released at 11:30 am (Canberra time) 23 Nov 2010

Table 2: Discrepancies in matching Sample data to Population data

Study	Key difference	National Health Survey (Population statistics used for weighting)	Research Sample	Actions
Study 1, 2,4,5 Face-to-face, 5 Online, 6	Definition of smokers	Smokers of all tobacco products including manufactured cigarettes, roll-your-own cigarettes, pipe and cigar smokers	Smokers of manufactured cigarettes	None
Study 2	Age coverage	Population statistics available for smokers aged 18-64 years old	Surveyed smokers aged 18-65 years old	Weighted data for 55-65 years old to population proportions for 55-64 years
Study 5 Face-to-face	Age coverage	Population statistics available for smokers aged 15-17years old	Surveyed smokers aged 16-17years old	Weighted data for 16-24 years old to population proportions for 15-24 years

The population targets viewed in Appendix A: Overall Research Details.

5.2 Qualitative Analysis

A thematic analysis model was used for the qualitative research. This involves participant views and opinions being analysed to find common themes and patterns. All researchers on the project contributed to the analysis by referring to their notes and transcripts and developing hypotheses based on the interviews and group discussions they conducted. Following this all project members participated in numerous debriefing sessions to discuss and plan analysis of the results. Within these, data was collated into potential themes using all the data relevant to each and identifying frameworks for further in-depth analysis. Ongoing analysis sessions refined the specifics of each theme and ensured the analysis addressed the research objectives. This was an iterative process that continued through the writing of the report. For this project the analysis referred to the full range of data sources collected throughout the project including self complete forms used during group discussions and the notes, audio tapes and transcripts emerging from them.

5.3 Reporting

A short summary report was provided to the Department at the conclusion of each individual study. These reports were intended to provide the Department with the findings required to inform the next study in the research program. These reports form the basis of this document.



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**STUDY 1: CONSUMER PERCEPTIONS OF BRANDING APPEAL, ATTRACTIVENESS
AND SMOKING HARM (SECTIONS 6-13)**

6 OBJECTIVES AND METHODOLOGY

Study 1 included a mixed methodological approach of quantitative and qualitative research to understand perceptions of cigarette branding and pack design in Australia. Fieldwork was conducted from the 2nd – 7th February 2011.

6.1 Research Objectives

The main objective of *Study 1 - Consumer perceptions of branding appeal, attractiveness and smoking harm*, was to confirm research findings about the impact of tobacco branding among an Australian sample. There exists a wealth of research and literature that evidences the impact of tobacco branding on smokers which have guided the plain packaging initiative.⁸ As such, this study serves to provide additional evidence in an Australian context. Specifically, this study sought to confirm the hypotheses that smokers have differing perceptions of the common cigarette brands and that these impact on brand appeal in an Australian sample. The methodology sought to understand the impact of current brand and packaging design (brand, colour, finish, pack size) on appeal, attractiveness and perceived harm among current smokers.

The research design of Study 1 was recommended by the Expert Advisory Group to replicate a similar study conducted in New Zealand by Janet Hoek.⁹ The quantitative questionnaire and qualitative discussion guide used in the study were devised by the GfK Blue Moon research team in consultation with the Department and the Expert Advisory Group.

6.2 Rationale for Approach

'Clinic' Methodology

The design of Study 1 was recommended by the Expert Advisory Group to emulate the format of a similar study conducted in New Zealand. This required both quantitative and qualitative methodologies. Our approach to the study design adopted a 'clinic style' methodology to allow for the collection of quantitative as well as qualitative data within the same session, thereby ensuring the approach was both time and cost effective.

Clinics enabled face-to-face interaction with respondents. This was necessary for a more in-depth discussion of the brand descriptors collected within the quantitative exercise and evaluation of the different types of cigarette stick designs and new packaging innovations. Respondents were able to interact with the different packaging designs to provide them with the more realistic experience that is relevant for testing new products.

⁸ Existing research includes that found in the reports of the Preventative Health Taskforce at <http://www.preventativehealth.org.au/>

⁹ Gendall, P., Hoek, Young Adults' Interpretations of Tobacco Brands: Implications for Tobacco Control, DOI: 10.1093/ntr/ntr094. Published on May 26 2011, Oxford University Press.



Given the nature of the topic, a group approach was suitable for this study as the group dynamics help respondents articulate thoughts they may have difficulty expressing individually. It can also facilitate sharing of opinions among peers.

Given there was a need to over sample in the 18-24 age bracket, a sampling structure was devised that would allow:

- relatively homogenous 'clinics' within the age groups;
- ensuring some over sampling; and
- still allow for other age groups to have a minimum sample of n=30.

The clinic sampling structure and final sample size for each age group are shown in the next section on Methodology.

6.3 Methodology

Study 1 involved a mixed methodological approach of 18 face-to-face group clinics, each lasting approximately one hour, conducted across Sydney, Melbourne and Adelaide.¹⁰ Respondents completed a self-completion questionnaire which informed the quantitative findings, and then participated in group discussions which informed the qualitative findings.

Respondents were pre-recruited and screened to ensure they smoked manufactured cigarettes at least every week. The sample was segmented according to age bands to ensure some homogeneity for the qualitative component. Quotas were used in recruitment to ensure representation of CALD respondents.

¹⁰ Originally, clinics were to be run in Sydney, Melbourne and Queensland. Due to the flood and cyclone crisis in Queensland in January 2011, the clinics initially scheduled to take place in Queensland were replaced by clinics in Adelaide.



The table below outlines the clinic sampling structure.

Table 3: Study 1 Clinic Sampling Structure

Clinic no.	Age	Gender	No. In clinic	Location
1	18-21	Male	approx. 6	Parramatta
2	18-21	Female	approx. 6	Melbourne
3	22-29	Mix	approx. 7	Adelaide
4	22-29	Mix	approx. 7	Parramatta
5	22-29	Mix	approx. 7	Melbourne
6	22-29	Mix	approx. 7	Adelaide
7	30-44	Mix	approx. 8	Sydney
8	30-44	Mix	approx. 8	Melbourne
9	30-44	Mix	approx. 8	Adelaide
10	30-44	Mix	approx. 8	Sydney
11	45-64	Mix	approx. 8	Melbourne
12	45-64	Mix	approx. 8	Adelaide
13	45-64	Mix	approx. 8	Parramatta
14	45-64	Mix	approx. 8	Melbourne
15	18-21	Male	approx. 8	Sydney
16	18-21	Female	approx. 8	Sydney
17	22-29	Mix	approx. 8	Sydney



Overall, there were n=122 respondents eligible for analysis as shown in the table below:

Table 4: Study 1 Sample Profile

Target groups	Male	Female	Total
Age 18-24 years	n=22	n=15	n=37
Age 25-44 years	n=30	n=29	n=59
Age 45-64 years	n=14	n=12	n=26
Total	n=66	n=56	n=122

Although there were 126 questionnaires completed, four of these did not include key demographic information and were thus removed from analysis. Recruitment was completed through Interviewer Quality Control Australia (IQCA) accredited recruitment specialists. A recruitment screener including all relevant demographic variables was provided to use for recruitment. A copy of the recruitment screener is included in Appendix B: Study 1.

6.4 Quantitative Methodology

Data Collection

On arrival, respondents were asked to fill out the self-completion questionnaire individually prior to participating in a group discussion. Respondents were allowed 20 minutes to complete the survey.

Questionnaire Design

In consultation with the Department and the Expert Advisory Group, six brands / variants were selected for evaluation in the self-completion study. These were selected to reflect current brands / variants in the Australian market that were familiar to Australian smokers and varied to reflect the diversity of cigarette brands / variants. These included:

- Winfield Red;
- Peter Jackson Rich;
- Longbeach Rich;
- Benson & Hedges Smooth;
- Alpine Original; and
- Camel (soft pack) – unfiltered.

Photos of the cigarette packs were taken and manipulated (using Adobe Photoshop) so that all packs featured the same 30% GHW, "Smoking clogs your arteries". Images of the brand / variant stimulus are shown in the questionnaire which can be found in Appendix B: Study 1.

The broad structure of the questionnaire was as follows:

- screener (age, gender, smoking frequency);
- brand descriptors;
- brand / pack perceptions; and
- demographics.

Brand Descriptors - In this section, respondents selected words from a list of nineteen which they felt best described the people who smoke the six different brands / variants of cigarettes tested. The list of words used was taken from the study by Janet Hoek in New Zealand.¹¹ Respondents were allowed to select as many or as few words for each brand / variant as they felt applied.

Brand / pack perceptions - Here respondents rated the same brands / variants on measures of pack attractiveness, brand appeal, ease of quitting, perceived harm and quality of cigarette.

Considerations in the Questionnaire Administration

To reduce the potential for order bias, there were two versions of the questionnaires used, Rotation 1 and Rotation 2. Rotation 2 reversed the order of:

- brands / variants tested - in Rotation 1, Winfield Red was the first brand / variant while in Rotation 2, Camel (soft pack) was the first brand / variant tested;
- brand descriptors tested - in Rotation 1, 'Mature' was the first word listed while in Rotation 2, 'Intelligent' was the first word listed; and
- brand / pack perceptions statements tested - in Rotation 1, "Looks like it contains a high quality cigarette" was the first statement shown while in Rotation 2, "Has a more attractive pack than other cigarette brands" was the first statement shown.

The two versions were distributed across the groups so that n=69 answered the Rotation 1 version and n=53 answered the Rotation 2 version. A copy of the quantitative self-completion questionnaire is included in Appendix B: Study 1.

¹¹ Gendall, P., Hoek, Young Adults' Interpretations of Tobacco Brands: Implications for Tobacco Control, DOI: 10.1093/ntr/ntr094. Published date on May 26 2011, Oxford University Press.

Weighting

The quantitative data for Study 1 has been post-weighted to the Australian smoking population aged 18-64 years old using ABS Census data.¹² Data has been weighted using age, gender and smoking frequency. Refer to Appendix A: Overall Research Details for population targets.

Quantitative Analysis

Frequency scores were obtained to identify how each brand / variant compared on each of the tested descriptor words. In addition to frequency counts, additional analysis was applied to this data to highlight the brand / variant profiles and differentiation between the brands / variants using correspondence analysis (perceptual maps).

Correspondence analysis is a multivariate statistical technique for providing a visual representation of the associations between the levels of a two-way contingency table, in this case, brands by descriptors. The output of this analysis is a two-dimensional map which shows the relative positioning of the brands / variants according to their relationship with the qualitative word-descriptors tested.

Where relevant, significance testing has been conducted on the data to highlight key differences at a 95% confidence interval for the following comparisons:

- brand / variant differences (for example, Winfield Red compared to Alpine Original); and
- demographic subgroups (for example, 18-24 years old vs. 45-64 years old, male vs. females).

6.5 Qualitative Methodology

Data Collection

Following completion of the questionnaire respondents participated in a group discussion of approximately 40 minutes duration. Three sets of stimuli were produced for use within the discussions:

- a set of six printed boards each with an image of a leading cigarette brand (and one printed board with all of them together);
- four separate boards displaying cigarette sticks of 'cork' tip, 'white' tip, 'slim' and 'fancy' cigarette varieties; and
- a range of existing cigarette pack designs of different brands, colours, finishes and packet size.

Images of the stimulus used can be found in Appendix B: Study 1.

¹² ABS - 43640DO011_20072008 National Health Survey: Summary of Results, 2007–2008 (Reissue) Released at 11:30 am (Canberra time) 23 Nov 2010



Interview Structure and Discussion Guide

A structured discussion guide was developed and approved by the Department prior to use. The general flow of the discussions is described below. The qualitative discussion guide can be found in Appendix B: Study 1.

The Study 1 qualitative interviews followed the structure outlined below:

- introduction and respondent warm up;
- comprehension of current brands smoked and triggers and barriers to brand choice;
- brand perceptions emerging from quantitative self-completion questionnaire;
- cigarette stick associations (comparison between different types of cigarette sticks); and
- pack design analysis.

7 BROADER CONTEXT FOR SMOKERS

The qualitative research demonstrated that broad contextual factors have some influence on smoking behaviour, including appeal, attractiveness and choice of different brands. Three key environmental factors emerged that also impact on brand choice. These include overriding negative perceptions of smoking, the influence of past advertising, and the influence of peers and family.

7.1 Negative Perceptions of Smoking

Broadly speaking smokers felt there exists a significant degree of negativity surrounding smoking. Smokers perceive a clear distinction between 'smokers' and 'non smokers', almost an 'us' and 'them' mentality.

"Non smokers don't really like being around other people smoking, we're normally outside on our own."

"My friends who don't smoke keep giving me shit about it."

Some smokers also clearly held negative views towards themselves and their smoking. Broadly, the appeal and attractiveness of the brand they smoked seemed to have some role in mediating these negative feelings. The positive associations made with different brands and packaging allowed respondents to distance themselves to some extent from the negative associations of 'being a smoker' in general.

"It's sophisticated, the people that I perceive smoking it, or people that I know who have smoked them...are a bit well off and sophisticated."

"I wouldn't want to be seen carrying it [a budget brand], I might change them into a different packet."

"[smoking B&H] it seems like you're not desperate for some reason, yeah, I'm smoking but really I could sort of afford to do this, and I'm in control, I could give up actually."

"They're [Vogue Slims] a type of cigarette you have when you're going out, to a wedding or somewhere really good."

"I think the gold is just more inconspicuous. These days smoking isn't the right thing to do, so having a red packet is just saying 'here look at me', whereas the gold you can just hide it away better."

Equally, while respondents were aware smoking was bad for their health, it was an accepted risk, and it became clear that a number of respondents used this as a justification for their brand choice.



"I know it's bad for me, so if I'm going to smoke I might as well get the most expensive cigarettes I can."

"No one needs to tell me smoking is bad for me, so if I'm going to smoke I might as well smoke the cigarettes I like"

Brand choice is a means of differentiation and as such various brands and variants of cigarette become more or less appealing depending on their perceived associations. Smokers make distinctions amongst themselves based on their and others brand choices. Brand choices are strongly associated with income, class, 'appropriateness' (i.e. which brand for which type of person), and level of addiction. Level of addiction is related to perceived 'control' over themselves.

"I actually started smoking B&H because I admired somebody who smoked B&H."

"You've hit the bottom of the barrel...I just associate it [50 packs] with all like you know scummy people."

"I relate them like Winfield was footie...and cricket B&H, so it was always like a different kind of brand you used to see people smoke."

"Those are for someone seriously addicted, someone with no self control who is going to smoke a deck a day or more."

"It's for people who don't really want to smoke, they only want to hold it and be seen holding it."

"I would not want to be seen trying that."

"Those are for sophisticated smokers...mature, older."

7.2 Friends / Social 'norming'

The influence of peers and family who are smokers themselves is significant. This is particularly true in the initial uptake of smoking, but equally in current smoking behaviours and the appeal and uptake of specific brands. This was noted across the sample, although significantly reduced among older smokers (over 40).¹³ Friendship groups and family can be heavily influential in the uptake of smoking in general, but also more specifically in forming 'me' or 'not me' relationships with different cigarette brands or variants.

"I just smoked what my friends did and that's it really."

¹³ Older audiences tended to downplay or resist any influence of peers and family in their current smoking habits but were vocal in the influence of these groups when they started smoking.



"When you're out and everyone is smoking one brand then you want to try that brand."

"It runs in the family, my cousin smokes them, my sister smokes, so I smoke them."

7.3 Past Advertising

Associations made through past advertising have a strong legacy, particularly among older smokers (on average 30 plus). A number of respondents were able to quote old advertising slogans and made strong associations with mainstream events such as Benson & Hedges sponsorship of the cricket, Winfield's sponsorship of the rugby league, and various other cigarette-brand sponsored sports such as Formula 1 and golf tournaments.

Equally, celebrity endorsements were also spontaneously mentioned, notably Paul Hogan for Winfield in the 1970s. This advertising continues to have some impact among older respondents in regards to their notions of brand appeal and attractiveness. For example B&H were more highly regarded in terms of quality and sophistication while Winfield Red in particular represented a more masculine 'true-blue' Australian, a working man or a 'tradie'.

"[the] brand name, it's popular...you've grown up with all the TV ads that used to be on."

"Winfield, Winfield Cup, you were brought up with it...it's Australian."

"Winfield cup, rugby league, Paul Hogan and all that."

"Benson and Hedges used to sponsor the cricket and I used to go to the cricket all the time."

"...used to smoke Marlboros because he wanted to be the Marlboro man."

"This pack [B&H], it hasn't changed much over the years, even when I was a kid I remember it being gold"

"Benson and Hedges, it's everywhere you go, it's sports, it's everything... and it hasn't changed in taste."

8 BRAND AND PACK ASSOCIATIONS

8.1 Overall Differences in Brand Perceptions

The quantitative and qualitative research provides clear evidence that:

- smokers have differing perceptions of the type of people who smoke different cigarette brands and variants; and
- brand and pack design influence overall appeal, attractiveness and perceived notions of harm for the various brands, variants and cigarette types.

The quantitative and qualitative analysis showed distinct profiles of the type of people that were seen to smoke particular brand variants of cigarettes. This can be seen in the significant differences between the proportions that associated certain words with smokers of each brand variant. For example, smokers of Winfield Red and Camel (soft pack) were more likely to be associated with words like 'masculine', 'serious' and 'tough'. Conversely, smokers of Alpine Original were more strongly associated with words like 'feminine', 'relaxing' and 'gentle'.

The table below shows the broad profiles and differentiating word descriptors that emerged from the quantitative brand descriptors.

Table 5: Study 1 Broad Profiles and Associated Brands

Profiles	Brands	Associated word descriptors (higher than other brands)	Word Descriptors not associated (lower than other brands)
'Hard smokers' / 'Masculine'	Winfield Red, Camel (soft pack)	masculine, serious, tough	feminine
'Soft smokers' / 'Feminine'	Alpine Original	feminine, relaxing, gentle	masculine, mature, tough, serious
'Budget smokers'	Longbeach Rich, Peter Jackson Rich	budget, plain, ordinary	well off, sophisticated,
'Upmarket smokers' / Premium	Benson & Hedges Smooth	well off, sophisticated, popular, attractive, intelligent	budget, plain, ordinary



The word descriptors associated to particular brands by respondents in column 3 were used as the basis for the names of the summary profiles in column 1 in the table above. These profiles, for example 'Hard smokers/Masculine' or 'Upmarket smoker/premium' will be used throughout the following sections of the report.

The above profiles were derived from figures show in the table below. This shows that different words were used to describe the smokers of different brands. Significance testing has been applied to show differences across the brands.¹⁴

¹⁴ For instance, the Camel (soft pack) was significantly more likely to be associated with the word 'mature' (61%) compared to other brands, whilst Alpine Original was significantly less likely to be associated with the word 'Mature' (22%) compared to other brands.

Table 6: Brand Descriptors (type of person who smokes the brand / variant)

Proportion who selected the word for each brand	Average of brands tested %	Winfield Red %	Camel (soft pack) %	Peter Jackson Rich %	Longbeach Rich %	Benson & Hedges Smooth %	Alpine Original %
Masculine	34	63 [^]	58 [^]	33	12 ^v	37	3 ^v
Tough	18	45 [^]	41 [^]	10	4 ^v	7	0 ^v
Mature	37	39	61 [^]	29	28	45	22 ^v
Traditional	25	35	34	24	11 ^v	34	14 ^v
Serious	15	25 [^]	22	17	4 ^v	16	5 ^v
Young	23	19	8 ^v	24	33 [^]	23	31
Ordinary	19	23	8 ^v	35 [^]	29 [^]	10 ^v	8 ^v
Plain	17	18	14	23	29 [^]	10 ^v	9 ^v
Budget	25	24	11 ^v	39 [^]	64 [^]	2 ^v	8 ^v
Well off	12	4 ^v	11	4 ^v	2 ^v	41 [^]	12
Popular	15	13	3 ^v	7 ^v	15	36 [^]	15
Sophisticated	12	5 ^v	10	5 ^v	3 ^v	33 [^]	16
Intelligent	8	1 ^v	5	4	2 [^]	26 [^]	7
Trendy	13	6	15	5	8	25	18
Attractive	6	2	0 ^v	4	9	14 [^]	9
Feminine	26	5 ^v	4 ^v	20	3	23	72 [^]
Gentle	8	2 ^v	5	3	7	4	29 [^]
Relaxing	12	7	8	6	14	12	27 [^]
Cool	13	9	15	7	7	14	23 [^]

Base: All respondents (n=122)

B1-6. Thinking about the brand of cigarette you see below, please indicate which words you feel describe the kind of person who smokes this brand of cigarette. Multiple response per brand.

^{^v} Significantly higher / lower than other comparison brands at 95% c.i.

8.2 Brand / Pack Appeal

The quantitative research also found that different brands had different levels of perceived quality, pack attractiveness, brand appeal, perceived ease of quitting and harm to health. There was strong evidence that smokers considered some brands / packs to be higher quality and more appealing than other brands / packs. The brands which performed stronger or weaker on the key brand / pack evaluation measures are summarised in the table below:

Table 7: Study 1 Summary of Brand Evaluation

Key measure	Brands associated with the measure	Brands not associated with the measure
High quality cigarette	Benson & Hedges Smooth	Longbeach Rich
More attractive pack	Benson & Hedges Smooth Alpine Original	Longbeach Rich
Hard to quit	Winfield Red Camel (soft pack)	Longbeach Rich Alpine Original
Lower perceived harm to health	Alpine Original	Camel (soft pack)
Overall appeal (would like to be seen smoking)	Benson & Hedges Smooth	Alpine Original Camel (soft pack) Longbeach Rich

The table below shows the proportion who agreed (Strongly agreed or Somewhat agreed) with the statements for each brand with significance testing applied between the brands.¹⁵

¹⁵ For instance, a significantly higher proportion agreed that Benson & Hedges Smooth 'looks like it contains a high quality cigarette' (80%) compared to other brands. Conversely, a significantly lower proportion agreed that the statement described Longbeach Rich (18%) compared to other brands. A similar proportion agreed that the statement described Winfield Red (53%), Peter Jackson Rich (40%), Alpine Original (45%) and Camel (soft pack) (42%).

Table 8: Study 1 Brand / Pack Appeal Measures

Strongly agree / somewhat agree	Average of all brands tested %	Winfield Red %	Peter Jackson Rich %	Longbeach Rich %	Benson & Hedges Smooth %	Alpine Original %	Camel Soft Pack %
Looks like it contains a high quality cigarette	46	53	40	18 [✓]	80 [^]	45	42
Has a more attractive pack than other cigarette brands	42	33	34	26 [✓]	66 [^]	54 [^]	37
Is a cigarette brand I would like to be seen smoking	28	29	23	20	67 [^]	13 [✓]	15 [✓]
Would be a harder cigarette brand to quit / give up than other cigarettes	21	37 [^]	18	10	22	7 [✓]	31 [^]
Is not as harmful to health as other cigarette brands	9	9	10	6	8	15 [^]	4 [✓]

Base: All respondents (n=122)
 C1. Now, here are some other statements about different cigarette brands. For each brand of cigarette shown, please indicate how strongly you feel each statement shown describes the cigarette brand. How strongly do you agree that this brand...? 5pt scale (Strongly Agree, Somewhat Agree)
[^] Significantly higher / lower than the average of other brands at 95% c.i.

Benson & Hedges Smooth, which was earlier shown to be seen as a brand for 'upmarket smokers', was the pack which was most strongly associated with:

- looking like it contains a 'high quality cigarette' (80%);
- having a 'more attractive pack' (66%); and
- being the most appealing in terms of being the 'brand they would most like to be seen smoking' (67%).

By contrast, Longbeach Rich, which was most strongly associated with 'budget smokers', was seen to be a pack with low associations on:

- looking like it contains 'high quality cigarettes' (18%);
- having a 'more attractive pack' (26%); and
- having a low association with being a 'brand they would like to be seen smoking' (20%).

All brands were seen to have a low association with being 'not as harmful to health as other cigarette brands' (9% average of all brands tested) supporting the contextual findings in the qualitative research that smokers are largely aware that all smoking is harmful to their health, regardless of brand. There

was, however, evidence that the level of perceived harm was influenced by the perceived strength of cigarette, as indicated by pack colour and the type of person associated with smoking the brand.¹⁶

- Alpine Original, which was described as the 'lightest' cigarette brand in the qualitative research and more for 'soft smokers', was seen to be (indicative evidence only) 'not as harmful to health' compared to other brands, 15% compared to 9%, the average of all brands;
- Camel (soft pack) which contained unfiltered cigarettes and was perceived to be smoked by 'hard smokers', had the lowest association on being 'not as harmful' (4%); and
- Longbeach Rich, which was seen to contain lower quality cigarettes and be a brand for 'budget smokers', was the brand which had the second lowest score on being 'not as harmful to health' (6%).

Other findings from this research are that brands or cigarettes which are seen to be stronger are seen to be harder to quit. On the measure 'would be a cigarette brand that would be harder to quit', Winfield Red and Camel scored highest on this measure (37% and 31% respectively) compared to Alpine Original (7%).

Whilst Benson & Hedges Smooth was most appealing in terms of quality, pack attractiveness and ultimately social appeal, the reverse was not always true for other brands. For example, whilst Alpine Original had the second most attractive pack (54%) it was the brand smokers would least like to be seen smoking (13%).

This supports the idea that there are a number of factors related to pack design and brand image which can influence overall appeal as explored in the qualitative research. These will be discussed in further detail in sections on 'Brand positioning and perceptual differences'.

Perceptions by Brand Appeal

There is statistical evidence to suggest that overall appeal could be linked to the perceived quality of cigarettes and pack attractiveness. That is, across all brands, those that 'would like to be seen smoking the brand' were significantly more likely to associate the brand / pack with having 'higher quality cigarettes' and having a 'more attractive pack'.

The table below shows the comparison in brand / pack evaluation measures of those who claimed they would like to be seen smoking the brand or would not like to be seen smoking the brand.¹⁷

¹⁶ Note 'perceived strength' was not tested quantitatively. References to perceived strength relate to qualitative findings.

¹⁷ For instance, respondents who said Winfield Red was a brand they would like to be seen smoking, were significantly more likely consider the brand to 'look like it contains a high quality cigarette (90%) compared to those that said Winfield Red was a brand they would not like to be seen smoking (30% on 'looks like it contains a high quality cigarette).



Table 9: Study 1 Brand / Pack Evaluation by Social Appeal

Strongly Agree / Somewhat Agree	Winfield Red		Peter Jackson Rich		Longbeach Rich		Benson & Hedges Smooth		Alpine Original		Camel (soft pack)	
	Brand would like to be seen smoking (n=36) %	Brand would not like to be seen smoking (n=40) %	Brand would like to be seen smoking (n=29*) %	Brand would not like to be seen smoking (n=30) %	Brand would like to be seen smoking (n=21*) %	Brand would not like to be seen smoking (n=30) %	Brand would like to be seen smoking (n=86) %	Brand would not like to be seen smoking (n=13*) %	Brand would like to be seen smoking (n=20*) %	Brand would not like to be seen smoking (n=52) %	Brand would like to be seen smoking (n=22*) %	Brand would not like to be seen smoking (n=41) %
Looks like it contains a high quality cigarette	90 [^]	30 ^ˇ	81 [^]	19 ^ˇ	44 [^]	8 ^ˇ	90 [^]	47 ^ˇ	72 [^]	36 ^ˇ	84 [^]	25 ^ˇ
Is not as harmful to health as other cigarette brands	19	4	21	7	26 [^]	1 ^ˇ	10	4	19	13	7	1
Would be a harder cigarette brand to quit / give up than other cigarettes	31	36	34	10 ^ˇ	23 ⁺	7	28	14	11	7	46	25
Has a more attractive pack than other cigarette brands	60 [^]	20 ^ˇ	66 [^]	23 ^ˇ	59 [^]	17 ^ˇ	82 [^]	24 ^ˇ	92 [^]	46 ^ˇ	93 [^]	22 ^ˇ

*Caution low sample size

Base: All respondents who selected Agree / Disagree to the statement 'Is a brand I would like to be seen smoking' C1. Now, here are some other statements about different cigarette brands. For each brand of cigarette shown, please indicate how strongly you feel each statement shown describes the cigarette brand. How strongly do you agree that this brand...?

Is a cigarette brand I would like to be seen smoking = Those that selected Strongly Agree / Somewhat Agree

Is a cigarette brand I would not like to be seen smoking = Those that selected Strongly Disagree / Somewhat Disagree

+/- Significantly higher / lower than the average of other brands at 90% c.i.

[^]_ˇ Significantly higher / lower than other comparison subgroups at 95% c.i.



9 BRAND POSITIONING AND PERCEPTUAL DIFFERENCES

9.1 Understanding the Data

The differences in the brand profiles and brand / pack evaluation of cigarette brands tested in the quantitative research have been depicted in the perceptual map below, where the relative positioning of each brand tested has been plotted on a two-dimensional map.

