Are Chinese Selfies Gender-Stereotypical:

A Content Analysis of Selfies on Weibo

We now live in the age of selfies. A selfie is defined as a photograph of oneself taken by oneself, typically with a smartphone or webcam, and uploaded on social media (Qiu, Lu, Yang, Qu, & Zhu, 2015; Fox and Rooney, 2015). The word "selfie" was first used in 2002, and between the year of 2012 and 2013 the usage of this the word increased by 17,000 % (Bennett, 2014). The surge in the popularity of selfies was such that it was announced as Oxford Dictionary's "Word of the Year" in 2013 ("Oxford Dictionaries," 2013). Exact numbers on the pervasiveness of selfies may vary, but they are all too large to overlook. Google revealed that 200 million users uploaded 24 billion selfies to its Google Photos (Sabharwal, 2016). Another Google report in 2014 showed that Android users sent 93 million selfies every day (Brandt, 2014). It has been estimated that each person takes more than 25,000 selfies in a lifetime (Wang, 2017).

Selfies are especially popular on social media (Tifentale, 2014; 2015). In 2004, the first hashtag of #selfie appeared on Flick (Bennett, 2014). Instagram's first #selfie emerged in 2011 (Woodruff, Santarossa, & Lacasse, 2018). As of March 2018, on Instagram, more than 380 million images were shared with #selfie. On Sina Weibo (China's Twitter), #selfie was viewed over 360 million times. On Snapchat, about 75% of all photos are selfies (Cohen, 2016).

Chinese, especially Chinese women, are obsessed with taking and sharing selfies— to the point that it became a culture in China (Fan, 2017; 2018). This can be

seen by the popularity of selfies and the scale of a whole industry based on it. Apps by

Meitu Inc., a Chinese technology company that makes smartphones and selfie apps, were

downloaded on over 1.1 billion devices worldwide (Williams, 2017)—about 70% of

these apps' monthly active users are within China (Shen, 2018). Faceu, a popular Chinese

beauty selfie camera app launched in 2016, attracted over 250 million users in just one

year and was sold for $300 million in 2018 (Zhao, 2018).

Gender stereotype is defined as "beliefs about the behaviors and characteristics of

each sex" (Martin, Wood, & Little, 1990, p. 1981). Studies have shown gender

differences in profile pictures existed on Facebook (Rose et al., 2012), WeChat (Zheng,

Yuan, Chang, & Wu, 2016), and a chat site for teens (Kapidzic & Herring, 2015). A

content analysis of selfies on Instagram showed that gender stereotypes existed; they

were more stereotypical than magazine advertisements (Döring, Reif, & Poeschl, 2016).

Most of the studies were conducted in Europe or America; in term of platforms,

most of them were done on Facebook or Instagram, both of which are blocked in China.

This is a major shortcoming in the extant literature because gender differences might vary

between cultures.

A "crisis in Chinese masculinity" was observed and heatedly debated in China

(Fifield, 2018; Quek, 2018). While Chinese masculinity in the past was informed by

physical strength (like Kung Fu), many Chinese men now spend much time on grooming

and they are expected to have impeccable skin and hair. Therefore, whether gender

stereotypes found in research by Western scholars exist between Chinese men and

women's selfies calls for more research.

There were studies on Chinese, for example, studies by Zheng et al. (2016) and Guo et al. (2018). However, the samples were accessed from WeChat which has huge privacy restrictions. This leads to the second shortcoming of the existing literature: non-random sampling. Apart from WeChat, Facebook and Instagram both have strict privacy restriction that made random sampling impossible.

To address these two problems, this study aims to investigate gender stereotypes reflected in selfies by Chinese women and men. The samples came from Weibo. Its advanced search function allows retrieval of all the posts hashtaged with #selfie posted in the year of 2018, making random sampling possible.

