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Ong, Brennan; Semmler, Carolyn; Mansfield, Peter Richard

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Cultivating Healthy Scepticism towards Help-seeking Ads: Dispelling the Illusion of Unique Invulnerability

FACULTY OF
HEALTH SCIENCES



Brennan Ong¹, Dr. Carolyn Semmler¹, & Dr. Peter Mansfield²

¹School of Psychology, The University of Adelaide ²Discipline of General Practice, The University of Adelaide

Background & Aims

Two experiments investigated the efficacy of an educational intervention designed to help individuals be better at evaluating help-seeking ads as trustworthy or untrustworthy. Our aims were to demonstrate that the intervention:

1. Leads to better sponsor identification.
2. Leads to greater scepticism towards pharmaceutical advertising.
3. Cultivates healthy scepticism in individuals.

Experiment 1 yielded promising results, but it also highlighted areas for improvement—specifically: how our intervention was delivered and the design of our help-seeking ads.

Consequently, Experiment 2 was conducted to address Experiment 1's limitations and replicate its findings.

Therefore, only Experiment 2 is discussed in detail here.

Help-seeking Ads & The Pharmaceutical Industry

- The pharmaceutical industry is prohibited from promoting prescription drugs to the Australian public.
- Help-seeking ads are an increasingly popular strategy used by pharmaceutical companies to engage the public.
- There is emerging evidence that people do not differentiate between government-sponsored and industry-sponsored help-seeking ads.
- Consumers might be unaware that industry-sponsored help-seeking ads are a form of advertising.
- Consumer ignorance of the inherent conflict of interest prevents the informed evaluation of industry-sponsored help-seeking ads.

Who is a Healthy Sceptic?

A healthy sceptic will neither simply accept nor disregard information that is provided in a help-seeking ad.

Instead, he/she will consider who is responsible for disseminating the information and whether its sources are trustworthy or untrustworthy.

Our goal is to train health consumers to be healthy sceptics.

Industry-sponsored Ads: Good or Bad?

Pros [1,2]

- Improves patient education
- Reduces under diagnosis or under treatment
- Lowers the economic costs on healthcare
- Reduces stigma
- Information provided may be biased or inaccurate
- Help the pharmaceutical companies engage in 'disease mongering'
- Gives the industry the power to re-define what is 'healthy' and what is 'abnormal'
- Helps the industry dictate what health conditions should dominate in the media

What is the Illusion of Unique Invulnerability?

The tendency to hold the "it won't happen to me" belief. It has been demonstrated that the illusion of unique invulnerability can negatively influence the effectiveness of an educational intervention. [8]

For an intervention to be effective, the individual must first experience that he/she is susceptible to the risk under consideration. This is achieved by explicitly demonstrating to the individual that he/she is vulnerable.

Results

Sponsor Identification Accuracy

Intervention group participants were more likely to correctly identify the ad sponsor than control group participants, $OR = 8.83$, $p < .001$. See Figure 3. In addition, the government-sponsored ad was more likely than the industry-sponsored ad to be correctly identified by participants, $OR = 5.58$, $p < .001$.

