



Perception on Cigarette Packs

Research Findings

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AIM

1. This report presents the findings from a study to assess the perceptions of smokers and non-smokers towards current and plainer cigarette packaging in Singapore.

BACKGROUND

2. A large body of evidence has established that brand building is a major driver of product performance.¹⁻⁸ In the area of tobacco control, evidence is also emerging that cigarette packaging serves as a powerful marketing strategy for promoting brand image. Through the use of colours, fonts, images, cigarette packs project a brand image that says something about the user of the product. This is evident from study findings shared by the tobacco industry. For example, in a study conducted by Philip Morris USA², similar cigarettes were put in different colored cigarette packs (red and blue packs), and participants rated cigarettes in red packs as “harsher” while those in blue packs as “too mild”. In addition, research has shown that reducing elements of brand design was associated with increasingly unfavorable appraisals of the packs, and that packs with the most design elements removed were most successful in eliminating brand image associations.³
3. The Guidelines on the Framework Convention on Tobacco Control Articles 11 and 13 recommend that Parties consider the adoption of plain packaging. As part of on-going review of Singapore’s tobacco control strategy, the Health Promotion Board conducted a study in 2014 to assess perceptions towards cigarette packaging among the local population.

STUDY OBJECTIVES

4. The objectives of the study were to examine 1) perceived attractiveness; 2) and noticeability of graphic health warnings, in relation to cigarette pack designs.
5. Specifically, this study sought to answer the following questions:
 - a. Is perceived attractiveness of pack design associated with attributes of tobacco use?
 - b. How does mock-up standardised pack compare with current packs in the market in terms of perceived pack attractiveness?
 - c. Does mock-up standardised pack design enhance the noticeability of graphic health warnings?

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RESEARCH METHODOLOGY

Participants and recruitment

- A total of 320 Singapore citizens or Permanent Residents aged 18 to 39 years old participated in an interviewer-administered survey conducted in households across different geographical locations in Singapore. There were 160 smokers and 160 non-smokers in the study.

Cigarette pack designs used in the study

- Four brands of cigarettes currently sold in Singapore's market were selected for this study. They were selected based on: (1) price (premium or budget), and (2) pack design (bright or dull colour) to reflect the diversity of cigarette packaging. The 4 brands included: Marlboro, Dunhill, Pall Mall and Gudang Garam.



Premium (Bright)



Premium (Dull)



Budget (Bright)



Budget (Dull)

- Mock-up standardised pack was produced with reference to Australia's plain packaging design which had a 'drab dark brown' colour without any logos and brand. The mock-up standardised pack had 50% graphic health warning labels (GHWL), based on current requirement in Singapore.



Mock-up standardised pack

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Procedure and questions asked

9. Individual cigarette packs were shown to the respondents in a random order. For each pack, respondents were asked to rate the pack attributes using a 5-point Likert scale from 'strongly disagree' to 'strongly agree'.
10. The following questions were asked to assess participants' perception on cigarette pack design:
 - To what extent would you agree that this pack:
 - a. Has an attractive design
 - b. Contains cigarettes of a high quality
 - c. Is likely to attract youths below 18 years old to try
 - d. Is harmful to health
 - e. (For smokers) Is a pack that you would like to be seen smoking
 - f. (For non-smokers) Is likely to encourage you to try
11. To assess the noticeability of the graphic health warning labels, participants were asked "to what extent would you agree that the graphic health warning is noticeable/stands out visually on the pack".

RESULTS

Research question (A): Is perceived attractiveness of pack design associated with perceived attributes of tobacco use?

Among smokers

12. A large proportion of smokers (between 40.0% and 56.3%) found current cigarette packaging to be attractive, with the exception of Gudang Garam (16.9%) (Figure 1).
13. Across all 4 market brands, smokers who found the pack design attractive were also much more likely to strongly agree/agree that the product is of high quality, likely to attract youths under 18 years to try, harmful to health and that they would like to be seen smoking the pack (Figure 1). For example, 51.3% of smokers reported that the Dunhill pack was attractive. Of these, 73.2% strongly agreed/agreed that the pack contained high quality cigarettes and 57.3% indicated that it would be a pack that they would like to be seen smoking.