Goffman's Gender Display in Advertisements

Erving Goffman (1979), in his book *Gender Advertisements*, identified five categories of gender display. The first category is (1) relative size: that men are often depicted as taller than women. The second type is (2) the feminine touch. He argued that women are more likely than men to be pictured "using their fingers and hands to trace the outlines of an object or to cradle it or to caress its surface" (p. 29). Feminine touch is also indicated by self-touching: touching one's own body using fingers or hands. The third category of gender display is (3) function ranking: that men are more likely to be depicted performing executive roles. The fourth is (4) the ritualization of subordination which implies that women are more likely to lower themselves physically. By contrast, men are more likely to hold their body upright and the head high, showing superiority.

Subject to ritualization of subordination, women are more likely to be shown smiling. Goffman (1979) also mentioned that women are more likely to be portrayed lying down, or tilting their head and/or bodies (Döring et al., 2016). The fifth category is (5) licensed withdrawal. Women are more likely to be pictured involved in activities that "remove them psychologically from the social situation" (Goffman, 1979, p. 57). For example, women are more often depicted losing control of their facial expressions or covering their face, especially their mouth.

Based on Goffman's framework, Kang (1997) added another two indicators of gender display: body display and independence (self-assertiveness). Body display measures whether the person wears body-revealing clothes such as mini-skirts, tight skirts, shorts, or "see through" clothes. Independence was added so as to look at the "big picture" (rather than details such as facial expressions and relative size), of the advertisements: whether women were depicted as independent and self-assertive. Her study showed that in terms of licensed withdrawal and body display, magazine advertisements in the year of 1991 were more gender stereotypical than those in 1979, the year of Goffman's theorization of gender display.

Goffman's gender display was mostly used in research on print advertisements (Smith and Sanderson, 2015). Only a few studies applied this theory to selfie studies. Of special note is the study by Döring et al. (2016). Their results showed that selfies on Instagram were not only demonstrated gender display; they were also more gender stereotypical than magazine advertisements.

So far, little research exists that examines gender stereotypes in Chinese people's selfies. Considering the alleged crisis in masculinity for Chinese men, the following research questions, based on the studies by Goffman (1979), Kang (1997), and Döring et al. (2016), were raised:

RQ₁: Did Chinese women show more *feminine touch* in selfies than Chinese men?

RQ₂: Did Chinese women show more *gaze aversion* in selfies than Chinese men?

RQ₃: Did Chinese women show a higher degree of *body display* in selfies than Chinese men?

Cuteness

Cuteness has been studied as "Japanese kawaii, South Korean aegyo, and Taiwanese and mainland Chinese sajiao" (Abidin, 2016, p. 33-4). Aside from sajiao, *meng* is also associates with cuteness (de Seta, 2013). Cuteness can both be enacted verbally (*fadie* or *wawayin*, in Chinese) and through non-verbal characteristics (Yueh, 2013; Abidin, 2016). Showing cuteness creates a "tiny, childlike, and controllable" (Yueh, 2013, p. 168). Abidin (2016) distinguished three types of cuteness based on her study of Internet influencers in Singapore: the doll (sexual delight), the darling (vulnerability, smallness, and dependency), and the dear (extravagant lifestyle).

Cuteness is gender stereotypical, at least in Asian context, because it is descried as girlish (Qiu, 2012) and womanhood (Yueh, 2013). It is a feminine strategy that women deploy to seek gains from men who are masculine, strong and protective (Abidin, 2016).

Based on the above literature, a hypothesis was proposed:

H_1: Chinese women showed a higher degree of *cuteness* in selfies than Chinese men.

Number of Selfies Included in Each Post

Little research has done on gender differences in the number of selfies published in each post. Guo et al. (2018) studied the number of selfies posted in Chinese WeChat friend's circle and found no significant gender difference. This result is inconsistent with that by Sorokowski et al. (2015) who showed that women published significantly more selfies on Facebook than men did.

It should be noted, however, that the number of selfies imbedded in each post is different from the total number of selfies posted. Considering the scarcity of related studies, the fourth research questions was formulated as follows:

RQ_4: Did Chinese women include a larger number of selfies in each Weibo post than Chinese men?

