



A Pilot Normative Study for Photographs of Celebrities in Hong Kong

Annie Fung, Anthony Pak Hin Kong and Dustin Kai-Yan Lau

EasyChair preprints are intended for rapid dissemination of research results and are integrated with the rest of EasyChair.

August 27, 2021

A pilot normative study for photographs of celebrities in Hong Kong

Annie Fung¹⁾, Anthony Pak-Hin Kong²⁾⁺, Dustin Kai-Yan Lau³⁾

1) Department of Chinese and Bilingual Studies, The Hong Kong Polytechnic University
email: annie.fung@connect.polyu.hk

2) Unit of Human Communication, Development, and Information Sciences, The University of Hong Kong
email: akong@hku.hk

3) Department of Chinese and Bilingual Studies, The Hong Kong Polytechnic University
email: dustin.lau@polyu.edu.hk

+: corresponding author

Keywords:

proper noun naming

psycholinguistic norms

Cantonese

Introduction

Psycholinguistic normative data have been facilitative to the research on the underlying mechanism for lexical processing (e.g., Lam, 2009). Increasing number of studies for various norms in Hong Kong Chinese (e.g., frequency of words in Hong Kong Cantonese; Lai, & Winterstein, 2020 and familiarity and age of acquisition (AoA) in naming action pictures; Tse, 2005) have been conducted. In this study, the naming of proper nouns (e.g., Bonin et al., 2012) was targeted by developing a set of norms for celebrity naming based on local native Cantonese speakers in Hong Kong. Specifically, this investigation collects a set of colored photographs of local and international celebrities and obtains ratings of various variables including AoA, facial distinctiveness, familiarity, surname frequency, emotional indicators, as well as behavioral data in naming including accuracy, naming and errors, such as tip-of-tongue (ToT).

Method

This study involving recruitment of 48 healthy adults (40-65 years, with a 1:1 gender ratio, stratified into two education groups) is being conducted in three phases.

The first phase generates a list of exemplars of celebrity names that are common, culturally and geographically specific to unimpaired speakers (n=16) across 22 selected occupational categories. Exemplars present in at least 20% of the responses will be selected as potential target stimuli and three photographs per corresponding celebrity will be chosen and standardized.

The second phase examines the face-name agreement of the photos chosen in Phase 1. Another group of participants (n=8) will be asked to imagine a given celebrity's face and compare the mental image created with the photographs presented for an agreement rating. For each celebrity, the photograph with the highest accumulated score will be used in the third phase.

In Phase 3, the finalized photographs from Phase 2 will first be presented to the third group of participants (n=12), who will be required to verbally tell the first name that came up to their mind as soon as possible. Response time (RT), accuracy (i.e., whether the naming matches with the celebrity's identity), erroneous responses, and reasons for 'no response'

(e.g. ToT) will be recorded. Subsequently, names of the chosen celebrities will be presented to the fourth group of participants (n=12) for subjective ratings on familiarity, AoA, face distinctiveness, and affective evaluation, using a seven-point scale.

Pilot results

Some pilot data of Phase 1 were collected from four participants (two female and two male speakers, education level not controlled). A total of 242 celebrity names across 22 selected occupational categories were generated (See Table 1). Further data collection is ongoing.

Conclusions

The pilot results reinforced the cultural and geographic specificity of celebrity norms, as only 2.4% of the generated exemplars overlapped with those collected based on speakers of British-English (Smith-Spark, 2006). We believe that this study will fill the gap in Chinese psycholinguistic norm studies. As such it distinguishes itself from other reported normative studies in Hong Kong Cantonese and the final deliverables should be useful to researchers who need such information, for example in designing psycholinguistics experiments in Cantonese.

References

- Bonin, P., Perret, C., Méot, A., Ferrand, L., Mermillod, M. (2012). Psycholinguistic norms and face naming times for photographs of celebrities in French. *Behavior Research Methods, 40*, 137-146. <https://doi.org/10.3758/BRM.40.1.137>
- Lai, R., & Winterstein, G. (2020). Cifu: A frequency lexicon of Hong Kong Cantonese. *Proceedings of the 12th Conference on Language Resources and Evaluation (LREC)* (pp. 3069-3077). European Language Resources Association.
- Lam, W. Y. (2009). *Treatment efficacy of semantic feature analysis (SFA) on verb retrieval of a Cantonese anomic speaker* (Unpublished bachelor dissertation). The University of Hong Kong, Hong Kong.
- Smith-Spark, J. H., Moore, V., Valentine, T., & Sherman, S. M. (2006). Stimulus generation, ratings, phoneme counts, and group classifications for 696 famous people by British adults over 40 years of age. *Behavior Research Methods, 38*(4), 590–597. <https://doi.org/10.3758/bf03193890>

Tse, P. J. (2005). *Normative data on Action naming of Hong Kong Cantonese adult speakers: Effects on age, education, familiarity and age of acquisition* (Unpublished bachelor dissertation). The University of Hong Kong, Hong Kong.

Table 1. Examples of celebrity names generated by four native Cantonese unimpaired participants in Hong Kong.

Local celebrities	Examples of exemplars generated	International celebrities	Examples of exemplars generated
L1. Actors (Female)*	劉嘉玲, 袁詠儀	I1. Actors (Female)*	Zhang Ziyi, Fan Bingbing
L2. Actors (Male)*	劉德華, 郭富城	I2. Actors (Male)*	Johnny Depp, Tom Hanks
L3. Singers (Female)*	林憶蓮, 王菲	I3. Singers (Female)*	Jane Zhang, Tan Weiwei
L4. Singers (Male)*	張國榮, 譚榮麟	I4. Singers (Male)*	Jay Chou, Harlem Yu
L5. Writers*	蔡瀾, 陶傑	I5. Writers*	Bing Xin, Yang Hongying
L6. Classic cartoon characters*	麥兜, 老夫子	I6. Classic cartoon characters*	Huanhuan, Yingying
L7. Athletes*	方力申, 李慧詩	I7. Athletes*	Fu Mingxia, Tian Liang
L8. Anchor/ Emcees*	方東昇, 曾志偉	I8. Anchor/ Emcees*	Wang Han, Meng Fei
L9. Tycoons/ millionaires*	李嘉誠, 李兆基	I9. Tycoons/ millionaires*	Bill Gates, Ma Huateng
L10. Musicians*	莫華倫, 姚珏	I10. Musicians*	Langlang, Li Yundi
L11. Artists/ Painters*	---	I11. Artists/ Painters*	Chen Danqing
L12. Designers (Fashion/ architectural/ brand etc.)*	張天愛, 鄧達智	I12. Designers (Fashion/ architectural/ brand etc.)*	---
L13. Music Producer	---	I13. Royalty members (e.g. UK)	Prince Harry, Elizabeth II
L14. Political figures/ social activists	林鄭月娥, 黃之鋒	I14. World leaders	Kim Jong Un, Xi Jinping
L15. Jockey	鄭棣池	I15. Entrepreneur	Bill Gates, Ma Huateng
L16. Film directors	王晶, 周星馳	---	---
L17. Football commentators	鄭兆聰, 張志德	---	---
L18. Lawyers	湯家驊, 黎清雄	---	---
L19. Criminals	林過雲, 葉繼歡	---	---
L20. Others (Any celebrity you know, but not included in the above category)	查小欣	I16. Others (Any celebrity you know, but not included in the above category)	---

Note: * Category that appears in both the 'Local' and 'International' list.