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See the Sign, Avoid the Fine: TSZ Parking Signs in Vancouver – A Behavioural Insights Project

CITY OF VANCOUVER

Carl Jensen, Parinda Chagani, Eva Lai & Dave Hardisty (University of British Columbia); & Chris Darwent (City of Vancouver)

Objective

When drivers park illegally in Temporary Special Zones (TSZs), they face ticketing and towing, and the person who requested the TSZ cannot use it for its intended purpose. How can we improve signage to better alert and inform drivers?

Background

An academic and cross jurisdictional scan showed that parking signage that uses visuals and clear and easy-to-read messaging is more effective. We conducted an online qualitative survey with drivers in Vancouver to better understand the barriers to TSZ compliance. Over 50% of the respondents stated that it is moderately or highly likely that TSZ signage is conflicting, confusing or not noticeable. 81% of the respondents said they did not know the current penalties for parking in a TSZ, and 22% said they were unsure.

Methods

- Used principles of Salience and Loss Aversion from the EAST framework to develop an eye-catching sign that would draw the driver's attention, and 'nudge' the driver to comply.
- Conducted a Randomized Control Trial (RCT) from March 7 to April 4, 2021, to evaluate the effectiveness of the BI solution.
- Sample size consisted of 117 TSZs (n = 68 for control and n = 49 for treatment).
- **Figure: Control Sign (left) vs Treatment Sign**

Results

- The unit of analysis was the number of violations, reported to the 311 Contact Centre.
- On average, violations in with the treatment sign dropped by 57% compared to the control sign.
- The BI sign resulted in greater compliance; however, the results are not statistically significant (p = .33).
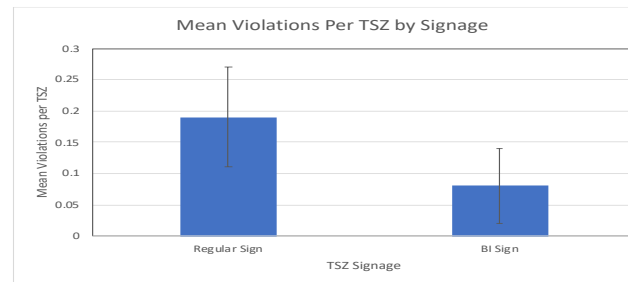
Error bars indicate +/- one standard error.

Recommendations

- Conduct additional testing of the TSZs, using the same signs, an increased sample size and extending the scope to include types of TSZs excluded in this study. If statistically significant results are achieved, these can inform the decision to scale.

- Develop treatment signs for a different category of parking signage (e.g., rush hour, loading zones, bus stops, commercial zones, etc.), which has a greater degree of non-compliance, and conduct a study to evaluate the effectiveness of the new sign.

- As the treatment sign did result in a 57% reduction in violations, the City may consider conducting a cost-benefit analysis to inform the decision to develop and implement the treatment signs based on the principles of Salience and Loss Aversion.

Digital Poster Guidelines

Posters will be shown onscreen during the digital poster session. Conference attendees will also be able to view a static image of each poster in the program (shared via email and available on the conference website).

Requirements

- Each poster can be maximum 1 slide.
- All posters must be created within the attached PowerPoint template file.
- Because attendees will have screens of all sizes, you should optimize your poster for a small screen. This means using large fonts and minimal text.
- Posters should include your preferred email contact so that attendees may reach out to learn more.
- For examples of past posters, visit https://bigdifferencebc.ca/program-2020 and https://bigdifferencebc.ca/program-2019.
- The tips on the next slide are general pointers that may or may not be a good fit for your specific poster. (Tips adapted from SJDM (https://sjdm.org/programs/poster.guidelines.html) and BC Public Service GCPE.)

Digital Poster Tips

Poster Elements: For posters that describe a Behavioural Insights lens or trial project, consider including the following elements:

- *Title:* Include your title (i.e., short phrase describing the main message of the poster). On the next line, list authors' names and professional affiliations.

- *Abstract:* 1 paragraph that summarizes the main points of the poster.

- *Intro:* 1 paragraph/panel that describes the background for the problem or theory.

- *Methods*: 1 paragraph/panel that describes techniques used or proposed.

- *Results:* 1 panel that details your results. Figures should include titles, axis labels, and legends. Include a brief description of any statistical tests run.

- *Discussion:* 1 paragraph/panel that summarizes the results and conclusions. This may be combined with the Results for a single Results and Discussion section.

- *References:* List key references used, ideally in APA format.

- *Acknowledgements:* List sources of financial or other support or project partners.

Design: Posters should be a single widescreen (16:9) slide.

- *Font size:* Font size should be readable on a small screen. Titles should be approximalte font size 24-32. Headers should be approximately font size 15-18. Main text should be approximately font size 12-15. Minor text (e.g., acknowledgements and references) should not be smaller than font size 10.

- *Font:* Choose an easy-to-read font, such as Calibri. Use the same type-face throughout your entire poster.

- *Emphasis:* It is better to use bolding than all caps when trying to emphasize a point.

- *Colour:* Incorporate colour in figures or images to help tell your story and add visual interest. At the same time, keep in mind that too much color is distracting.

- *Less is More:* Your poster will be most effective if there is minimal text for the reader. Avoid long descriptions and explanations. Use plain language and stick to short, concise sentences in bullet point or short paragraphs.

- *Accessibility:*
  - Test your poster in grayscale to see how it will look to someone who is colourblind: https://www.webucator.com/how-to/how-change-the-view-grayscale-microsoft-powerpoint.cfm
  - Run Microsoft's Accessibility Checker to review and improve accessibility: https://support.office.com/en-us/article/improve-accessibility-with-the-accessibility-checker-a16f6de0-2f39-4a2b-8bd8-5ad801426c7f