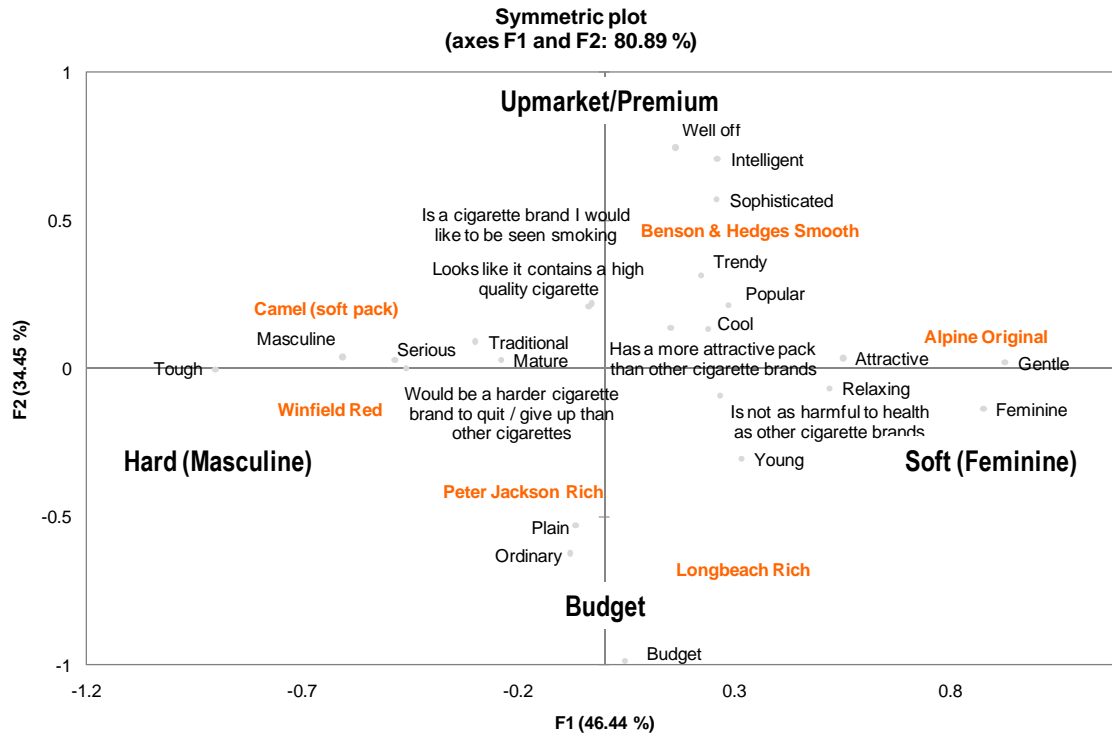
This map is a visual representation of the correspondence analysis on the quantitative data incorporating both the word descriptors used to describe the type of smoker per brand and perceptions of the brand / pack (appeal, quality of cigarettes, pack attractiveness and so on). This provides a brand profile in terms of:

- how each brand is perceived relative to the other brands in terms of who smokes the brand; and
- how these relate to brand / pack evaluations of quality, appeal, pack attractiveness, harm, and ease of quitting.

In reading the map, the following should be noted:

- the further the brand from the centre of the map, the more 'differentiated' it is from other brands;
- brands which are positioned closely together are more similar, and brands that are positioned far from each other are more different;
- the descriptors that are positioned close to the brand, are those that differentiate it, or are most associated to it relative to other brands; and
- the words that are positioned far from the brand, are those that are less associated with it compared to other brands.

Figure 1: Study 1 Brand Positioning (Perceptual map)



Base: All respondents (n=122)

B1-6. Thinking about the brand of cigarette you see below, please indicate which words you feel describes the kind of person who smokes this brand of cigarette. Multiple response

C1. Now, here are some other statements about different cigarette brands. For each brand of cigarette shown, please indicate how strongly you feel each statement shown describes the cigarette brand. How strongly do you agree that this brand...? 5pt scale (Strongly Agree, Somewhat Agree)

As shown in the map above, there are unique types of smokers associated with the different brands. As discussed earlier, the perceptual divides are characterised by 'hard' / 'masculine' compared to 'softer' / 'feminine' and 'budget' compared to 'upmarket' / 'premium', the latter being linked to stronger perceptions of quality and higher appeal.

The analysis suggests:

- brands associated with 'hard' / 'masculine' smokers are also seen to be relatively 'harder to quit';
- brands associated with 'upmarket' / 'premium' smokers are seen to be relatively 'more appealing' in a social context, have higher quality cigarettes and more attractive packaging;
- brands associated with 'soft' / 'feminine' smokers are seen to be relatively less harmful to health; and
- brands associated with 'budget' smokers are seen to be relatively weaker on appeal and quality of cigarettes.



These brand associations and perceptions are supported in the qualitative research, which identified similar divides based on gender differences, socio-economic associations, nicotine content and local compared to foreign brands, each which inform and affect levels of brand appeal.

9.2 Masculine and Feminine

From the qualitative research, respondents labelled certain brands as either 'feminine' or 'masculine'. These perceptions were informed by associations based on packaging and design, their own brand choice and observed smoking behaviours.

For example, the lighter colour packaging of Alpine or Longbeach was considered feminine, while observations of those who smoked Winfield Red or Camel smokers led to strongly masculine associations.

"To me that's a man's cigarette, I've never known a woman to smoke it."

"I think it's a woman's cigarette, a young woman...I think the pack also, it looks a feminine pack."

"As a male to say you're smoking that, I don't think it goes down too well."

"Feminine and classy."

The quantitative research showed that the brands which were more strongly associated with 'hard smokers' or 'masculine smokers', that is, Winfield Red and Camel (soft pack), were more frequently associated with the word 'tough', and perceived as heavier cigarettes with a higher nicotine level. Conversely, 'Alpine Original' the brand with the most frequent association with smokers who were 'feminine', was also more likely to be associated with the word 'gentle'. Although not statistically higher than other brands, there is indicative evidence (supported by qualitative evidence) that Longbeach Rich is also seen to have a higher association with feminine or female smokers compared with other brands.

Table 10: Study 1 Brand Descriptors (Masculine and Feminine)

Proportion who selected the word / statement for each brand	Average of brands tested %	Winfield Red %	Camel (soft pack) %	Peter Jackson Rich %	Benson & Hedges Smooth %	Longbeach Rich %	Alpine Original %
Masculine	34	63 [^]	58 [^]	33	37	12 ^v	3 ^v
Serious	15	25 [^]	22	17	16	4 ^v	5 ^v
Tough	18	45 [^]	41 [^]	10	7	4 ^v	0 ^v
Feminine	26	5 ^v	4 ^v	20	23	32	72 [^]
Gentle	8	2 ^v	5	3	4	7	29 [^]
Attractive	6	2	0 ^v	4	14 [^]	9	9

Base: All respondents (n=122)
 B1-6. Thinking about the brand of cigarette you see below, please indicate which words you feel describe the kind of person who smokes this brand of cigarette. Multiple response per brand.
^{^v} Significantly higher / lower than the average of other brands at 95% c.i.

There was also some indication that preference for the brands varied by gender, as seen in the pack descriptor results, where males were slightly more likely to want to 'be seen smoking' the brands associated with 'hard smokers' or 'masculine smokers' (Winfield Red). Females on the other hand were slightly more likely to want to 'be seen smoking' the brands which were more associated with 'feminine smokers' (Alpine Original and Longbeach Rich), as shown in the table below.

Table 11: Study 1 Social Appeal by Gender

Is a brand I would like to be seen smoking (Strongly Agree / Somewhat Agree)	Total (n=122) %	Males (n=66) %	Females (n=56) %
Benson & Hedges Smooth	67	67	67
Winfield Red	29	36+	20-
Camel (soft pack)	15	17	12
Peter Jackson Rich	23	21	25
Longbeach Rich	20	14-	26+
Alpine Original	13	11	16

C1. Now, here are some other statements about different cigarette brands. For each brand of cigarette shown, please indicate how strongly you feel each statement shown describes the cigarette brand. How strongly do you agree that this brand...? 5pt scale
 +/- Significantly higher / lower than the average of other brands at 90% c.i.



9.3 Premium and Budget

The qualitative research found that respondents used a scale of 'premium' to 'budget' as the common criterion of difference. For lower socio-economic groups (SEG), budget considerations generated positive appeal toward the low-cost end of the scale. For all other respondents appeal was largely correlated with cost. The impact on brand appeal based on consideration of budget and cost was strongly apparent throughout the research.

"If something is more expensive you tend to just think it's better don't you."

"There is an assumption that they [higher cost brands] are better quality."

"Cost is a factor [in brand purchasing decisions]"

"[what I wouldn't smoke] The budget ones...anything that comes in 50s"

'Exclusive' or 'premium' branded cigarettes, such as Davidoff or Cartier, appealed to some respondents, based as much on their expense as the perceived brand associations of sophistication and class. It was clear that the cost of these cigarettes reinforces the perceived quality and appeal of the brand.

"If I'm going to smoke, which I know is bad for me, then I want to get the best cigarettes I can so I buy the most expensive ones I can afford."

"Those cigarettes are the best you can get really and the price reflects that, they're bloody expensive."

"I'd love to try some of those if I could afford them."

Equally, brand design and packaging led to associations with sophistication and status. Respondents found the more 'understated' packs most appealing, as opposed to those which were perceived as trying to 'shout out' their brand names to consumers. An example of this was Benson and Hedges, which was seen to be extremely sophisticated due to its small font size, 'royal blue on gold' colours and 'toned down' nature. Equally it was felt that the writing on the pack was secondary in comparison with the pack colour which by itself indicated sophistication and desirability. In contrast the Peter Jackson brand was seen as trying too hard both in terms of pack design and in colour, where it was felt to be attempting to emulate the B&H design.

"[smoking B&H] it seems like you're not desperate for some reason, yeah, I'm smoking but really I could sort of afford to do this, and I'm in control, I could give up actually."



"The Peter Jackson is so desperate. It just feels like it's begging you to buy it. It's got the name on it, but then that stupid shield as well which has PJ in it again. Having your name on there twice, that's a bit desperate."

The cheapest or 'budget' brands were generally unappealing. The overall quality was perceived to be low and they generated associations with poverty or budgeting, which all but lower SEG respondents found unattractive.

"The cheap ones are cheap for a reason. They're rubbish."

"I think Horizon is a budget smoke, that's from working at a supermarket."

"I like it, it's in my price range."

This socio-economic divide between 'budget' and 'premium' was confirmed in the quantitative research. Benson & Hedges Smooth, the brand which was seen to be smoked by smokers who were more 'upmarket', was also the most appealing in terms of being seen smoking.

Table 12: Study 1 Brand Descriptors (Premium and Budget)

Proportion who selected the word / statement for each brand	Average of brands tested %	Benson & Hedges Smooth %	Longbeach Rich %	Peter Jackson Rich %	Winfield Red %	Alpine Original %	Camel (soft pack) %
Well off	12	41 [^]	2 [✓]	4 [✓]	4 [✓]	12	11
Sophisticated	12	33 [^]	3 [✓]	5 [✓]	5 [✓]	16	10
Trendy	13	25	8	5	6	18	15
Popular	15	36 [^]	15	7 [✓]	13	15	3 [✓]
Intelligent	8	26 [^]	2 [✓]	4	1 [✓]	7	5
Budget	25	2 [✓]	64 [^]	39 [^]	24	8 [✓]	11 [✓]
Plain	17	10 [✓]	29 [^]	23	18	9 [✓]	14
Ordinary	19	10 [✓]	29 [^]	35 [^]	23	8 [✓]	8 [✓]
Is a brand I would like to be seen smoking (Strongly Agree / Somewhat Agree)	28	67 [^]	20	23	29	15 [✓]	13 [✓]

Base: All respondents (n=122)

B1-6. Thinking about the brand of cigarette you see below, please indicate which words you feel describe the kind of person who smokes this brand of cigarette. Multiple response per brand.

^{^✓} Significantly higher / lower than the average of other brands at 95% c.i.



Other important distinguishers that emerged in the qualitative research in relation to premium and budget brands surrounded 'taste' and the perceived quality of constituent parts (tobacco, filter, and paper). In regards to both 'taste' and quality of constituent parts, respondents had difficulty in describing what made a 'good' or 'bad' cigarette. The only way in which they were able to do this was to use tried brands of cigarette as a frame of reference (usually the brand they smoked). Perceived 'taste' has a strong effect on brand appeal.

"When you first start smoking you don't know one from the other, which ones taste nice and which taste bad."

"Once you've got your brand the others just seem to taste funny."

"What tastes good? Peter Jackson!"

"Winnie-red have the best taste, I've tried a lot and these just taste the best. I always smoke those if I can."

9.4 Tradition

In regards to 'tradition', brands were credited with a degree of appeal owing to their longevity in the market. The perception is that the brand must have been doing something 'right' to have achieved longevity. There was some sense that the cigarettes of these brands had not changed either and may contain better quality tobacco or fewer chemicals. This is largely reflective of smokers feeling that the traditional brands are associated with a time period when smoking was not viewed so negatively across society.

"It's traditional too, in the 70s when I was growing up that's the sort of brand that older people smoked."

"The older ones, I reckon they've got less chemicals in them."

"Benson and Hedges, it's everywhere you go, it's been sports, it's everything...and it hasn't changed in taste."

"This pack, it hasn't changed much over the years, even when I was a kid I remember it being gold."

9.5 Nicotine Content (Light and Heavy)

Brands tailored toward 'heavy' / 'light' / 'casual' and 'social' smokers also impacted on brand appeal. Stronger, cheaper brands, and those that come in larger pack sizes, were associated with heavy smokers who have a high level of addiction. Light and menthol cigarettes were associated with casual, light and social smokers.



"I wouldn't smoke those really, they seem like someone really addicted would smoke them."

"Depends on what I want, if I want a stronger one I'll go with this or that."

"Well, those aren't really for smokers are they? They're so light it's like smoking with air conditioning."

"The really strong ones are the ones that come in big packs, I think of heavily addicted smokers who need a big hit or smoke a lot."

"If you have half strength you might as well have two!"

"If you go too low [nicotine content] you have to smoke twice as much as you would have on full strength!"

Stronger cigarettes are typically linked to more 'serious' or 'tough' and 'masculine' descriptors. This is discussed in more detail in the section 9.2. This suggests that 'heavier' cigarettes are associated more 'masculine' traits, whilst lighter cigarettes are more associated with 'feminine traits'.

The quantitative research also found that brands which were more frequently associated with 'harder smokers' or 'masculine smokers' such as Winfield Red and Camel (soft pack) were also seen to be 'harder to quit'. Cigarette brands which were more frequently associated with being 'gentle' (lighter) such as Alpine Original were considered less hard to quit, as shown in the table below.



Table 13: Study 1 Brand Descriptors (Heavy vs. Light)

Proportion who selected the word / statement for each brand	Average of brands tested %	Winfield Red %	Camel (soft pack) %	Peter Jackson Rich %	Benson & Hedges Smooth %	Longbeach Rich %	Alpine Original %
Mature	37	39	61 [^]	29	45	28	22 [~]
Tough	18	45 [^]	41 [^]	10	7	4 [~]	0 [~]
Serious	15	25 [^]	22	17	16	4 [~]	5 [~]
Young	23	19	8 [~]	24	23	33 [^]	31
Gentle	8	2 [~]	5	3	4	7	29 [^]
Would be a harder cigarette brand to quit / give up than other cigarettes (Strongly Agree / Somewhat Agree)	21	37 [^]	31 [^]	22	18	10	7 [~]

Base: All respondents (n=122)
 B1-6. Thinking about the brand of cigarette you see below, please indicate which words you feel describe the kind of person who smokes this brand of cigarette. Multiple response per brand.
 C1. Now, here are some other statements about different cigarette brands. For each brand of cigarette shown, please indicate how strongly you feel each statement shown describes the cigarette brand. How strongly do you agree that this brand...? 5pt scale
[^] Significantly higher / lower than the average of other brands at 95% c.i.

The spontaneous descriptions provided within the quantitative research also suggested that Winfield Red was associated with ‘long term smokers’, ‘hard core smokers’ and older smokers. These were more strongly associated with smokers with a high level of addiction, which was a negative association.

The spontaneous frame of reference for describing the different strengths of cigarette brands was through packet colour. For example, the colour red was associated by respondents with high nicotine-content cigarettes, whereas blue was associated with medium, and gold was associated with low nicotine-content cigarettes.

The ability to identify cigarette strength by colour had a direct effect on appeal, depending on individual preference. However, it is important to note that some respondents did mention that the recent change in how vendors are able to display cigarettes has made this immediate identification of cigarettes impossible.

“The heavier ones are more sort of like toward a darker colour.”



"The blue gives it that light effect, not as harsh."

"When I ask for the rich one or the other one half the time they can't tell, so I look for the colour and say I want the red one or the blue one."

"You know straight away what strength they are depending on the colour."

"You used to walk into the shop and you could immediately see where the cigarettes you want are, but not anymore."

Pack colour and strength were also correlated with perceived harm. Those packs whose colours indicated a high strength cigarette were also perceived to be the most harmful. There was little to no knowledge amongst the majority of respondents that damage caused by cigarettes is not necessarily correlated to cigarette strength, and as such many used pack colour and perceived strength as the indicative factor in their decision-making in regards to perceived harm.

"I would smoke white tips [menthol] especially when I'm sick. I'd buy one or two packets depending on how sick I am."

"Red ...it's a danger colour as well."

"Yeah, [red], it's a lot stronger."

The quantitative research showed that respondents typically considered all brands as harmful to health, as indicated by the high proportion of disagree scores on the dimension 'not as harmful to health'. However, brand variants which were in a darker colour were more likely to be seen as 'harmful to health' than the lighter coloured packs. For example, Winfield Red had one of the highest levels of perceived harm to health (65% strongly disagreed that the brand was 'not as harmful to health') whilst respondents were significantly less likely to see Alpine Original which had a light blue pack in the same way (52% strongly disagreed that the brand was 'not as harmful to health'). Interestingly, Longbeach Rich, which has a blue and white pack, was perceived to be as harmful (64%) as Winfield Red (65%). In this case, perceptions of Longbeach as a 'budget' brand could be influencing perceptions of harm. Whilst only speculative, this could suggest that there is an association between perceived quality and subsequently, perceived harm.¹⁸

¹⁸ In the section of 'Premium vs. Budget' it was indicated that 'budget' cigarettes (lower priced cigarette brands) were seen to be lower quality.

Table 14: Study 1 Perceived Harm by Pack Colour

Pack Descriptors by brand	Camel (soft pack) %	Winfield Red %	Longbeach Rich %	Benson & Hedges Smooth %	Peter Jackson Rich %	Alpine Original %
<i>Pack colour</i>	Brown	Red	Blue and White	Gold	Light gold	Light blue
Harm to health - Is not as harmful to health as other cigarette brands (Strongly Disagree)	71 [^]	65 [^]	64	57 ^v	58 ^v	52 ^v
Base: All respondents (n=122) B1-6. Thinking about the brand of cigarette you see below, please indicate which words you feel describe the kind of person who smokes this brand of cigarette. Multiple response per brand. C1. Now, here are some other statements about different cigarette brands. For each brand of cigarette shown, please indicate how strongly you feel each statement shown describes the cigarette brand. How strongly do you agree that this brand...? 5pt scale ^{^v} Significantly higher / lower than other comparison subgroups at 95% c.i.						

9.6 Local and Foreign

Notions of 'local' or 'foreign' cigarettes also impacted on overall brand appeal. Specific brands, most commonly Camel, were negatively described by respondents as 'foreign' cigarettes and distinctly 'non-Australian'. However, some felt the reverse and considered the brand Camel to be appealing, as it was somewhat 'exotic', or specifically 'European' in nature.

"You see a lot of Europeans smoking those [Camel]."

"I mostly see Asians smoking those, they're not very Australian."

"Those are for ethnics."

In contrast, a number of brands were seen as distinctly 'Australian', which overall was viewed as making the brand more appealing. Distinctly 'Australian' cigarettes were primarily those which were seen to be in the market-place the longest or were perceived to be smoked by particular types of individuals who 'represented' clearly defined Australian stereotypes (for example tradies, football or cricket fans.)

"Everyone smokes those [Winfield]. If you're Australian and you smoke, at some point you'll smoke them."



"It's a real 'Anglo' smoke, traditional...going back to Paul Hogan sort of things, it's not a real multicultural kind of cigarette"

Similarly, the quantitative research showed that although Winfield Red and Camel (soft pack) were seen in a similar light in terms of being a more 'masculine' and 'tough' cigarette, Camel (soft pack) was less associated with being 'ordinary'. This is congruent with the element of exoticism described in the qualitative research. Camel (soft pack) was also seen to be lower on appeal compared to some other brands.

Table 15: Study 1 Brand Descriptors (Ordinary)

Proportion who selected the word / statement for each brand	Average of brands tested %	Winfield Red %	Camel (soft pack) %	Peter Jackson Rich %	Benson & Hedges Smooth %	Longbeach Rich %	Alpine Original %
Masculine	34	63 [^]	58 [^]	33	37	12 [✓]	3 [✓]
Serious	15	25 [^]	22	17	16	4 [✓]	5 [✓]
Tough	18	45 [^]	41 [^]	10	7	4 [✓]	0 [✓]
Ordinary	19	23	8 [✓]	35 [^]	29 [^]	10 [✓]	8 [✓]
Is a brand I would like to be seen smoking (Strongly Agree / Somewhat Agree)	28	29	15 [✓]	23	67 [^]	20	13 [✓]

Base: All respondents (n=122)
 B1-6. Thinking about the brand of cigarette you see below, please indicate which words you feel describe the kind of person who smokes this brand of cigarette. Multiple response per brand.
 C1. Now, here are some other statements about different cigarette brands. For each brand of cigarette shown, please indicate how strongly you feel each statement shown describes the cigarette brand. How strongly do you agree that this brand...? 5pt scale
 ^^Significantly higher / lower than the average of other brands at 95% c.i.

9.7 Pack Size (Quantity)

The immediate association all respondents had with larger pack sizes was 'bulk buying'. For lower SEG respondents, buying larger pack sizes was generally the result of a cost analysis, with the positive view that 'you get more for your money'.

"I suppose it's because I get value for money."

"It's much cheaper for me to buy them in 50s...and then I never run out."



However, for middle to higher SEGs the associations with 'bulk buying' were negative and had a direct impact on brand appeal. For these respondents, buying cigarettes in larger pack sizes indicated someone who was a 'heavy' smoker and subsequently 'more addicted'. Both of these descriptors were viewed negatively.

"Everyone knows smoking is addictive, but you just don't want to think about it do you."

"Chain smokers are dirty man, that's nasty."

Equally respondents reported that they did not want to 'look poor', 'cheap' or 'addicted'. There was a strong sense of 'image consciousness' or aspirational smoking directly linked to pack size and brand appeal.

"Sometimes I buy a 50 pack and then take them out and fill up my 25 pack."

"They just look like you're on a budget if you see someone buying 50 packs."

"Even if Winfield or Benson and Hedges had a 50 pack I still wouldn't buy it, to me it's too many and you'll smoke more."

"I think that the person who buys the bigger pack is a heavier smoker."

There is also evidence in the quantitative research to suggest that brands which offer larger pack sizes, namely Longbeach Rich and Peter Jackson Rich, are considered to be more 'budget' and also less appealing in terms of a brand respondents would like to be seen smoking.

"I wouldn't smoke anything in a pack of 50s."

Perceptions by Key Subgroups

Although, the quantitative data showed some statistical variations in perceptions towards brands, there was a strong consistency across the brand perceptions for both males and females and different age groups. Qualitatively, there was some evidence that younger smokers are less familiar with the various brands and their history and also less set in their ways and as such, tend to hold less negative views on different brands.

Tables of the quantitative data on Brand descriptors and the Brand / Pack evaluation measures by demographics can be found in Appendix B: Study 1.



10 SPECIFIC BRAND PROFILES

10.1 Winfield Red and Camel (soft pack)

In the quantitative analysis, Winfield Red and Camel (soft pack) were seen as the cigarette for 'hard smokers'. The brands were associated with being:

- 'tough' (45% and 41% respectively compared to 18% average of all brands tested);
- 'masculine' (63% and 58% respectively compared to 34% average of all brands tested); and
- for 'serious' smokers (25% and 22% respectively compared to 15% average of all brands tested).

However, while Winfield Red was considered definitively 'Australian' (from the qualitative findings), Camel was differentiated by being less associated with 'ordinary' (8%) compared to Winfield Red (23%) and open-ended responses about 'Camel' suggested that it has a more 'foreign' association. Winfield was also more strongly associated with lower SEG smokers and with the descriptor 'budget' (24%) compared to Camel (soft pack) smokers (11%).

The table below shows the quantitative results for Winfield Red and Camel (soft pack) compared to the average of all brands tested.



Table 16: Study 1 Winfield Red and Camel (soft pack) Key Measures

Proportion who selected the word / statement for each brand	Average of brands tested %	Winfield Red %	Camel (soft pack) %
Masculine	34	63 [^]	58 [^]
Tough	18	45 [^]	41 [^]
Mature	37	39	61 [^]
Traditional	25	35	34
Serious	15	25 [^]	22
Budget	25	24	11 [∨]
Ordinary	19	23	8 [∨]
Young	23	19	8 [∨]
Plain	17	18	14
Popular	15	13	3 [∨]
Strongly agree / somewhat agree %			
Looks like it contains a high quality cigarette	46	53	42
Would be a harder cigarette brand to quit / give up than other cigarettes	21	37 [^]	31 [^]
Has a more attractive pack than other cigarette brands	42	33	37
Is a cigarette brand I would like to be seen smoking	28	29	15 [∨]
Is not as harmful to health as other cigarette brands	9	9	4 [∨]
Base: All respondents (n=122) B1-6. Thinking about the brand of cigarette you see below, please indicate which words you feel describe the kind of person who smokes this brand of cigarette. Multiple response per brand. Top 10 word descriptors. C1. Now, here are some other statements about different cigarette brands. For each brand of cigarette shown, please indicate how strongly you feel each statement shown describes the cigarette brand. How strongly do you agree that this brand...? 5pt scale ^{^∨} Significantly higher / lower than the average of other brands at 95% c.i.			



In respondents' own words, Winfield Red was described as:

"Typical Aussie."

"An old man in a pokie room."

"Blue Collar / Factory Worker."

"Viewed as 'tradesmen' cigarette in my circle. It's the common 1st brand for young smokers, including me, then grow into more 'sophisticated' brands."

"Long term smoker 'Never going to quit, smoke till the day I die' type."

The spontaneous descriptions provided in the quantitative survey about Camel (soft pack) included:

"International traveller."

"It reminds me of Europe & the Summer as everyone smoked them when I was in Greece."

"Rare, heavy, hot."

"Ethnic/ Indian."

This reflects the perceptions shared in the qualitative findings regarding local compared to foreign brands, with local brands having higher appeal.

In line with the findings from the qualitative research relating to nicotine content, Winfield Red and Camel, which were perceived to be 'stronger cigarettes' were also considered 'harder to quit'. This was borne out of the spontaneous association between smoking stronger cigarettes and higher levels of addiction.

10.2 Benson & Hedges Smooth

Benson & Hedges Smooth was perceived as distinctly 'premium' and 'upmarket'. Words that differentiated the brand were:

- 'well off' (41% compared to 12% average of all brands tested);
- 'sophisticated' (33% compared to 12% average of all brands tested);
- 'popular' (36% compared to 15% average of all brands tested); and
- 'intelligent' (26% compared to 8% average of all brands tested).



The brand was also seen to be more socially desirable and to have higher quality cigarettes, with a significantly higher proportion who agreed that it:

- 'looks like it contains higher quality cigarettes' (80% compared to 46% average of all brands tested);
- 'is a cigarette brand would like to be seen smoking' (67% compared to 28% average of all brands tested); and
- 'has a more attractive pack' (66% compared to 42% average of all brands tested).



The table below shows the quantitative results for Benson & Hedges compared to the average of all brands tested.

Table 17: Study 1 Benson & Hedges Smooth Key Measures

Proportion who selected the word / statement for each brand	Average of brands tested %	Benson & Hedges Smooth %
Mature	37	45
Well off	12	41 [^]
Masculine	34	37
Popular	15	36 [^]
Traditional	25	34
Sophisticated	12	33 [^]
Intelligent	8	26 [^]
Trendy	13	25
Young	23	23
Feminine	26	23
Strongly agree / somewhat agree %		
Looks like it contains a high quality cigarette	46	80 [^]
Is a cigarette brand I would like to be seen smoking	28	67 [^]
Has a more attractive pack than other cigarette brands	42	66 [^]
Would be a harder cigarette brand to quit / give up than other cigarettes	21	22
Is not as harmful to health as other cigarette brands	9	8
Base: All respondents (n=122) B1-6. Thinking about the brand of cigarette you see below, please indicate which words you feel describe the kind of person who smokes this brand of cigarette. Multiple response per brand. Top 10 word descriptors. C1. Now, here are some other statements about different cigarette brands. For each brand of cigarette shown, please indicate how strongly you feel each statement shown describes the cigarette brand. How strongly do you agree that this brand...? 5pt scale [^] Significantly higher / lower than the average of other brands at 95% c.i.		



Qualitatively, as a brand and pack, Benson & Hedges Smooth had the most 'positive' connotations in terms of the brand descriptors being used. It was also talked about as being more desirable than other brands. The qualitative research suggested that this was largely attributed to the 'gold' pack. It was also an attractive pack across all age ranges as well as to both male and female smokers.

10.3 Longbeach Rich

Longbeach Rich was more likely to be associated with lower SEGs, with a higher association to the word descriptors:

- 'budget' (64% compared to 25% average of all brands tested);
- 'ordinary' (29% compared to 19% average of all brands tested); and
- 'plain' (29% compared to 17% average of all brands tested).

It had the least attractive pack (26% compared to 42% average of all brands tested), and was seen to contain lower quality cigarettes (18% compared to 46% average of all brands tested) as shown in the table below.



Table 18: Study 1 Longbeach Rich Key Measures

Proportion who selected the word / statement for each brand	Average of brands tested %	Longbeach Rich %
Budget	25	64 [^]
Young	23	33 [^]
Feminine	26	32
Ordinary	19	29 [^]
Plain	17	29 [^]
Mature	37	28
Popular	15	15
Relaxing	12	14
Masculine	34	12 ^v
Traditional	25	11 ^v
Strongly agree / somewhat agree %		
Has a more attractive pack than other cigarette brands	42	26 ^v
Is a cigarette brand I would like to be seen smoking	28	20
Looks like it contains a high quality cigarette	46	18 ^v
Would be a harder cigarette brand to quit / give up than other cigarettes	21	10
Is not as harmful to health as other cigarette brands	9	6
Base: All respondents (n=122) B1-6. Thinking about the brand of cigarette you see below, please indicate which words you feel describe the kind of person who smokes this brand of cigarette. Multiple response per brand. Top 10 word descriptors. C1. Now, here are some other statements about different cigarette brands. For each brand of cigarette shown, please indicate how strongly you feel each statement shown describes the cigarette brand. How strongly do you agree that this brand...? 5pt scale ^{^v} Significantly higher / lower than the average of other brands at 95% c.i.		



In respondents' own words, Longbeach Rich was described as:

"Budget smoker, younger teenagers" (18 – mid 20's) due to lower cost"

"Person on a budget, lower income earners"

"Bogan"

"Cheap"

"Single Mums"

With these perceptual links to lower SEGs, Longbeach also had relatively low scores on being a 'brand I would like to be seen smoking'. The strongest positive association which emerged from the lower SEG respondents was that Longbeach provided good value for money in terms of the quantity of cigarettes in each pack.



