

# **Convenience Conundrums: A Study of Choice Architecture and Social Norms on a Japanese university campus**

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## **Abstract**

Choice architecture and social norms are just some of the many insights gleaned from the field of behavioural science that contribute to a more representative model of decision making amongst consumers. The value of these insights is that not only do they paint a better picture of how consumers make choices; applications of these insights tend to be low cost and effective. The goal of this study is to examine the effects of these two insights, choice architecture and social norms, on consumer choice in the health industry. Specifically, through the interventions of product placement and prominent informational posters, this study examines how these insights affect sales of specific drinks and food items at the Keio University Shonan Fujisawa Co-op. In the first intervention, the shelf position of Co-op's chocolate éclair was changed to a more visible position, and its sales volume was subsequently observed for any significant changes. The second intervention saw posters displaying information on the top five most popular drinks sold at the Co-op, which happened to be water and sugar-free teas. Subsequently, the sales volume of these drinks in comparison to unhealthy drinks during the same period, was measured. As of this writing, the experiment period is not over. Results will be collected and conclusion added during the full paper submission (29 Septemebr).

Keywords: Choice Architecture, Social Norms, Health, Behavioural Economics

JEL classification: D03, I12

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## 1. Introduction

### 1.1. Field Background

The field of applied behavioural science investigates insights into decision making not conventionally considered in the rational choice model. Since people do not make decisions in a vacuum, the design of the environment (choice architecture) and how others behave (social norms) seem to influence our own behaviour to a significant extent.

### 1.2. Health Nudges

In the context of health, policymakers invest resources into programs that remind individuals of the long-term benefits of exercise, healthy eating, and other intrinsic benefits. However, behavioural economists have identified cognitive biases such as future discounting that impede individuals from making painful decisions today to improve wellbeing in the long run. Nudge theory as conceptualised by Thaler and Sunstein, postulates that relying on the intrinsic benefits of these choices alone is not enough to convince consumers to make healthier choices. These decisions should be easy and socially approving where possible. This has also been encapsulated in the Easy, Attractive Social and Timely (EAST) framework proposed by the Behavioural Insights Team. This paper therefore seeks to study applications of choice architecture and social norms into health nudges on a Japanese university campus.

### 1.3. Literature Review

#### 1.3.1 Choice Architecture: Product Placement

A similar study on choice architecture in terms of product placement, was conducted by Wong et al. (2015). They designed a simulation system that optimised store locations of healthy beverages that would increase the likelihood of purchasing a non-sugar sweetened beverage (non-SSB) by 2.8 times. This optimal location tends to be the second or third shelves of the front cooler, and worst being the back. However, it is still a simulation so empirical results from testing implementations are still preferred.

#### 1.3.2 Social Norms: Informational Posters

Numerous studies have been conducted on pasting informational posters for healthier drinks. One such prominent study was conducted by Sonnenberg et al.(2013). The posters featured traffic light colours for the nutritional value of each drink, with red being sugar sweetened beverages (SSB's) and green being non-SSB's. While the researchers concluded that such posters, which relies on saliency to convey information were effective in getting consumers to pick non-

SSB's, similar research on social norms have not been conducted.

## 2. Research Plan

### 2.1. Objective

The goal of this study is to examine the effects of these two insights, choice architecture and social norms, on consumer choice at a Japanese university campus. Specifically, through the interventions of product placement and prominent informational posters, this study examines how choice architecture and social norms might affect sales of specific drinks and food items at the Keio University Shonan Fujisawa campus Co-op.

#### 2.1.1. Limitations to choice architecture implementation

Chocolate éclair was chosen as the product to be experimented on, as opposed to SSB's and non-SSB's as a result of negotiating with the store manager over concerns of major changes in the store's layout causing confusion amongst consumers.

Although the earlier study and simulation on choice architecture pointed to the shelves furthest from the entrance being the least optimal, the store's top two drinks, Southern Alps and Mountain Geyser are both located here, being justified by the store manager that it would be easier to manage the crowd of customers gathering at the rear as they would not be blocking others.

#### 2.1.2. Limitations to social norms implementation

While it would have been ideal to test the effectiveness of the traffic light posters for SSB's in Japan to tease out potential cultural differences in information perception, it was not feasible in this case. This is because of the fear of straining relations between the Co-op store and manufacturers of such drinks, which is something greatly valued by the company. These developments led to the study choosing to focus on social norms as the key behavioural insight instead. Given that social norms and customs are also prominent features of the Japanese society, it would be interesting to see if this could translate to a large effect of such information presented in posters.

## 2.2 Hypotheses

H1: The switching of shelf position of chocolate éclair from a lower to a higher and more visible position will increase sales of chocolate éclair in the Co-op.

H2: The placement of informational posters relating health information and social norms will increase the relative sales of healthier drinks in the Co-op.

## 2.3. Importance

### 2.3.1. Health Issues

Many drinks sold in stores are full of sugar, the prime example being Coca-Cola. 500ml of Coca Cola contains 56.5 grams of sugar, which is more than twice the recommended sugar intake level of 25 grams as recommended by the World Health Organisation.<sup>1</sup> Within Keio University Shonan Fujisawa Campus' Co-op, Coca Cola is the 8<sup>th</sup> most popular drink.<sup>2</sup> While pushes for more resources into policies that aim to improve health outcomes are certainly desirable, given low profit margins, recorded in the Co-op store, it is challenging to push for such solutions. Given the low-cost nature of most behavioural interventions, there is merit in pushing for this study on experimenting on such interventions.

### 2.3.2. Expanding the field in Japan

The field of applied behavioural science and economics is notably more active in Western institutions, but it is believed that many of the insights gleaned could be applied to many of Japan's issues. However, cultural contexts, nuances and even language have been shown to greatly impact the efficacies of these insights on the decision-making processes of people of different backgrounds and nationalities. Therefore, it is crucial that experiments, such as these that attempt to directly evaluate the efficacies of these insights, be conducted to gain a better understanding of the field applied to the Japanese context, allowing policymakers in the future to design better policies that truly reflect the way people make decisions.

While Japan has been seen to be a healthy nation (which this paper does not dispute), health problems will continue to plague an ageing population, making insights from studies like these valuable. In addition, it is hoped that conclusions drawn from this study can be used as references for further similar studies.

## References

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<sup>1</sup> Christian Lindmeier and Olivia Lawe Davies 2015. WHO calls on countries to reduce sugars intake among adults and children. World Health Organisation  
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<sup>2</sup> Taken from sales data provided by Keio SFC Co-op. Consumers are mainly high school and university students. Of the 4430 university students, there are 252 international students.

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