

Message Framing to Reduce Smoking Behaviours

Department/Organisation: Health Promotion Board (HPB) & Temasek Polytechnic Estates and Facilities Management (EFM)

In a Nutshell

Due to the undesirable and negative effects of smoking, health campaigns and efforts have been launched at the national level to reduce smoking. The aim of this study was twofold, (1) to understand smoking behaviours among adolescent smokers; and (2) to examine the effects of message framing in reducing smoking behaviours in an educational institution. To understand adolescent smoking behaviours, adolescent smokers were interviewed on their attitudes towards smoking, related behaviours, motivations, and opinions on current smoking cessation efforts. Moreover, the effectiveness of message framing on smoking behaviours was examined through posters eliciting community identity, moral obligation, and rules. These posters were placed at various smoking “hotspots” and smoking behaviours were recorded through naturalistic observations. The results revealed that the role of peers was a key factor influencing adolescents’ smoking attitudes and behaviours, and attitudes towards current smoking initiatives were generally negative. Additionally, reminding smokers of the rules (“no smoking allowed”) reduced the number of smokers at different locations, while reminding smokers of their moral obligation reduced the number of cigarettes smoked.

Understand

A survey conducted by Singapore’s Ministry of Health in 2015 reported a steadily-increasing trend of smoking among Singaporean adults aged 18 to 49 years old. This is of much concern, as smoking is undeniably detrimental to one’s health. Initiatives and efforts have been implemented nationally to tackle this issue, and educational institutions have also been roped in as part of this national push. In comparison to adult smokers, less is known about the attitudes and opinions, motivations, and behaviours of adolescent smokers in Singapore. Furthermore, the Singapore government has instituted strict regulations regarding no-smoking zones around educational institutions, and penalties are imposed on individuals who infringe these regulations. Despite these regulations and communicative efforts (e.g., posters and rule reminders), smoking behaviours are frequently observed to occur within those zones. In collaboration with the Health Promotion Board, one of the aims of this study was to engage in fact-finding, to better understand this issue from the perspective of this population group. In collaboration with TP’s EFM department, another aim of this study was to examine the effects of message framing on reducing smoking behaviours in certain locations around the institution.

30 adolescent smokers were interviewed on their attitudes towards smoking, related behaviours, motivations, and opinions on current smoking cessation efforts. The role of peers emerged as a key factor influencing adolescents’ smoking attitudes and behaviours, and attitudes towards current smoking cessation initiatives were generally negative – smokers did not view these programmes as being effective or helpful to them, and many adolescents were also concerned with issues of confidentiality. Awareness of current smoking cessation programmes and initiatives was also low.

Solve – Ideate

The effectiveness of message framing on smoking behaviours was examined through posters eliciting community identity, moral obligation (i.e., to not affect others through the inhalation of second-hand smoke from one’s smoking), and rules. These posters were placed at various smoking “hotspots”, and their impact on smoking behaviours (if any) was assessed through naturalistic observations.

Figures 1 – 3 illustrate the different types of posters designed by the research team.

Figure 1. Poster for Control (rules).



Figure 2. Moral Obligation Poster.



Figure 3. Community Identity Poster.



Solve - Implement

A field experiment examining the effectiveness of posters and messages eliciting current rules, moral obligation, and community identity in reducing smoking behaviours was conducted. Measures of the number of cigarettes smoked and number of smokers

(per 15 min interval during peak hours) were collected. For the intervention, a randomised controlled trial (RCT) was used and the three locations, identified as smoking hotspots around campus, were counterbalanced. Data was collected during specific periods in the day (10 – 11am, 1 – 2pm, 3 – 4pm) for 3 days.

Evaluate

Reducing smoking behaviours: Findings suggest that different poster messages were effective at addressing different smoking behaviours. The poster reminder of the rule (“no smoking allowed”) was the most effective in reducing the number of people smoking across the various locations (*Figure 4*). On the other hand, across all the locations, there was no practical significance in the number of cigarettes smoked. Each smoker would smoke an average of about 1 cigarette, regardless of the poster message (*Figure 5*).

Figure 4. Number of people smoking per 15 minute blocks.

