

Application for 2014 Russell Ackoff Doctoral Student Fellowships:

**CHARACTER-AUDIENCE SIMILARITY & PERSUASION:
MODERATING ROLE OF MESSAGE THEMES IN
ANTI-SMOKING CAMPAIGN MESSAGES**

Minji Kim

Ph.D. Candidate
Annenberg School for Communication

Faculty Advisor

A handwritten signature in black ink, appearing to read "J. Cappella", is written over a horizontal line.

Dr. Joseph N. Cappella

Professor
Annenberg School for Communication

Research goal: This research project aims to examine the interaction between character-audience similarity, a core part of tailored or targeted communication, and theme of anti-smoking public services announcements (PSAs) on message persuasiveness.

Background and previous research: Smoking is responsible for 480,000 deaths in the United States every year (U.S. Department of Health and Human Services, 2014). Much persuasive communication efforts have been utilized to reduce smoking after the first Surgeon General's Report warning against the hazard of smoking in 1964. While traditional efforts have focused much on the use of mass media and broadcast for general audience, modern approaches to persuasion accompanied by ever-developing new media technologies enabling fast handling of large data are moving increasingly toward "narrowcasting," with targeted and tailored communication strategies (Kreuter & Wray, 2003).

Tailored messages, addressing individual characteristics a specific target audience, are expected to increase perceived relevance of the messages, which would in turn increase the audience's attention to and engagement with the message. Tailoring have been shown as effective in promoting smoking cessation (e.g. Strecher et al., 2008); the same conclusion has been made in meta-analyses of tailored health interventions (e.g. Noar, Benac, & Harris, 2007).

One of the core elements of targeted and tailored communication is using exemplar or persuader characters that are similar to target audience in several aspects, such as demographics or current risk status. While many previous studies have shown the effectiveness of tailored messages in comparison to generic ones, they did not take the different roles of exemplar and persuader characters, or potential differences between message themes into consideration. To address the first issue, our previous work found that similarity between the smoker (i.e. exemplar) and the audience exerts significant positive effect on engagement with anti-smoking PSAs, which in turn enhances the perceived message effectiveness (Kim, Shi, & Cappella, 2013). This paper was selected as one of the top 5 papers in Health Communication Division and presented in National Communication Association in November, 2013.

With regard to the second issue, we would not expect that the effect of smoker-audience similarity will trump all the other effects, as for example showing a similar character engaged in immoral or unethical behavior, which happens a lot among anti-smoking messages employing secondhand-smoking themes, would not necessarily be effective or engaging. This is in the same line with research on the effectiveness of guilt appeals: too strong guilt appeals reduce message persuasiveness (O'Keefe, 2000). While the previous work suggests a positive effect of tailored anti-smoking messages in general, when smokers are depicted as endangering others (i.e. secondhand smoking), similarity and subsequent identification with the smoker character may backfire and reduce the persuasive effect of the message. Therefore, it needs to be further examined if tailoring strategy might undermine the public health effort to reduce smoking rate when certain message themes are to be employed.

Planned method to test the research question: To the best of my knowledge, no previous attempt has been made to examine interaction between character-audience similarity and message themes. Therefore, we are planning a two-step approach – first conducting a secondary analysis of observational data (Study 1), and then conducting an experiment to orthogonally test the research question. This application includes stages up to the pilot test to test stimuli for the second study (Study 2 – message pilot test).

Study 1. This proposed study will attempt to extend the results acquired in previous research. With the funding support from National Cancer Institute and National Health Institute, four surveys were conducted between 2006 and 2012 where 200 anti-smoking messages were evaluated by 2,435 smokers in terms of message persuasiveness (perceived effectiveness; Dillard, Weber, & Vail, 2007). The message features, including message themes such as negative health consequences, secondhand smoking, industry manipulation, were also coded by independent group of coders trained at Annenberg School. These evaluations will be further analyzed to address the research question.

In this stage, the funding will be used to train two undergraduate coders. They will be trained to identify smoker characters present in anti-smoking PSAs and code their demographic information. The coding results will be used to determine smoker-audience similarity, and secondary analyses will be conducted to understand how smoker-audience similarity affects persuasiveness of messages with varying themes.

Study 2 – Message pilot test. For the main experiment, a new set of messages will be developed using a picture of smoker (with varying race, gender and age) accompanied by textual messages. These messages should be tested before being used in the main experiment, so that the messages are equivalent in all factors that are expected to influence message persuasiveness, except for the features to be manipulated (smoker demographics and message themes). Funding will be used to collect data on the message evaluation in this stage.

Based on the variances in race (African American vs. Caucasian), gender (Male vs. Female) and age (Young vs. Mature), there will be 8 types of smokers. Total of 40 photographs, showing five different smokers for each of the cases, will be tested for a) Reysen likability scale (e.g. friendly, likeable, physically attractive, etc.; Reysen, 2005), and b) smoking cues (e.g. clarity of cigarettes shown in the photograph, extent of enjoyment of smoking behavior, etc). Sixteen textual messages, eight different versions for each theme condition (negative health consequences vs. secondhand smoking), will be evaluated in terms of argument strength (e.g. believable, convincing, put thoughts in my mind about quitting smoking, makes a strong claim, etc.; Zhao, Strasser, Cappella, Lerman, & Fishbein, 2011) and emotionality (e.g. angry, hopeful, angry, proud, guilty). 200 current smokers will be recruited to evaluate two textual messages and five photographs randomly selected from the message pool.

Detailed Budget and justification: We are requesting \$3,000 of support from Russell Ackoff fellowship for coder training and data collection.

Study 1. Coding PSAs for secondary analysis

Training undergraduate coders and execution of character coding of PSAs

Cost per hour	\$10.00
Hours	50
Number of coders	2
Estimated total	\$1,000.00

Study 2 – Message pilot test

In a previous study accepted to the International Communication Association 2014 annual conference, we have found that 23 evaluators per message can provide efficient and accurate message evaluation (Kim & Cappella, 2014). Sampling 200 current smokers from online survey panel (e.g. SSI) to evaluate two text messages and five photographs randomly selected from total message pools, we will be able to acquire 25 average evaluations per textual message, and 25 average evaluations per smoker photograph. The test will be designed using Qualtrics, and hosted by the Annenberg School.

Cost per participant	\$10.00
Number of participants	200
Estimated total	\$2,000.00

Other funding sources: National Cancer Institute’s Center of Excellence in Cancer Communication (CECCR) as well as National Health Institute’s Exceptional, Unconventional Research Enabling Knowledge Acceleration (EUREKA) provided funding support to collect data to be used in Study 1 (secondary data analysis).

Annenberg School for Communication provides \$1,200 per fiscal year for travel funding. Graduate students at Annenberg School may apply for a dissertation budget of up to \$1,200 to be used for payment of incentives to study participants, coding expenses or additional travel expenses.

Reference

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