

# The experimental tobacco marketplace I: Substitutability as a function of the price of conventional cigarettes

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## Abstract

**INTRODUCTION:** Behavioral economic studies of nicotine product consumption have traditionally examined substitution between two products and rarely examined substitution with more products. Increasing numbers of tobacco products available for commercial sale leads to more possible cross-product interactions, indicating a need to examine substitution in more complex arrangements that closely mirror the tobacco marketplace.

**METHODS:** The experimental tobacco marketplace (ETM) is an experimental online store that displays pictures, information, and prices for several tobacco products. Smokers were endowed with an account balance based on their weekly tobacco purchases. Participants then made potentially real purchases for seven (Experiment 1) or six (Experiment 2) tobacco/nicotine products under four price conditions for conventional cigarettes while prices for other products remained constant. Smokers returned 1 week later to report tobacco/nicotine use and return unused products for a refund.

**RESULTS:** In Experiment 1 ( $n = 22$ ), cigarette purchasing decreased as a function of price. Substitution was greatest for electronic cigarettes and cigarillos and significant for electronic cigarettes. Experiment 2 ( $n = 34$ ) was a replication of Experiment 1, but with cigarillos unavailable in the ETM. In Experiment 2, cigarette purchases decreased as a function of price. Substitution was robust and significant for electronic cigarettes and Camel Snus.

**CONCLUSIONS:** The ETM is a novel, practical assay that mimics the real-world marketplace, and functions as a simple research tool for both researchers and participants. Across the two experiments the product mix in the ETM altered which products functioned as substitutes suggesting complex interactions between purchasing and product availability.

**IMPLICATIONS:** This article adds a novel method of collecting purchasing data that mimics real world purchasing to the existing literature. The ETM is a practical avenue by which to study both hypothetical and potentially real purchasing.

## Recommended Citation

Quisenberry, A.J., Koffarnus, M.N., Hatz, L. E., Epstein, L.H., & Bickel, W.K. (2016). The experimental tobacco marketplace I: Substitutability as a function of the price of conventional cigarettes. *Nicotine and Tobacco Research*, 18(7), 1642-1648.

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