

RGC Ref. No.: UGC/FDS16/H10/21 <hr/> (please insert ref. above)
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**RESEARCH GRANTS COUNCIL  
COMPETITIVE RESEARCH FUNDING SCHEMES FOR  
THE LOCAL SELF-FINANCING DEGREE SECTOR**

**FACULTY DEVELOPMENT SCHEME (FDS)**

**Completion Report**  
(for completed projects only)

<p><b><u>Submission Deadlines:</u></b></p> <p>1. Auditor's report with unspent balance, if any: within <b><u>six</u></b> months of the approved project completion date.</p> <p>2. Completion report: within <b><u>12</u></b> months of the approved project completion date.</p>
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**Part A: The Project and Investigator(s)**

**1. Project Title**

The boomerang effect in anti-drug advertisements in Hong Kong

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**2. Investigator(s) and Academic Department(s) / Unit(s) Involved**

Research Team	Name / Post	Unit / Department / Institution
Principal Investigator	Dr CHENG Shing, Assistant Professor	Department of Social Sciences, School of Arts and Social Sciences, Hong Kong Metropolitan University
Co-Investigator	Dr CHAN Wai-leung, Senior Lecturer	Department of Social Sciences, School of Arts and Social Sciences, Hong Kong Metropolitan University
Co-Investigator	Dr CHEUNG Ho-nam, Assistant Professor	Department of Social Work and Social Administration, The University of Hong Kong
Co-Investigator	Dr HAU Vera Chui-luen, Assistant Professor	Department of Social Sciences, School of Arts and Social Sciences, Hong Kong Metropolitan University
Co-Investigator	Dr HO Lawrence Ka-ki, Assistant Professor	Department of Social Sciences, The Education University of Hong Kong
Co-Investigator	Dr MA Yiu-chung, Assistant Professor	Department of Social Sciences, School of Arts and Social Sciences, Hong Kong Metropolitan University
Others		

### 3. Project Duration

	Original	Revised	Date of RGC / Institution Approval (must be quoted)
Project Start Date	1 January 2022		
Project Completion Date	31 March 2023		
Duration (in month)	15		
Deadline for Submission of Completion Report	31 January 2024		

4.4 Please attach photo(s) of acknowledgement of RGC-funded facilities / equipment.

## **Part B: The Final Report**

### 5. Project Objectives

#### 5.1 Objectives as per original application

- 1. To assess whether and how the perceived tone of anti-drug advertisements affects the tendency of the boomerang effect.*
- 2. To examine whether and how the perceived realness of anti-drug advertisements affects the tendency of the boomerang effect.*
- 3. To explore whether and how the gender of audiences affects the tendency of the boomerang effect.*

#### 5.2 Revised objectives

Date of approval from the RGC: Nil

Reasons for the change:

1.

2.

3. ..

### 5.3 Realisation of the objectives

All the project objectives have been achieved.

Our findings from the experiment group shows that 27% of the participants exhibit some degree of boomerang effect (development of pro-drug perceptions). Also, findings indicate that (1) gender, (2) tone and (3) perceived realism of anti-drug messages do have an impact on the effectiveness of anti-drug advertisements. More specifically, our findings indicate that gender could indirectly affect the boomerang effect through the mediation of prior drug attitudes, perceived freedom threat, and perceived realism. Moreover, perceived freedom can indirectly impact the boomerang effect through the mediation of perceived realism. Below is the matching of objectives and our findings:

*1. To assess whether and how the perceived tone of anti-drug advertisements affects the tendency of the boomerang effect.*

Data shows that high-threat anti-drug messages do not have a direct impact on the boomerang effect. Yet, it has a negative impact on audiences' perception of anti-drug advertisement through the mediation of perceived realism.

*2. To examine whether and how the perceived realness of anti-drug advertisements affects the tendency of the boomerang effect.*

We found that perceived realness of anti-drug messages do have a direct impact on the boomerang effect - the more unrealistic the audience perceive the anti-drug message, the more likely the boomerang effect there will be.

*3. To explore whether and how the gender of audiences affects the tendency of the boomerang effect.*

We found that the gender of audiences have a mediated impact on the tendency of boomerang effect through the mediation of perceived freedom threat and perceived realness of anti-drug messages.

By summarizing our findings, we conclude that men are more likely than women to have a more permissive attitude to drug use, and perceive the anti-drug message as high freedom-threatening, and unrealistic. As such, men are more likely than women to exhibit a boomerang effect.