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Among non-smokers

14. Similar findings were observed for non-smokers. A sizeable proportion of non-smokers (between 40.0% and 45.0%) found the current cigarette packaging to be attractive, with the exception of Gudang Garam (10.6%) (Figure 2).
15. Non-smokers who found the packs attractive also perceived the product to be of high quality, likely to attract youths below 18 to try and harmful to health (Figure 2). In addition, a significant minority of non-smokers (8.5% to 17.6%) who found the packaging to be attractive responded that they would be encouraged to try smoking.

Research question (B): How does mock-up standardised pack compare with current packs in the market in terms of perceived pack attractiveness?

Among smokers

16. The mock-up standardised pack had the lowest number of smokers rating it as being attractive (8.8%) compared to the current packs in the market (Dunhill 51.3%; Marlboro 56.3%; Pall Mall 40.0%; Gudang Garam 16.9%) (Figure 3).

Among non-smokers

17. Similarly, fewer non-smokers rated the mock-up standardised pack (24.4%) as being attractive, compared to current packs (Dunhill 44.4%; Marlboro 40.0%; Pall Mall 45.0%) with the exception of Gudang Garam (10.6%) (Figure 3).

Research question (C): Does mock-up standardised pack design enhance the noticeability of graphic health warning?

18. Majority of respondents reported that graphic health warnings were noticeable on both current cigarette packs and the mock-up standardised pack. An average of 7 out of 10 smokers and 6 out of 10 non-smokers agreed/strongly agreed that the graphic health warnings are noticeable across both current and mock-up standardized packs. (Figure 4).

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CONCLUSION

19. The results from the study concluded that:
 - a. Current cigarette pack design influenced perceptions towards pack attributes. Perceived appeal was strongly associated with perception of cigarette quality, perceived likelihood of attracting youths to try, and perceived harm to health. In addition, perceived pack attractiveness amongst smokers was associated with reported preference to be seen smoking the pack. Amongst a significant minority of non-smokers, perceived pack attractiveness was associated with intention to try smoking.
 - b. Mock-up standardised packs were seen as less attractive compared to current cigarette packs. This finding was consistent with international evidence which showed that limiting brand elements would reduce appeal of tobacco products.^{3,6-8}
 - c. The noticeability of graphic health warning labels was high across both current cigarette packs and mock-up standardised pack. Since the introduction of graphic health warnings in 2004, the Singapore population has been exposed to different graphic health warnings for more than a decade. The already high level of exposure likely explains the high level of noticeability of graphic health warnings across both current and mock-up standardised packs.
20. In summary, the findings in this study are consistent with those in the international and local literature on consumer-brand relationships.^{1-2,4-5} Standardised packaging renders the pack less attractive and mitigates the positive impact cigarette packs may have on consumers.