10.4 Peter Jackson Rich

Peter Jackson Rich had a similar profile to Longbeach Rich but was less strongly associated with being 'budget' (39% compared to 64% Longbeach Rich). It was largely seen to be less differentiated than the other brands tested as shown in the table below:

Table 19: Study 1 Peter Jackson Rich Key Measures

Proportion who selected the word / statement for each brand	Average of brands tested %	Peter Jackson Rich %
Budget	25	39 [^]
Ordinary	19	35 [^]
Masculine	34	33
Mature	37	29
Traditional	25	24
Young	23	24
Plain	17	23
Feminine	26	20
Serious	15	17
Tough	18	10
Strongly agree / somewhat agree %		
Looks like it contains a high quality cigarette	46	40
Has a more attractive pack than other cigarette brands	42	34
Is a cigarette brand I would like to be seen smoking	28	23
Would be a harder cigarette brand to quit / give up than other cigarettes	21	18
Is not as harmful to health as other cigarette brands	9	10
Base: All respondents (n=122) B1-6. Thinking about the brand of cigarette you see below, please indicate which words you feel describe the kind of person who smokes this brand of cigarette. Multiple response per brand. Top 10 word descriptors. C1. Now, here are some other statements about different cigarette brands. For each brand of cigarette shown, please indicate how strongly you feel each statement shown describes the cigarette brand. How strongly do you agree that this brand...? 5pt scale [^] Significantly higher / lower than the average of other brands at 95% c.i.		



Open-ended descriptions of Peter Jackson Rich suggested there was less of a unified perception of the brand. In respondents' own words, Peter Jackson Rich was described as:

"Middle-aged. Started smoking in 70s, 80s when brand was popular and have remained true to the brand"

"Working class"

"Beach going - 20 - something - for beer drinkers."

The availability of this brand in larger pack sizes also contributes to its perceptions as a more 'budget' brand.

10.5 **Alpine Original**

Alpine Original was seen to be a brand that was more likely to be for 'soft smokers' or 'feminine smokers'. It was more likely to be associated with smokers who were:

- 'feminine' (72% compared to 26% average of all brands tested); and
- 'gentle' (29% compared to 8% average of all brands tested).

The brand was also less likely to be associated with smokers who were 'mature' (22% compared to 37% average of all brands tested).

Other words used to describe the brand were 'relaxing' (27% compared to 12% average of all brands tested) and 'cool' (23% compared to 13% average of all brands tested). These are descriptors which reflect the pack and the variant messages 'uniquely refreshing'. Perceptions of the Alpine Original pack are in line with general views on 'menthol' cigarettes as a lighter cigarette.



Table 20: Study 1 Alpine Original Key Measures

Proportion who selected the word / statement for each brand	Average of brands tested %	Alpine Original %
Feminine	26	72 [^]
Young	23	31
Gentle	8	29 [^]
Relaxing	12	27 [^]
Cool	13	23 [^]
Mature	37	22 [∨]
Trendy	13	18
Sophisticated	12	16
Popular	15	15
Traditional	25	14 [∨]
Strongly agree / somewhat agree %		
Has a more attractive pack than other cigarette brands	42	54 [^]
Looks like it contains a high quality cigarette	46	45
Is not as harmful to health as other cigarette brands	9	15 [^]
Is a cigarette brand I would like to be seen smoking	28	13 [∨]
Would be a harder cigarette brand to quit / give up than other cigarettes	21	7 [∨]
Base: All respondents (n=122) B1-6. Thinking about the brand of cigarette you see below, please indicate which words you feel describe the kind of person who smokes this brand of cigarette. Multiple response per brand. Top 10 word descriptors. C1. Now, here are some other statements about different cigarette brands. For each brand of cigarette shown, please indicate how strongly you feel each statement shown describes the cigarette brand. How strongly do you agree that this brand...? 5pt scale ^{^∨} Significantly higher / lower than the average of other brands at 95% c.i.		



Open-ended descriptions of Alpine associated the brand with female and younger smokers in line with the brand's low association with being 'masculine', 'tough', 'mature', and 'traditional'.

In respondents' own words, Alpine Original was described as:

"A more gentle package for a more gentle person"

"A woman's cigarette"

"Younger girls (18-23 years old) who don't want the normal tobacco after-taste in their mouth"

11 PERCEPTION OF CIGARETTE STICKS

The qualitative research also explored respondents' views and assumptions regarding 'white tip' and 'cork tip' cigarettes. This also included 'slim' cigarette sticks and specifically a 'More dark' stick and a 'Peel Sunny Peach' stick. Pictures of the stimulus used can be found in Appendix B: Study 1.

The brands used in the group discussions were:

- white tip: Alpine, DJ Mix, and Dunhill;
- cork tip: Dunhill, Escort and Marlboro;
- slim stick: Benson and Hedges, Dunhill and Vogue; and
- specific variant: More Dark, Peel Sunny Peach.

The findings clearly indicate that there are strong assumptions and levels of appeal associated with different cigarette sticks. There are strong associations with different stick types or sizes, as well as colouration and differentiating factors such as patterned tips.

11.1 White / Cork Tips

'Normal' or Menthol

The immediate and consistent assumption made by respondents across the sample upon viewing the two types of cigarette sticks was that white tips were menthol. This is borne out of their experience of menthols, either having tried them or having seen other people smoking them. Cork tip cigarettes were described as 'normal' or 'standard' tobacco cigarettes.

"I've only ever seen menthols have white tips."

"Anytime you see someone smoking a menthol it's got a white tip on it."

Gender Associations

White tipped cigarettes were strongly seen as feminine, while cork tips, in direct comparison, were considered more masculine. However, as both male and female respondents had experience of smoking cork tips themselves, as well as observing others, they were not considered exclusively masculine. Associating a gender with either white or cork tips was equally present among male and female respondents.

The association of 'menthol' with white tips largely enhanced the feminine association as these were seen to be predominantly the choice of female or effeminate smokers.

"I'd just find it really weird if a guy was smoking a cigarette with a white filter [menthol]."



"I wouldn't smoke Alpine because I don't like menthol...and I'm not a 15 year old girl."

"They're more feminine. I think more women smoke those."

Due to familiarity, cork tips were strongly regarded as signifying a 'standard' or 'normal' cigarette. While in direct comparison to white tips they were seen as 'masculine', overall they were considered unisex, or gender neutral.

"Those [cork tips] are what most people smoke, men, women, boys, girls, everyone."

"That's neither masculine or feminine. I mean, everyone you see is smoking cork tips really."

"I'd say it's more masculine [cork tip]."

In relation to cigarette stick appeal, women felt more at ease moving between the different types of tips, while the majority of men would not entertain the idea of smoking a white tip out of choice. For men there was an association of white tips with social or casual smokers and female or effeminate smokers.

"I'd smoke any of them really, just based on how they look I don't mind smoking either." [Female respondent]

"If I could I'd never smoke a white tip, it just looks like a woman's cigarette."

Type of Smoker

Respondents linked different 'types' of smokers with white and cork-tipped cigarettes. This affected their 'me' or 'not me' associations with particular tips, which in turn affected their level of appeal.

Cork tips were clearly associated with 'average', 'everyday', and for the majority 'more like me' smokers, whereas white tips were strongly associated with 'casual' or 'social' smokers due to the perception they were 'menthol' and 'lighter'. Cork tips encompassed every other type of smoker regardless of what brand, variant or strength cigarette they smoked.

"That's just a normal smoker's cigarette...that's what you see your everyday smoker smoking."

"Those are all I've ever smoked. That's what everyone I know smokes."

"That's all there was when I started smoking I think, so I've just always thought of those as normal."



"I think those people are a bit image conscious...they actually think about what they look like when they're smoking."

"It's for people who don't really want to smoke, they only want to hold it and be seen holding it."

'Average' and 'Sophisticated'

Associations with 'sophistication' also emerged from participants' responses. Cork tips were very much seen as the 'everyman's' or 'average' cigarette. For white tips, as well as the feminine association described above, there was a sense they denoted a more 'sophisticated' cigarette, or at the least a cigarette with pretensions to target a smoker who sought to project sophistication.

"If I compared it with the normal ones I think these are more sophisticated."

"I can imagine high class intelligent people smoking those."

In these instances 'sophisticated' was linked to affluence, but also stretched to include the descriptors 'international', 'European', and 'premium'. There were some premier brand associations with white tips (for example with Cartier or Davidoff), but the majority of associations were formed from observations of foreign smokers, or through travel experience.

"In Europe everyone smokes white tips."

"Some of the classy brands have white tips."

Perceived Quality

Although respondents most often perceived white tips to be a more 'sophisticated' cigarette, in general they were felt to be of inferior quality. Some exceptions exist around perceptions of the 'premium' brands, but overall the majority of respondents felt they tasted worse, were badly made, and contained less quality and quantity of tobacco.

"They're much worse, there's hardly any tobacco in them. If you tap them down they just turn into nothing."

"I think they're worse made, there's something about them that just makes me think they're somehow worse quality."

"They tend to taste pretty bad, I don't really enjoy them."

These opinions were largely based on perceptions of the white tip cigarettes being either menthol or manufactured in cheaper overseas countries.

"I've tried them, but there's no way I'd swap what I smoke now for white tips."



"White tips just make me think of cheap shitty cigarettes from Thailand."

"I've actually weighed them [white versus cork tipped] out of curiosity and the white ones have less tobacco in them."

11.2 Slim Sticks

Respondents across the sample found slim sticks to be very feminine. This association was more pronounced than with the standard size white tip sticks. This was due to their size / thickness and by the observations respondents had made of who smoked them.

"I kind of find the idea of a girl smoking the thin one appealing."

"It's much more effeminate."

In a similar vein to standard white tip cigarettes, the slim sticks were associated with people who they felt wanted to be 'seen' to be smoking or were more image conscious, not 'real smokers'. The strong association that it was younger girls who were more likely to smoke slim sticks contributed to this perception.

While white tip responses were about projecting a degree of sophistication, respondents felt slim cigarettes were attempting to do the same but failing. Instead they were seen as 'try hard' and openly aspiring to be sophisticated. Respondents' evaluation of this perceived 'aspiration' was deemed to be negative.

"These are so try-hard."

"Super trendy rich kids trying to look cool. My perception is that they're trying to look cool, they might be thinking that this is cool because it's different."

Young girls, however, did find them appealing as 'occasion' cigarettes and as holding a high and attractive level of projected sophistication.

"They're mainly for going to club,..that sort of thing."

"If I'm going somewhere fancy then I might buy a pack, they're really nice."

Overall the slim cigarette design had very little appeal as it was considered mostly for young girls who were not 'real' smokers.

11.3 'Fancy' Cigarettes - 'More Dark' and 'Peel Sunny Peach'

The More Dark was consistently and spontaneously compared to a cigar. As such, respondents said they felt it would be strong in nicotine content and taste. It was also universally considered to be highly



masculine. The colour, length and cigar-like association of the cigarette stick contributed to this impression.

Younger respondents felt it was an older man's cigarette, while older respondents (40 plus), some of whom had tried the brand, identified it as something 'for them'. For these older respondents it was aspirational, high quality and appealing. Cigars had a strong association with sophisticated and affluent men which the More Dark capitalises on.

"Is that a cigar?"

"I bet it tastes strong. It looks like a cigar, or like something an older maybe retired man would smoke."

"That looks really strong."

"It's an old man's cigarette. It's all dark and look how long it is!"

"Classy you know...beautiful cigarette"

"Mores are a great make. You see serious people smoking those."

However, a degree of appeal emerged for younger respondents due to the 'novelty' factor. It was something different and as such created a level of intrigue and appeal.

"It's different...I'd probably try it just because it's different."

"I know 'More' and they're good cigarettes so I'd definitely try it."

The Peel Sunny Peach produced contrasting responses. There was some degree of intrigue expressed among respondents less than 30 years old, whereas those over 30 years old immediately dismissed it as a 'gimmick' or 'novelty' for casual or light smokers. Most strongly it was seen by all respondents in the sample as clearly marketed for younger smokers due to the multi-coloured tip. This had strong negative connotations. The bright and patterned filter created an immediate 'not me' association for older respondents, who felt it was not 'serious' enough for them. The colours suggested to older smokers that it was a product for young smokers.

The majority of respondents felt it to be very feminine, driven by the pink pattern on the tip. There was low perceived appeal largely prompted by the impression that this cigarette stick was not an 'everyday' or 'serious' smoker's stick, but rather a 'gimmick' cigarette. Younger respondents claimed that they were unlikely to say no to trying one should they be offered it, but were also unlikely to buy a packet themselves. The 'difference' or 'stand out' nature of the filter is what attracted young people to saying they would try the cigarette. It was seen as something 'different' and thus could be attractive.

"I mean, I'd try it. If someone gave me one for free I'd try it, but it would be more of a joke than for any kind of satisfaction."



"That looks like something you'd serve up at a kids birthday party!"

"I think that is just the cigarette companies wanting to sell cigarettes to a younger audience."

"It looks childish...that would entice kids I reckon."

11.4 Cigarette Stick Branding

Respondents had difficulty in offering spontaneous differences based on appeal between the different brandings on cigarette sticks. They reported not normally paying much or any attention to the actual branding on the cigarette stick itself.

"I don't ever look at these really."

"Who notices these? I've got my finger over them the whole time I'm smoking anyway."

"You don't really look down when you're taking your cigarette out of the pack which is the only time you might notice it. It's just automatic, you grab it, put it in your mouth and light the thing."

"Is this an old Marlboro or something? I don't remember ever seeing this before? Or maybe I've just not been noticing."

However, once prompted using the stimulus, two clear criteria were used by respondents across the sample to appraise their appeal or attractiveness (beyond the colour of the tips).

The first and most prominent was known-brand recognition. Respondents immediately identified the brands they were familiar with, or smoked themselves, and put more attention on these in their responses than those they were less familiar with.

The second criterion was described by the respondents as the perceived amount of 'effort' that had been put into the branding. For example, Marlboro was perceived to have put in minimal effort with a washed grey colour and standard font. Dunhill, in contrast, had colour, text, a logo and a gold stripe around the tip. This denoted a high degree of effort, which was equated with sophistication and quality– both aspirational indicators that increased the brand appeal.

"The Marlboro is just really boring, it doesn't look like they've tried really."

"The B&H is the best by far. I like the gold band, it's kind of classy really."

"Is that pin-striping? Producing that means more effort, I do like it, I do perceive it as a more expensive cigarette."



Across the sample there was a universal level of negative projection onto the white tip cigarettes, which made it difficult for respondents to differentiate between the individual brands. Only when they were looked at in detail did any positive responses emerge. Otherwise they were generally perceived to be 'bad' or simply indicating menthol. The few positive comments that were made were targeted towards the Alpine, which was praised for a degree of perceived 'effort', as it was more substantial in size and scope than the others. Equally the inclusion of colour on the Dunhill was considered impressive, especially in comparison with the other white tips.

The length of the More and the white tip Dunhill were also commented on and seen by respondents as part of the overall branding. They were distinguishing features which signified a heavy smoker's cigarette. Increased size was equated with increased addiction and need, or desire, for a 'bigger hit'. On the whole, this prompted a negative perception of these cigarette sticks. For some they did prompt a degree of warmth, as there was some romanticised connection with the 'elegance' of 'days gone by' involving cigarette holders and parlour rooms.

"Who needs to smoke a cigarette that long?! That's got to be for seriously heavy smokers, I'm not sure I could finish it."

"That so old school! Looks like something they would smoke in the 1920's at a champagne party."

For the slim cigarettes sticks, the only branding associations for the 'Vogue' were with under- 21 year old females. There was an association for some with the fashion magazine and this elevated appeal above the other brands. The colour and font were also seen as attractive, clearly associated with women and especially targeted at younger girls. However, for older respondents there was little to no brand recognition and the colour and font were seen as unappealing and unattractive.

"I love the colour, it's so girly, I really like them."

"Why would I ever smoke that? Apart from the fact it's tiny it's got purple all over it and swirly girls writing!"

"That couldn't scream 'I'm for young girls' any louder."

Of the white tips, the slim Dunhill generated the most interest across the sample. A combination of brand recognition, cork coloured tip and the pinstriped pattern was cited by respondents as a sign of increased effort, which induced positive appeal.

"Of all of them the only one I'd be tempted to try is the Dunhill. They put some effort into it and I like it's got a normal filter on it."

"The pin-striping is cool, it's different."

12 PERCEPTIONS OF PACK DESIGN

A range of different pack designs which varied in shape, opening styles, size and materials, were tested in the qualitative research. Respondents were given time to examine each pack and were asked to focus on specific elements of pack design including colour and opening styles.

The following packs were used in the qualitative interviews.

- B&H Super Slims Menthol;
- Vogue 'Lilas' Super Slim;
- Du Maurier 'Distinct' re-sealable;
- Marlboro Limited Edition; and
- Dunhill 'My Mixture No 33'.

Images of these packs have been appended in Appendix B: Study 1.

12.1 Vogue and B&H

The Super Slims Vogue and B&H packets were both considered to appeal to the more image-conscious smoker. Respondents across the sample felt they would attract someone who wanted to make a public statement of 'I'm not a smoker'. The small size of the packets and cigarettes suggested a lower level of addiction which had an impact on self image, and therefore brand appeal.

"Good if you know you're going out with a group of people who don't smoke...it's discrete."

"If I'm going out these could be great. They're a bit more elegant than carrying a 25 pack around."

A number of female respondents were attracted to these packets based on the ability to easily fit them into their handbags, especially on social occasions. This was consistent across both older and younger female smokers. For a number of respondents the 'novelty' factor also played a significant role in the perceived attractiveness of the packs, as it was felt they would help to 'stand out' from amongst 'the crowd' of smokers.

"They'd be good if I was going out, they'd easily fit into my handbag."

"If you're out it would be quite cool not to just have a normal old-school pack like everyone else."

Overall, the colours of the packs were unappealing for respondents. Apart from among young girls aged 21 years or less, the Vogue was considered too 'girly' and immature. The B&H Super Slims were not associated with cigarettes. While the colours were not off-putting, neither pack was viewed as a



'traditional' for cigarettes, and many comparisons with other products were made, mostly with products from sweet shops or pharmacies / chemists.

"What is that?... It looks like a packet of chewing gum."

"That could be deodorant or tampons! I'd expect to see something like that at the chemists."

"Those don't look like cigarettes at all. Without the health warning I wouldn't think they were smokes, maybe condoms or something."

"I mean, I actually like the green. It's just not something I'd associate with cigarettes though. It doesn't look right for a pack of cigarettes."

"The green is good. It's bright and eye catching, but do I want my cigarettes to come in that colour pack? No, definitely not."

12.2 Dunhill

The Dunhill packaging was considered highly unique, with only a very small minority of respondents having seen it before. This alone created a strong level of immediate intrigue and appeal.

"Oh wow. I've never seen anything like that before. That's kind of cool."

"That's really cool. Where is this from? Where can I get one?"

Immediate associations were with high levels of sophistication and elegance. This emerged from the perceived similarity of the opening style with cigarette cases. There was a sense of nostalgia relating to when society viewed cigarettes and smokers in a more positive light, which people strongly associated with people having a cigarette case.

"That's awesome, it's like a cigarette case. Something you pull out after dinner and offer everyone a cigarette with some brandy or something".

"It's just like a ciggie case. That's for a really sophisticated smoker."

"I love cigarette cases and this is like one of those."

The quality of the cardboard was considered particularly sturdy and well made, and the embossed emblem stood out. Both of these factors, combined with the similarities to a cigarette case, contributed to the pack being seen as containing more premium cigarettes. This was true across the sample.

"It's really well made, this isn't going to get squashed in your pocket or in someone's bag."



"The cardboard is really thick, makes me think it's more expensive to make."

"I always end up squashing my packs, I wish mine were this thick."

However, there were also a number of spontaneous negatives expressed by respondents. The pack was seen as highly impractical for the 'daily' smoker who would have to take it out and about with them. Respondents felt that it clearly signified a 'stay at home' or 'coffee table' pack of cigarettes.

"It looks good but it's not going to fit into my pocket. It's totally impractical really."

"Potentially great but it ends up with everyone sharing your cigarettes."

"That's something I'd keep in the living room...serve it to guests or something...but not good for out in a club."

"I'd probably spill them everywhere, especially after a few drinks."

Equally the majority of respondents felt that to a large extent it was 'overly sophisticated' or aspirational. It did not fit with their perceptions of themselves as smokers.

"I think I'd rather be offered one than be the one offering. If someone offered me one I'd think that's pretty cool, but I reckon I'd feel like a bit of dick offering someone one myself."

"If a guy offered me a cigarette like that I'd be pretty impressed, but if he did it again I'd start to think 'loser'. Or if someone always had these on them I'd think they were a bit of a dick really, a try-hard."

In terms of the colour, responses were almost universally negative. The bright blue and contrasting yellow were unappealing, while the font in particular was unattractive and difficult to read.

"That is rank, just rank...I know it's Dunhill 'cos we looked at it closer, but from far away I can't even read that."

"I don't know who designed that but they must be colour-blind."

12.3 Du Maurier – Resealable Pack

This pack prompted the least degree of intrigue and appeal as it was felt to have the least novelty. Overall, it was seen as a high quality pack made with thick cardboard. The rounded edges were appealing, particularly for men, who felt that this would lessen the sharp edges of packs digging into them when being carried in pockets.

"It's a good pack, pretty sturdy."



"I like the round edges, it might not dig into my thighs so much when it's in my pocket."

The resealable feature polarised respondents. The two positive aspects of the seal were seen as potentially aiding in keeping the tobacco 'fresh' and stopping the actual sticks or spilt tobacco falling out into pockets or handbags.

"That would be good, it would keep the tobacco fresh."

"Sometimes they fall out in your bag...so the seal would stop that."

"Well, they're going to keep the filters clean."

In contrast, other respondents felt it was an impractical 'gimmick'. They felt that this was not for 'real' smokers because they go through their packs fast enough such that freshness is not an issue. Thus it was felt to be unnecessary and 'an irritation'.

"That's just annoying. You have to open your pack twice now."

"I'd just rip it off, I smoke enough that I just don't think about freshness or anything, there isn't time for it to go dry. It would be straight in the bin."

"Useful yes, appealing yes, practical no."

The colour red signified 'strength' and respondents assumed the sticks had high nicotine content. There was very little appeal among respondents regarding the colour, font and overall design. It did not create a high level of intrigue or appeal, even among those who felt it had some positives, and was appraised rationally rather than emotionally compared with the other packs.

"Red is always strong, so immediately I wouldn't buy it."

"It's just a bit boring. Red all over and a lot of writing."

12.4 **Marlboro Limited Edition**

Similarly to the Dunhill this pack was considered highly unique and created a strong level of intrigue and immediate appeal. It was seen as novel and had an immediate positive association with Zippo lighters, specifically in mimicking the Zippo opening style.

"I like that, that's pretty cool that. The flip-top one reminds me of a cigarette lighter."

"It's like a Zippo! My mates got one of them."

"Oh yeah! I want that, can I have that?"

Respondents expressed that its appeal lay in its novelty and described it as 'flash' and 'trendy'. Although it was seen as somewhat 'show off', this was not in the same overly aspirational vein as the Dunhill pack. The appeal was that it was not only 'fun' to use, but also a novel and exciting way to offer someone a cigarette. The packet was seen to reflect a degree of 'coolness' onto the user. Some related it directly to a similar feeling of 'coolness' when flicking a cigarette from a soft pack by tapping the bottom of the pack.

"If I offered a mate a cigarette like that I'd feel pretty cool I've got to say."

"I wish mine came in that pack!"

"It's pretty flash, but it's not too show off. Some of the other ones were a bit 'look at me', but this one is just cool."

That said, there was a sense of impracticality in terms of design and quality. Respondents were concerned that it would easily be torn and therefore become useless, with a high risk that all their cigarettes would fall out.

"It is cool but I bet it would get ripped off in no time."

"It's going to break, that's the only thing."

The colours and overall pack design were associated with nicotine strength due to the overriding black used. However, they also prompted some strong associations with car racing or Formula 1 with a number of respondents across the sample. This had a somewhat glamorous connotation for some, but was confusing for others.

"It's a bit dark, I reckon they look pretty strong."

"Something about it just say racing to me, it's the red on the black."

"I keep thinking of Formula 1, which is sort of cool, but it's a pack of cigarettes, so what's going on basically?"

While respondents reported a strong sense of appeal in relation to this pack, it was solely due to the novel opening mechanism. This novelty was maintained for some throughout the discussions while it lessened for others after consideration of practicality.

13 CONCLUSIONS

The research strongly suggests that Australian smokers do have differing perceptions of the common cigarette brands. The influence of brand design and packaging inform and affect associations strongly related to appeal, attractiveness and perceived harm. Although there was evidence that there was some variation in the strength of perceptions held by different demographic groups, there was consistency in the way smokers viewed different brands.

Pack design, size, and cigarette type inform various associations: cigarette quality; nicotine content; perceptions of being foreign or local; premium or budget; and masculine or feminine. These associations are commonly used by smokers to differentiate between brands and variants.

Brands which were seen to be more 'masculine' were also seen to be more 'tough' and 'serious' and closer aligned to heavy or stronger cigarettes, which were also perceived as slightly more harmful to health and harder to quit. The reverse was true for cigarettes perceived to be more 'feminine'. That said, there was evidence that although different brands can be perceived as 'more harmful to health', generally smokers see all cigarettes as being 'harmful'. Brands which were seen to be smoked by 'budget' smokers had less social appeal and were perceived to have lower quality cigarettes. Brands associated with smokers who were 'well off' or 'sophisticated' were more socially appealing, had more attractive packs and were considered to have higher quality cigarettes. As might be expected, there was also evidence that when a smoker considered a brand to be more socially appealing (a brand they would like to be seen smoking), the brand was also seen to be have more attractive packaging and contain higher quality cigarettes.

For the specific brands tested the research found:

- Benson and Hedges Smooth (B&H) was considered the most premium and was held as an 'upmarket smokers' cigarette. It was most strongly associated with smokers who were 'well off', 'sophisticated', 'popular' and 'intelligent'. As such, it was also the most desirable brand in terms of quality of cigarettes, pack attractiveness and a 'brand I would like to be seen smoking'. Its understated layout and established brand design created associations with a premium market leader.
- Winfield Red was seen as the 'everyman's' cigarette and strongly 'Australian'. The red packaging denoted high nicotine content, associated with heavy and masculine smokers, and the brand was most strongly associated with smokers who were 'masculine', 'tough' and 'serious'. To a lesser extent it was seen as 'budget'.
- Camel (soft pack) unfiltered was largely seen negatively in the context of being a 'foreign' brand, although for a few this made them 'exotic' and desirable. The brand was most strongly associated with smokers who were 'mature', 'masculine', 'tough' and 'serious'.
- Longbeach Rich was seen as the most 'budget' of the brands tested. It was most strongly associated with smokers who were 'budget', 'plain' and 'ordinary'. The pack design was considered to be highly feminine and the perceived quality of the cigarettes was low.

- Peter Jackson Rich was associated with average to low income earners and tended to appeal more to smokers aged 25 years and older. Most respondents were more used to seeing the brand in red and blue packaging and they found the gold to be overly aspirational and 'trying too hard' (especially in comparison to the B&H).
- Alpine Original was regarded as feminine due to being menthol. It was the brand most associated with smokers who were 'feminine' and 'gentle'. As such, the brand was implicitly rejected by men. The pack however was considered to be relatively more attractive and it was considered to be 'not as harmful' as other brands of cigarettes because of its menthol flavour, which its light blue pack colour helped to inform.

Pack design also created strong associations relating to levels of appeal. The two strongest associations were in relation to the colours and specific branding used across cigarette brands and specifically variants, as well as the pack style in relation to size and opening mechanism.

As with responses to the specific cigarette brands tested, selection criteria emerged by which respondents formed their associations with various cigarette packs. These included associations with masculine and feminine smokers, 'practicality', and 'novelty'.

- The Vogue Super Slims were seen as solely attractive for female or effeminate smokers. More specifically for young females (under 25years old). The pack size, colours, font and association with the fashion magazine created this association.
- The Dunhill No. 33 was associated with aspirational male smokers. The bright yellow writing on a blue background was off putting for respondents across the sample. It was seen as 'style over substance' and considered highly impractical. Yet it was somewhat desirable for its unique opening style (similar to cigarette cases) and the associations which that evoked (a degree of 'cool' and sophistication).
- The Du Maurier pack denoted high strength cigarettes due to the all-round red packaging, (red being strongly associated with high nicotine content cigarettes). As such it was unattractive to the majority of respondents. The resealable mechanism divided opinions, with some respondents seeing it as a practical measure which would help avoid some existing issues (tobacco drying out, or spilling into pockets / handbags), whilst others saw it as an impractical and annoying 'gimmick', not for 'real' smokers.
- The Benson & Hedges Super Slim Menthol pack was strongly seen as atypical of cigarette packs. As such it had some small appeal amongst a few respondents for its uniqueness. The majority however felt it impractical due to its size, and the bright green colour reminded them of other products including lollies, condoms, tampons and deodorant.
- The Marlboro Limited Edition pack created the most intrigue owing to its unusual opening mechanism. Its uniqueness and similarity to a Zippo lighter was seen as 'cool', 'trendy' and desirable across the entire sample. The dark packaging denoted a heavy or strong cigarette, but the strength of appeal created by the opening style overrode most concerns relating to nicotine content for the majority of respondents.



In relation to the testing of cigarette sticks, clear and spontaneous associations were expressed across the entire sample. There are high levels of differentiation between the various stick types.

For white-tipped cigarettes, respondents perceived a degree of sophistication linked with premium brands such as Davidoff or Cartier. However, their everyday experience of white tips created contrasting associations. Personal experience and observed smoking behaviours led respondents to most strongly associate white tips with menthol, foreign and budget cigarettes, as well as with female or effeminate smokers.

Cork tips were seen as 'everyday' or 'standard'. They were smoked by the majority of respondents, and thus had more appeal. While not necessarily seen as attractive in terms of design, they denoted a user experience respondents were familiar with and desired.

Slim stick cigarettes were considered niche, highly feminine or effeminate and were undesirable for the majority of respondents. The exception was young females, who viewed them as 'occasion' or 'social' cigarettes designed as 'to be seen' smoking. For this audience they held a degree of projected sophistication. In contrast the rest of the sample felt that they were pretentious and 'not a real smoker's cigarette'. It was assumed they would not deliver the desired user experience associated with normal thickness cigarettes.