## 5.4 Summary of objectives addressed to date

<b>Objectives</b> <i>(as per 5.1/5.2 above)</i>	<b>Addressed</b> <i>(please tick)</i>	<b>Percentage Achieved</b> <i>(please estimate)</i>
1. To assess whether and how the perceived tone of anti-drug advertisements affects the tendency of the boomerang effect.	✓	100%
2. To examine whether and how the perceived realness of anti-drug advertisements affects the tendency of the boomerang effect.	✓	100%
3. To explore whether and how the gender of audiences affects the tendency of the boomerang effect	✓	100%

## 6. Research Outcome

### 6.1 Major findings and research outcome

*(Maximum 1 page; please make reference to Part C where necessary)*

#### ***1. To assess whether and how the perceived tone of anti-drug advertisements affects the tendency of the boomerang effect.***

In individualistic American and European cultural contexts, where freedom of drug use is valued, anti-drug messages with a high freedom-threatening tone were found to have a direct impact on the boomerang effect. Different from studies in western context, results of our experiment do not indicate such a relationship (Publication 1). To understand such variation, 50 individual qualitative interviews and 8 focus groups have been conducted.

Qualitative data indicates that participants believed that individuals should not be given the freedom to use drugs (Publication 2). They believe that although they have the freedom to harm their own body (by using drugs), they should not be given the freedom to use drugs because using drugs could harm the well-being of their family members, which violates the value of filial piety. In addition, under the influence of authoritarian education culture, they perceived high-threat messages as necessary and effective for delivering anti-drug messages.

#### ***2. To examine whether and how the perceived realness of anti-drug advertisements affects the tendency of the boomerang effect.***

Similar to studies in western context, results of our experiment indicate that the perceived realness of anti-drug messages does have a direct impact on the boomerang effect (Publication 1). More specifically, anti-drug messages perceived by participants as unrealistic could have a negative impact on anti-drug messages by inducing a boomerang effect. It shows that anti-drug advertisements that exaggerate the negative impact of drug use could have a negative impact on its effectiveness in promoting anti-drug messages.

Qualitative data indicates that participants often compare anti-drug messages that they watch in the anti-drug advertisement with similar messages that they obtained from other sources (including those they learn from school curriculums, newspapers, real life experiences, and popular culture). Although most participants claimed that they trust government anti-drug advertisements and school curriculums the most, many of them make reference to popular culture when they criticized the anti-drug advertisements as unrealistic. In other words, the influence of popular culture on participants' perception of the anti-drug message could be much larger than commonly expected. It also indicates that unrealistic portrayal of drug use/drug users in popular culture could have a negative impact on drug prevention (Publication 3).

#### ***3. To explore whether and how the gender of audiences affects the tendency of the boomerang effect.***

We found that the gender of audiences have a mediated impact on the tendency of boomerang effect through the mediation of prior drug attitudes, perceived freedom threat, and perceived realness of anti-drug messages. More specifically, we found that male participants are more likely to have more permissive prior drug attitudes, perceive the anti-drug message as high-freedom threat and unrealistic, and thereby more likely to be affected by the boomerang effect. It shows that gender specific anti-drug advertisements could have a positive impact on its effectiveness in promoting anti-drug messages (Publication 1).

## 6.2 Potential for further development of the research and the proposed course of action (*Maximum half a page*)

After the major findings get published in academic journals, summaries of our findings will be sent to the Narcotic Division, Security Bureau of HKSAR. In addition, this research can be further developed into studies that investigate the impact of government advertisement to audiences. The PI is currently preparing two related proposals: ( 1 ) The impact of the media on people's stigmatizing perceptions of drug users; (2) The impact of anti-drug advertisements on people who use drugs.

## 7. Layman's Summary

*(Describe in layman's language the nature, significance and value of the research project, in no more than 200 words)*

This project investigates the impact of anti-drug advertisements to audiences. We found that 27% of the participants in our experimental group exhibit some degree of boomerang effect (development of pro-drug perceptions). Also, findings indicate that (1) gender of audiences, (2) tone and (3) perceived realism of anti-drug messages do have an impact on the effectiveness of anti-drug advertisements. More specifically, our findings indicate that:

(1) Unrealistic anti-drug advertisements can lead to a boomerang effect, and audiences judge whether the advertisement is realistic by making references to other sources of information related to drug use (popular culture, school curriculum, and newspaper). It indicates that the promotion of anti-drug messages cannot be solely done by the government anti-drug advertisements. Instead, it requires collective and collaborative efforts from various social agencies (school, news agencies, media agencies, and popular culture producers). Effort in maintaining consistency in information about drug abuse among these agencies is particularly important.