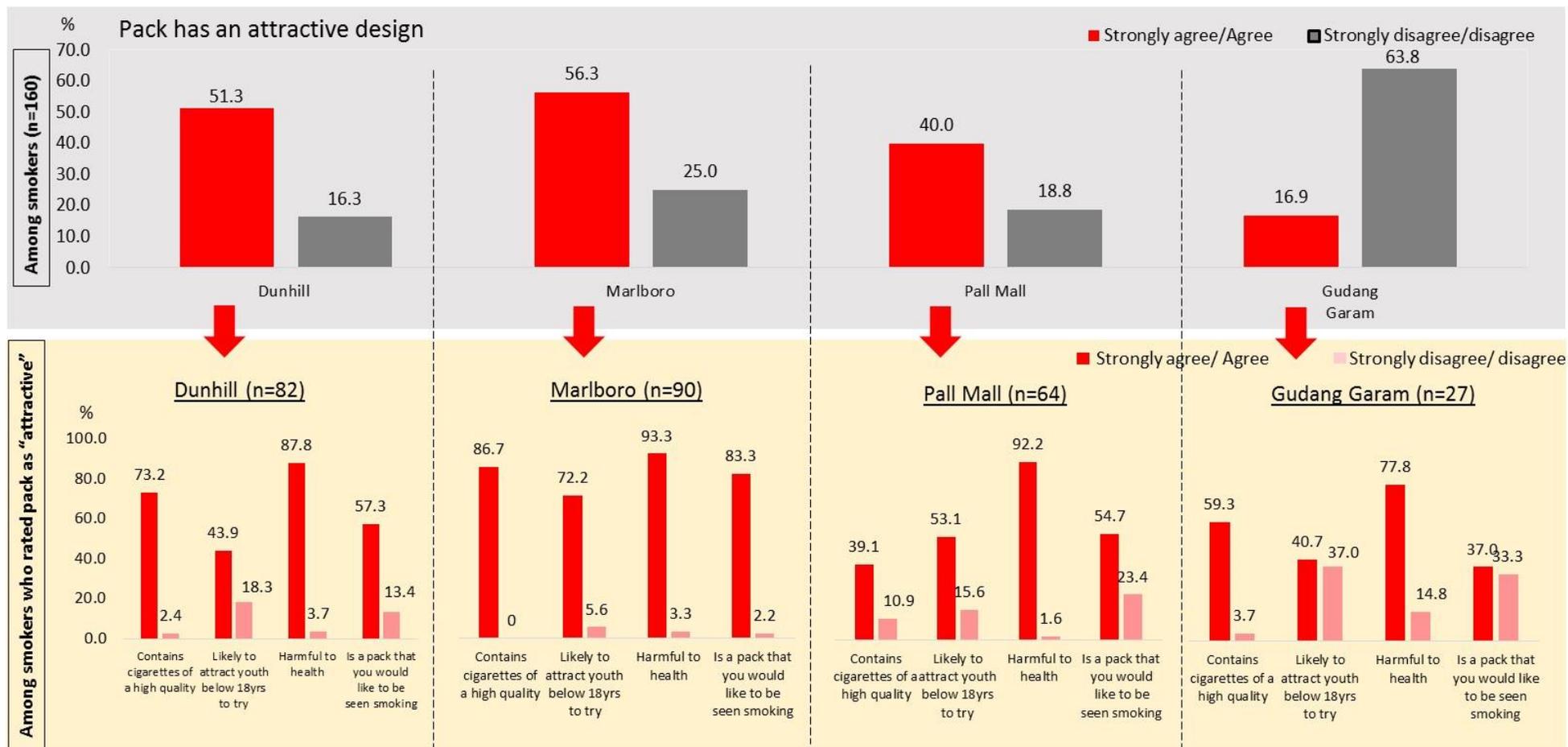
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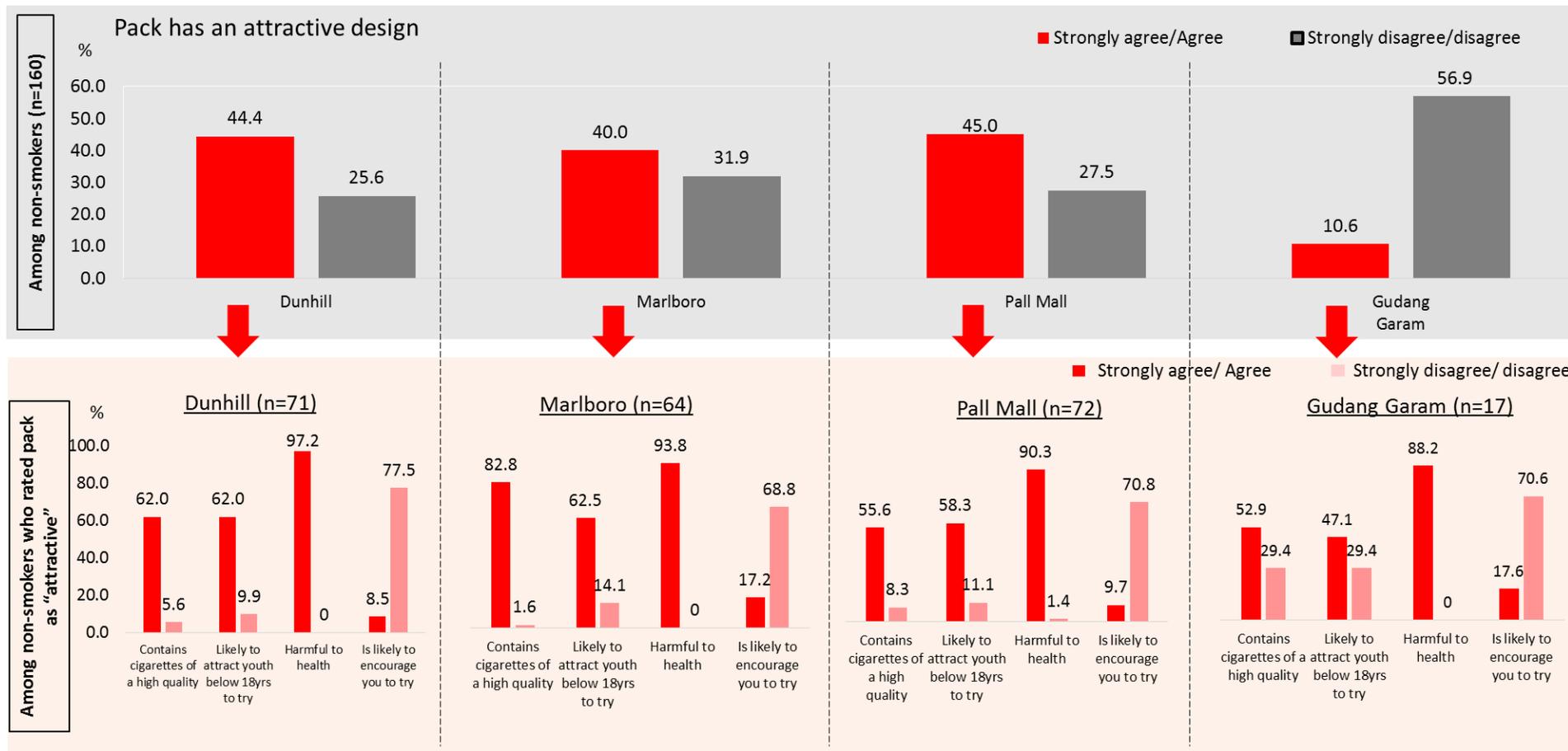
Annex A: Charts