Face-ism

Another form of gender stereotyping in media is face-ism (Smith & Cooley, 2012). Research in face-ism was initiated by Archer, Iritani, Kimes and Brrios (1983). They found that there existed a greater facial prominence in depictions of men than women: depictions of men focused on their faces whereas depictions of women featured their bodies. This gender difference in facial prominence, or "face-ism", was found not only in the United States, but also in 11 cultures, including Hong Kong. A possible

explanation offered by Archer et al. (1983) was that men are valued for their intellect and

personality which are related to face characteristics, whereas women are important for

their physical attractiveness which is more relevant to their bodies (Dodd, Harcar, Foerch,

& Anderson, 1989). This type of gender stereotype was also found in prime time

entertainment television programs (Copeland, 1989), and Internet pictures of university

professors and parliament members in Germany (Szillis & Stahlberg, 2007). However, it

did not emerge in LGBT magazines (Cheek, 2016).

Face-ism also differed based on professional status or social roles (Read, Pavelko,

& Hwang, 2017). Dodd et al. (1989) investigated face-ism by studying cover photos of

Time and *Newsweek*. While their results corroborated the findings of Archer et al. (1983),

they found that controlling for *social roles*, gender differences in face-ism were minimal.

However, this finding was not supported by Matthews (2007), who, after investigating

face-ism in six US magazines, concluded that for intellectually focused roles, men still

had higher face-ism than women in similar occupations.

Face-ism stereotype was found to exist in self-created pictures, for examples,

online profile photos and selfies. Sczesny and Kaufmann (2018) found that when asked to

prepare a photo of themselves for profiles on career-related social media, men were more

likely to crop the picture, creating more facial prominence. Babič, Ropert and Musil

(2018) examined 2754 Instagram selfies by people from six cities worldwide: Bangkok,

Berlin, London, Moscow, New York and Sao Paolo. Overall, men still had greater facial

prominence then women. However, in selfies from Moscow, Bangkok and New York, this

gender difference in face-ism was not fount.

Notably, Huang and Park (2012) examined face-ism among Facebook users in Taiwan and the United States. After studying participants digital profile photos, they concluded that while men tended to have greater facial dominance than women in both cultures, the difference was not significant in either culture.

It is unclear, as least based on the above literature, whether face-ism bias exists in Chinese selfies. To make this guessing more complicated, Asian woman have their own unique beauty standards (Yan & Bissell, 2014). While Western women emphasize *weight* and *shape*, Asian women stress their *face*, *hair* and *skin* features more (Wu & Lang, 2018; Frederick, Kelly, Latner, Sandhu, Tsong, 2016; Kawamura, 2012; Staley & Zhan, 2011; Firth, Shaw & Cheng, 2005). For example, the most popular cosmetic procedures among Chinese women are about their faces—double eyelid, size and shape of face and eyes, height of nose, and shape of jawbone—rather than their bodies (Jackson & Chen, 2015; Luo, 2012; Wen, 2009). Since people tend to present idealized versions of themselves on selfies (Ma, Yang & Wilson, 2017), Chinese women are likely to focus on their faces, rather than their bodies, in their selfies, leading to a relatively higher degree of facial prominence. Based on the above literature, the fifth research question was formulated as follows:

RQ$_5$: Did Chinese men's selfies display greater *facial prominence* than selfies of Chinese women?

Methods

Data Collection

The author obtained IRB approval for the present study. All Weibo posts, in total 8,866 posts with 33,074 images, hashtaged with #selfie ("#自拍#" in Chinese) shared in the year of 2018 were accessed from Weibo.com. A random sample of 200 selfies of Chinees women and 200 selfies portraying Chinese men were analyzed (N = 400). Weibo (China's equivalent to Twitter which was blocked in China) was chosen as the source of samples. Although WeChat is a more popular platform for Chinese people to share selfies, random sampling on it was impossible since WeChat posts are private. By contrast, posts on Weibo are public (unless the account holder intentionally made it private).

The study was about selfies posted by Chinese nationals in the year of 2018. Therefore, posts shared on Weibo.com from 00:01 on December 31, 2017 to 23:59 on January 1, 2019 were included. Coordinated Universal Time (CUT) was employed since Chinese Weibo users can be found everywhere in the world. Residents from Hong Kong, Macau, and Taiwan were not included in this study.