The More Dark and Peel Sunny Peach had the highest 'novelty' factor and as such created some level of appeal. However, although there was immediate interest, and respondents expressed a desire to try them 'out of intrigue', it was not sustained to the point respondents were eager to purchase them themselves. Specifically, the More Dark was equated with a cigar and as such was perceived to be masculine and high in nicotine content. Cigars and cigarillos were perceived to be the domain of affluent, sophisticated and older males, which was to some degree projected onto the More Dark. In contrast the Peel Sunny Peach was seen as specifically targeting the under 20 year old group, or 'children'. This had strong negative connotations across the sample. The patterned filter was the key contributing factor to this perception and was seen as highly unappealing.

Smokers clearly have some relationship with their brand. This helps them inform and develop their opinion or relationship with other brands or variants, and with the people who smoke them. While the broader contexts of peer influence and previous advertising are contributors to forming associations based on appeal, specific associations relating to pack design, size, colour, quantity, quality, nicotine content, foreign or local heritage, premium or budget price, and masculinity or femininity, are primary driving factors in the perceived appeal, quality and attractiveness of one brand over another.



GfK bluemoon

STUDY 2: CONSUMER PERCEPTIONS OF PLAIN PACK COLOUR (SECTIONS 14-16)

14 OBJECTIVES AND METHODOLOGY

Study 2 was the first study conducted in the overall research program and sought to evaluate a list of potential colour candidates for plain packaging using a quantitative online methodology. Fieldwork was conducted from 13th December to 23rd December 2010.

The Expert Advisory Group recommended the research design (data collection method and target sample) for Study 2. The questionnaire and experimental design was designed by the GfK Blue Moon research team in consultation with the Department and the Expert Advisory Group.

14.1 Research Objectives

The objective of *Study 2: Consumer perceptions of plain pack colour* was to identify a shortlist of discrete colours for plain packaging (cigarette packs) to be taken into the next stage of testing.

The specific objectives of this study were to identify the most unattractive plain packaging colour for cigarette packs in terms of the following criteria:

- overall appeal (most unappealing);
- quality of cigarettes (lowest quality cigarettes);
- harm to health (highest perceived harm to health); and
- ease of quitting (hardest to quit).

14.2 Methodology

Study 2 used a quantitative online survey methodology conducted among Australians aged 18-65 years old who were current smokers. Online panel members were invited to participate in the survey and screened for age, gender and smoking status.

Target Sample

The survey specifically targeted Australians aged 18-65 years of age who smoked manufactured cigarettes at least weekly in the last 12 months. During recruitment for this survey, panel members who were classified in their original panel profile as 'smokers' were targeted. Invitations were sent to a 'representative' sample of panel members in regards to residence (state residing in), age and gender.

Please note, the initial sample specifications included monthly smokers however, population data for monthly smokers was unable to be accessed. As such, in the final analysis n=41 respondents who smoked monthly, but less than weekly were removed from the analysis as the data for this group could not be weighted. For more details on the weighting of the data, see the section 'Weighting' in Section 14.5.

Sample Size

The final sample size for this study was n=409 who smoked manufactured cigarettes at least weekly. Soft quotas were set on age and gender to ensure representativeness and sufficient sample sizes for subgroup analysis. The table below details the sample achievements and profile for Study 2.¹⁹

Table 21: Study 2 Sample Profile

Target Groups	Target Quotas	Sample size (including monthly smokers)	Sample size (excluding monthly smokers)
Male 18-24 year olds	min n=60	n=51	n=42
Male 25-44 year olds	min n=60	n=85	n=79
Male 45-65 year olds	min n=60	n=85	n=81
Female 18-24 year olds	min n=60	n=66	n=55
Female 25-44 year olds	min n=60	n=81	n=72
Female 45-65 year olds	min n=60	n=82	n=80
Other Gender 18-65 year olds	No quotas set	n=0	n=0
Total	n=400	n=450	n=409

14.3 Questionnaire Design

The Study 2 questionnaire followed the structure outlined below:

- screener;
- computer screen quality test;
- pack evaluation; and
- smoking profile and demographics.

A copy of the questionnaire can be found in Appendix C: Study 2.

The pack evaluation section used a forced choice based design, Maximum Difference Scaling (Max-Diff) to compare the eight mock up packs on the four key dimensions:

- overall appeal;
- quality of cigarettes;

¹⁹ Due to the lower response rates resulting from the fieldwork period coinciding with end of the year holidays, and difficulty in reaching the younger age groups, the actual sample size fell short for the younger age groups.



- harm to health; and
- ease of quitting.

Each respondent was shown a set of four packs and then asked to select the 'best' and 'worst' from the set of packs shown on a given dimension. As there were eight packs to be tested for each selection criteria, each respondent evaluated each dimension (overall appeal, quality of cigarettes, harm to health and ease of quitting) for six sets of packs. For this study, a cigarette brand name not smoked by Australians ("Mayfair") was used on all packs in order to avoid associations created by known brand names in the Australian market.

Maximum Difference (Max-Diff) Technique

Maximum Difference Scaling (Max-Diff), also known as 'Best-Worst' scaling, is a technique whereby respondents are shown a subset of the possible combinations of items being tested in the study. They are asked to indicate the best and worst items (or most and least important). This approach can be thought of as a more sophisticated extension of the Method of Paired Comparisons where each item can be compared to every other item being tested. Max-Diff is appropriate when researching a larger number of test items.

Consider a set in which a respondent evaluates four items, A, B, C and D. If the respondent says that A is best and D is worst, these two responses inform us of five of six possible implied paired comparisons: $A > B$, $A > C$, $A > D$, $B > D$, $C > D$ where ">" means "is more important/preferred than". The only paired comparison that we cannot infer is B vs. C.

Maximum difference scaling questionnaires are relatively easy for most respondents to understand. Furthermore, humans are much better at judging items at extremes than in discriminating among items of middling importance or preference. And since the responses involve choices of items rather than expressing strength of preference, there is no opportunity for scale use bias. This is an extremely valuable property for cross-cultural research studies.

Example of the Maximum Difference (Max-Diff) Scaling Question

P1A. Looking at these four cigarette packs, please indicate which pack you think is the... Most appealing overall and the Least appealing overall?

You should see four packs on the screen. If you don't see four packs please use the scroll function on the bottom of the screen to ensure you can see all the packs.

<u>Most</u> appealing overall <i>Please select one</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Least</u> appealing overall <i>Please select one</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

A similar question was asked again showing a different set of packs.

P1B. And which pack do you think is the...?

Most appealing overall and the Least appealing overall?

You should see four packs on the screen. If you don't see four packs please use the scroll function on the bottom of the screen to ensure you can see all the packs.

<u>Most</u> appealing overall <i>Please select one</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Least</u> appealing overall <i>Please select one</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

This exercise was repeated another four times for each dimension tested showing a different combination of the eight packs.

The experimental design ensured that the packs shown and the order in which they were shown were rotated to reduce order bias. The experimental design also ensured that all pack options would be compared an equal number of times in the least number of iterations.²⁰ This was important to avoid overburdening respondents with a large number of repetitive tasks which could result in respondent fatigue and impact the quality of respondents' answers.

On average, respondents took 16.7 minutes to complete the Study 2 survey.

14.4 Stimulus

The Department provided eight colours for testing which were applied to a generic image of a mock up cigarette pack. The proposed colour candidates included colours tested in previous research (Browns and Greys) and those selected to provide a range of colours.

The image artwork for Study 2 was designed for screen viewing, with the front face of the pack measuring around 275 (x axis) x 445 (y axis) pixels.

The mock up pack images were identical in design, with the exception of colour. Each mock up pack image featured:

- Mayfair brand in a 25 cigarette pack size;
- shadow detail (grey back shadow and coloured front shadow);
- Arial Narrow font size (36pt for brand, 18pt for front view pack size and 21pt for side view pack size);
- 30% size graphic health warning ("Smoking clogs your arteries").

²⁰ Note it is not necessary that each respondent actually compares all packs against each other. For example, in the case where there are four test items, A, B, C and D. If the respondent says that A is best and D is worst, these two responses inform us on five of six possible implied paired comparisons: A>B, A>C, A>D, B>D, C>D where ">" means "is more 'better' or 'more than'". The only paired comparison that cannot be inferred is B vs. C. An experimental design is developed to ensure that comparison data between all items is available.

The eight mock up pack images that were tested in Study 2 are shown below. Note the colour descriptions reflect the intended colours as selected from colour specifications provided by the Department.

1

White



5

Dark Grey



2

Lime Green



6

Beige



3

Mid Brown



7

Caramel brown



4

Green Grey



8

Dark Brown



The specific colour specifications can be found in Appendix C: Study 2



Screen Quality Considerations

In order to see how respondents' screen views varied, two sets of questions were administered prior to the pack evaluations. The results from the visual screen tests conducted in the screening section of the survey showed that respondents' computer screens varied in terms of colour saturation and hue. Only a small minority had accurate gamma calibration. However, there was little evidence to indicate that pack (colour) evaluation results varied significantly for respondents with different screen quality classifications.

The results from the screen quality tests are shown in Appendix C: Study 2.

14.5 Analysis

Maximum Difference or 'Best' – 'Worst' Scaling Analysis

The scores obtained from the survey were analysed to obtain a composite score for each dimension using Hierarchical Bayes estimation (HB). HB makes it possible to estimate stable item scores from relatively sparse choice data. It does so by borrowing information across the entire sample to stabilise the scores for individuals. In the Maximum Difference exercise, respondents evaluated multiple combinations of eight test packs. For each set of four packs, the respondent indicated the 'best' and 'worst' pack on a given dimension. Individual respondents' responses are analysed using HB techniques to derive attribute importance or preference scores at the individual respondent level. In this case, a single score is calculated that indicated performance of a pack in terms of the key dimensions.

Weighting

The quantitative data for Study 2 has been post-weighted to the Australian smoking population aged 18-64 years old using ABS Census data.²¹ Data has been weighted using age, gender and smoking frequency. Refer to Appendix A: Overall Research Details for population targets. It is worth noting that there was only population data available for the age bracket 45-64 years old. However as our sample included smokers aged 65 years old, weights relating to the smokers 45-64 years old were applied to the sample data for 45-65 year olds.

²¹ ABS - 43640DO011_20072008 National Health Survey: Summary of Results, 2007–2008 (Reissue) Released at 11:30 am (Canberra time) 23 Nov 2010

15 PACK EVALUATION

Overall, the Dark Brown pack was seen to be the least attractive pack in terms of the selection criteria. It was seen to be the least appealing pack overall, contain the lowest quality cigarettes, and contain the most harmful cigarettes. It was also seen to be the pack which would contain the third hardest cigarettes to quit.

15.1 Overall Appeal

The Dark Brown pack was the least appealing overall (4.5% score on overall appeal). In fact, it was half as appealing as the next lowest scoring packs in Lime Green (10.1%) and Caramel Brown (11.0%). Conversely, the Grey coloured packs, the Green Grey pack (16.7%) and the Dark Grey pack (16.1%) were considered to be the most appealing packs overall. The next most appealing packs were the lighter shade packs in Beige (14.1%) and White (14.0%).

Although there were some statistical differences observed for the different age groups, the Dark Brown pack was seen to be the pack that was least appealing overall across all age groups.

Table 22: Study 2 Overall Pack Appeal

	Colour	Study 2 Total (n=409) %	Age 18-24 years (n=97) %	Age 25-44 years (n=151) %	Age 45-65 years (n=161) %
Least appealing overall	Dark Brown	4.5↓	4.4	4.9	4.0
	Lime Green	10.1↓	7.6	9.6	11.8
	Caramel Brown	11.0↓	8.6	9.7	14.1 [^]
	Mid Brown	13.6↑	13.8	14.3	12.3
	White	14.0↑	17.2 [^]	13.2	13.7
Most appealing overall	Beige	14.1↑	14.0	13.3	15.4
	Dark Grey	16.1↑	17.0	17.7 [^]	13.3
	Green Grey	16.7↑	17.4	17.3	15.3

P1A. Looking at these four cigarette packs, please indicate which pack you think is the...

Most appealing overall and the Least appealing overall?

Composite score calculated using both most and least scores

[^] Significantly higher / lower than other comparison subgroups at 95% c.i.

↑↓ Significantly higher / lower than other pack colours at 95% c.i.



The table above shows the Maximum-Differences scores for each pack colour. Each score is a composite score that is calculated based on the proportion that selected the pack colour as 'most' or 'least' on the dimension measured compared to the other pack colours. In the table above, the colours with the lowest percentage scores are those that were less likely to be selected as 'most appealing' and more likely to be selected as 'least appealing'. So the Dark Brown colour which had the lowest percentage score overall (4.5%) was seen to be the least appealing whilst the Green Grey (16.7%) and Dark Grey (16.1%) had the highest scores and were therefore more appealing. Significance testing has also been applied.²²

²² The long arrows signify significant differences between the colours on that dimension whilst the hat arrows signify significant differences between age groups for each colour.

15.2 Perceived Quality of Cigarettes

Across the total sample, the Dark Brown pack was considered to be the pack which looked like it contained the lowest quality cigarettes (5.3% score on quality of cigarettes). The Lime Green pack was seen to contain the second lowest quality cigarettes (8.7%), followed by the Caramel Brown pack (11.1%). The Grey packs, Dark Grey (16.4%) and Green Grey (16.4%), were perceived to contain the highest quality cigarettes.

Although there were some statistical differences observed for the different age groups, the Dark Brown pack was seen to be the pack to have the lowest quality cigarettes across all age groups.

Table 23: Study 2 Perceived Quality of Cigarettes

	Colour	Study 2 Total (n=409) %	Age 18-24 years (n=97) %	Age 25-44 years (n=151) %	Age 45-65 years (n=161) %
Lowest quality cigarettes	Dark Brown	5.3↓	5.7	5.1	5.6
	Lime Green	8.7↓	6.8	9.2	8.8
	Caramel Brown	11.1↓	8.4 [~]	9.7 [~]	14.5 [^]
	White	13.5	14.9	13.3	13.4
	Beige	13.8↑	12.9	13.1	15.1 [^]
Highest quality cigarettes	Mid Brown	14.8↑	15.0	15.5	13.6 [~]
	Green Grey	16.4↑	17.8	16.8	15.1 [~]
	Dark Grey	16.4↑	18.5 [^]	17.4	13.9 [~]

P2A. Now you are going to see another six screens with the same cigarette pack in different colours.

We'd now like you to indicate which pack looks like it contains the...Highest quality cigarettes and the Lowest quality cigarettes?

Composite score calculated using both most and least scores

^{^~} Significantly higher / lower than other comparison subgroups at 95% c.i.

↑↓ Significantly higher / lower than other pack colours at 95% c.i.

15.3 Perceived Harm to Health

When it came to health perceptions, darker colours were seen to be more harmful to health than lighter colours. This was consistent across all age groups. The Dark Brown pack was considered to be the pack which looked like it contained the most harmful cigarettes (23.6% score on harm to health). The other pack colours which were seen to contain more harmful cigarettes included Dark Grey (16.3%) and Lime Green (16.2%). Packs in a lighter shade such as the White pack (5.4%) and Beige pack (5.4%) and the Green Grey pack (7.2%) were seen to be least harmful to health.

There were no significant differences in the pack evaluation ratings of perceived harm to health across the age groups.

Table 24: Study 2 Perceived Harm to Health

	Colour	Study 2 Total (n=409) %	Age 18-24 years (n=97) %	Age 25-44 years (n=151) %	Age 45-65 years (n=161) %
Most harmful cigarettes	Dark Brown	23.6↑	23.8	22.9	24.5
	Dark Grey	16.3↑	15.3	16.0	17.1
	Lime Green	16.2↑	15.4	17.2	15.0
	Caramel Brown	15.0↑	15.6	14.9	14.8
	Mid Brown	10.9↓	10.9	10.7	11.3
Least harmful cigarettes	Green Grey	7.2↓	6.7	7.7	6.8
	Beige	5.4↓	6.0	5.7	4.9
	White	5.4↓	6.3	5.0	5.5

P3A. Now you are going to see another six screens with the same cigarette pack in different colours.

We'd now like you to indicate which pack looks like it contains cigarettes that are the...Most harmful and the Least harmful to health?

Composite score calculated using both most and least scores

^^ Significantly higher / lower than other comparison subgroups at 95% c.i.

↑↓ Significantly higher / lower than other pack colours at 95% c.i.

15.4 Perceived Ease of Quitting

The packs with the lightest shades were seen to contain cigarettes that would be easier to quit. The White pack was seen to be the easiest to quit (24.9% score on ease of quitting) across all age groups. The pack in Lime Green (15.1%) was also seen to be relatively easy to quit compared to other packs tested. This finding is consistent with Study 1, which found that lighter pack shades are associated with 'lighter' strength cigarettes, and are therefore easier to quit.

Following on from the observation that lighter shades were perceived to be easier to quit, the darker shades tested were seen to be harder to quit in that they are typically associated with stronger cigarettes. Study 1 findings demonstrated that smokers associate stronger cigarettes with greater levels of addiction and with more addicted people finding it more difficult to quit. Thus, darker pack colours are seen to contain stronger cigarettes associated with higher levels of addiction and greater difficulties in quitting. The Dark Grey pack (6.4%) and Caramel Brown pack (6.5%) were considered the hardest to quit followed closely by the pack in Dark Brown (7.8%) which rated low on the other dimensions (least appealing overall, lowest quality cigarettes and most harmful cigarettes).

There were no significant differences in the pack evaluation ratings of perceived ease of quitting across the age groups.

Table 25: Study 2 Perceived Ease of Quitting

	Colour	Study 2 Total (n=409) %	Age 18-24 years (n=97) %	Age 25-44 years (n=151) %	Age 45-65 years (n=161) %
Hardest to quit	Dark Grey	6.4↓	5.6	6.7	6.2
	Caramel Brown	6.5↓	6.4	6.8	6.0
	Dark Brown	7.8↓	7.0	7.7	8.1
	Mid Brown	8.3↓	8.6	8.5	7.8
	Green Grey	12.3	13.6	11.7	12.5
	Lime Green	15.1↑	14.4	15.1	15.5
Easiest to quit	Beige	18.8↑	19.9	18.6	18.5
	White	24.9↑	24.5	24.8	25.3

P4A. Now you are going to see another six screens with the same cigarette pack in different colours.

We'd now like you to indicate which pack looks like it would contain cigarettes that would be...Easiest to quit and Hardest to quit?

Composite score calculated using both most and least scores

^^Significantly higher / lower than other comparison subgroups at 95% c.i.

↑↓ Significantly higher / lower than other pack colours at 95% c.i.

16 CONCLUSIONS AND RECOMMENDATIONS

16.1 Plain Pack Colour Candidate

The results from the pack evaluation comparison suggested that the Dark Brown colour be taken through to the next stage of research as it best met the selection criteria. The Dark Brown colour pack was considered by respondents to be:

- the least appealing pack overall;
- the pack which looked like it contained the lowest quality cigarettes; and
- the pack which looked like it contained cigarettes which were most harmful to health.

In terms of perceived ease of quitting, it was seen to be the pack that contained cigarettes which were third hardest to quit.

The Caramel Brown and Lime Green packs were the other two packs that were seen to be have an unappealing pack. However, they did not perform consistently in meeting the desired objectives and as such were not appropriate candidates.

Other general findings that emerged from the research were that darker colours were seen to contain cigarettes which were more 'harmful to health' and 'harder to quit'. Conversely, lighter colours were seen to be 'easier to quit'.

16.2 Sample Design Recommendations for Future Research

Based on the differences encountered between the available population statistics used to weight the data and the current target sample definition, the sample design should be revised for future studies within this research program. The changes recommended include:

- only including daily and weekly smokers (i.e. excluding monthly smokers who smoke less than weekly); and
- including smokers aged 18-64 years old (i.e. excluding 65 year olds).

This would allow all sample data to be more precisely weighted to population statistics.



16.3 Outcome of Study 2

Given the findings from Study 2, the Department chose to take the Dark Brown colour into the next stage of testing. The Department also decided to test a lighter Brown colour. The primary reason for testing this colour was the Department's desire to have a brown colour that could accommodate a black font colour. Although the Caramel Brown colour was one of the colours that were closest to meeting the selection criteria in Study 2, the Department decided on testing a different colour as comparative results were already available for the Caramel Brown. The Department, in consultation with the Graphic designer, decided on a Mustard colour that could accommodate a black font. In addition to this, it would allow testing to see if the noticeability of graphic health warnings differed against lighter and darker backgrounds, as would be covered in Study 4. The Dark Brown and Mustard colours were the basis for Study 3 and Study 4 testing.



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**STUDY 3: LEGIBILITY OF BRAND NAMES ON PLAIN PACKS FOR RETAILERS
(SECTIONS 17-20)**

17 OBJECTIVES AND METHODOLOGY

Study 3 comprised a quantitative research study to identify the optimal combination of design elements (for example; font size, font colour) for legibility and ease of identification by potential retailers. Fieldwork was conducted from 17th to 21st January 2011.

The research design, in terms of data collection method and target sample, for Study 3 was recommended by the Expert Advisory Group. The interview guide and participant tasks were designed by the GfK Blue Moon research team in consultation with the Department.

17.1 Research Objectives

The objective of Study 3 was to determine what font style and font size would be legible to potential retailers on two different pack colours.

17.2 Methodology

Study 3 involved a quantitative methodology of a series of readability tests administered in a face-to-face environment. At the conclusion of the quantitative questionnaire some general discussion could occur. All sessions were conducted in Sydney and lasted approximately 15 minutes.

Target Sample

The research was conducted via face-to-face interviews among n=10 respondents aged 40 years and older. Respondents were pre-recruited and screened for age as well as occupation. It was a requirement of the research that participants worked within a retail environment. This resulted in a total of seven respondents from the total sample of ten that worked in retail across the food, clothing, health, tourism and general merchandise sectors. Four respondents from culturally and linguistically diverse (CALD) backgrounds were included within the sample, to ensure representation of retailers from different cultural backgrounds.

The table below outlines the profile of the participating respondents.

Table 26: Study 3 Sample Profile

Respondent	Age (years old)	Language status	Occupation
1	51		Retail
2	53	CALD	Accountant
3	65		Retail
4	48	CALD	Retail
5	50	CALD	Accountant
6	58		Retail
7	54		Retail
8	43		Retail
9	42		Retail
10	43	CALD	Sales Rep On the Road

17.3 Interview Structure

The structure of the Study 3 interview was as follows:

- introduction and set up (positioning the respondent one metre away from a shelf in the interview room);
- testing of font size legibility using the eye boards where respondents read out names aloud from the top (largest font size) to bottom (smallest font size) to identify the smallest font size legible to the respondent;
- testing of font size legibility on pack using mock up packs where respondents were shown different packs at different angles (tilted front view and lid view) to identify the smallest font size that could be read on pack; and
- a short unstructured discussion about the respondents' perceptions of pack colours.

For the pack testing, respondents were shown two different views of each mock up pack design, a tilted front view and a lid view. These angles were chosen as they simulate the display views of cigarettes in retail environments.

Mock up packs were placed one metre away from respondents, at eye level. To ensure that the angle at which the tilted front view was displayed was consistent between packs, a small holder (fixed at a 20% incline) was developed and used by interviewers for the tilted front view tests. For each angle, respondents were shown a pack design featuring the smallest font size (12pt) and asked if they could read out the name on the pack. If they were unable to read out the name, an identical pack which

featured the next font size up (using two pt increases, for example, 14pt) was shown and the exercise repeated. This was repeated until the respondent could read out loud the name on the pack.

To ensure that 'recall' did not influence respondents' ability to read out the names on the pack, four different sets of names featured on the mock up packs.

The Study 3 interview guide can be found in Appendix D: Study 3.

17.4 Stimulus

Two plain pack colours were used in this study:

- the Dark Brown colour identified as the 'worst performing' from Study 2; and
- a Mustard colour based on requests from the Department. This was a lighter brown colour that could accommodate a black font and the exact shade was decided on by the Department in consultation with the Graphic designer. This colour was not tested in Study 2.

There were two types of stimulus used in Study 3, eye boards and mock up packs.

- Eye boards were A4 sized boards that featured a randomly ordered list of current cigarette brands in Australia with decreasing font sizes starting at 20pt and ending in 5pt in 1pt font decreases. Boards were developed in each of the two colours in Arial font and Lucida sans font styles; and
- Mock up packs were wrap around cigarette packs that featured four potential 'brand names' based on popular words in font sizes 12pt, 14pt, 16pt and 18pt font. Packs were developed in each of the two colours in Arial font style.

A total of 16 mock up packs were used for testing. The table below details the pack design.

Colour	'Brand name'	Font sizes (pt)
Dark Brown	Target	12,14,16,18
Dark Brown	Olympic	12,14,16,18
Mustard	Mayfair	12,14,16,18
Mustard	Casino	12,14,16,18

Below are images of the eyeboards and front of pack stimuli.



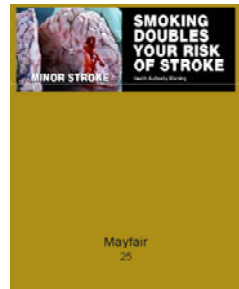
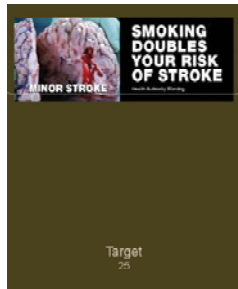
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Dark Brown

20pt	Benson and Hedges
19pt	Dunhill
18pt	Winfield
17pt	Alpine
16pt	Marlboro
15pt	Peter Stuyvesant
14pt	Peter Jackson
13pt	Longbeach
12pt	Escort
11pt	Freedom
10pt	Horizon
9pt	Holiday
8pt	Stradbroke
7pt	Brandon
6pt	More
5pt	Lucky Strike
4pt	Freedom
3pt	Alpine
2pt	Winfield
1pt	Peter Jackson
0pt	More
0pt	Lucky Strike

Mustard

20pt	Dunhill
19pt	Stradbroke
18pt	Benson and Hedges
17pt	Horizon
16pt	Escort
15pt	Peter Stuyvesant
14pt	Marlboro
13pt	Brandon
12pt	More
11pt	Lucky Strike
10pt	Freedom
9pt	Alpine
8pt	Winfield
7pt	Peter Jackson
6pt	More
5pt	Lucky Strike
4pt	Freedom
3pt	Alpine
2pt	Winfield
1pt	Peter Jackson
0pt	More
0pt	Lucky Strike



Images of all Study 3 Stimulus can be found in Appendix D: Study 3



Printing of Stimulus

Printing of the stimulus material was outsourced to a commercial printer to ensure that the print quality was to specifications. Test runs of the colours and paper type were conducted prior to the final printing and checked for colour consistency and match. All materials were printed using digital printers on uncoated 150gsm white paper.

17.5 Reducing Order bias

Two questionnaire rotations were developed so that half the respondents would be shown the stimulus in an opposite order to the other half of respondents interviewed. That is, for the first five respondents, the Dark Brown colour was always tested first and for the last five respondents, the Mustard colour was always tested first. This was done to reduce the potential for rotation bias.

17.6 Analysis

The information collected from the interviews was tallies and counts of the font sizes respondents could read. As such, quantitative analysis has been conducted on the results from the legibility testing and additional comments that arose from the discussion component have been added where relevant to the quantitative findings.



18 FONT SIZE LEGIBILITY

18.1 Font Size Legibility (Eye boards)

Based on the font size legibility tests using the eye boards, the smallest font that was legible to all respondents at a distance of one metre was the 14pt font in both font styles, regardless of colour. That is, all ten respondents could read the 14pt font, in Arial or Lucida sans on the Dark Brown and Mustard colours.

Table 27: Study 3 Font Size Legibility counts (Eyeboard tests)

Font size legibility (n=10) Number of respondents who could read the font size	Dark Brown Arial	Dark Brown Lucida Sans	Mustard Arial	Mustard Lucida Sans
20pt	10	10	10	10
19pt	10	10	10	10
18pt	10	10	10	10
17pt	10	10	10	10
16pt	10	10	10	10
15pt	10	10	10	10
14pt	10	10	10	10
13pt	10	9	10	10
12pt	10	9	10	10
11pt	9	9	9	9
10pt	9	9	9	9
9pt	8	8	8	8
8pt	4	7	7	7
7pt	2	6	6	4
6pt	1	5	2	3
5pt	0	1	1	0

Base: n=10 respondents
 B1-B4. Now, looking at the brands on the middle of the board, from the top and reading down, please read out each brand listed aloud. Interviewer recorded the last (smallest) font size the respondent could read out.

A table summarising the results from the font size legibility test is shown below. This table shows that although some respondents were able to read font sizes as small as 5pt font, a font size of at least 14pt font was required for all respondents to read out the names on the board.

Table 28: Study 3 Smallest Font Size Legibility (Eye board tests)

Smallest font size legibility (n=10)	Dark Brown Arial	Dark Brown Lucida Sans	Mustard Arial	Mustard Lucida Sans
Smallest font size read by any respondent	6	5	5	6
Smallest font size read by all respondents	12	14	12	12
B1-B4. Now, looking at the brands on the middle of the board, from the top and reading down, please read out each brand listed aloud. Interviewer recorded the last (smallest) font size the respondent could read out.				

Spontaneous comments made by respondents during testing suggest that less difficulty was experienced in reading the Lucida Sans font than the Arial font, particularly among the smaller font sizes. Respondent comments included:

“That one seemed easier” (reading Lucida sans)

“Is it different? It seemed harder than the other” (reading Arial)

There was a mixed response regarding the legibility of the pack colours and associated font colours. Some felt the black font on the Mustard colour had a higher contrast which was more legible and the reverse was true for other respondents. As such, maximising the contrast between the font colour and the background colour is likely to improve legibility.

Some respondents also mentioned during testing that whilst they were able to read a certain font size, the next size up was a more comfortable read.

18.2 Font Size Legibility on Pack (Mock up packs)

Testing of legibility of font sizes on the mock up packs, indicated that a font size of 16pt would be ideal on the pack for either colour tested. Whilst all could read the 14pt font for the Dark Brown mock up packs, one respondent was unable to read the 14pt font in the Mustard coloured mock up pack.

Spontaneous comments from respondents indicated that even when they could read the 12pt font, they were much more comfortable with the 14pt font size. There was no indication that legibility of the font sizes varied by the angles tested, tilted front view or lid view.

The table below details the number of respondents who could read out the name on the pack at the various font sizes.