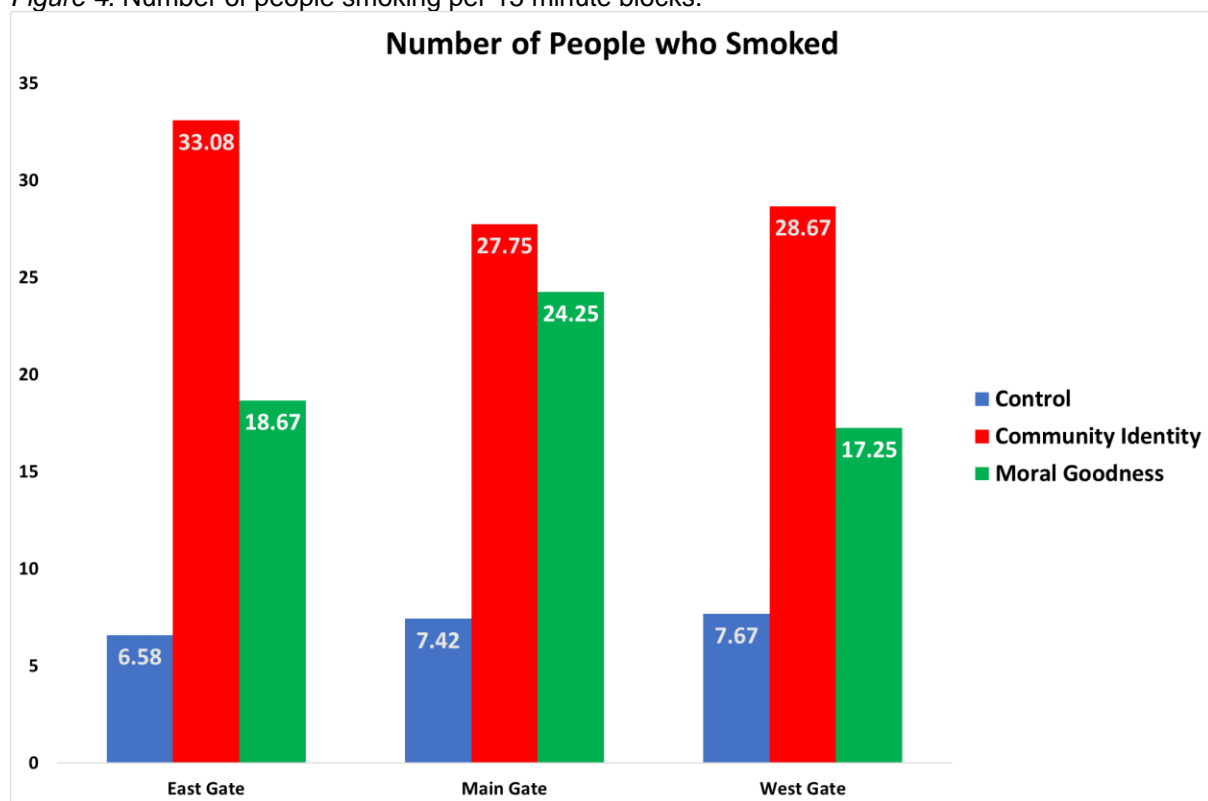
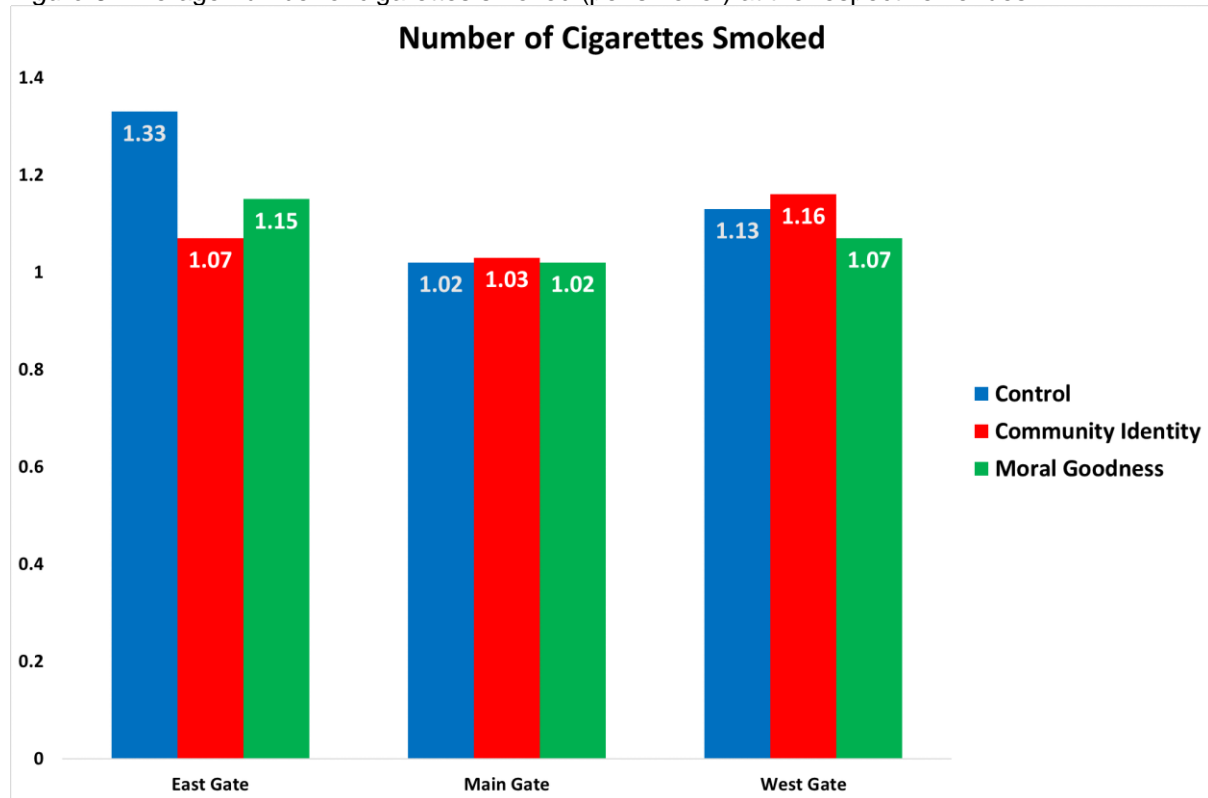


Figure 5. Average number of cigarettes smoked (per smoker) at the respective venues.



Lessons Learnt

The lesson learnt here was that sometimes, a clear and direct message sends the strongest nudge. This mirrors findings that we have found in some other studies, where sometimes a clear and simple nudge would be found to be more effective than 'multi-pronged' nudges incorporating multiple Behavioural Insights (BI) mechanisms.

Next Steps

To continue to use posters with clear and direct messaging, to reduce smoking behaviours.