"#Selfie" was chosen as the keyword for searching. Weibo search has 50-page limit—for each search, only 50 pages were retrieved with each page containing 20 posts. To overcome this barrier, Weibo's advanced search was employed. On the interface of advanced search, it is easy to set "post type", "post inclusion", "time" and "location". The above mentioned time period (after being transformed to corresponding Beijing Time) and keyword were chosen.

In terms of "Post Type", only "Original" posts were included. In an "unoriginal" post, the selfie was not about the account holder—he or she just retweeted others' posts. Retweeted posts were excluded for two reasons: (a) it might be originally posted before the year of 2018, (b) if it was posted in 2018, and it was included, then it is more likely to be chosen than original posts which only appear once in the whole dataset. For "Elements", only posts containing images were chosen. The "Location" option was left blank since Chinese nationals can be found every corner around the globe.

Again, the Advanced Search has 50-page limit too. Fortunately, by narrowing the time period, this barrier was overcome. For example, rather than choosing the whole year of 2018, I chose "from January 1, 2018 to January 15, 2018". If the results showed fewer than 50 pages, it means that all the posts hashtaged with #selfie in this chosen time period were shown. However, if more than 50 pages were shown, it means that some posts were not included in the results. In this case, I narrowed the time period by half, say, "from January, 1, 2018 to January 7, 2018". The process went on and on. This procedure was made possible by Java programming. Relevant data of each post, i.e., its post ID, time when it was posted, texts, links to every picture, user name of the account holder, and the link to the profile page of the account holder, was stored in a Microsoft Excel file. In total, 8,867 posts were retrieved.

Data Selection

First, a random number was assigned to each post. Then these random numbers were ranked and the first coder (the author) selected images from top to bottom. This

made sure that every post in the file had equal chance to be chosen. 200 selfies of

Chinese women and 200 selfies of Chinese men were collected.

For both men and women, only selfies meeting the following requirements were

selected:

(a) had only one person;

(b) did not expose genital, nor nipples (for women);

(c) included body parts other just limbs;

(d) taken within one's arms reach (not by others or by a camera timer; selfies

taken by a selfie stick was included);

(e) the selfie taker and the account holder were the same person (for example, if a

celebrity's selfie was posted by others, this was excluded);

(f) the account holder was over 13 years old;

(g) shared by Chinese nationals (excluding people from Hong Kong, Macau, and

Taiwan; selfies by mixed-race users were also excluded);

(h) for each user, only one selfie of him/her was collected;

(i) in each post, only the first selfie was collected;

(j) it is a still image;

(k) it contains body parts other than just hands or feet.

This study excluded selfies depicting more than one person because (a) it was

impossible to tell who took the selfie; and (b) even if we could tell who the selfie-taker

was, the other person might have influenced the way the selfie was taken. Sexually

sensitive selfies (it was extremely rare because censorship on Weibo concerning sexual explicitness was extremely strict) were excluded because this might have been be a mistake by Weibo staff. If this was included, it would be unfair for those that were "successfully" censored. Selfies not taken within one's arm's reach were excluded because it is hard to tell whether the selfie taker and the person that the selfie was about was the same.

200 selfies of Chinese women and 200 selfies of Chinese men were prepared by the first coder (the author). Gender was decided based on users self-select when setting up their account. Specifically, in each user's profile, there is a column called "her album" or "his album". For each gender, selfie collection stopped when 200 selfies had been downloaded.

Nationality was also based on users self-select. For example, the profile might indicate that s/he was from Korea, Malaysia, Taiwan, or Hong Kong. Sometimes, the text imbedded in the post would show that the user was Korean or Japanese. As stated above, only selfies by mainland Chinese nationals were included in the study. Most Weibo users did not specify their nationality because the majority of them were mainland Chinese. Therefore, users not indicating their nationality and looking like an East Asian were included.

Coding Procedure

Three coders, two Chinese men and one Chinese woman, participated in the study. Coder 1 was the author of the paper. Except for face-ism which was measured by

coder 1 and coder 3, all other variables were measured by coder 1 and coder 2. Coders

went through more than 20 hours of training. The first 100 randomly selected selfies were

used for training. A 5-page codebook made by the author containing all the following

variables, explanations, and concrete examples were used in coding. Aside from the

following variables, the original codebook also included "posture", "head/body canting",

"smiling" and "vertical camera angle", informed by Goffman's (1979) gender display.