Table 29: Study 3 Font Size Legibility counts (Mock up packs)

Font size legibility on pack (n=10) Number of respondents who could read the font size	Dark Brown Arial – Tilted front	Dark Brown Arial – Lid	Mustard Arial – Tilted front	Mustard Arial – Lid
12pt	4	5	5	6
14pt*	10	10	9	9
16pt*	10	10	10	10
18pt*	10	10	10	10
*If a respondent was able to read a smaller font size, they have been added into these counts. Respondents may not have been shown these sizes but the assumption was made that if they could read the smaller font, they would be able to read the larger font.				
T1-T4. Can you read out the name on the pack? If respondent unable to read out at font size, the interviewer replaced the pack with the next font size up. The question was repeated.				

The table below details the results for font legibility on pack results. These results indicate that although there were respondents who could read the brand name on pack if the font size was 12pt, a font size of 16pt was required for all respondents to be able to read the brand name on pack.

Table 30: Study 3 Smallest Font Size Legibility (Mock up packs)

Smallest font size legibility on pack (n=10)	Dark Brown Arial – Tilted front	Dark Brown Arial – Lid	Mustard Arial – Tilted front	Mustard Arial – Lid
Smallest font size read by any respondent	12	12	12	12
Smallest font size read by all respondents	14	14	16	16
T1-T4. Can you read out the name on the pack? If respondent unable to read out at font size, the interviewer replaced the pack with the next font size up. The question was repeated. The last five respondents were shown the pack colours in a reverse order.				

19 PERCEPTIONS OF COLOUR

A brief discussion was conducted with respondents following the conclusion of the legibility testing. This demonstrated that their perceptions of the two colours were mixed. There were a number of both positive associations and negative associations with each colour. Overall, the Mustard colour drew more positive comments about the colour and the type of cigarettes likely to be contained within than the Dark Brown. About half of the respondents described the Mustard colour as 'Gold'. This colour was associated with being more striking and prestigious. These respondents felt that the pack would contain more premium cigarettes, with a small few commenting that the cigarettes would probably be of medium strength. A few felt it was similar to existing brands on the market, namely Benson and Hedges or Dunhill.

Others respondents referred to the Mustard colour as sickly and unattractive and did not feel it had the same association of prestige and premium contents.

A number described the Dark Brown as 'chocolate'. For some this was a positive association with the colour appearing quite 'rich' and 'deep'. In contrast to the Mustard pack, the Dark Brown was not associated with any existing brands. While this may be a positive in that no existing brand associations are carried over to plain packs, the unfamiliarity of the pack colour with an existing brand also indicated that the brand could be 'new', 'modern', and 'different'. Importantly, most felt that the pack would contain cigarettes of lesser quality than the Mustard pack. Negative descriptions of the Dark Brown included the colour being seen as 'unattractive' and 'dirty'.



20 CONCLUSIONS AND RECOMMENDATIONS

20.1 Font

Taking into account both legibility tests, a font size of at least 14pt (for Arial or Lucida Sans font style) should be considered for the brand name on plain packaging.

When observing the Dark Brown packs, a font size of at least 14pt font was necessary for all respondents to read the name on the pack. When observing the Mustard pack, a larger font size of at least 16pt font was necessary for all respondents to read the name on the pack.

During the interview it was clear from observations and spontaneous comments by respondents that they were more comfortable when reading a font size larger than the smallest size they could read. For example, those who could read the 12pt font on packs expressed that a 14pt font was much more comfortable. Many felt that the smaller font sizes would prove much more difficult if faced with rows or packs only differentiated by the name.

It is worth noting that this study focused on legibility and not shelf location (respondents' ability to find a pack on shelf). In the absence of brand cues, a more conservative estimation of brand font size legibility could be considered. However, it is feasible to assume that cigarette retailers will organise their shelves in a systematic way to facilitate identification and location of brands. Similarly, retailers are likely to approach the shelves and view the packs at a closer distance than one metre (the test distance). Retail outlets are also likely to display price and product tickets that will aide location of products. A 14pt font on a Dark Brown background, or 16pt font on a Mustard background will be sufficient for legibility at one metre.

Although the results of the tests do not necessarily show a substantial difference between legibility of the different font styles, there was a general feeling that the Lucida Sans font style was slightly more readable and as such could be the font style used on the final test packs.

Design guidelines typically recommend a high contrast between the font colour and background colour to increase legibility. There is evidence in the testing that a higher contrast between the font colour and background colour would improve legibility.

20.2 Colour Considerations

The varying preference and perceptions of the colours tested, suggested that there may be a further need to test the final colour candidates for perceptions, associations and brand similarity.



20.3 Outcome of Study 3 Research

Based on the findings and recommendations from Study 3, the Department used 14pt font size in Lucida sans font style for the mock up pack stimulus used in Study 5 Face-to-face. The recommendation to increase the contrast between the background pack colour and the font colour was also acknowledged and applied to the design of the printed mock up packs tested in Study 5 Face-to-face.

It was also decided that consumer perceptions of the final plain packaging colours should be investigated further in terms of associations and brand similarity. This was incorporated into Study 5 Face-to-face using a qualitative discussion.



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STUDY 4: CONSUMER PERCEPTIONS OF PLAIN PACK COLOUR WITH BRAND ELEMENTS (SECTIONS 21-25)

21 OBJECTIVES AND METHODOLOGY

Study 4 was run in parallel with Study 3 using an online quantitative methodology to confirm which shade of Brown (Dark Brown or a lighter shade of brown, Mustard) should go into the next round of testing. Fieldwork was conducted from 19th January to 26th January 2011.

The Expert Advisory Group recommended the research design (data collection method and target sample) for Study 4. The quantitative questionnaire and experimental design were designed by the GfK Blue Moon research team in consultation with the Department.

21.1 Rationale for Research

In Study 2 the plain packaging colour candidates were tested with a mock brand name 'Mayfair' to obtain a clean read on the performance of the colour candidates without the influence of brand on perceptions. The rationale for Study 4 (testing short-listed elements of plain packaging) was to introduce the brand element into the testing and understand the impact of brand on perceptions of plain packaging colour. This was required to ensure the selected plain packaging colour did not resonate with current brands in the market so that its impact could be generalised.

21.2 Research Objectives

The overriding objective of *Study 4 - Consumer perceptions of plain pack colour with brand elements*, was to create a shortlist of plain packaging colours that minimised brand impact. The research sought to:

- identify the pack colour which was most unappealing in terms of the plain packaging objectives (between Dark brown and Mustard) on key dimensions of appeal, harm to health, ease of quitting, quality of cigarettes and consideration; and
- measure the impact of brand on perceptions of plain pack colour.

More specifically, the key criteria to determine which pack colour was most unappealing was based on the following dimensions:

- overall appeal (least appealing);
- harm to health (high perceived harm to health);
- ease of quitting (hard to quit);
- quality of cigarettes (low quality cigarettes); and
- likelihood of smoking (low likelihood to consider smoking).

There were also some concerns raised by both the GfK Blue Moon research team and the Department that in Study 2 and Study 3 the Dark Brown colour appeared to be more 'olive' on screen. Another concern that emerged was whether the dark background colour would detract from the GHW noticeability. As such, two secondary objectives were added to Study 4:

- to identify the colour respondents thought they were evaluating; and
- to measure impact of the background colour on noticeability of the GHW.

21.3 Methodology

Study 4 involved a quantitative online survey conducted among n=455 Australian smokers aged 18-64 years old who smoked manufactured cigarettes at least weekly. Online panel members were invited to participate in the survey and screened for age, gender and smoking status. Soft quotas were set on age and gender to ensure representativeness and sufficient sample sizes for subgroup analysis.

The table below shows the samples achieved for Study 4:

Table 31: Study 4 Sample Profile

Target groups	Target Quotas	Sample size (weekly smokers)
Male 18-24 year olds	min n=60	n=61
Male 25-44 year olds	min n=60	n=85
Male 45-64 year olds	min n=60	n=86
Female 18-24 year olds	min n=60	n=60
Female 25-44 year olds	min n=60	n=82
Female 45-64 year olds	min n=60	n=81
Other Gender 18-64 year olds	No quotas set	n=0
Total	n=400	n=455

21.4 Questionnaire Design

The Study 4 questionnaire followed the structure outlined below:

- screener;
- computer screen quality test;
- pack evaluation;
- noticeability evaluation;
- colour description; and
- smoking profile and demographics.

The questionnaire can be found in Appendix E: Study 4.

The pack evaluation section comprised a paired forced choice based design to compare mock up packs on the five key dimensions:

- overall appeal;
- harm to health;
- ease of quitting;
- quality of cigarettes; and
- likelihood of smoking.

Respondents were shown two different coloured packs, and asked to select the one pack that best fit the description of a given dimension. This was repeated for the remaining four dimensions for each pack set shown.

Unlike in Study 2, where colour was the only test variable, Study 4 also tested the impact of brand. To measure the impact of brand, respondents were shown pack images (in the two colours being tested) that featured one of five current cigarette brands in Australia. See the next section on 'Stimulus' for more details on the stimulus packs. Respondents were shown pack images for one brand and asked to evaluate the colours and this was repeated for a second, randomly allocated brand.

There were five brands researched in the study, however, each respondent evaluated only two brands. This was important to avoid overburdening respondents with a large number of repetitive tasks as this could result in respondent fatigue and impact the quality of respondents' answers. The two brands were randomly allocated to respondents. Each brand was evaluated by at least n=180 respondents and the design also ensured that all pack options would be compared an equal number of times.

Respondents took 12.3 minutes, on average, to complete the Study 4 survey.

21.5 Stimulus

The Department provided the specifications for two colours which were applied to a generic image of a mock up cigarette pack.

The two colours tested were:

- Dark Brown – Study 2 identified this colour as an ideal colour candidate as it was seen to be the 'most unattractive', 'most harmful to health', second 'hardest to quit' and contain the 'lowest quality cigarettes' compared to the other colours tested.
- Mustard – the Department requested that this colour was included in Study 4. The rationale for including this colour was to include a version of brown where black font could be used for the brand labelling. In addition to it would allow the measurement of impact of the background colour on noticeability of the GHW. This colour was selected by the Department in consultation with a graphic designer.

The image artwork for Study 4 was designed for screen viewing, with the front face of the pack measuring around 275 (x) x 445 (y) pixels.

The mock up pack images were identical in design, with the exception of colour and brand. Each mock up pack image featured:

- brand on a 25 cigarette pack size;
- shadow detail (grey back shadow and coloured front shadow);
- Arial font (16pt for brand);²³ and
- 30% size graphic health warning ("Smoking doubles your risk of stroke").

There were two sets of stimuli used in Study 4, pack evaluation mock up packs and graphic health warning (GHW) mock up packs. The first featured the top five brands in Australia on pack whilst the second set featured the brand 'Mayfair' using different graphic health warnings.

Pack Evaluation Mock up packs

Mock up pack images with different brands on pack were used for the pack evaluation, to determine the ideal colour, and to measure the brand impact. Study 4 tested the top five brands in Australia which were applied to each of the two mock up pack colours. Other than brand name and colour the packs were identical each featuring the GHW "Smoking doubles your risk of stroke" with a total of ten mock up packs developed. The brands selected for testing were the top five selling cigarette brands in Australia:

- Winfield;
- Longbeach;
- Benson & Hedges;
- Dunhill; and
- Peter Jackson.

A total of ten pack images were developed for testing in Study 4, a Dark Brown and Mustard version of each of the five brands as shown below:

²³ As results from Study 3 were not available when Study 4 commenced, it was not yet confirmed which font style should be used. The Department advised on using Arial for the stimulus.



GfK bluemoon



Graphic Warning Noticeability Mock up packs

A separate set of mock up pack images was developed to test the noticeability of two different designs of GHWs (“Smoking clogs your arteries” and “Smoking causes peripheral vascular disease (gangrene)”) on the two test pack colours. The ‘Smoking clogs your arteries’ image is on a black background whilst the gangrene image has a lighter, white background. The brand name ‘Mayfair’ (a brand not used in Australia) was used on the pack to ensure that the background pack colour and graphic health warnings were the only test variables in this evaluation.

There were four images developed for this test as shown below:





Screen Quality Considerations

In order to see how respondents screen views varied, two sets of questions were administered prior to the pack evaluations. The results from the visual screen tests conducted in the screening section of the survey showed that respondents' computer screens varied in terms of colour saturation and hue. Only a small minority had accurate gamma calibration. However, there was little evidence to indicate that pack (colour) evaluation results varied significantly for respondents with different screen quality classifications.

The results from the screen quality tests are shown in Appendix E: Study 4.

21.6 Analysis

Pack Evaluations

Although the questionnaire asked respondents to answer according to the most natural measure, that is which pack was most appealing?, easiest to quit?, contained the highest quality cigarettes?, would they be most likely to smoke?, at the analysis stage we reversed responses so that they reflected the research objectives.

For example, if a respondent selected 'Mustard' as the 'most appealing' pack, then in analysis this response would be recorded as 'Dark brown' as the 'least appealing' pack.

An aggregate score was also constructed that took into account the responses from each respondent's evaluation of the two brands tested to obtain an overall preference score.

For example, if a respondent selected 'Mustard' as the 'most appealing' pack for both brands evaluated, in analysis this response would be recorded as 'Dark brown for both brands'. If a respondent selected each colour at least once as 'most appealing' then this is recorded as 'One of each'.

The objective of the exercise was to identify the pack which performed consistently in line with the plain packaging objectives, regardless of brand. The main scores of interest were those relating to one colour being selected for both brands.

GHW Noticeability

The outputs from this question were four point allocations scores, one for each test pack image. The total of the four scores add to 100 points. The analysis involved creating an 'average' or 'mean' score for each pack to determine any relative differences between the noticeability of the GHW on each pack.



Weighting

The quantitative data for Study 4 has been post-weighted to the Australian smoking population aged 18-64 years old using ABS Census data.²⁴ Data has been weighted using age, gender and smoking frequency. Refer to Appendix A: Overall Research Details for population targets.

²⁴ ABS - 43640DO011_20072008 National Health Survey: Summary of Results, 2007–2008 (Reissue) Released at 11:30 am (Canberra time) 23 Nov 2010

22 PACK COLOUR EVALUATION

22.1 Total Sample

Overall, the Dark Brown colour was the least appealing pack colour tested. There was statistically significant evidence that the Dark Brown pack was perceived to:

- be the 'least appealing overall' (68%), compared to the Mustard colour (23%);
- contain cigarettes that were 'most harmful to health' (64%), compared to the Mustard colour (23%)
- contain cigarettes that were 'hardest to quit' (53%), compared to the Mustard colour (32%);
- contain the 'lowest quality cigarettes' (62%), compared to the Mustard colour (30%); and
- contain cigarettes they would be 'least likely to smoke' (55%), compared to the Mustard colour (19%).

The table below details the proportion that selected each colour for each pack tested. This table combines the results from both the pack colour evaluation and the GHW noticeability evaluation to show the overall pattern in the evaluation of each colour, regardless of brand. Significance testing has been applied.²⁵ Note that scores have been adjusted to reflect the desired selection criteria. For example, in terms of appeal, we asked respondents to provide their evaluation of the 'most appealing' pack as this was a more natural and instinctive way to obtain responses. During analysis, the scores were reversed.

²⁵ The long arrows signify significant differences between the proportions of respondents who choose the different colours. The proportion that considered the Dark Brown pack as 'least appealing overall' for both brands was 68%. This was significantly higher than the proportion who selected Mustard pack as 'least appealing overall' for both brands (23%) and the proportion that selected either colour once (9%).

Table 32: Study 4 Overall Pack Evaluation

Proportion who selected each colour in evaluations	Least appealing overall* %	Most harmful to health %	Hardest to quit* %	Lowest quality cigarettes* %	Least likely to smoke* %
Dark brown for both brands	68↑	64↑	53↑	62↑	55↑
Mustard for both brands	23↓	23↓	32↓	30↓	19↓
One of each colour	9↓	12↓	15↓	8↓	9↓
Dark Brown + Would not smoke either	-	-	-	-	6↓
Mustard + Would not smoke either	-	-	-	-	2↓
Would not smoke either	-	-	-	-	9↓

Base: All respondents (n=455)
P1A-E. Looking at these two cigarette packs, please indicate which pack you think is the ...? *Single response*
Combines all ratings regardless of brand on pack.
*Note showing scores for pack not selected to reflect research objectives.
↑↓ Significantly higher / lower than other pack colours at 95% c.i.

As such, the Dark Brown pack best meets the objectives of the research in terms of being least appealing and containing cigarettes which are seen to be most harmful to health, harder to quit, lower quality and less likely to smoke.

22.2 Younger Smokers

An important target group in this study were younger smokers aged 18-24 years old.

The pack colour evaluation results were consistent for the younger smokers (aged 18-24 years old), as shown in the table below. For both brands evaluated, there was statistically significant evidence that the Dark Brown pack was seen to:

- be the 'least appealing overall' (61%), compared to the Mustard colour (26%);
- contain cigarettes which were 'most harmful to health' (69%), compared to the Mustard colour (19%);
- containing cigarettes that were 'hardest to quit' (51%), compared to the Mustard colour (31%);

- contain the 'lowest quality cigarettes' (47%), compared to the Mustard colour (33%); and
- contain cigarettes they would be 'least likely to smoke' (51%), compared to the Mustard colour (19%).

Table 33: Study 4 Overall Pack Evaluation among 18-24 year olds

Proportion who selected each colour in evaluations	Least appealing overall* %	Most harmful to health %	Hardest to quit* %	Lowest quality cigarettes* %	Least likely to smoke* %
Dark brown for both brands	61↑	69↑	51↑	47↑	51↑
Mustard for both brands	26↓	19↓	31↓	33↓	19↓
One of each colour	13↓	12↓	18↓	20↓	16
Dark Brown + Would not smoke either	-	-	-	-	6↓
Mustard + Would not smoke either	-	-	-	-	2↓
Would not smoke either	-	-	-	-	5↓

Base: Respondents aged 18-24 years old (n=121)
P1A-E. Looking at these two cigarette packs, please indicate which pack you think is the ...? Single response
Combines all ratings regardless of brand on pack.
* Note scores reversed (brand not selected).
↑↓ Significantly higher / lower than other pack colours at 95% c.i.

A direct comparison of the different age groups confirmed that the Dark Brown colour performed consistently in line with the desired criteria, regardless of respondents' age. The table below shows the proportion selecting the Dark Brown pack for both brands for the key measures tested by age groups.

Table 34: Study 4 Dark Brown Pack Evaluation by Age groups

Proportion who selected Dark Brown for both evaluation	Total (n=455) %	Age 18-24 years (n=121) %	Age 25-44 years (n=167) %	Age 45-64 years (n=167) %
Least appealing overall*	68↑	61↑	63↑	78↑ [^]
Most harmful to health	64↑	69↑	60↑	69↑
Hardest to quit*	53↑	51↑	49↑	58↑
Lowest quality cigarettes*	62↑	47↑	57↑ [^]	76↑ [^]
Least likely to smoke*	60↑	54↑	56↑	69↑ [^]

Base: All respondents (n=455)
P1A-E. Looking at these two cigarette packs, please indicate which pack you think is the ...? *Single response*
Combines all ratings regardless of brand on pack.
* Note scores reversed (brand not selected).
[^] Significantly higher / lower than other comparison subgroups at 95% c.i.
↑↓ Significantly higher / lower than other pack colours at 95% c.i.

As shown in the table above, the Dark Brown pack best met the research objectives (least appealing, most harmful, hardest to quit, lowest quality cigarettes and least likely to smoke) across age groups. Among the older audience (45-64 years old), there was even stronger evidence that the Dark Brown pack was least appealing overall.

22.3 Impact of Brand on Pack Colour Evaluations

There did not appear to be a noticeable brand influence on the pack colour perceptions, with the Dark Brown colour performing in line with the research objectives, regardless of which brand was shown on pack. The table below details the proportion that selected the Dark Brown colour for each dimension by the brand shown. There were no significant differences between the proportion selecting the Dark Brown colour for any of the brands tested.

In terms of overall appeal, the Dark Brown pack was seen to be the least appealing pack colour across brands. The proportion that considered the Dark Brown pack as 'least appealing' ranged from 70% to 78% with no significant difference between brands. There were no significant differences observed between brands tested on other criteria with one exception. For the Winfield pack, a similar proportion selected Winfield as 'hardest to quit' on the Dark Brown pack (55%) as on the Mustard pack (45%).

Table 35: Study 4 Overall Pack Evaluation by Brand on pack

Proportion who selected Dark Brown in each evaluation	Total evaluation (selected for both brands)# %	Dunhill (n=183) %	Longbeach (n=182) %	Peter Jackson (n=182) %	Winfield (n=182) %	Benson & Hedges (n=181) %
Least appealing overall*	68↑	71↑	72↑	71↑	70↑	78↑
Most harmful to health	64↑	72↑	69↑	66↑	73↑	73↑
Hardest to quit*	53↑	62↑	65↑	58↑	55	62↑
Lowest quality cigarettes*	62↑	65↑	62↑	66↑	67↑	71↑
Least likely to smoke*	60↑	61↑	62↑	59↑	62↑	66↑

Base: Respondents who were shown the pack with the brand name.
P1A-E. Looking at these two cigarette packs, please indicate which pack you think is the ...? Single response
* Note scores reversed (brand not selected).
Note, this figure is lower than the proportion for individual brands as it reflects respondents who selected 'Dark Brown' for both brands evaluated.
↑↓ Significantly higher / lower than other pack colours at 95% c.i.

23 GRAPHIC WARNING NOTICEABILITY

There was no evidence to suggest that the darker plain packaging colour was detracting from the noticeability of the GHW. Each pack, regardless of background pack colour and GHW image colour, scored similarly to other packs with equal noticeability when compared side by side.

The table below shows the average point allocation (out of 100) for noticeability. For each pack shown, the points were evenly distributed, ranging from 24 to 28 points per pack. This suggests that each GHW had equal noticeability, regardless of background colour. There were no notable differences in the perceived noticeability across age groups.

Table 36: Study 4 Noticeability of Graphic Health Warning

Mean score Noticeability of GHW	Total (n=455) Average points allocated	Age 18-24 years (n=121) Average points allocated	Age 25-44 years (n=167) Average points allocated	Age 45-64 years (n=167) Average points allocated
Dark brown Mayfair 'Gangrene' (Lighter GHW background)	25	28	26	23
Dark brown Mayfair 'Smoking clogs' (Black GHW background)	24	24	24	24
Mustard Mayfair 'Gangrene' (Lighter GHW background)	26	24	26	26
Mustard Mayfair 'Smoking clogs' (Black GHW background)	25	24	24	26

Based: All respondents (n=455)
 P2.Now looking at these four cigarette packs, we'd like you to indicate how noticeable the graphic health warnings are on each of these packs. That is, whether there are any differences in how much the graphic health warning stands out on these different packs.
 Score allocation out of 100 across all packs.

24 PERCEIVED COLOUR

Study 4 found strong evidence to confirm suspicions that respondents were viewing a slightly different shade of brown online than was intended. The majority of respondents were actually viewing a 'Dark Olive' rather than a 'Dark Brown' pack colour for the online studies. Although for the Mustard pack, while the majority claimed to see a colour they described as 'Mustard', there was a fair proportion who described the colour they saw as 'Gold'.

Dark Brown

The table below shows that respondents were most likely to say they were viewing a Dark Olive (66%) colour when shown the Dark Brown pack image on screen. Only 18% described the colour they saw as 'Dark Brown'. This confirmed the hypothesis that there may be some colour rendering discrepancies in the colours tested online, and confirmed the need to test the pack colours using printed material. It also suggested further testing of different shades of brown to establish the final plain packaging colour.

Table 37: Study 4 Perceived Colour (Dark Brown)

Colour seen on screen	Total (n=455) %	Age 18-24 years (n=121) %	Age 25-44 years (n=167) %	Age 45-64 years (n=167) %
Dark Brown	18↓	24↓	15↓	20↓
Dark Olive	66↑	59↑	68↑	67↑
Medium Brown	6↓	9↓	6↓	5↓
Medium Olive	9↓	8↓	10↓	7↓

Based: All respondents (n=455)
 Which of the following colours best describes the colour of this pack? SHOW the DARK BROWN MAYFAIR PACK (SMOKING CLOGS LUNGS). Single response
 ↑↓ Significantly higher / lower than other colours at 95% c.i.

Mustard

When shown the Mustard coloured pack, over half (52%) claimed to be seeing ‘Mustard’ whilst four in ten (39%) identified the colour as ‘Gold’. Older smokers aged 45-64 years old were significantly more likely to describe the colour they saw as ‘Gold’ (47%), as shown in the table below.

Although both colour descriptions, mustard and gold, are largely similar, Study 1 demonstrated that a ‘gold’ colour can generate positive associations of being more ‘premium’. In addition to this, a ‘gold’ coloured pack would have a similarity to established brands in the market, namely Benson & Hedges or Dunhill.

Table 38: Study 4 Perceived Colour (Mustard)

Colour seen on screen	Total (n=455) %	Age 18-24 years (n=121) %	Age 25-44 years (n=167) %	Age 45-64 years (n=167) %
Mustard	52↑	52↑	56↑	46↑
Gold	39	35	35	47 [^]
Dark Yellow	7↓	10↓	7↓	6↓
Light brown	2↓	3↓	1↓	1↓

Based: All respondents (n=455)
 Which of the following colours best describes the colour of this pack? SHOW the MUSTARD MAYFAIR PACK (SMOKING CLOGS LUNGS). Single response
[^] Significantly higher / lower than other test variables or subgroups at 95% c.i.
 ↑↓ Significantly higher / lower than other colours at 95% c.i.



25 CONCLUSIONS & RECOMMENDATIONS

25.1 Conclusions

Pack Colour

Overall, the Dark Brown colour best met the criteria of the research objectives as it was seen to:

- be least appealing overall;
- contain cigarettes that have the highest harm to health;
- contain cigarettes that are harder to quit;
- contain lower quality cigarettes; and
- contain cigarettes that smokers would be less likely to consider smoking.

Impact of Brand on Pack Colour Evaluations

There was also no evidence to suggest that brand had any significant impact on the perceptions of the Dark Brown colour. The Dark Brown colour performed consistently in line with the selection criteria, regardless of which brand was on the pack.

Colour Description

The majority of respondents perceived that they were actually viewing a 'Dark Olive' colour on screen, with only a minority viewing and therefore evaluating a 'Dark Brown' colour. There was further support to exclude the Mustard colour from further testing. It could be perceived as being 'Gold' in colour which not only carries positive perceptions of being premium (as seen in Study 1) but also a similarity to existing cigarette brands on the market, namely Benson & Hedges and Dunhill.

GHW Noticeability

Based on the test conducted, there was no evidence to suggest that the darker plain packaging colour was distracting from the noticeability of the GHW.

25.2 Recommendations

As the Dark Brown pack colour was seen to be the least appealing both in comparison to the lighter Mustard pack and across the brands tested, the research supports taking the Dark Brown colour into final testing. However, as the online research to date may be testing a 'Dark Olive' pack rather than a 'Dark Brown' pack, further testing of different shades of brown should be conducted. This testing should use printed stimuli that are of a print quality as close to the final prototype as possible, and include a shade of the original 'Dark Brown' and a 'Dark Olive'.



25.3 Outcome of Study 4 Research

Additional research objectives were considered for the next phase of research based on the colour concerns that emerged from Study 3 and Study 4. Firstly, a range of pack colours would need to be retested. Secondly, more information is required to understand the general perceptions and associations with each of the colour candidates. Based on the findings from Study 3 and 4, the Department decided to test mock up packs featuring a range of brown colours, the original Dark Brown, a Dark Olive to match the screen rendering and a Medium Olive. This would be tested in Study 5 Face-to-face and the packs would be printed using Off-set printing to ensure the colour quality was close to final prototype quality and appearance. It was also decided that consumer perceptions of the final plain packaging colours should be investigated further in terms of colour associations and brand similarity to understand what people associate with each of the plain packaging colours. This would be explored in Study 5 Face-to-face.



GfK bluemoon

STUDY 5: FACE-TO-FACE: CONSUMER APPRAISAL OF PLAIN PACKS WITH NEW HEALTH WARNINGS USING PROTOTYPE PACKS (SECTIONS 26-31)

26 OBJECTIVES AND METHODOLOGY

Study 5 Face-to-face (F2F) was conducted after Study 4 and in parallel to Study 5 Online. It involved a mix of qualitative and quantitative methodologies within group clinics conducted between 14th February and 22nd February 2011.

26.1 Rationale

The original purpose of the *Study 5 Face-to-Face - Consumer appraisal of plain packs with new health warnings using prototype packs*, was to test the impact of the final shortlisted colour in combination with new graphic health warnings (GHW) on actual pack prototypes. The final test colour was to be determined from earlier studies in the plain packaging research program.

The Dark Brown colour performed best in line with the plain packaging objectives and was the clear finalist for earlier studies, Study 2 and Study 4, both of which were conducted online. It performed strongest on the selection criteria of being the 'least appealing overall', having 'low quality cigarettes', being more 'harmful to health' and 'harder to quit'. However, in Study 3, where mock up packs (printed using a digital printer) were tested for legibility of font size and style, there was some suggestion that the Dark Brown pack had positive associations, with respondents describing the colour as 'chocolate', 'sleek' and 'modern'.

The GfK Blue moon research team and the Department both had concerns that the screen conversion of the colour used in the online studies appeared to render the 'Dark Brown' in a more olive shade. These suspicions were confirmed in Study 4 where the majority of respondents indicated the colour they saw was 'Dark Olive', with fewer indicating 'Dark Brown' (or 'Medium Olive') as the colour they were seeing on screen.

As such, it was decided by the Department that a subsequent round of colour evaluations was required. This was included in the Study 5 Face-to-face component using actual pack prototypes to test the three final plain packaging colour candidates, the original Dark Brown, a Dark Olive and a Medium Olive.

26.2 Research Objectives

There were two key objectives to Study 5 F2F - *Consumer appraisal of plain packs with new health warnings using prototype packs*:

- to identify the exact shade of background pack colour to be used for plain packs; and
- to identify the graphic health warning (GHW) size and layout, front of pack, that would maximise message effectiveness and reduce appeal.

The specific selection criteria for determining the ideal plain packaging colour was based on identifying the pack colour which was seen to:

- be least appealing overall;



- contain the lowest quality cigarettes;
- contain cigarettes which were seen to be harder to quit;
- have minimal positive associations or similarity to other brands in market;
- not detract from the GHW noticeability.