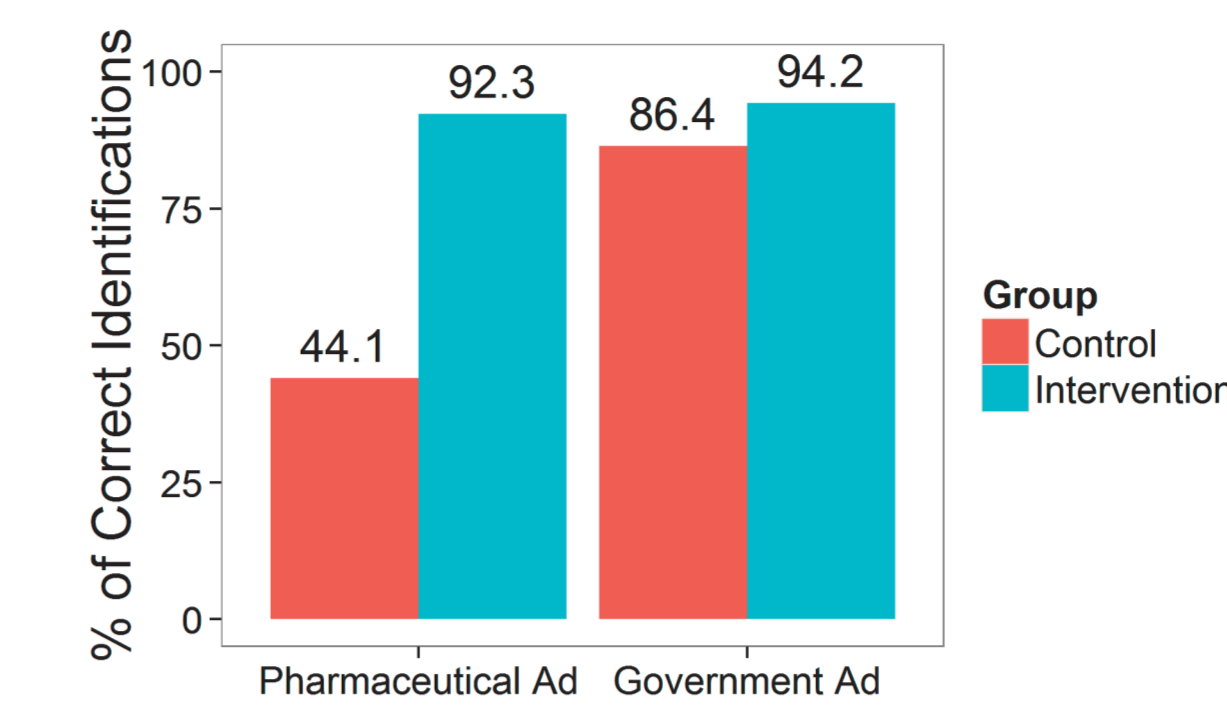


Figure 3. Participants' Sponsor Identification Accuracy.

Scepticism towards Pharmaceutical Advertising

Intervention group participants had statistically significantly greater scepticism towards pharmaceutical advertising ($M = 32.29$, $SD = 4.40$) than control group participants ($M = 26.17$, $SD = 5.60$), $p < .001$. The difference between groups had a large effect size, $d = 1.22$. See Figure 5.

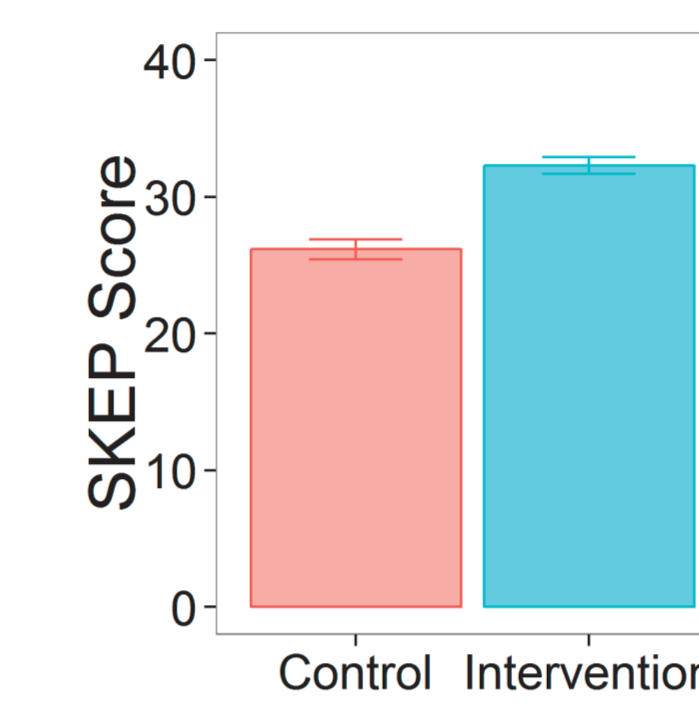


Figure 5. Participants' Scepticism towards Pharmaceutical Advertising. Error bars represent standard errors. Higher scores indicate greater scepticism.

Behavioural Intentions after Viewing Ads

There was a significant Group x Ad-type interaction for "talk to doctor about the condition", $p = .01$; "ask doctor about treatment and tests", $p = .008$; and "look for information as directed by the ad", $p < .001$.

For these three items, the intervention group was more likely than the control group to report an intention to engage in those behaviours after viewing a government-sponsored ad.

For all other items, the only significant effect was a main effect for Group for "do nothing". The control group was more likely than the intervention group to report an intention to "do nothing" after seeing an ad, regardless of its sponsor, $OR = 2.87$, $p = .003$. See Figure 6.

Perceived Value of Help-seeking Ads

There was a significant Group x Ad-type interaction, $p < .001$. See Figure 4.

When shown an industry-sponsored ad, the control group was more likely to agree that the ad was valuable compared to the intervention group, $OR = 9.82$, $p < .001$.