However, the two coders (1, and 2) could not reach desired intercoder reliability (ICR)

after multiple trials. These four variables thus were dropped off the codebook; only

variables for which acceptable intercoder reliability (Krippendorff's α = .80) was reached

were studied. Of special note is cuteness whose ICR was .74. Given that human facial

expressions and actions were very difficult to interpret, .74 was acceptable in this regard

and thus remained in the codebook. Intercoder reliability for face-ism was calculated by

Pearson's *r*. Krippendorff's Alpha was used to calculated intercoder reliability for all

other variables.

49 selfies were used to test the ICR of "gender", "feminine touch", "body

display", "gaze aversion" and "cuteness". Once desirable ICR was reached, coder 1 and

coder 2 split the remaining 351 selfies. Data of the 49 selfies used for ICR testing was

included in data analysis after the disagreements were settled by the two coders. For face-

ism, 50 selfies were used. After desirable reliability was obtained, coder 1 coded 250

selfies, and coder 3 coded 100 selfies.

Measurements

Gender. Although the selfies were prepared by the first coder, gender information of each selfie was absent. Gender was treated as a dichotomous variable. Each selfie was coded as either "woman" or "man" (Krippendorff's α = 1.0).

Gender is the independent variable in the present study. The first coder coded this variable for all the 400 selfies before testing intercoder reliability. As can be seen above, there was no disagreement in the 49 selfies used for reliability testing. If disagreements occurred in the following separate coding between coder 2 and 1, they were settled by looking at the user's profile.

Feminine touch. This is a binary variable. It measured whether the person in the selfie engaged in self-touching. If his or her hand(s) touched (a) any area of the body: head, hair, chin, mouth, etc., or the (b) clothes, feminine touch was present. The selfie was coded as either "feminine touch present" or "feminine touch not present" (Krippendorff's α = 0.8).

Body display. For women, if the person was wearing clothes (or nothing) that exposed her cleavage, midriff, buttock, and/or large part of her thighs, then the selfie was coded as "Sparse clothing". Otherwise, it was coded as "Complete clothing". For men, if he was wearing clothes (or nothing) that exposed his chest, stomach, and/or buttock, then the selfie was coded as "Sparse clothing". Otherwise, it was coded as "Complete clothing" (Krippendorff's α = 1).

Gaze aversion. Originally, gaze aversion was coded on four levels. For a selfie in which (a) either eye was not depicted; (b) the person blocked both eyes with hands, mask,

phone, sunglasses, selfie stickers, etc.; (c) the person closed both eyes, it was coded as

"not looking at the camera", i.e., the person was avoiding the camera. If the person was

looking at her/his own image in the screen but not looking in the camera, then the selfie

was coded as "looking at the screen". If the coder could make eye contact with the

person, the selfie was coded as "looking into the camera".

Mirror selfies were complicated here since eye contact was reflected by the

mirror. To make things more complicated, if the person was looking at her/his own image

on the screen, sometimes either eyes were not visible since they are both blocked by the

phone. Considering that some people did not block their eyes with their phone in a mirror

selfie, both coders concluded that blocking eyes with phone was intentional even in a

mirror selfie. Based on this, a mirror selfie in which both eyes were blocked was also

coded as "not looking at the camera". A mirror selfie in which at least one eye is visible

and open was coded as "Not applicable" since we could not tell the direction in which the

person was looking at in this case. These cases were not included in the data analysis.

Krippendorff's Alpha for this variable was lower than .70. However, after

revisiting Goffman's (1979) conceptualization, it was concluded that it was unnecessary

to distinguish between "looking at the screen" and "looking into the camera". Goffman

(1979) considered gaze aversion as a representation of licensed withdrawal. Gaze

aversion was present if "the individual can withdraw his gaze from the scene at large …

and lock it in such a way as to give the impression of having only minor dissociated

concern with what is thus seen…" (p. 64). Therefore, either "looking at the screen" or

"looking into the camera", the person was not engaged in gaze aversion.