In terms of identifying the most effective GHW design, the specific objectives of the study were to identify the GHW design that would result in a pack that:

- was least appealing overall (in terms of selection criteria relating to pack appeal);
- had the most noticeable GHW;
- had a message that was easiest to understand;
- strongly prompted a reaction to 'stop and think';
- conveyed a serious health risk; and
- had low social appeal in terms of not feeling comfortable being seen with the pack.

26.3 Methodology

This study used a mix of quantitative and qualitative methodologies within a face-to-face group clinic structure:

- quantitative – self-completion survey lead by a moderator; and
- qualitative – short group discussion.

Respondents were pre-recruited and screened to ensure they smoked pre-manufactured cigarettes at least every week. Quotas were set to ensure sufficient representation from the key age groups of interest. However, as the majority of the clinic did not involve group interaction, with respondents filling out the self administration survey for most of the session, groups were not structured according to age or gender. Quotas were used in recruitment to ensure representation of CALD respondents. There were 8-10 respondents recruited for each clinic. Younger adults aged 16-17 years old were also included in this study as they are a key audience of the initiative and it was important to understand their reactions given this was one of the final studies. The final sample size for the study was n=193. The research involved n=201 participants in total, however, eight respondents were removed from the quantitative analysis due to incomplete surveys or surveys with incomplete demographic data. Clinics were split between Sydney and Melbourne.

Table 39: Study 5 F2F Sample Profile

Age Group	Male	Female	Total
Aged 16-17yrs	n=23	n=17	n=40
Aged 18-24yrs	n=22	n=19	n=41
Aged 25-44yrs	n=28	n=28	n=56
Aged 45-64yrs	n=28	n=28	n=56
Total	n=101	n=92	n=193

26.4 Quantitative Methodology

Respondents were first asked to evaluate mock up plain pack prototypes using a self-completion survey. As the survey required a number of packs to be evaluated, a moderator guided respondents through different tasks. Respondents answered the questionnaires individually.

There were two sections to the questionnaire:

- pack colour evaluation; and
- impact of graphic health warning (GHW) size.

Colour Evaluation

Respondents were asked to look at three pack prototypes in three colours, each featuring the same size GHW. They were given time to interact with these packs before answering the questions relating to colour evaluation. The questions asked respondents to select 'best' and 'worst' pack on key measures of overall pack appeal, quality of cigarettes, perceived harm to health, ease of quitting, and noticeability of the GHW on pack. Note, it was not mentioned anywhere in the questionnaire, or at any time by the moderator that the respondents were evaluating colours specifically.

A rotation was applied such that a third of respondents evaluated the colours featuring a 30% GHW, another third the 60% GHW and the final third the 75% GHW. Note, as the objective of this component was to test the colour, the sample groups (rotations) were not matched.

Impact of GHW Size

Respondents were then asked to look at three pack prototypes in the same colour each featuring a different size GHW. They were given time to interact with these packs before answering the questions relating to GHW size evaluation. The questions asked respondents to rate each pack on key measures of appeal and message comprehension using an 11pt scale of 0-10. Note, it was not mentioned anywhere in the questionnaire, or at any time by the moderator that the respondents were evaluating GHW sizes specifically.



A rotation was applied such that a third of respondents evaluated the packs in Dark Olive, another third the Medium Olive pack and the final third the Dark Olive pack. Note, as the objective of this component was to test the impact of GHW size, the sample groups (rotations) were not matched.

The tasks and completion of the questionnaire took 30-40 minutes to complete.

The self-completion questionnaire can be found in Appendix F: Study 5 Face-to-face.

26.5 Qualitative Methodology

Following the group discussion, respondents participated in a short 10 minute group discussion that reviewed their responses to the survey in relation to:

- overall perceptions of the different colours;
- overall perceptions of the GHW and their impact;
- how they look at packs and pack elements; and
- overall appeal of packs.

There was no qualitative discussion guide developed for this component.

26.6 Stimulus

There were two sets of stimulus used in the study:

- plain packaging pack prototypes; and
- images of GHW designs.

Physical Mock up packs

The Department ordered nine different pack prototypes to be produced for the testing. These included three different shades of brown and three different GHW sizes, with each of the GHW sizes for each colour, as shown in the grid below.

Dark Olive 30% GHW	Dark Olive 60% GHW	Dark Olive 75% GHW
Medium Olive 30% GHW	Medium Olive 60% GHW	Medium Olive 75% GHW
Dark Brown 30% GHW	Dark Brown 60% GHW	Dark Brown 75% GHW

Three GHW sizes were tested:

- 30% (15% written warning and 15% image side by side);
- 60% (30% written warning on lid and 30% image below); and
- 75% (30% written warning on lid and 45% image below).

Each pack featured the 'Lung Cancer' ("Smoking causes Lung Cancer") GHW (a potential new health warning for Australian smokers) and was printed using off-set printing.²⁶ These pack prototypes were tested in the quantitative self-completion questionnaire and discussed in the qualitative component.

Photos of the mock up prototypes used in Study 5 Face-to-face are shown below. They are a representation of the actual stimuli so colours and quality may vary to limitations in the photography.

Medium Olive (75% GWH, 60% GHW, 30% GHW)



Dark Olive (75% GWH, 60% GHW, 30% GHW)



Dark Brown (75% GWH, 60% GHW, 30% GHW)



²⁶ The image is subject to copyright. The 'Lung Cancer' image (Bryan Lee Curtis image) is copyright owned by V. Jane Windsor / St. Petersburg Times (Fla.), United States

Images of GHW Designs

In addition to this, four images of pack designs (taken from the Study 5 Online research) were used in the qualitative discussion component to understand the impact of split layout designs. Each pack featured the ‘Lung Cancer’ GHW as shown below.

Lung Cancer 30%



Lung Cancer 60%



Lung Cancer 75%



Lung Cancer 60% Split



Four GHW sizes were tested:

- 30% (15% written warning and 15% image side by side);
- 60% (30% written warning on lid and 30% image below);
- 75% (30% written warning on lid and 45% image below); and
- 60% split layout (30% written warning on lid and 30% image at bottom of pack).

26.7 Analysis and Reporting

Weighting

The quantitative data has been post-weighted to the Australian smoking population aged 15-64 years old using ABS Census data.²⁷ Data has been weighted using age, gender and smoking frequency.

Please note, in previous rounds of testing, the sample included daily or weekly smokers aged 18-64 years old. For this study, smokers aged 16 -17 years old were also included in the testing. As population data was only available for smokers aged 15-64 years old including an age band of 15-17 years old, the 16-24 year age group has been weighted to the 15-24 year old population data.

Refer to Appendix A: Overall Research Details for population targets.

²⁷ ABS - 43640DO011_20072008 National Health Survey: Summary of Results, 2007–2008 (Reissue) Released at 11:30 am (Canberra time) 23 Nov 2010

27 SPONTANEOUS REACTIONS TO PACKS

The qualitative research component of the study found that respondents were generally curious about the packs, given the difference in format, layout and colour than what they were accustomed to. Spontaneous reactions often consisted of suggestions of how smokers could avoid the new style of packs, with many claiming they would:

- buy a cigarette case to cover the packaging;
- repackage the cigarettes from new packs into other containers/ types of packaging; and / or
- be prompted to give up.

Regardless of which size of health warning rotation was used, first impressions were almost always in reference to the graphic health warning of Lung Cancer. The reaction to the colours was secondary. The graphic health warning had a very strong, immediate impact, seen as 'in your face', and foreboding.

Overall, none of the colours were seen to be attractive or appealing. When asked to choose the best pack, respondents identified it was 'the best out of a bad bunch'. It was also apparent that when the sessions were conducted under artificial light respondents had greater difficulty in differentiating between the two darker colours of 'Dark Brown' and 'Dark Olive'. There was a clearer difference between the two darker colours in natural light. The venue configuration and the weather resulted in all of the Melbourne sessions being conducted in natural light and all of the Sydney session in artificial lighting.

The bright yellow warning label on the side of pack was described as eye catching. The colour ensures that people look at it.



28 COLOUR EVALUATION

28.1 Qualitative Research Findings

As mentioned in relation to the spontaneous reactions to the packs, none of the pack colours were seen to be independently attractive or appealing. Respondents consistently commented that when asked to choose the best pack, it was more about picking 'the best out of a bad bunch'.

Medium Olive

The qualitative discussion found that the Medium Olive was polarising in regards to respondent perceptions. Some identified it as almost 'gold', and therefore it held associations of being 'classy' and 'sophisticated'. Some linked it to Benson & Hedges (B&H), with the gold colour signifying a more premium brand. For many, it was very close to the colour of their existing cigarette packet, for example, B&H, Winfield Gold and Peter Jackson. For these respondents this colour was more appealing.

Negative reactions were primarily from respondents who felt the colour was more 'green' or 'olive' than gold. Those who found this colour unappealing described it as 'tacky', 'cheap' and 'baby poo' in colour.

All felt this colour signified 'weaker' cigarettes (light in nicotine content). This made this pack more appealing for those who already smoker lighter cigarettes over and above the darker colours.

Dark compared to Light colours

In comparison to the Medium Olive, both of the darker colours were more likely to be seen negatively. Both were commonly described as signifying 'death', 'dirty' and 'tar'.

Dark Brown

In spite of some difficulty differentiating between the two colours under artificial lighting, it was clear that certain demographic groups found the Dark Brown colour to be more appealing than the Dark Olive. Some younger respondents in their late teens and early twenties as well as older men were more positive about the Dark Brown colour. Positive associations with colour included 'warm', 'chocolate', 'classy', 'sophisticated', 'luxurious' and 'inoffensive'. The Dark Brown was described as reflecting light in a way that gave it a glossier appearance. This increased the positive associations for this colour among those that held them.

Dark Olive

In contrast, there were no positive association made with the Dark Olive colour. It held the negativity of the darker colours in general, 'death', 'dirty' and 'tar', but did not prompt positive associations among respondents. Most had difficulty in describing what the colour was, finding it difficult to name. Descriptors used included 'murky', 'hazy', 'unclear', 'olivey / greeney / khaki', 'colour of smokers lungs'.



Impact of Colour on Desire to Quit

From the qualitative evaluations, darker colours were typically seen as 'dirtier' so were seen as more likely to encourage consideration to quit. This was in contrast to the lighter olive colour which was more likely to be identified as premium / desirable due to being seen as 'gold' so would be less likely to prompt consideration to quit.

28.2 Quantitative Research Findings

The colour comparison results from the quantitative research were somewhat contradictory on face value, however, the qualitative findings provides context to these discrepancies.

Overall Colour Evaluation

The quantitative research showed that the Dark Brown pack performed best in delivering the research objectives. It was seen to be least appealing overall, have the lowest quality cigarettes and have cigarettes that were seen to be hardest to quit. The Medium Olive pack was seen to be the most appealing pack overall. There was some ambiguity in the perceptions of the Dark Olive pack, which was not associated with any of the extremes, positive or negative. That is, the Dark Olive was neither seen to be 'most appealing' nor 'least appealing'.

The table below shows the proportion that rated each colour as 'best' or 'worst' on the measures based on the total sample, regardless of GHW size show. Significance testing has been applied to compare between packs colours.²⁸

²⁸ Ratings on each measure are row percentages. When asked which pack was least appealing, 45% selected the Dark Brown, which was a significantly higher proportion than the 25% who selected the Dark Olive, and higher, but not significantly higher than the 30% who selected the Medium Olive.

Table 40: Study 5 F2F Pack Evaluation measures by Colour

% who selected each colour on each measure	Medium Olive	Dark Olive	Dark Brown
Least appealing overall %	30	25↓	45↑
Most appealing overall %	62↑	20↓	19↓
Lowest quality cigarettes %	39	21↓	40↑
Highest quality cigarettes %	50↑	21↓	29
Most harmful to your health %	23↓	21↓	56↑
Least harmful to your health %	64↑	21↓	15↓
Hardest to quit %	30	18↓	52↑
Easiest to quit %	60↑	20↓	19↓
Base: All respondents (n=193) Q1-Q5. Which pack you think is the / And which pack looks like it contains cigarettes which are the Single response. Combines all ratings regardless of GHW size shown. ↑↓ Significantly higher / lower than other pack colours at 95% c.i.			

The Dark Brown colour was seen to be the least appealing (45%), have lower quality cigarettes (40%), cigarettes which were the hardest to quit (52%) and had the highest perceived harm to health (56%). This confirms the qualitative findings that this colour, by nature of being the darkest colour, had the lowest appeal, perceived quality and perceived harm.

The Medium Olive colour was seen to be the most appealing (62%), have the highest quality cigarettes (50%), contain cigarettes which were least harmful to health (64%), and cigarettes which were the easiest to quit (60%). These scores were significantly higher than those observed for Dark Olive and Dark Brown. This confirms the qualitative findings that as a lighter colour, the Medium Olive was seen to be less harmful to health.

The Dark Olive colour rated low on all positive and negative measures. This confirms the qualitative evaluations that the Dark Olive pack had the least positive associations but also lower negative perceptions relative to the Dark Brown colour

Interestingly, the spread of colours for 'least appealing' colour was relatively well distributed compared to other measures. This confirmed the qualitative findings that all colours were considered

unappealing. However, there does appear to be evidence that the darker the colour, the more unappealing and the lighter the colour the more appealing.

Although the Dark Brown colour best met the selection criteria of the research objectives for appeal, quality of cigarettes, perceived harm and ease of quitting, the qualitative research found that the colour also elicited some positive associations. These findings challenge the appropriateness of the Dark Brown colour as a plain packaging colour. Whilst the Dark Olive colour was not viewed as undesirably as the Dark Brown colour, it had the negative associations of the darker colours without the positive reactions of the Dark Brown found in the qualitative research.

There were few noteworthy age or gender differences in the colour evaluation. Tables showing colour evaluation scores by age can be found in Appendix F: Study 5 Face-to-face.

Impact of Colour on GHW Noticeability

Another consideration for the plain packaging colour selection was to understand the impact that background colour had on the noticeability of the GHW. The quantitative research showed no conclusive evidence that the background pack colour affected noticeability of the GHW. The table below details the results from the 'best' and 'worst' exercise pertaining to the GHW noticeability by pack colour.

Table 41: Study 5 F2F GHW Noticeability by Colour

% who selected each colour on each measure	Medium Olive	Dark Olive	Dark Brown
Stands out the most %	40	17↓	43↑
Stands out the least %	47↑	22↓	30
Base: All respondents (n=193) Q1-Q5. Which pack you think is the / And which pack looks like it contains cigarettes which are the Single response. Combines all ratings regardless of GHW size shown. ↑↓ Significantly higher / lower than other pack colours at 95% c.i.			

There was no pattern in responses that indicated any one colour to have a GHW that stood out the most or least. In terms of having a GHW that stood out the most, a similar proportion selected the Medium Olive (40%) and the Dark Brown (43%). However, when asked which pack had the GHW that stood out the least, the same colours, Medium Olive (47%) and Dark Brown (30%) elicited the highest mentions. Meanwhile, the Dark Olive had the lowest scores for having the GHW warning that 'stood out the most' (17%) as well as the GHW that 'stood out the least' (22%).

As such, there was no colour that compromised the GHW noticeability.



29 IMPACT OF GHW SIZE

29.1 Quantitative Research Findings

Overall, the larger GHW size packs, particularly the 75% GHW pack, best met the study's objectives in being lower in appeal and higher in message comprehension and impact. Larger GHW were associated with being less appealing, having lower quality cigarettes and lower social appeal (would not feel comfortable being seen smoking) as well as containing cigarettes which were higher in perceived harm to health. Larger GHW were also associated with higher GHW stand out, being easier to understand, prompting more of a reaction (to 'stop and think') and a stronger ability to convey the seriousness of health risks.

The quantitative research showed that the larger GHW, the 60% GHW and 75% GHW packs, performed better than the 30% GHW pack on all measures tested with the exception of 'ease of quitting'. The greatest improvements were seen when increasing the GHW from 30% to 60%, but these were not always statistically significant increases. However, increasing the GHW from 60% to 75% saw further improvements and there were statistically significant differences between the 30% and 75% GHW across all measures except 'ease of quitting'.

There were two analyses conducted to test the impact of GHW size on message comprehension and cut through, mean score analysis and top 3 / bottom 3 box analysis. These are detailed below.

Mean score Analysis

To understand the degree of impact for each of the GHW sizes, a mean score (or average score) was calculated for each of the different GHW size packs. This provided an overall figure to compare how each of the GHW sizes performed on the selection criteria.

The table below shows the mean scores out of 10 for each of the key measures with associated percentage shifts by pack. The first three columns show the means scores and the last three columns of the table show the percentage change in scores between GHW sizes. For instance, on average, a 30% GHW was seen to have an overall appeal of 5.8 out of 10 whilst on average, the 60% GHW was seen to have an overall appeal of 3.4 out of 10. Increasing GHW size from 30% to 60% GHW resulted in a 41% decrease in overall appeal.

Table 42: Study 5 F2F Mean score of Pack Evaluation measures by GHW size / layout

Mean score out of 10	GHW size			% difference in scores between GHW sizes		
	30% GHW % (A)	60% GHW % (B)	75% GHW % (C)	From 30% to 60%	From 30% to 75%	From 60% to 75%
Appeal (0=not at all appealing, 10=extremely appealing)	5.8 AB	3.4 C	2.4	-41%	-59%	-29%
Quality of cigarettes (0=contains low quality cigarettes, 10=contains high quality cigarettes)	6.4 AB	5.0 C	4.2	-22%	-34%	-16%
Harm to health (0=not at all harmful to health, 10=extremely harmful to health)	7.1	8.0	8.5 A	13%	20%	6%
Ease of quitting (0=extremely hard to quit, 10=extremely easy to quit)	4.0	4.4	4.6	10%	15%	5%
GHW noticeability / standout (0= graphic health warning doesn't stand out at all, 10= graphic health warning stands out a lot)	5.4	8.2 A	9.1 AB	52%	69%	11%
Ease of understanding the message (0=extremely difficult to understand the message, 10=extremely easy to understand the message)	7.7	8.9	9.3 A	16%	21%	4%
Ability to make me 'stop and think' (0=doesn't make me 'stop and think' at all, 10=really makes me 'stop and think')	5.4	7.3 A	7.9 A	35%	46%	8%
Seriousness of health risks (0=don't feel the health risks are serious at all, 10=feel the health risks are very serious)	7.0	8.4 A	8.9 A	20%	27%	6%
Social appeal (comfort level of being seen with the pack) (0=would not feel at all comfortable being seen with this pack, 10=would feel very comfortable to be seen with this pack)	5.5 AB	3.5	3.0	-36%	-45%	-14%

Base: All respondents (n=193 – 191)
 B1-C4. 11 pt scale 0-10.
 Combines all ratings regardless of pack colour evaluated.
 A / B / C Significantly higher / lower than specified column at 95% c.i

Overall appeal and perceived quality of cigarettes were lower for the larger GHW sizes:

- the 60% GHW pack was significantly less appealing (3.4 out of 10) than the 30% GHW pack (5.8 out of 10);
- the 75% GHW pack was significantly less appealing (2.4 out of 10) than the 30% GHW pack and significantly less appealing than the 60% GHW pack;
- the perceived quality of cigarette of the 60% GHW pack was significantly lower (5.0 out of 10) than that of the 30% GHW (6.4 out of 10); and
- the perceived quality of cigarette of the 75% GHW (4.2 out of 10) was significantly lower than both the 60% GHW and 30% GHW pack.

Noticeability of the GHW was also highest for the larger GHW sizes:

- the GHW on the 60% GHW pack stood out significantly more (8.2 out of 10) than the 30% GHW pack (5.4 out of 10); and
- the GHW on the 75% GHW pack stood out significantly more (9.1 out of 10) than the 30% GHW and 60% GHW pack.

Although ease of understanding of the message was high across all GHW sizes tested, message comprehension was even higher for the larger GHW:

- the GHW on the 60% GHW pack was easier, but not significantly easier, to understand (8.9 out of 10) than the 30% GHW pack (7.7 out of 10); and
- the GHW on the 75% GHW pack was significantly easier to understand (9.3 out of 10) than the 30% GHW and easier, but not significantly easier to understand than the 60% GHW pack.

The ability of the GHW to prompt a reaction was also higher for the larger GHW sizes:

- the GHW on the 60% GHW pack significantly more likely, to prompt the respondent to 'stop and think' (7.3 out of 10) than was the 30% GHW pack (5.4 out of 10); and
- the 75% GHW pack was significantly more likely to prompt a reaction (7.9 out of 10) than the 30% GHW pack, but only marginally more impactful than the 60% GHW pack (7.3 out of 10).

The ability of the GHW to convey the seriousness of health risks was also highest for the 75% GHW:

- the 75% GHW (8.9 out of 10) and the 60% GHW pack (8.4 out of 10) were significantly more likely to convey the seriousness of health risks than was the 30% GHW pack (7.0 out of 10); but
- the 75% GHW pack was on par with the 60% GHW pack on conveying the seriousness of health risks.

Social desirability was also lower for the larger GHW sizes:



- respondents were significantly less comfortable being seen with the 60% GHW pack (3.5 out of 10) and the 75% GHW pack (3.0 out of 10) than the 30% GHW pack (5.5 out of 10); but
- respondents were only marginally less comfortable being seen with the 75% GHW pack than being seen with the 60% GHW pack (3.5 out of 10).

The measure 'ease of quitting' had low scores across all GHW sizes tested, ranging from 4.0 to 4.6. This reiterated qualitative findings that most consider cigarettes to be 'hard to quit', regardless of the GHW size.

Top 3 / Bottom 3 box analysis

Another way the results were analysed was by comparing the proportion of respondents who considered the GHW size to perform in line with the desired objectives. This analysis sought to identify the pack where the *most* respondents considered the GHW size to be:

- less appealing (pack appeal and social appeal);
- more harmful to health (perceived harm and ease of quitting)
- have a more noticeable GHW; and
- have a GHW that had a greater impact (prompt a reaction, convey the seriousness of health risks).

To do this, Top 3 box / Bottom 3 box analysis was conducted on the pack evaluation responses. This reports the proportion who gave a score in the top 3 score ratings (8-10 out of 10) or a score in the bottom 3 score ratings (0-2 out of 10). The table below shows the top 3 or bottom 3 boxes for each score as relevant to the objectives.²⁹

²⁹ For instance, in the case of appeal, where the objective is to identify the 'least appealing' pack, the bottom 3 boxes are shown, corresponding to the proportion that considers the pack to be 'not at all appealing'. For a negative dimension such as perceived harm to health, where the objective is to identify pack which is seen to contain cigarettes that are more harmful to health, the top 3 box proportions are reported.

Table 43: Study 5 F2F Top 3 box / Bottom 3 box Analysis of Pack Evaluation measures by GHW size / layout

Column % Top 3 / Bottom 3 Box	30% GHW % (A)	60% GHW % (B)	75% GHW % (C)
Not at all appealing (0-2 out of 10)	13	36 A	63 AB
Contains low quality cigarettes (0-2 out of 10)	8	12	29 AB
Extremely harmful to health (8-10 out of 10)	46	63 A	79 AB
Extremely hard to quit (0-2 out of 10)	32	26	31
Graphic health warning stands out a lot (8-10 out of 10)	27	69 A	89 AB
Extremely easy to understand the message (8-10 out of 10)	62	80 A	90 AB
Really makes me 'stop and think' (8-10 out of 10)	33	57 A	68 AB
Feel the health risks are extremely serious (8-10 out of 10)	45	70 A	81 AB
Would not feel at all comfortable being seen with this pack (0-2 out of 10)	23	46 A	56 A
Base: All respondents (n=193 – 191) B1-C4. 11 pt scale 0-10. Combines all ratings regardless of pack colour evaluated. A / B / C Significantly higher / lower than specified column at 95% c.i			

This analysis further supports the findings presented earlier, that the 75% GHW performed strongest on the key criteria. For all dimensions tested, with the exception of 'ease of quitting', a significantly higher proportion of respondents rated the 75% GHW pack in line with the research objectives. The 30% GHW pack performed weakest in terms of meeting the research objectives. The 60% GHW performed more in line with the objectives than the 30% but weaker than the 75% GHW pack.

29.2 Qualitative Findings on Size of GHW

These results are supported by the qualitative evaluations from the Study 5 Face-to-face component which found that:

- increasing the size of the GHW increased noticeability and impact; and
- increasing the size of the GHW decreased appeal.

The qualitative component found the 30% GHW to be the least effective of the designs tested. When testing actual mock up packs, the 30% GHW was less prominent than the 60% and 75% GHW warning. In fact, other features on the 30% GHW pack would take prominence, such as the 'brand name'.

"I prefer the smaller visual, it allows me to avoid looking at it"

Meanwhile the larger images were seen to be inescapable.

"The image is huge you really can't get away from it"

Overall, the larger pictures were seen to equate with easier message comprehension and stronger impact. The text of both the 60% and 75% GHW was seen as easily and clearly comprehended given its size and location at the top of the pack.

In addition to increasing message effectiveness, a larger GHW resulted in decreased appeal. The larger the picture, the more off putting it was perceived to be in terms of 'being seen smoking them'. This is a highly influential for smokers. Distasteful graphics are thought to be even more offensive the larger they are. This was even more so for non-smokers. The larger graphics makes the health warning almost over- bearing, and therefore something they did not want to been seen taking out of a pocket / handbag. Some identified that they would feel as if they were carrying an offensive item.

"I use to place my lighter over the image so I couldn't see it, now no matter which side you look it is in your face, I will have to leave it in my bag."

Although the quantitative research did not show conclusive evidence that a larger GHW size impacted perceptions of how easy it would be to quit smoking the cigarettes in each pack, the qualitative research did find some evidence in this regard. In relation to size of graphic warning, participants said that the smaller the warning, the less likely it was to prompt them to quit, as it was easier to ignore the message of the warning. By contrast, larger warnings were considered more difficult to ignore, therefore providing a continuous prompt to quitting for the smoker.

29.3 Split Layout Compared to Non-Split Layout.

Although this topic was covered qualitatively in Study 5 F2F, analysis and conclusions relating to this topic are addressed in Study 5 Online, where the 60% split layout was tested quantitatively.

30 IMPACT ON SIZE OF GHW ON PACK COLOUR PERCEPTIONS

There was some indication that a larger, 75% GHW could detract from the impact of the plain packaging colour. Quantitatively, there was some evidence that a 75% GHW pack resulted in fewer differences in pack perceptions between the different colours. It is important to note that the groups testing the different GHW sizes for the colour evaluation were not matched samples. As such, any inferences drawn from comparing these groups should be considered indicative and not conclusive as they could be explained by sampling differences rather than actual differences in perceptions.

The table below shows the net percentage scores for each pack colour by the GHW size tested. These are shown in a way that reflects the research objectives. These net scores are composite measures to obtain the overall net proportion selecting the colour. For example, the score for 'least appealing' net is constructed by subtracting the proportion who selected the colour as 'most appealing' from the proportion who selected the same colour as 'least appealing'.

Table 44: Study 5 F2F Pack Evaluation ratings

Pack evaluation by colour and GHW size Nett scores	Medium Olive 30% GHW	Dark Olive 30% GHW	Dark Brown n 30% GHW	Medium Olive 60% GHW	Dark Olive 60% GHW	Dark Brown n 60% GHW	Medium Olive 75% GHW	Dark Olive 75% GHW	Dark Brown n 75% GHW
Sample size	n=68			n=66			n=57		
Least appealing net score (Least - Most appealing %)	-24	1	23	-56	14	42	-4	1	4
Lowest quality net score (Least - Highest quality %)	-8	-1	8	-27	8	19	11	-12	2
Most harmful net score (Most - least harmful %)	-46	4	42	-43	-2	44	-33	2	31
Hardest to quit net score (Hardest - easiest to quit %)	-53	7	45	-14	-18	30	-33	9	24
Stands out the most net score (stand out the most - stand out the least %)	7	-12	5	-12	-4	-17	-13	-3	16
Base: All respondents who answered for that GHW size. Q1-Q5. Which pack you think is the / And which pack looks like it contains cigarettes which are the etc. Single response.									

The pack colour which was 'least appealing' was most obvious for the 60% GHW evaluations and less obvious for the 30% and 75% GHW packs. For the 60% GHW pack, the Dark Brown pack had the highest net score on being 'least appealing', 42%, whilst the Medium Olive was clearly seen to be more



appealing with a score of -56%. However, for those evaluating the 75% GHW packs, the Dark Brown pack had a lower net score on being 'least appealing', 4%, only marginally higher than the Medium Olive packs net score of -4%. This was also the case for perceived quality.

This suggests (indicatively) that a large GHW which has high front of pack coverage could limit the ability of the plain packaging colour to influence perceptions of appeal. This would be a logical conclusion to draw in that there is less colour visible on pack to evaluate.

There was also evidence that supported the idea that a larger GHW can detract from the background colour in drawing more attention to the image and written warning. This was observed in Study 5 Online (quantitatively) where the GHW share of noticeability further increased for 75% GHW.³⁰

³⁰ Study 5 Online. As the GHW size increased from 60% to 75%, the share of noticeability of the image increased significantly (from 45% to 55%). This increase provides some evidence that the larger image detracts attention from the written warning. Share of noticeability for the written warning decreased significantly (from 47% to 36%), making the written warning's share of noticeability lower than the 30% GHW.



31 CONCLUSIONS AND RECOMMENDATIONS

31.1 Conclusions

Colours

All colours tested were seen to be unappealing. From the quantitative research, the Medium Olive pack was seen to be the pack which was the most appealing, had the highest quality cigarettes and had cigarettes that were least harmful to health. It was also seen to carry positive associations such as 'gold', 'sophisticated', 'classy' and have similarities to other brands in market. There was quantitative and qualitative evidence to suggest that a Medium Olive colour should be ineligible for the plain packaging.

The Dark Brown colour was seen to be the least appealing, had lower quality cigarettes and the highest perceived harm to health. Whilst overall performance was most in line with the research objectives, the qualitative component of the research found that the colour also held some very positive associations, being referred to as 'upmarket', 'sophisticated' or having a 'chocolate' colour.

There was some ambiguity around the Dark Olive colour which was scored consistently low on both extremes. That is, it scored low on being 'most appealing' but also low on being 'least appealing'. Qualitatively speaking, it did not elicit any positive associations.

There was no quantitative evidence to suggest that the different colours affected noticeability of the GHW.