Figure 1. Association between current cigarette pack attractiveness and perceptions among smokers



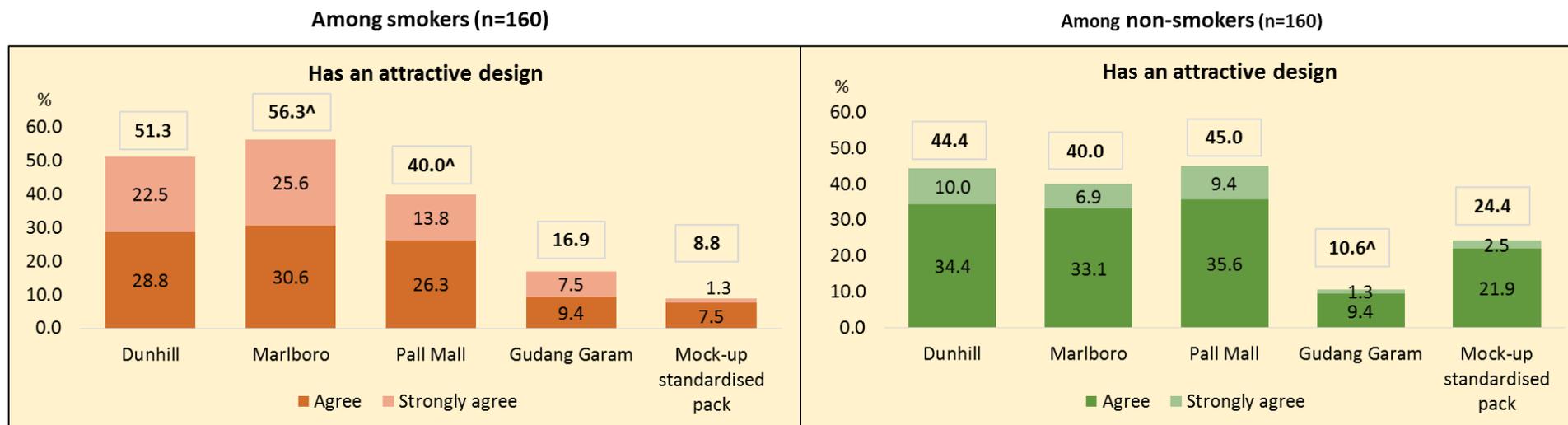
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Figure 2. Association between current cigarette pack attractiveness and perceptions among non-smokers