However, when a government-sponsored ad was shown, there was no statistical difference in odds between the two groups, $OR = 1.01$, $p = .99$.

Did you find the Help-seeking Ad Valuable?

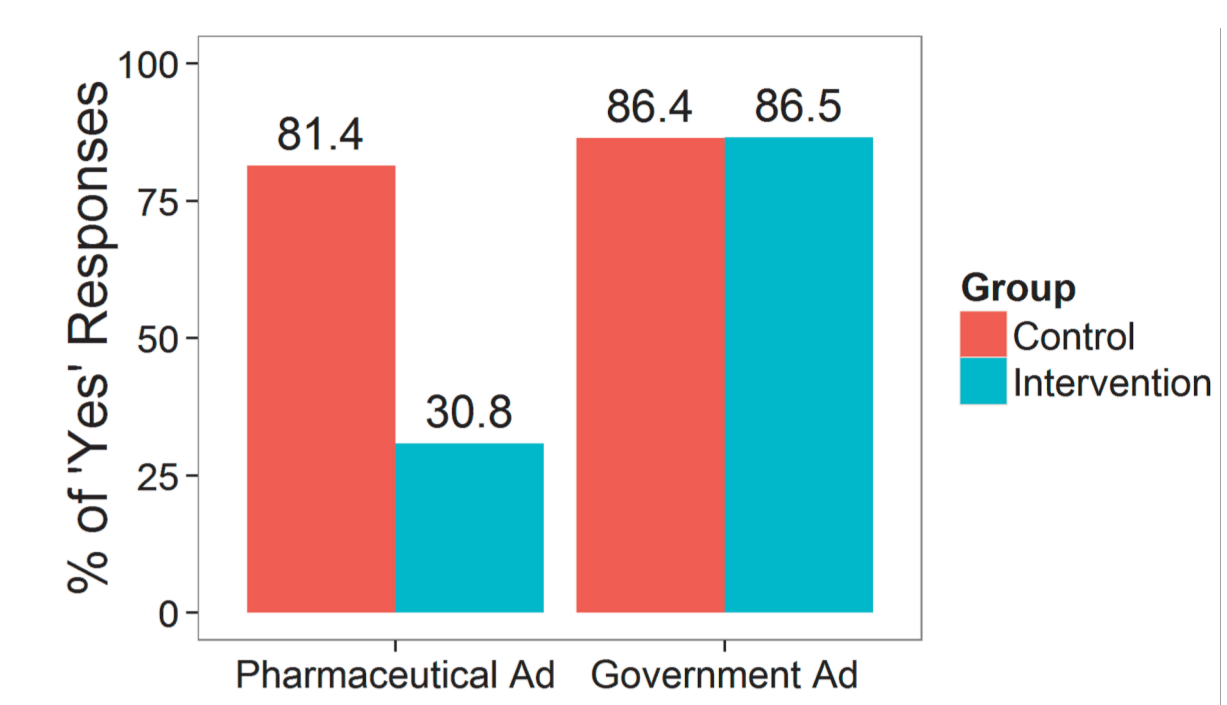


Figure 4. Participants' Perceived Value of Help-seeking Ads.