Size of GHW

The results from the quantitative and qualitative research components provide evidence that:

- increasing the size of the GHW increases noticeability and impact; and
- increasing the size of the GHW decreases appeal.

The 75% GHW pack performed the best in line with the research objectives. Although a 60% GHW resulted in significantly stronger performance than a 30% GHW on selection criteria, a GHW with 75% front of pack coverage was overall least appealing and had the greatest potential to maximise noticeability and impact on pack.

31.2 Recommendations

In summary, a darker background colour which has minimal positive associations but the desired negative connotations in combination with a larger GHW will optimise the objectives of the plain packaging initiative.



As all the colours within this study were deemed to be largely unappealing, it would be most effective to select the final colour that carries the least positive associations whilst having the desired negative connotations.

Based on this, the Dark Olive colour would be the most effective plain packaging colour as it did not elicit any positive associations. The rationale being that the Dark Olive:

- outperformed all other colours in earlier rounds of online testing (under the description of 'Dark Brown' for Study 2 and 4)
- carries the negative connotations of 'death', 'dirty' and 'tar', albeit at a lower degree than when directly compared to the Dark Brown;
- does not have a strong similarity to any current brands on the market;
- is a difficult colour to define; and as such, does not elicit any positive associations and has limited potential to do so.

Adopting a 75% GHW would have the optimal impact as it has the greatest potential to reduce pack attractiveness and appeal and increase the noticeability and effectiveness of GHW. This will work in conjunction with the plain packaging colour to produce the least appealing and attractive pack.



GfK bluemoon

STUDY 5 : ONLINE: CONSUMER APPRAISAL OF DIFFERENT GRAPHIC HEALTH WARNING SIZES AND LAYOUTS ON PACK (SECTIONS 32-36)

32 OBJECTIVES AND METHODOLOGY

Study 5 Online was conducted after Study 3 and 4 and in parallel with Study 5 Face-to-face. The original objectives of including an online component to Study 5 were to boost the sample size for the Study 5 Face-to-face component. As other issues emerged through the course of the research program, the Study 5 Online component was conducted to address a revised objective of testing GHW sizes and layouts. Fieldwork was conducted from 18th February to 23rd February 2011.

32.1 Research Objectives

The objective of *Study 5 Online - Consumer appraisal of different graphic health warning sizes and layouts on pack* was to identify one graphic health warning size and layout on the front of the pack that would maximise the noticeability and impact (message comprehension and cut through) of the GHW on cigarette packaging.

More specifically, the research sought to identify the GHW which:

- was most noticeable (stands out the most);
- easiest to understand (message was easiest to understand);
- had the strongest ability to prompt a reaction (makes you 'stop and think' the most); and
- had the strongest ability to convey the seriousness of health risks (feel the health risks are extremely serious).

32.2 Methodology

Study 5 Online comprised a quantitative methodology where online surveys were conducted amongst n=409 Australians aged 18-64 years old who were current weekly smokers of manufactured cigarettes. Online panel members were invited to participate in the survey and screened for age, gender and smoking status. Soft quotas were applied on age and gender to ensure representativeness and provide sufficient sample sizes for subgroup analysis.

The table overleaf shows the sample profile for Study 5 Online.

Table 45: Study 5 Online Sample Profile

Target Groups	Target Quotas	Sample size (weekly smokers)
Male 18-24 year olds	min n=60	n=69
Male 25-44 year olds	min n=60	n=68
Male 45-64 year olds	min n=60	n=68
Female 18-24 year olds	min n=60	n=68
Female 25-44 year olds	min n=60	n=68
Female 45-64 year olds	min n=60	n=68
Other Gender 18-64 year olds	No quotas set	n=0
Total	n=400	n=409

32.3 Questionnaire Design

The questionnaire followed the structure below:

- screener;
- noticeability of pack elements;
- perceptions of front of pack by GHW size / layout; and
- smoking profile and demographics.

The pack perceptions tested the different GHW sizes / layout options on the following dimensions:

- noticeability;
- comprehension;
- impact; and
- effectiveness.

Respondents were first asked to provide a rating from 0 - 10 on each of the above measures for each pack. Four packs featuring the four different front of pack GHW sizes / layouts were shown on the screen, side by side.

Following these evaluations, the same four packs were shown on the screen side by side and respondents were asked to select the pack they felt performed 'most' and which pack performed 'least' on each of the dimensions.

Two different GHW were used in the research, however, the survey was designed so that respondents only evaluated one of the GHWs. Respondents were randomly allocated to one of the GHWs and

quotas were set for age and gender to ensure the samples evaluating either GHW were matched. Specific details of the GHW and pack designs are outlined in the next subsection on Stimulus.

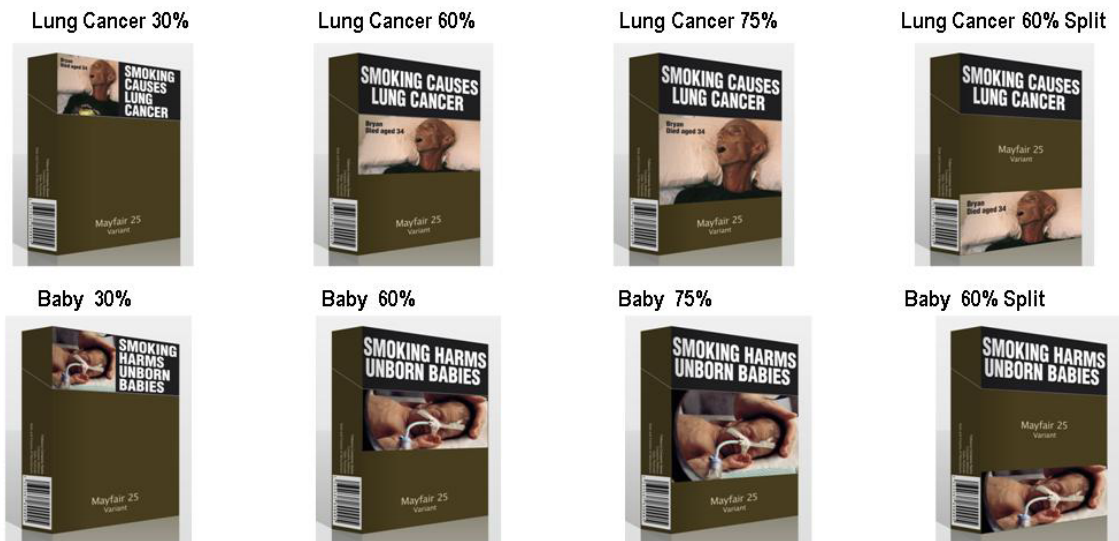
The questionnaire can be found in Appendix G: Study 5 Online.

32.4 Stimulus

Four different GHW designs for front of pack were developed for testing:

- 30% (15% written warning and 15% image side by side);
- 60% (30% written warning on lid and 30% image below);
- 75% (30% written warning on lid and 45% image below); and
- 60% split layout (30% written warning on lid and 30% image at bottom of pack).

There were two GHWs used - 'Lung Cancer' ("Smoking causes Lung Cancer") and 'Baby' ("Smoking harms unborn babies").³¹ Neither of these GHWs had been seen in Australia before. As mentioned earlier, the survey was designed so that half the respondents evaluated the packs featuring the 'Lung Cancer' GHW and the other half evaluated the 'Baby' GHW. All packs were in the 'Dark Olive' colour used in the previous online studies, under the description 'Dark Brown'.³² It was decided that this colour should be used as it was the least appealing colour in previous online tests. The pack images that were tested appear below:



³¹ These images for both the GHW are subject to copyright. The 'Baby' image © Commonwealth of Australia. The 'Lung Cancer' image (Bryan Lee Curtis image) is copyright owned by V. Jane Windsor / St. Petersburg Times (Fla.), United States

³² Note at this stage it has been established that the colour 'Dark Brown' used in earlier online studies (Study 2 and 4) is being rendered online as 'Dark Olive' from findings in Study 4 and Study 5 Face-to-face.



32.5 Analysis and Reporting

The following section reports the quantitative findings from the Study 5 online research.

Study 5 Face-to-face, was also conducted in parallel with Study 5 Online where respondents were shown the same packs featuring the 'Lung Cancer' GHW tested in this study to understand reactions to non-split and split GHW designs. This was a face-to-face quantitative study (self-completion survey) conducted in clinics with a short qualitative discussion component run after respondents completed the questionnaire. Where relevant, findings from the qualitative component of the Study 5 Face-to-face study have been added to provide further understanding into the quantitative results, more specifically in regards to the split layout design.

Weighting

As with the other quantitative studies, data for Study 5 Online has been post-weighted to the Australian smoking population aged 18-64 years old using ABS Census data.³³ Data has been weighted using age, gender and smoking frequency. Refer to Appendix A: Overall Research Details for population targets.

³³ ABS - 43640DO011_20072008 National Health Survey: Summary of Results, 2007–2008 (Reissue) Released at 11:30 am (Canberra time) 23 Nov 2010



33 PACK ELEMENT SHARE OF NOTICEABILITY

Respondents were shown a pack and asked to indicate in which front of pack elements (GHW written warning, GHW image, brand name and number of cigarettes) they noticed and in what order. Both the GHW *image* and the *written warning* were the most noticeable elements on packs, regardless of graphic warning size. Larger GHW sizes corresponded with higher share of noticeability for the GHW. The 60% and 75% GHW returned the strongest share of GHW noticeability in its entirety, whilst the 75% GHW had the highest share of noticeability for the GHW image.

The table below details the elements respondents first noticed. The table shows the element which respondents first noticed, for instance 44% first noticed the written health warning when shown the 30% GHW pack. There were no observable differences between the share of noticeability for any pack element when comparing the 'Lung Cancer' and 'Baby' pack evaluations for the 30%, 60% and 75% GHW designs. However, for the 60% split GHW design, there were notable and significant differences observed for the share of noticeability of the brand name when comparing the different GHWs, 'Lung Cancer' vs. 'Baby'.

Table 46: Study 5 Online Noticeability of Pack Elements

Element first noticed (n=409)	30% GHW %	60% GHW %	75% GHW %	60% split GHW %	Lung Cancer 60% split GHW (n=205) %	Baby 60% split GHW (n=204) %
Written health warning	44	47	36 [✓]	70 [^]	74 [^]	66 [^]
Health warning image / photo	42	45	55 [^]	13 [✓]	12 [✓]	15 [✓]
Brand name	8	5	5	11 [^]	7	16 [^]
Number of cigarettes	6	4	4	5	7	3
Combined Health warning (image and written warning)	86	91 [^]	92	83 [✓]	86	81
Difference in noticeability of GHW elements (written warning – image)	2	2	-19	57	63	51
Base: All respondents (n=409) Q0. Now looking at this pack, please indicate in what order you noticed ...? Showing '1 st ' noticed First four columns show results for all respondents regardless which GHW they were shown ('Lung Cancer' or 'Baby'). [^] Significantly higher / lower than comparison pack at 95% c.i. (60% vs. 30%, 75% vs.60%, 60% split vs. 60%) and (Lung Cancer 60% split vs. Baby 60% split)						

Overall, there were some clear patterns that emerged from this share of noticeability analysis:

- the majority viewing a 30% GHW pack were most likely to first notice the GHW (86%). Noticeability of the different GHW components were split evenly between the written warning (44%) and the graphic image (42%);
- a GHW of 60% had significantly higher share of noticeability (91%) than a 30% GHW (86%). Noticeability of the different GHW components were split evenly between the written warning (47%) and the graphic image (45%);
- a GHW of 75% had significantly higher share of noticeability (92%) than a 30% GHW (86%) but only a marginally higher share of noticeability compared to the 60% GHW (91%). Noticeability of the different GHW components were skewed towards the graphic image (55%) with only 36% first noticing the written warning;



- a 60% split GHW had the lowest share of GHW noticeability (83%) and had significantly lower share of noticeability compared to a 60% non-split GHW (91%). The written warning dominated noticeability (70%) with only 13% first noticing the graphic image; and.
- brand name noticeability was marginally lower for the larger GHW, 60% GHW (5%) or 75% GHW (5%), compared to the 30% GHW (8%). However, brand name noticeability is highest for the 60% split GHW (11%). Higher brand name noticeability was more likely to be observed for the 'Baby' GHW packs, 16% share of noticeability for brand name compared to 7% for the 'Lung Cancer' GHW.

As such, a larger non-split GHW can increase noticeability of the GHW elements. The increase in the noticeability of the graphic image in the 75% GHW analysis suggests the larger image can detract attention from the written warning. A split GHW layout results in a lower share of GHW noticeability overall and potentially higher brand name noticeability.

These quantitative results are consistent with the qualitative evaluations found in the Study 5 Face-to-face research where most respondents were able to perceive a difference between the 60% and 75% GHW. The 75% warning was almost impossible to avoid, whereas the 60% GHW offered some relief. When looking at the 75% GHW, smokers claimed their eye went straight to the image and then the written warning, with the brand name being recessive. That said, this may change once smokers become accustomed to the location on the pack of the brand name.



34 IMPACT OF GHW SIZE ON MESSAGE COMPREHENSION AND CUT THROUGH

34.1 Quantitative Findings

The research found that a larger GHW can improve message comprehension and cut through. The 60% GHW and 75% GHW packs performed more strongly than the 30% GHW pack and the 60% split GHW pack on all selection criteria tested. The 75% GHW pack performed significantly better than all other packs, though with a smaller margin on the 60% GHW on all measures.

Pack Ratings

The table below shows the Top 3 box / Bottom 5 box analysis scores for all GHW sizes tested. These scores show the proportion who selected the top 3 scores (8-10 out of 10) or the bottom 5 scores (0-4 out of 10).³⁴ A composite score is also shown where the bottom 3 box proportion is subtracted from the top 3 box proportion to show 'overall performance' of each GHW design on the measured dimensions. This allows identification of the GHW size which has the overall proportion who considered the GHW to perform in line with the key dimensions.

³⁴ Note bottom 5 box analysis was used due to the low proportion who allocated bottom box scores.

Table 47: Study 5 Online Perceptions of Pack by GHW size / layout

Top 3 Box (8 / 9 / 10 out of 10)	30% GHW %	60% GHW %	75% GHW %	60% split GHW %
Noticeability (stand out) - Health warning stands out a lot	49	72 [^]	87 [^]	60 [~]
Ease of understanding - Extremely easy to understand the message	77	85 [^]	90 [^]	76
Makes me 'stop and think' - Really makes me 'stop and think'	32	45 [^]	62 [^]	35
Feel the seriousness of health risks- Feel the health risks are extremely serious	47	56 [^]	70 [^]	48
Bottom 5 Box (0 / 1 / 2 / 3 / 4 out of 10)	30% GHW %	60% GHW %	75% GHW %	60% split GHW %
Noticeability (Stand out) - Health warning doesn't stand out at all	8	4 [~]	2 [~]	7
Ease of understanding - Extremely hard to understand the message	5	2	1 [~]	3
Makes me 'stop and think' - Doesn't make me 'stop and think' at all	15	9 [~]	6 [~]	14 [^]
Feel the seriousness of health risks - Don't feel the health risks are serious at all	10	6 [~]	4 [~]	11 [^]
Score (Top 3 Box minus Bottom 5 Box)#	30% GHW %	60% GHW %	75% GHW %	60% split GHW %
<i>Noticeability (stand out)</i>	41	68	84	52
<i>Ease of understanding</i>	73	82	89	73
<i>Makes me 'stop and think'</i>	18	36	55	21
<i>Feel the seriousness of health risks</i>	37	50	66	38
<p>Q1. How noticeable are the health warnings on each of these packs? 10 – Health warning stands out a lot, 0 - Health warning doesn't stand out at all</p> <p>Q2. How easy or hard is it to understand the message of the health warnings on each of these packs? 10 – Extremely easy to understand the message, 0 - Extremely hard to understand the message</p> <p>Q3. How much do each of these packs make you 'stop and think' when you look at them? 10 - Really makes me 'stop and think', Doesn't make me 'stop and think' at all</p> <p>Q4. How serious do you feel the health risks from smoking are when you look at each of these packs? 10 - Feel the health risks are extremely serious, 0 - Don't feel the health risks are serious at all. Single response per pack.</p> <p>Combined score regardless of GHW ('Lung Cancer' or 'Baby') shown.</p> <p>^{^^} Significantly higher / lower than comparison pack at 95% c.i. (60% vs. 30%, 75% vs.60%, 60% split vs. 60%)</p> <p>#Note, calculations may differ by plus or minus 1% due to rounding.</p>				

The 75% GHW pack had the highest proportion that considered that it performed according to the research objectives. The 75% GHW pack had:

- the highest GHW noticeability (87%) which was significantly more noticeable than the 60% GHW pack (72%) and the 60% split layout (60%) and 30% GHW pack (49%);
- the greatest ease of understanding (90%). Although ease of understanding was relatively high for the 30% GHW (77%), it was significantly higher for the 60% GHW (85%) and 75% GHW but was unchanged for the 60% split GHW (76%);
- the strongest impact on prompting a reaction, to 'stop and think'(62%). This measure increased significantly when the size of the GHW increased from 30% (32%) to 60% (45%) and further for the 75% GHW (62%). Prompting a reaction was thus significantly lower for the 30% GHW pack (32%) and the 60% split layout pack (35%);
- the strongest ability to convey the seriousness of health risks (70%). This was significantly higher than the 30% pack (47%). A 60% GHW pack was also significantly higher on this measure (56%). However, there was no increase between the 30% pack and the 60% GHW split layout (48%).

As shown from the composite scores in the table above, the 75% GHW pack had the highest overall performance in terms of noticeability (84%), ease of understanding (89%), prompting a reaction to 'stop and think' (55%) and conveying the seriousness of health risks (66%).

Forced Choice

Similarly, when forced to choose which packs performed 'best' and 'worst' on these measures, the 75% GHW pack outperformed all other packs with a majority margin on all dimensions. When forced to choose a pack which performed strongest on the key dimensions, all other packs were seen to be significantly less powerful on the key measures.

The table below shows the proportion who rated each pack 'most' or 'least' on the key measures, regardless of which GHW message ('Lung Cancer' or 'Baby') was shown with significance testing applied.³⁵

³⁵ Proportions are row percentages. Significance testing to compare the size of GHW between each of the packs is shown by the hat arrows. For example, in terms of noticeability, 78% considered the 75% GHW pack to have the GHW that 'stood out the most' and this was statistically significantly higher than the proportion who considered any other pack to have a GHW that 'stood out the most'.

Table 48: Study 5 Online Best and Worst Perceptions

Proportion selecting pack for each statement#	30% GHW %	60% GHW %	75% GHW %	60% split GHW %
Stands out the most %	5 [✓]	9 [✓]	78 [^]	8 [✓]
Stands out the least %	69 [^]	2 [✓]	4 [✓]	25
<i>Noticeability score (%most –%least) %</i>	-64	7	74	-17
Easiest to understand %	7 [✓]	11 [✓]	73 [^]	9 [✓]
Hardest to understand %	67 [^]	5 [✓]	4 [✓]	25
<i>Ease of understanding score (%most –%least) %</i>	-59	6	69	-16
Makes me 'stop and think' the most %	7 [✓]	8 [✓]	81 [^]	4 [✓]
Makes me 'stop and think' the least %	64 [^]	3 [✓]	5 [✓]	28
<i>'Stop and think' score (%most –%least) %</i>	-58	5	76	-23
Feel the health risks are the most serious %	6 [✓]	8 [✓]	84 [^]	3 [✓]
Feel the health risks are the least serious %	63 [^]	4 [✓]	4 [✓]	29
<i>Health risk score (%most –%least) %</i>	-57	3	80	-26
<p>Base: All respondents (n=409)</p> <p>Q1b. And looking at each of these, on which pack do you think the <i>health warning is the easiest to understand</i> and on which pack do you think the <i>health warning is the hardest to understand</i>?</p> <p>Q2b. And looking at each of these, on which pack do you think the health warning <i>stands out the most</i> and on which pack do you think the health warning <i>stands out the least</i>?</p> <p>Q3b. And looking at each of these, on which pack do you think the health warning makes you 'stop and think' the most and on which pack do you think the health warning makes you 'stop and think' the least?</p> <p>Q4b. And when looking at each of these packs, which makes you feel the health risks are the most serious and which makes you feel the health risks are least serious?</p> <p>Single response per option.</p> <p>Combined score regardless of GHW ('Lung Cancer' or 'Baby') shown.</p> <p>[^] Significantly higher / lower than comparison pack at 95% c.i.</p> <p>#Note, calculations may differ by plus or minus 1% due to rounding.</p>				

The pack which performed best met the research objectives was the 75% GHW pack. A statistically significant majority considered the 75% GHW pack design to have the GHW that:

- stood out the most (78%);
- was easiest to understand (73%);
- had the greatest power to prompt a reaction ('stop and think') (81%); and
- was most likely to convey the seriousness of health risks (84%).

There were few notable age group or gender differences observed. Tables of the 'most' and 'least' scores by demographics can be found in Appendix G: Study 5 Online.

34.2 Qualitative Findings

These quantitative results were supported qualitatively in the Study 5 Face-to-face component that found that increasing the size of the GHW increased noticeability and impact.

The qualitative component found the 30% GHW to be the least effective of the designs tested. When testing actual mock up packs, the 30% warning resulted in the focal point of the pack being the 'brand name' as there are other areas of the pack that can take prominence.

Meanwhile the larger images were seen to be inescapable.

"The image is huge you really can't get away from it"

"I use to place my lighter over the image so I couldn't see it, now no matter which side you look it is in your face, I'll have to leave it in my bag."

Overall, the larger pictures were seen to equate to easier message comprehension and stronger impact. The text of both the 60% and 75% GHWs was seen as easily and clearly comprehended given its size and location at the top of the pack.

35 SPLIT LAYOUT VS. NON-SPLIT LAYOUT.

35.1 Quantitative Findings

The quantitative and qualitative research showed that there is strong evidence to exclude split layout designs. Compared to the similar sized non-split layout design, the split design has lower GHW noticeability and message impact. Furthermore, the research indicates that the 60% split layout tests very similarly to the 30% warning in regards to a number of variables, indicating little increase in the effect of graphic health warnings by increasing the size from 30%, if a split layout was used.

As shown in the table below, in terms of share of GHW noticeability on pack, the 60% split GHW had:

- the lowest share of GHW noticeability on pack (83%), on par with GHW noticeability for the 30% (86%) GHW; and
- significantly lower share of noticeability than the 60% non-split GHW layout (91%) and the 75% GHW (92%).

Table 49: Study 5 Online Noticeability of Pack elements

Element first noticed (n=409)	30% GHW %	60% GHW %	75% GHW %	60% split GHW %
Written health warning	44	47	36 [~]	70 [^]
Health warning image / photo	42	45	55 [^]	13 [~]
Brand name	8	5	5	11 [^]
Number of cigarettes	6	4	4	5
<i>Combined Health warning (image and written warning)</i>	<i>86</i>	<i>91[^]</i>	<i>92</i>	<i>83[~]</i>
<i>Difference in noticeability of GHW elements (written warning – image)</i>	<i>2</i>	<i>2</i>	<i>-19</i>	<i>57</i>
Base: All respondents (n=409) Q0. Now looking at this pack, please indicate in what order you noticed ...? Showing '1 st ' noticed First four columns show results for all respondents regardless which GHW they were shown ('Lung Cancer' or 'Baby'). [^] Significantly higher / lower than comparison pack at 95% c.i. (60% vs. 30%, 75% vs.60%, 60% split vs. 60%) and (Lung Cancer 60% split vs. Baby 60% split)				



The GHW contains the two components, the written warning and the image. In the 30%, 60% and 75% non-split GWH, both of these components tended to receive an equal share of being noticed. By contrast, the split layout design resulted in much greater focus on only one component of the GHW, with 70% first noticing the written warning in the split layout and only 13% who first noticed the GHW image. There was also significantly higher noticeability of brand name on pack for the 60% split GHW design (11%) compared to 5% for both the 60% GHW and 75% GHW. Both of these measures indicate that the image, which is an important element of GHW communication, becomes recessive using the split layout. This would have some impact on message takeout due to lower noticeability.

In relation to impact and message comprehension (top 3 box scores of 8 / 9 / 10 out of 10), the 60% split GHW also elicited lower scores than the 60% non-split and 75% GHW. In fact, although there was some evidence of the GHW standing out more than the 30%, on all other measures it performed similarly to the 30% GHW, as shown in the table below.

Table 50: Study 5 Online Perceptions of Pack by GHW size / layout

Top 3 Box (8 / 9 / 10 out of 10)	30% GHW %	60% GHW %	75% GHW %	60% split GHW %
Noticeability (stand out) - Health warning stands out a lot	49	72 [^]	87 [^]	60 [~]
Ease of understanding - Extremely easy to understand the message	77	85 [^]	90 [^]	76
Makes me 'stop and think' - Really makes me 'stop and think'	32	45 [^]	62 [^]	35
Feel the seriousness of health risks- Feel the health risks are extremely serious	47	56 [^]	70 [^]	48

Q1. How noticeable are the health warnings on each of these packs? 10 – Health warning stands out a lot, 0 - Health warning doesn't stand out at all
 Q2. How easy or hard is it to understand the message of the health warnings on each of these packs? 10 – Extremely easy to understand the message, 0 - Extremely hard to understand the message
 Q3. How much do each of these packs make you 'stop and think' when you look at them? 10 - Really makes me 'stop and think', Doesn't make me 'stop and think' at all
 Q4. How serious do you feel the health risks from smoking are when you look at each of these packs? 10 - Feel the health risks are extremely serious, 10 - Don't feel the health risks are serious at all. Single response per pack.
 Combined score regardless of GHW ('Lung Cancer' or 'Baby') shown.

[^] Significantly higher / lower than comparison pack at 95% c.i. (60% vs. 30%, 75% vs.60%, 60% split vs. 60%)

The GHW noticeability or standout measure for the 60% split layout GHW was 60%. While this was higher than the 30% GHW (49%), it was significantly weaker in standout compared to the 60% non-split GHW (72%) and 75% GHW (87%). In terms of message comprehension (ease of understanding the message), ability to prompt a reaction ('makes me stop and think') and feeling the seriousness of health risks, the split layout performed only marginally better or on par with the 30% GHW:

- understanding the message – 60% split layout GHW (76%), 30% GHW (77%);
- prompt a reaction (makes me 'stop and think') – 60% split layout GHW (35%), 30% GHW (32%); and
- feel the health risks are serious – 60% split layout GHW (48%), 30% GHW (47%).

Compared to the non-split 60% GHW and the 75% GHW, the 60% split layout GHW's ability to communicate a strong message (Top 3 box scores of 8 / 9 / 10 out of 100) was:

- significantly weaker (76%) than both the 60% GHW (85%) and the 75% GHW (90%) on understanding of the message;
- significantly weaker (35%) than the 75% GHW (62%) at prompting a reaction to 'stop and think', and weaker than the 60% non-split GHW (45%); and
- significantly weaker (48%) than the 75% GHW (70%) in conveying the seriousness of health risks, and weaker than the 60% non-split GHW (56%).

35.2 Qualitative Findings

The small component of qualitative research undertaken in Study 5 Face-to-face reinforced the quantitative findings. Overall, the qualitative research found that the split layout disrupts message comprehension and was perceived to be of limited impact when compared to both the 60% and 75% non-split options.

In both the 60% and 75% non-split layouts, the image of the graphic health warning is placed in the location of branding of current packs. This is the position on the pack, the middle of the front, where smokers currently focus their attention when looking at cigarette packs as it allows them to look at the brand rather than the image. By placing the image in this location in the 60% and 75% GHW non-split layouts, the image becomes the dominant element of the pack in terms of message take out.

The split layout with the brand in the middle increases prominence of the brand as it is effectively 'framed' by the headline and image. While not making the message recessive as a whole when used in the 60% size, it impacts on whole message understanding. Either the headline is noticed first, then the brand name with the image becoming recessive and more easily ignored, or the reverse occurs where the image is noticed first, then the brand name and the text is recessive and ignored. The quantitative research suggests that, in the majority of cases, the image is recessive. It therefore disrupts message comprehension within the limited time that smokers are forced to engage with the message.



A split layout was also seen to limit exposure to the message by smokers. A split message with the image at the bottom would mean that smokers would often have their hand over the image as they are handling the cigarette packet – holding the bottom and opening the top. The brand in the middle is all that would be seen.

As such, it would appear that a split layout design would not have a positive impact in terms of improving noticeability or effectiveness as it:

- performs only marginally better, if at all, than the 30% GHW, on all key measures of noticeability, message comprehension and impact; and
- is noticeably, if not significantly weaker than the 60% and 75% GHW with statistically lower scores on all measures compared to the 75% GHW.

36 CONCLUSIONS AND RECOMMENDATIONS

36.1 Conclusions

The pack with the 75% GHW on front of pack outperformed all other packs on all measures tested. It was seen to be the pack which had the highest share of GHW component noticeability on pack, in which the GHW stood out the most, where the GHW message was easiest to understand, that had the strongest impact to make one 'stop and think' and the pack that conveyed the health risks to be most serious. The second best performing pack on the above measures was the 60% GHW which performed significantly better than the 30% GHW pack on most selection criteria.

The 30% GHW pack and the 60% split GHW pack were the weakest designs with the lowest scores on noticeability, comprehension and message impact. Although the 60% split GHW was more noticeable than the 30% GHW, there were no observable changes in measures of comprehension or cut through. There was qualitative evidence that the splitting the GHW reduces the overall visual impact and message comprehension of the warning.

Although the 75% GHW pack leads the other GHW designs by a large margin, there is evidence to suggest that the larger image on the 75% GHW pack could distract from the written warning and the 60% non-split pack performs better in terms of equal share of noticeability of image and written warning. That said, as seen in the Study 5 Face-to-face qualitative component, the image has a greater share of noticeability, not just because of its size but because of an image's ability to draw attention and convey a stronger message. As such, selecting the design with the larger image, 75% GHW size, has the greatest potential to maximise noticeability and impact on pack.

The 60% split GHW layout design had the least impact on improving noticeability or effectiveness. It performed only marginally better, if at all, than the 30% GHW, on all key measures of noticeability, message comprehension and impact. Compared to the 60% non-split GHW it performed significantly weaker on some of the selection criteria. Compared to the 75% GHW, the 60% split GHW had statistically lower scores on all measures. The split layout design is not recommended. This is because it does not provide further improvement to 'message effectiveness' or 'message impact' when compared to the current 30% GHW design.

