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DOCTORAL THESIS

**A Psychological Approach to Understanding
and Resisting the Influence of Advertising
from the Pharmaceutical Industry**

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Abstract

There is a growing concern that the marketing of pharmaceutical products exerts undue influence over healthcare professionals. However, there is a lack of empirical evidence to substantiate or refute this. Furthermore, the pharmaceutical industry's marketing strategy has evolved to a two-pronged approach, incorporating consumer-directed marketing activities alongside the more traditional direct-to-physician marketing. In response, my thesis reports on two parallel lines of research that tackles each prong. In a series of randomised controlled experiments, I have 1) sought to provide more empirical evidence for the impact of pharmaceutical promotion on healthcare professionals and 2) evaluated an educational intervention developed to combat consumer-directed disease awareness advertisements disseminated by the pharmaceutical industry.

First, I attempted to replicate and advance [Grande, Frosch, Perkins, and Kahn \(2009\)](#)'s work by investigating whether exposure to pharmaceutical print advertising can shift medical students' implicit attitude towards the advertised product, such that the individual exhibits a stronger positive association with the advertised product relative to a non-advertised product. Implicit attitudes were measured using an Implicit Association Test (IAT) designed to assess the strength of association between the advertised/non-advertised product and a list of positive/negative words. I could not replicate Grande and colleagues' (2009) findings because of difficulties recruiting enough participants. A lack of statistical power meant that I could not make any inferences or draw any conclusions with confidence. However, the experiment did illuminate methodological issues associated with the IAT.

Next, I investigated the effectiveness of an educational intervention that informs the general public about industry-sponsored disease awareness campaigns and encourages the cultivation of healthy scepticism (i.e. having a critical eye when evaluating information) towards such potentially biased and misleading sources of health information. Specifically, I investigated the impact of this intervention on participants' ability to identify the sponsor of a disease awareness advertisement, their attitudes towards such ads, their perceptions of the medical conditions discussed in the ads, their scepticism towards pharmaceutical advertising, and their behavioural intentions after viewing the ads. Across three experiments, I consistently demonstrated that the intervention increased participants' sponsor identification accuracy and their scepticism towards pharmaceutical advertising. Healthy scepticism was consistently observed with regards to the perceived value of an ad. Participants who underwent the intervention were less likely to agree that an ad was valuable only when it was industry-sponsored. However, there was more inconsistency for measures, such as participants' reported behavioural intentions, that required them to think through the implications of their attitude changes.

Declaration of Authorship

I, Brennan ONG, certify that this thesis titled, “A Psychological Approach to Understanding and Resisting the Influence of Advertising from the Pharmaceutical Industry” and the work presented in it contains no material which has been accepted for the award of any other degree or diploma in my name, in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission in my name, for any other degree or diploma in any university or other tertiary institution without the prior approval of The University of Adelaide and where applicable, any partner institution responsible for the joint-award of this degree.

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Signed:

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02/07/2015

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