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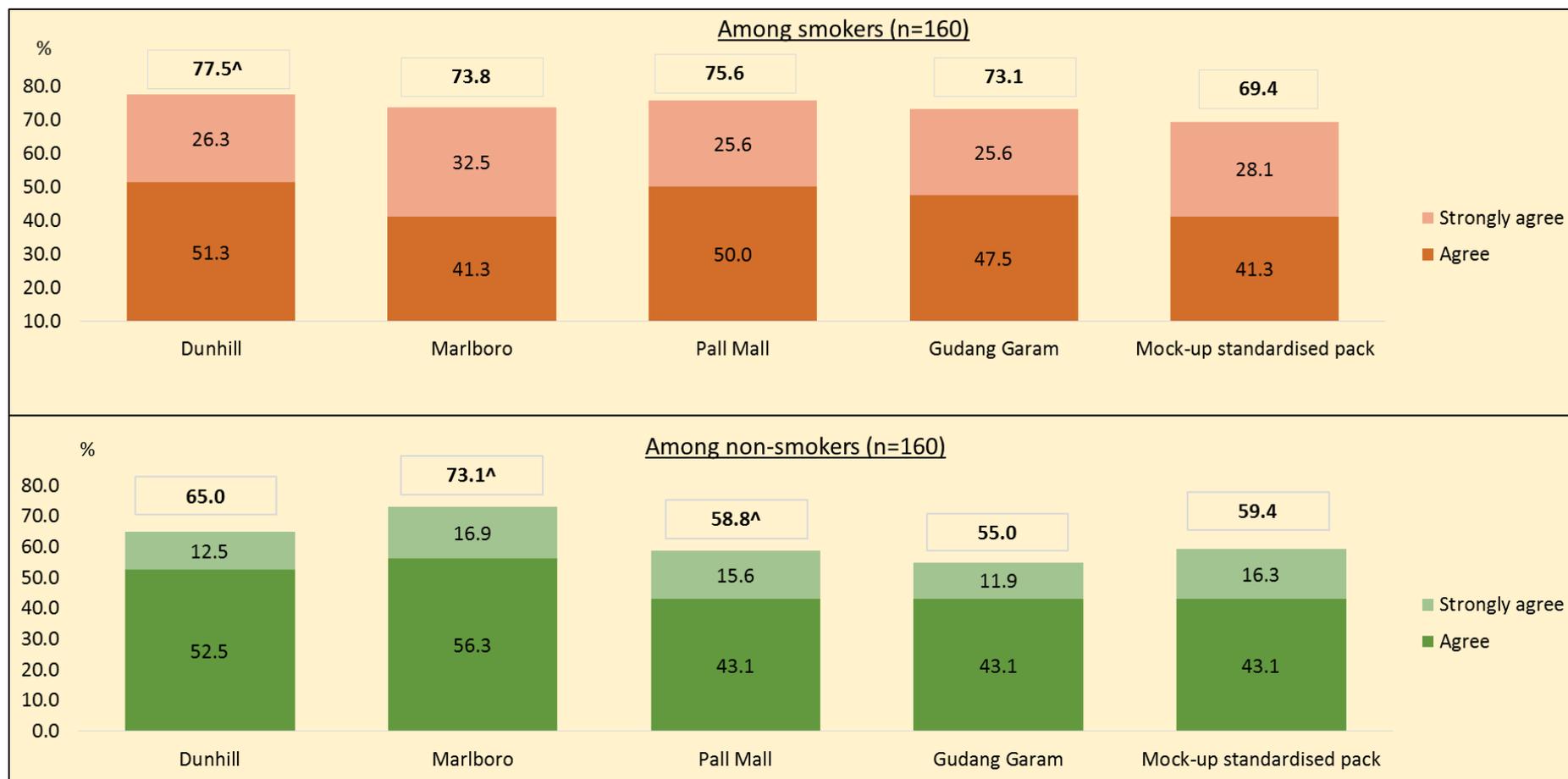
Figure 3. Perceived attractiveness of pack design for current packs and mock-up standardised pack by smoking status



[^]Percentages may have slight differences due to rounding estimation

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Figure 4. Noticeability of graphic health warning labels for current cigarette packs and mock-up standardised packs by smoking status



[^]Percentages may have slight differences due to rounding estimation