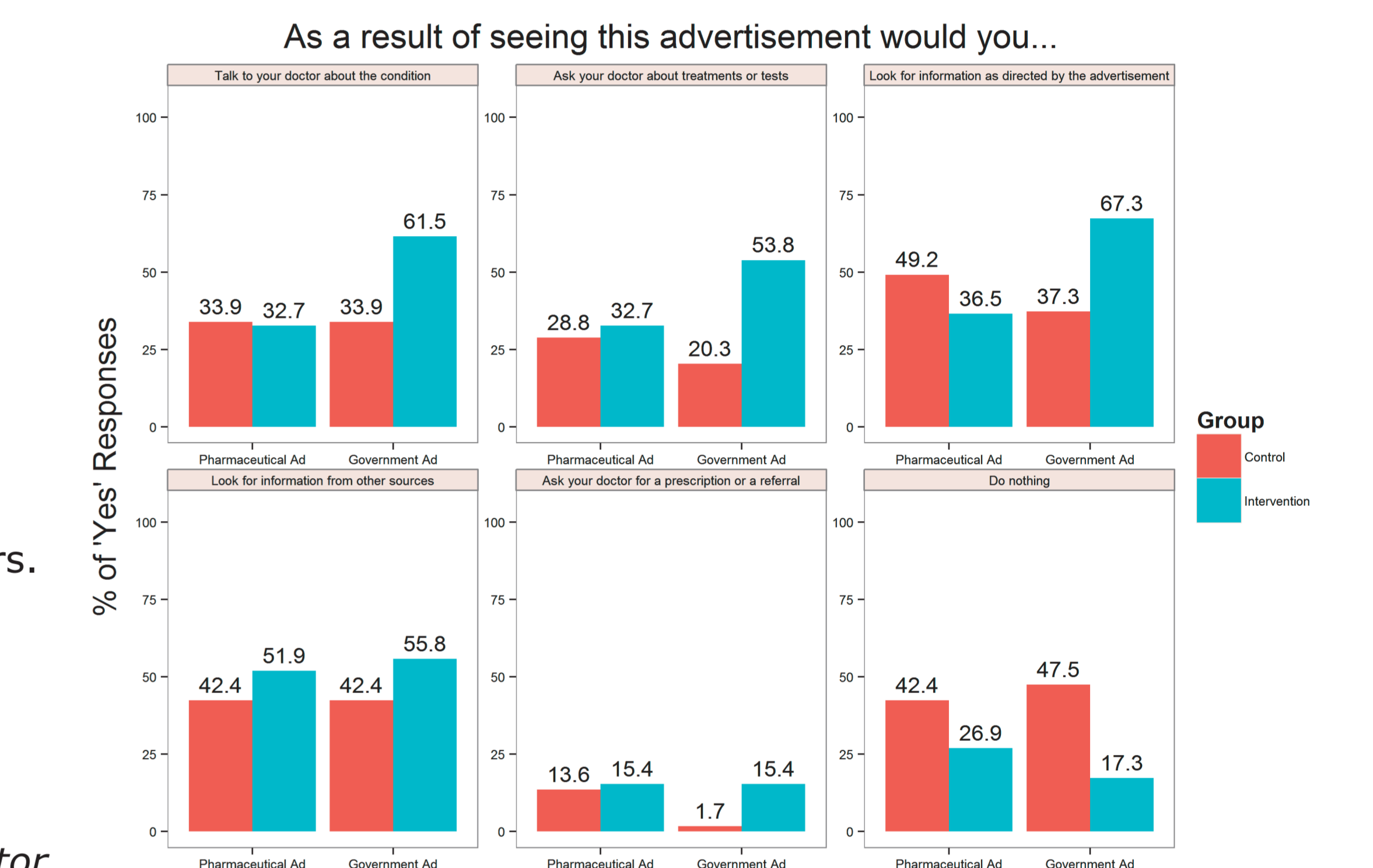


Figure 6. Participants' Behavioural Intentions.

Method

Participants

111 participants (30 males, 81 females) who were either volunteers or 1st year Psychology students participating for course credit. Participants' age ranged from 18 to 61 years ($M = 20.5$, $SD = 5.6$).

Design & Procedure

See Figure 1 for an overview of the experimental procedure. Participants were randomly assigned to the two groups.