(2) Men are more likely than women to: Have a more permissive attitude to drug use, perceive the anti-drug message as high freedom-threatening, and unrealistic, and exhibit a boomerang effect. It indicates that gender specific anti-drug advertisements can be useful in promoting anti-drug messages.

**Part C: Research Output****8. Peer-Reviewed Journal Publication(s) Arising Directly From This Research Project**

(Please attach a copy of the publication and/or the letter of acceptance if not yet submitted in the previous progress report(s). All listed publications must acknowledge RGC's funding support by quoting the specific grant reference.)

The Latest Status of Publications				Author(s) (denote the corresponding author with an asterisk*)	Title and Journal / Book (with the volume, pages and other necessary publishing details specified)	Submitted to RGC (indicate the year ending of the relevant progress report)	Attached to this Report (Yes or No)	Acknowledged the Support of RGC (Yes or No)	Accessible from the Institutional Repository (Yes or No)
Year of Publication	Year of Acceptance (For paper accepted but not yet published)	Under Review	Under Preparation (optional)						
2024				Vincent S Cheng*, Wai L Chan, Vera CL Hau, Amy HN Cheung, Arbitor YC Ma	Influences of parenting styles on perceptions of high-freedom-threatening language in anti-drug messages in Hong Kong / <i>China Journal of Social Work</i> <a href="https://doi.org/10.1080/17525098.2024.2397224">https://doi.org/10.1080/17525098.2024.2397224</a>	No	Yes [Attachment 1]	Yes	Yes
2024				Vincent S Cheng*, C Zhang, X Situ, YC Ma	Impact of Anti-drug Use Advertisements in Hong Kong: A Randomized Control Experiment / <i>Journal of Drug Issues</i> , 0(0), 1-16 <a href="https://doi.org/10.1177/00220426241288713">https://doi.org/10.1177/00220426241288713</a>	No	Yes [Attachment 2]	Yes	Yes

**9. Recognized International Conference(s) In Which Paper(s) Related To This Research Project Was / Were Delivered**

*(Please attach a copy of each conference abstract)*

Month / Year / Place	Title	Conference Name	Submitted to RGC <i>(indicate the year ending of the relevant progress report)</i>	Attached to this Report <i>(Yes or No)</i>	Acknowledged the Support of RGC <i>(Yes or No)</i>	Accessible from the Institutional Repository <i>(Yes or No)</i>
01/2023 Hawaii, University of Hawaii at Manoa	The impact culture to psychological reactance in anti-drug advertisement in Hong Kong: A mixed method approach	Hawaii International Conference on Chinese Studies (Center for Chinese Studies, University of Hawaii at Manoa)	No	Yes [Attachment 3]	Yes	No

**10. Whether Research Experience And New Knowledge Has Been Transferred / Has Contributed To Teaching And Learning**

*(Please elaborate)*

After the major findings get published in academic journals, summaries of our findings will be incorporated into curriculums in criminology, sociology, and psychology. Example of these course includes:

SOCI A221F Social Problems and Social Issues

SOCI A328F Perspectives and Issue on Crime

COUN 4001AEF Addiction Counselling

**11. Student(s) Trained**

*(Please attach a copy of the title page of the thesis)*

Name	Degree Registered for	Date of Registration	Date of Thesis Submission / Graduation
Nil			



**12. Other Impact**

*(e.g. award of patents or prizes, collaboration with other research institutions, technology transfer, teaching enhancement, etc.)*

Nil

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**13. Statistics on Research Outputs**

	Peer-reviewed Journal Publications	Conference Papers	Scholarly Books, Monographs and Chapters	Patents Awarded	Other Research Outputs (please specify)	
No. of outputs arising directly from this research project	2	1	Nil	Nil	Type	No.
					Nil	

**14. Public Access Of Completion Report**

*(Please specify the information, if any, that cannot be provided for public access and give the reasons.)*

Information that Cannot Be Provided for Public Access	Reasons
Nil	