36.2 Recommendations

It is recommended that to maximise the potential for the GHW to communicate the message effectively and have greater cut through in terms of considerations of health risks, the GHW on the front of pack should be larger, at a minimum of 60% and ideally 75% in a combined (non-split) layout.



GfK bluemoon

STUDY 6 : ONLINE: CONSUMER APPRAISAL OF DIFFERENT GRAPHIC HEALTH WARNING SIZES AND LAYOUTS ON PACK - SPLIT 75% GHW TESTING (SECTIONS 37-41)

37 OBJECTIVES AND METHODOLOGY

This study follows on from the results of Study 5 Online. Based on the results of the plain packaging research, the Department decided to use a 75% GHW on the front of pack. However, research to date had not tested a 75% GHW in a split layout on the front of pack. The rationale for this additional round of Graphic Health warning (GHW) size and layout testing was to understand the impact of a split 75% GHW layout on front of pack on overall message comprehension and message effectiveness. This new study was designed to replicate Study 5 Online to ensure comparability with the results. Fieldwork was conducted from 18th March to 23rd March 2011.

37.1 Research Objectives

The objective of *Study 6 Online - Consumer appraisal of different graphic health warning sizes and layouts on pack* was to identify one graphic health warning size and layout on the front of pack that would maximise the noticeability and impact (message comprehension and cut through) of the GHW on cigarette packaging.

More specifically, the research sought to identify the GHW which:

- was most noticeable (stands out the most);
- easiest to understand (message was easiest to understand);
- had the strongest ability to prompt a reaction (makes you 'stop and think' the most); and
- had the strongest ability to convey the seriousness of health risks (feel the health risks are extremely serious).

The focus of Study 6 Online was primarily to compare the split 75% GHW to a 75% non-split GHW on the above key measures. However, to ensure consistency and comparability with Study 5 Online results, the overall objectives were broadened to cover 30%, 60% and the 75% and split 75% GHW.

37.2 Methodology

Study 6 Online involved a quantitative methodology where online surveys were conducted amongst n=205 Australian smokers aged 18-64 years old who smoked manufactured cigarettes at least every week. Online panel members were invited to participate in the survey and screened for age, gender and smoking status. Soft quotas were applied on age and gender to ensure representativeness and provide sufficient sample sizes for subgroup analysis. Although the sample size for previous studies was n=400 respondents, due to time constraints, the sample size for this study was restricted to n=205 respondents.

The table below shows the sample profile for Study 6 Online.

Table 51: Study 6 Online Sample Profile

Target Groups	Target Quotas	Sample size (weekly smokers)
Male 18-24 year olds	min n=30	n=32
Male 25-44 year olds	min n=30	n=35
Male 45-64 year olds	min n=30	n=36
Female 18-24 year olds	min n=30	n=35
Female 25-44 year olds	min n=30	n=34
Female 45-64 year olds	min n=30	n=33
Other Gender 18-64 year olds	No quotas set	n=0
Total	n=200	n=205

37.3 Questionnaire Design

The questionnaire followed the structure below:

- screener;
- noticeability of pack elements;
- perceptions of pack by GHW size / layout; and
- smoking profile and demographics.

The pack perceptions tested the different GHW sizes / layout options on the following dimensions:

- noticeability;
- comprehension;
- impact; and
- effectiveness.

The questionnaire replicated Study 5 Online with the exception that only one GHW, 'Baby' ("Smoking harms unborn babies") was tested.

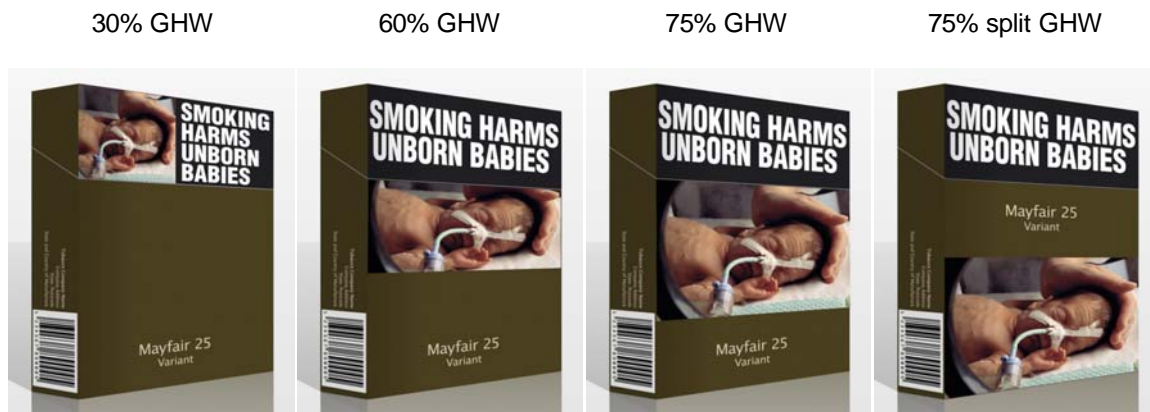
37.4 Stimulus

Four different GHW design images were developed for testing:

- 30% (15% written warning and 15% image side by side);
- 60% (30% written warning on lid and 30% image below);
- 75% (30% written warning on lid and 45% image below); and
- split 75% layout (30% written warning on lid and 45% image at bottom of pack).

The 'Baby' ("Smoking harms unborn babies") GHW was featured on all packs.³⁶ This GHW had not been seen in Australia before. All packs were in the 'Dark Olive' colour used in the previous online studies, under the description 'Dark Brown'.³⁷ It was decided that this colour should be used as it was the least appealing colour in previous online tests.

The pack images that were tested appear below:



37.5 Analysis and Reporting

Comparability of Study 5 Online and Study 6 Online

The data reported in this document will include results from both the Study 6 Online and Study 5 Online for those who evaluated the 'Baby' GHW.³⁸ This is to provide a summary of the overall findings from the GHW testing.

The table below shows the demographic profile and smoking frequency of the sample from each study, after weighting. The respondent samples from both studies are almost identical in terms of these characteristics.

³⁶ The 'Baby' image is subject to copyright, @ Commonwealth of Australia.

³⁷ Note at this stage it has been established that the colour 'Dark Brown' used in earlier online studies (Study 2 and Study 4) is being rendered online as 'Dark Olive' from findings in Study 4 and Study 5 Face-to-face.

³⁸ In Study 5 Online, the sample was split with half evaluating the packs featuring the 'Lung Cancer' GHW and the other half evaluating the 'Baby' GHW.



Table 52: Study 6 Online and Study 5 Online Sample Profile

	Study 6 Online (n=205) %	Study 5 Online 'Baby' (n=204) %
Daily Male Age 18-24	7	8
Daily Male Age 25-34	14	13
Daily Male Age 35-44	13	13
Daily Male Age 45-54	10	11
Daily Male Age 55-64	6	5
Weekly Male Age 18-24	1	2
Weekly Male Age 25-44	3	4
Weekly Male Age 45-64	1	0
Daily Female Age 18-24	6	7
Daily Female Age 25-34	9	9
Daily Female Age 35-44	10	10
Daily Female Age 45-54	10	10
Daily Female Age 55-64	6	5
Weekly Female Age 18-24	1	1
Weekly Female Age 25-44	2	1
Weekly Female Age 45-64	1	1

However, in terms of attitudes toward Government initiatives and plain packaging there were some notable and significant differences as shown in the table below. The Study 6 respondents were less positively disposed towards government support to reduce smoking. A significantly higher proportion of Study 5 Online 'Baby' respondents were likely to approve of plain packaging compared to Study 6 respondents. Although not significant, there was also evidence that Study 5 Online 'Baby' respondents were more likely to 'support Government initiatives to reduce smoking in Australia'. There was a higher proportion of Study 6 respondents who claimed there was 'nothing the Government could do to encourage me to quit smoking'.

Table 53: Study 6 Online and Study 5 Online Attitudes to Government Initiatives

	Study 6 Online (n=205) %	Study 5 Online 'Baby' (n=204) %
Before today, I had heard about the Government initiative to introduce 'plain packaging' for cigarettes	76	75
I approve of the idea of plain cigarette packs	33	43 [^]
I support Government initiatives to try to reduce smoking in Australia	53	63
There is nothing the Government could do to encourage me to quit smoking	46	38
The Government should do more to support people to quit smoking	60	67
^ Significantly higher than Study 6 Online at 95% c.i.		

Comparisons between the evaluation data from both studies show that there were negligible differences in the observations for share of noticeability (first element noticed on pack), top 3 box scores on noticeability, ease of understanding and conveying the seriousness of health risks across studies. The measure where there was a notable difference was in a pack's ability to prompt a reaction to 'stop and think'. This is likely to be the result of the sampling differences in attitudes towards smoking and Government initiatives, as Study 6 Online respondents appear to be more resistant to attempts to encourage quitting. As such, the ability of a GHW to make them 'stop and think' was lower, for any given GHW. That said, the pattern in the scores were similar in terms of increasing impact with increasing GHW size.

Overall, the results between the two studies are largely comparable, as shown in the table below.

Table 54: Study 6 Online and Study 5 Online Key measure comparison

Measure	Study	30% GHW %	60% GHW %	75% GHW %
1st noticed Health warning (image and written warning)	Study 6 Online ('Baby' GHW)	82	92	93
	Study 5 Online ('Baby' GHW)	87	93	90
<i>% difference between Study 6 Online and Study 5 Online</i>		-5%	-1%	3%
Top 3 Box score (8 /9 /10 out of 10) Noticeability (stand out) - Health warning stands out a lot	Study 6 Online ('Baby' GHW)	50	72	82
	Study 5 Online ('Baby' GHW)	49	73	87
<i>% difference between Study 6 Online and Study 5 Online</i>		1%	-1%	-5%
Top 3 Box score (8 /9 /10 out of 10) Ease of understanding - Extremely easy to understand the message	Study 6 Online ('Baby' GHW)	78	83	86
	Study 5 Online ('Baby' GHW)	77	87	90
<i>% difference between Study 6 Online and Study 5 Online</i>		1%	-4%	-4%
Top 3 Box score (8 /9 /10 out of 10) Makes me 'stop and think' - Really makes me 'stop and think'	Study 6 Online ('Baby' GHW)	20	40	47
	Study 5 Online ('Baby' GHW)	30 [^]	46	58 [^]
<i>% difference between Study 6 Online and Study 5 Online</i>		-10%	-6%	-11%
Top 3 Box score (8 /9 /10 out of 10) Feel the seriousness of health risks- Feel the health risks are extremely serious	Study 6 Online ('Baby' GHW)	41	50	64
	Study 5 Online ('Baby' GHW)	43	54	63
<i>% difference between Study 6 Online and Study 5 Online</i>		-2%	-4%	1%
[^] Significantly higher than Study 6 Online at 95% c.i.				



Focus of Analysis

As the prime objective of the study was to understand the impact of a split 75% GHW, analysis focused on comparisons between the 60%, 75% and split 75% GHW.

Where relevant, the report compares all GHW designs tested across both studies, 30%, 60%, split 60%, 75% and split 75% to provide an overall comparison on the impact of the different designs. Such analysis draws from the results of the Study 6 Online study for GHW of 30%, 60%, 75%, split 75% and the results from Study 5 Online 'Baby' respondents for the split 60% GHW.

Weighting

As with the other quantitative studies, Study 6 Online has been post-weighted to the Australian smoking population aged 18-64 years old using ABS Census data.³⁹ Data has been weighted using age, gender and smoking frequency. Refer to Appendix A: Overall Research Details for population targets.

³⁹ ABS - 43640DO011_20072008 National Health Survey: Summary of Results, 2007–2008 (Reissue) Released at 11:30 am (Canberra time) 23 Nov 2010

38 PACK ELEMENT SHARE OF NOTICEABILITY

38.1 Study 6 Online results

As seen in Study 5 Online, both the GHW *image* and the *written warning* were the most noticeable elements on the front of pack, regardless of graphic warning size. Larger GHW sizes and non-split layouts corresponded with a higher share of GHW noticeability on pack.

The table below shows the proportion who first noticed each element.

Table 55: Study 6 Online Noticeability of Pack Elements

Study 6 Online Element first noticed (n=205)	30% GHW %	60% GHW %	75% GHW %	Split 75% GHW %
Written health warning	48	55	40 [✓]	61 [^]
Health warning image / photo	34	38	53 [^]	28 ^{✓-}
Brand name	11	3 [✓]	4	7
Number of cigarettes	7	4	4	3
<i>Combined Health warning (image and written warning)</i>	<i>82</i>	<i>92[^]</i>	<i>93</i>	<i>90</i>
<i>Difference in noticeability of GHW elements (written warning – image)</i>	<i>14</i>	<i>17</i>	<i>-13</i>	<i>33</i>
Base: All respondents Study 6 Online (n=205) Q0. Now looking at this pack, please indicate in what order you noticed ...? Showing '1 st ' noticed [^] Significantly higher / lower than comparison pack at 95% c.i. (60% vs. 30%, 75% vs. 60%, split 75% vs. 75%) [✓] Significantly higher / lower than 60% GHW at 95% c.i.				

As shown in the table above, the health warning element had the highest share of noticeability, regardless of GHW size.

Key takes outs from the share of noticeability analysis showed:

- the combined GHW share of noticeability was highest for the 75% GHW (93%);
- the GHW image element was significantly higher for the 75% GHW (53%) compared to the 60% GHW (38%)
- the split 75% GHW had the lowest GHW image noticeability (28%) which was significantly lower than the noticeability of the 75% non-split GHW (53%);

- the split 75% GHW also had higher GHW written warning noticeability (61%) which was significantly lower than the noticeability of the 75% non-split GHW (40%)
- brand name share of noticeability was also highest for the 30% and split 75% GHW (11% and 7% respectively).

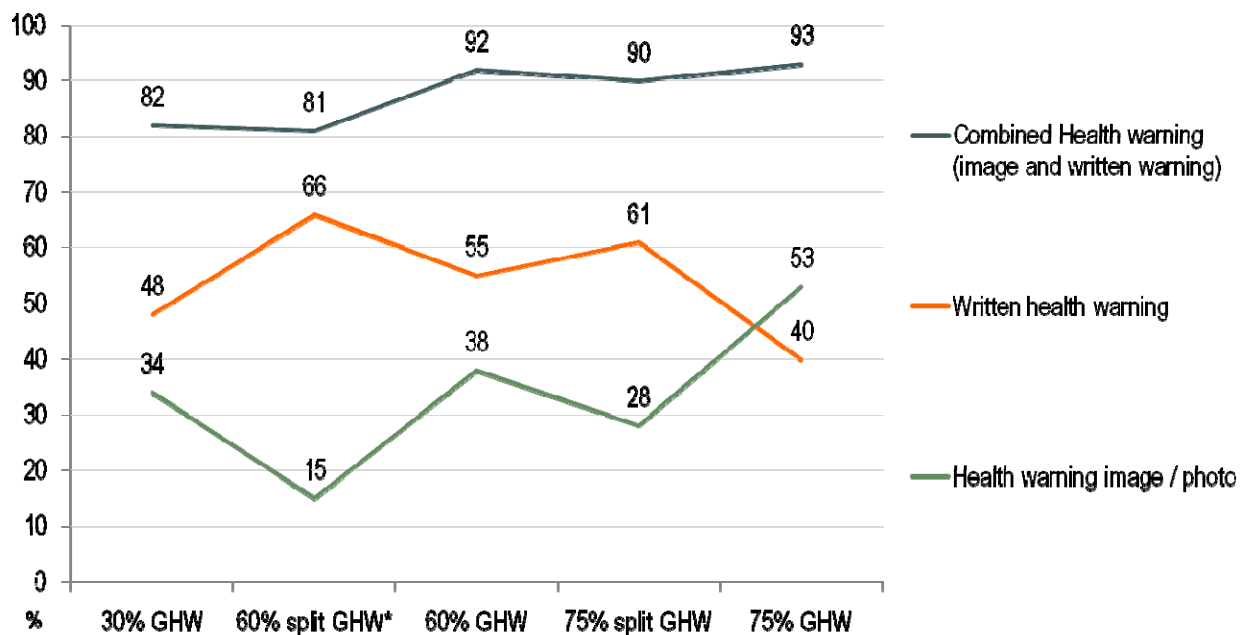
As such, a 75% non-split GHW maximises the share of GHW image noticeability of the GHW on the front of pack.

38.2 Study 6 and Study 5 Online results

The following analysis combines the results from Study 6 Online (30%, 60%, 75%, 75% split) and Study 5 Online (for 60% split GHW only) results to show share of noticeability of each pack element for all GHW size and layout designs tested.

The figure below plots the share of noticeability for the GHW elements first noticed across the GHW size and layout designs.

Figure 2: Study 6 Online and Study 5 Online Noticeability of Pack Elements across GHW designs



Base: Study 6 respondents (n=205) **Baby' respondents Study 5 Online (n=204)
 Q0. Now looking at this pack, please indicate in what order you noticed ...? Showing '1*' noticed



Overall, this analysis suggests that:

- a larger GHW results in higher GHW share of noticeability;
- a non-split GHW results in higher GHW share of noticeability than a split GHW; and
- a split GHW results in lower noticeability for the GHW image and higher noticeability of the written warning.

Across all GHW pack designs tested (in Study 5 Online and Study 6), the 75% non-split GHW performed best in terms of maximising the noticeability of the GHW and giving prominence to the image component. Tables of the Study 5 Online 'Baby' share of noticeability results can be found in Appendix H: Study 6 Online.



39 IMPACT OF GHW SIZE ON MESSAGE COMPREHENSION AND CUT THROUGH

39.1 Study 6 Online results

The research also found that a larger GHW can improve message comprehension and cut through. The 75% GHW pack best met the selection criteria for this study. The split 75% GHW was weaker in noticeability and message impact and performed similarly to the 60% GHW. This supports earlier findings (Study 5 Online and Study 5 F2F) that splitting the GHW can detract from the overall impact of the warning.

Pack Ratings

The table below shows the Top 3 box analysis scores for all GHW designs tested in Study 6 Online.

Table 56: Study 6 Online Perceptions of Pack by GHW size / layout

Study 6 Online Top 3 Box (8 / 9 / 10 out of 10)	30% GHW %	60% GHW %	75% GHW %	Split 75% GHW %
Noticeability (stand out) - <i>Health warning stands out a lot</i>	50	72 [^]	82 [^]	74 [~]
Ease of understanding - <i>Extremely easy to understand the message</i>	78	83	86	83
Makes me 'stop and think' - <i>Really makes me 'stop and think'</i>	20	40 [^]	47	41
Feel the seriousness of health risks- <i>Feel the health risks are extremely serious</i>	41	50	64 [^]	56

Base: All respondents Study 6 Online (n=205)
 Q1. How noticeable are the health warnings on each of these packs? 10 – Health warning stands out a lot, 0 - Health warning doesn't stand out at all. Q2. How easy or hard is it to understand the message of the health warnings on each of these packs? 10 – Extremely easy to understand the message, 0 - Extremely hard to understand the message. Q3. How much do each of these packs make you 'stop and think' when you look at them? 10 - Really makes me 'stop and think', Doesn't make me 'stop and think' at all. Q4. How serious do you feel the health risks from smoking are when you look at each of these packs? 10 - Feel the health risks are extremely serious, 10 - Don't feel the health risks are serious at all. Single response per pack.
[^] Significantly higher / lower than comparison pack at 95% c.i. (60% vs. 30%, 75% vs. 60%, split 75% vs. 75%)

As shown in the table above, the size of the GHW significantly impacted GHW noticeability, perceptions of health risks and the ability to prompt a reaction. It did not, however, significantly impact message understanding which was already clear with a 30% GHW. The 75% GHW performed best on all dimensions tested, significantly better than the 30% and 60% GHW designs on most measures and better, but not always significantly better than the split 75% GHW. It performed significantly better than the 60% GHW on noticeability (82% compared to 72% respectively) and conveying the seriousness of



health risks (64% compared to 50% respectively). It was stronger, but not significantly stronger than the 60% GHW on prompting a reaction to 'stop and think' (47% compared to 40% for the 60% GHW).

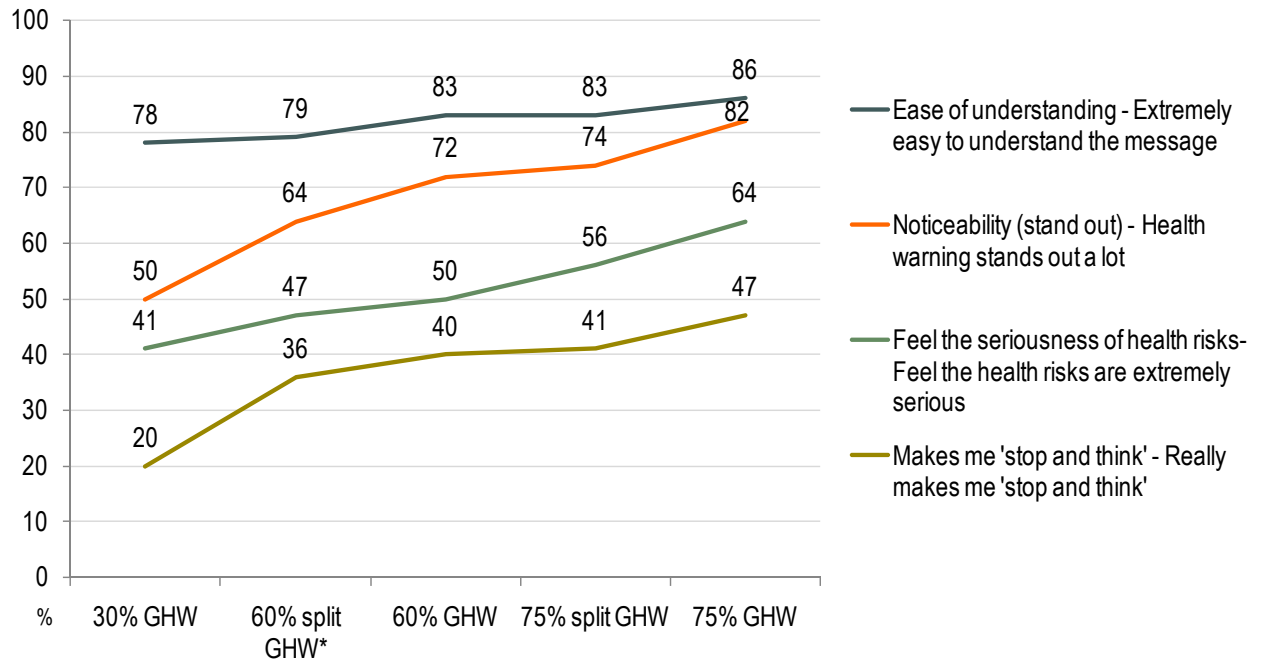
The 75% split GHW was weaker than the non-split 75% GHW on the key measures. It was significantly weaker than the 75% GHW on noticeability (82% compared to 74% respectively) and notably, but not significantly, weaker on prompting a reaction to 'stop and think' (41%) and conveying the seriousness of health risks (56%). The 75% split GHW performed similarly to the 60% GHW on all measures.

39.2 Study 6 and Study 5 Online results

The following analysis combines the results from Study 5 Online (for the split 60% GHW only) and Study 6 Online results to show the top 3 box scores for the selection criteria for all GHW size and layout designs tested (30%, 60%, 75% and split 75% GHW).

The chart below shows the positive link between larger GHW sizes and split vs. non-split GHW to increased GHW impact.

Figure 3: Study 6 Online and Study 5 Online Impact by GHW size / layout (Top 3 Box)



Base: Study 6 respondents (n=205) *'Baby' respondents Study 5 Online (n=204)

Q1. How noticeable are the health warnings on each of these packs? 10 – Health warning stands out a lot, 0 - Health warning doesn't stand out at all. Q2. How easy or hard is it to understand the message of the health warnings on each of these packs? 10 – Extremely easy to understand the message, 0 - Extremely hard to understand the message. Q3. How much do each of these packs make you 'stop and think' when you look at them? 10 - Really makes me 'stop and think', Doesn't make me 'stop and think' at all. Q4. How serious do you feel the health risks from smoking are when you look at each of these packs? 10 - Feel the health risks are extremely serious, 10 - Don't feel the health risks are serious at all. Single response per pack. Top 3 Box (8 / 9 / 10 out of 10)



Overall this suggests that:

- a larger GHW results in greater message cut through and impact; and
- a non-split GHW results in greater message cut through and impact compared to a split GHW.

Although there were some small gains in 'ease of understanding' with increased GHW size, the message appears to be well understood regardless of GHW size with 78% who felt the message was extremely easy to understand, even at a 30% GHW size.

Tables of the Study 5 Online 'Baby' Top 3 box scores on key measures can be found in Appendix H: Study 6 Online.

Forced Choice

Similarly, when forced to choose which packs performed 'best' and 'worst' on these measures, the 75% GHW pack outperformed all other packs with a majority margin on all selection criteria. When forced to choose a pack which performed strongest on the selection criteria, all other packs were seen to be significantly weaker on the key measures.

The table below shows the proportion who rated each pack 'most' or 'least' on the key measures for the GHW in Study 6 Online.⁴⁰

⁴⁰ Proportions are row percentages and should be compared at within rows.

Table 57: Study 6 Online Best and Worst Perceptions

Study 6 Online Proportion selecting pack for each statement	30% GHW %	60% GHW %	75% GHW %	Split 75% GHW %
Stands out the most %	3	6	65 [^]	26 [~] +
Stands out the least %	85	3 [~]	5	6
<i>Noticeability score (%most –%least) %</i>	-82	3	60	20
Easiest to understand %	8	12	53 [^]	27 [~] +
Hardest to understand %	76	4 [~]	9	12+
<i>Ease of understanding score (%most –%least) %</i>	-67	8	44	16
Makes me 'stop and think' the most %	9	7	67 [^]	18 [~] +
Makes me 'stop and think' the least %	80	5 [~]	5	10
<i>'Stop and think' score (%most –%least) %</i>	-71	2	62	8
Feel the health risks are the most serious %	5	7	66 [^]	22 [~] +
Feel the health risks are the least serious %	82	4 [~]	7	7
<i>Health risk score (%most –%least) %</i>	-77	3	59	15

Base: All respondents Study 6 Online (n=205)

Q1b. And looking at each of these, on which pack do you think the *health warning is the easiest to understand* and on which pack do you think the *health warning is the hardest to understand*?

Q2b. And looking at each of these, on which pack do you think the health warning *stands out the most* and on which pack do you think the health warning *stands out the least*?

Q3b. And looking at each of these, on which pack do you think the health warning makes you **'stop and think' the most** and on which pack do you think the health warning makes you **'stop and think' the least**?

Q4b. And when looking at each of these packs, which makes you feel the **health risks are the most serious** and which makes you feel the **health risks are least serious**?

Single response per option.

[^] Significantly higher / lower than comparison pack at 95% c.i. (60% vs. 30%, 75% vs. 60%, split 75% vs. 75%)

+ - Significantly higher /lower than 60% GHW at 95% c.i.



The pack which best met the research objectives was the 75% GHW pack with a statistically significant majority considering it to be the design that:

- stood out the most (65%);
- was easiest to understand (53%);
- had the greatest power to prompt a reaction ('stop and think') (67%); and
- conveyed the seriousness of health risks the most (66%).

The pack which performed second best was the split 75% GHW pack although at a much lower level than the 75% GHW. The scores for the split 75% GHW pack are summarised below:

- stood out the most (26%);
- was easiest to understand (27%);
- had the greatest power to prompt a reaction ('stop and think') (18%); and
- conveyed the seriousness of health risks the most (22%).

Tables of the Study 5 Online 'Baby' forced choice scores on key measures can be found in Appendix H: Study 6 Online.



40 CONCLUSIONS AND RECOMMENDATIONS

40.1 Conclusions

Taking into account the results from both the Study 6 Online and the Study 5 Online research, the research provides strong evidence that:

- a larger GHW on the front of pack results in higher GHW noticeability, message cut through and impact;
- a non-split GHW results in higher GHW noticeability, message cut through and impact, for a given GHW coverage; and
- a split GHW results in lower GHW image noticeability.

The pack with the 75% (non-split) GHW on the front of pack outperformed all other packs on all measures tested and resulted in stronger message cut through and impact than the split 75% design. The split 75% GHW performed similarly to the 60% GHW.

40.2 Recommendations

It is recommended if the Department decides to use a GHW with 75% coverage on the front of pack, it should use a non-split GHW as this will maximise the noticeability and message comprehension impact of the GHW.

41 SUMMARY OF FINDINGS AND RECOMMENDATIONS

41.1 Candidate Colours for Plain Packaging

The findings from the overall research program suggest that a Dark Olive colour is the best candidate for plain packaging. It is the colour that performed better than other test colours in online testing in terms of being less appealing, containing cigarettes that were perceived to be more harmful to health, lower quality, and harder to quit. Although it did not meet the objectives as well as the 'Dark Brown' pack when comparing actual print prototype packs (in terms of being least appealing, higher perceived harm, lowest quality cigarettes, hardest to quit smoking), it did not elicit any positive associations as did the 'Dark Brown' colour. It does not have any similarity to any existing brands and carries the negative associations of darker colour packaging. As such, we recommend that, if plain packaging is introduced, Dark Olive is used as the plain packaging colour.

41.2 Font and Font size for Brand name

The findings from the research program support the use of at least 14pt font (based on an Arial or Lucida Sans font style) for brand name. In regards to font type styles, the Lucida Sans font type was seen to be easier to read than Arial and should be considered for plain packaging design.

41.3 Graphic Health Warning Design (size and layout)

The research suggests that a larger front of pack GHW has the potential to deliver a more effective message in that it is more noticeable, easier to understand and has a stronger ability to prompt a reaction to 'stop and think' and convey the seriousness of health risks. In addition, it can reduce the overall appeal and quality perceptions of cigarette packaging. Although a 60% GHW performed better than the 30% GHW on selection criteria, a GHW with 75% front of pack coverage performed strongest on the selection criteria. A split layout has the weakest ability to deliver an effective message and performed similarly to a 30% GHW for a 60% split GHW and to a 60% GHW for a 75% split GHW.

This research recommends a larger non-split GHW, on front of pack. A 60% GHW improves key dimensions of stand-out, comprehension and impact, This can, however, be further improved using a 75% GHW. Overall a 75% GHW elicits the highest noticeability, message comprehension and dissuasive effect on appeal.