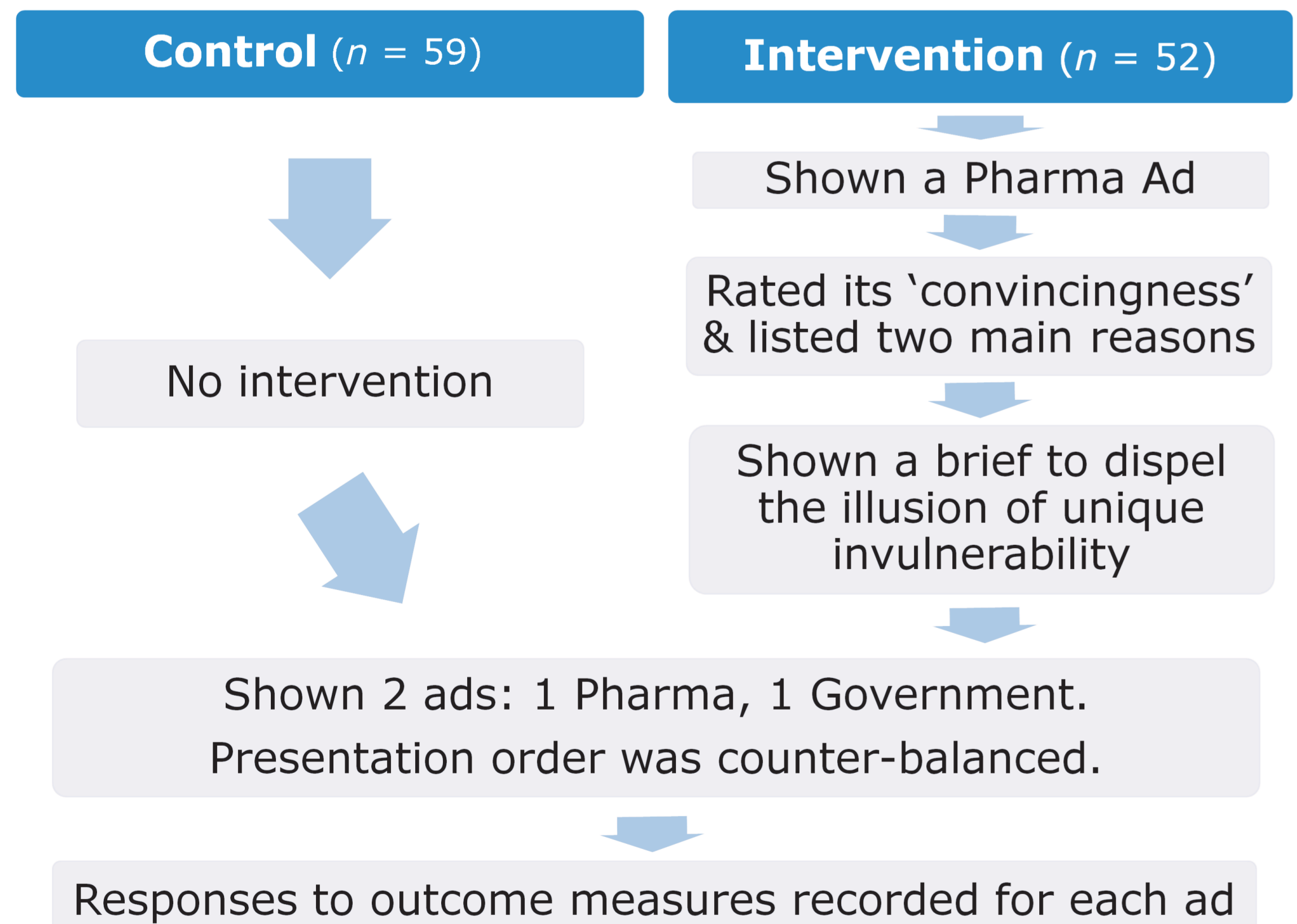


Figure 1. Experimental design & procedure.

Materials

Help-seeking Ads

Help-seeking ads for three medical conditions: Coeliac Disease, Multiple Sclerosis, & Social Anxiety Disorder were used.

Each condition had 4 variants that were unique combinations of sponsor (pharmaceutical/government) and gender (male/female). See Figure 2 for an example.



Figure 2. The 4 variants for the Multiple Sclerosis Help-seeking Ad. From left to right: Female government-sponsored, Female industry-sponsored, Male government-sponsored, Male industry-sponsored.

Conclusion

Improved Identification Accuracy

Experiment 2's effects were substantially larger ($OR_{\text{Expt 2}} = 8.83$ vs. $OR_{\text{Expt 1}} = 3.09$), suggesting that the changes in how the intervention was delivered improved its efficacy.

Increased Scepticism towards Pharmaceutical Advertising

Once again, Experiment 2's effects were substantially larger (Cohen's $d_{\text{Expt 2}} = 1.56$ vs. Cohen's $d_{\text{Expt 1}} = 0.40$) reiterating the positive impact of the improved intervention. However, it remains unclear whether these attitudinal changes are resilient over time.

Cultivated Healthy Scepticism

Healthy scepticism was observed for the *perceived value of the ad*, but not for *behavioural intentions*.

For the *behavioural intentions* measure, the intervention only worked in favour of trustworthy government ads, increasing the likelihood of seeking further information. However, the intervention did not instil resistance to untrustworthy pharmaceutical ads. The intervention group's behavioural intentions after viewing pharmaceutical ads were not significantly different to the control group's.

This pattern of responding is usually observed when the illusion of unique invulnerability is at play. So, even though the intervention group could identify pharmaceutical-sponsored ads and did not perceive these ads as valuable, their perceived invulnerability to untrustworthy ads impeded their ability to resist the ads.

Further research is needed to develop the right balance between successfully dispelling the illusion of invulnerability in participants and keeping the participants engaged with the educational message.

For further details, please contact Brennan Ong (brennan.ong@adelaide.edu.au)

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