The author recoded "looking at the screen" and "looking into the camera" into "looking at the camera", the opposite of "not looking at the camera". Intercoder reliability was checked again, and this time, Krippendorff's α reached 1. Since the codebook could not be changed once intercoder reliability was tested, coders coded the selfies according to the codebook, i.e., gaze aversion was coded at four levels. In final data analysis, however, the author, as discussed above, combined "looking at the screen" and "looking into the camera" into one category: "looking at the camera".

Cuteness. Cuteness is comprised of cute facial expressions, cute acts, and cute selfie stickers. Cute facial expressions included: (a) duck face (kissing pout); (b) sticking out tongue; (c) closing one or both eyes; (d) pressed lips; and (f) raised eyebrows. Cute acts include: (a) "V" hand gesture; (b) finger heart gesture; (c) making a circle or heart (either a full heart or half) using thumb and index finger; (d) covering mouth with cute objects; (e) covering one or two eyes with body parts and/or cute objects. Selfie stickers are defined as images generated by selfie apps to make the person appear cute. They were distinguished from filters. Although some texts were cute too, text alone was not considered as example of cuteness as its interpretation was much more subjective than cute graphs.

Coding of cuteness has seven levels: "no cuteness present" (0 point); "Only cute facial expressions" (1 point); "Only cute acts" (1 point); "Only cute acts" (1 point); "Both cute facial expressions and cute acts" (2 points); "Selfie sticker and one of the two: cute

facial expressions and cute acts" (2 points); and "All three" (3 points). Krippendorff's α

for cuteness was .74.

Face-ism. Following Archer et al. (1983), face-ism, or facial prominence, was

determined by the lengths of two vertical lines. The distance between the top of the head

to the lowest point of the chin was the numerator and the distance between the top of the

head to the lowest visible part of the person was the denominator.

Due to the complexity of selfies, additional rules were also made for the

measurement of face-ism:

(a)   When the body axis was not perpendicular the horizontal line, the picture

was rotated until it was upright;

(b)   If the head/face was partially visible with the bottom of the visible body

being above the chin, face-ism was coded as 1;

(c)   If the head/face was partially visible with the bottom of the visible body

being below the chin, but the chin was invisible (either not in the picture or blocked by

body parts, clothes or any other objects), the location of the chin was guessed by the

coders;

(d)   If in the picture, apart from the head, only arms were shown, face-ism was

coded as 1.

Face-ism was measured in Microsoft Excel. After importing photographs into

Excel, the coders, as instructed above, first rotated the body axis so that it became

vertical. The vertical line was decided based on the information in the selfie, for example,

a wall, buildings, a closet, etc. After tilting the picture, a rectangular was drawn to calculate the distance (a) from top of the head to bottom of chin and (b) from top of head to bottom of the visible body in the picture. Face-ism = a/b. Following Cheek (2016), reliability of face-ism index measurement was calculated by Pearson's r. Two coders measured face-ism scores of the same 50 selfies. In line with previous research on face-ism, there was a strong correlation between judgements made by the two coders, $r = .97$, $p < .001$.

Results

RQ1 asked whether Chinese women's selfies show more feminine touch than those of men. To answer this question, a chi-square test of independence was performed. The test showed that the association between gender and feminine touch was significant, X^2 (1, $N = 400$) $= 11.04$, $p = .001$. Chinese women show more feminine touch in their selfies than Chinese men did. See Table 1.

RQ2 asked whether Chinese women show more gaze aversion in their selfies. A chi-square test of independence was conducted to answer this question. The relation between gender and the likelihood to avoid camera was not significant, X^2 (1, $N = 363$) $= .15$, $p = .70$. The results showed no significant differences in the frequencies of gaze aversion between selfies of Chinese women and men. See Table 1.

To answer RQ3—whether Chinese women's selfies had a higher degree of body display than Chinese men—a chi-square test of independence was run. The association between gender and the degree of body display was not significant, X^2 (1, $N = 399$) $= .04$,

$p = .84$. Therefore, selfies of Chinese women have almost the same level of the body

display than those of Chinese men. See Table 1.

Table 1

Feminine touch, body display and gaze aversion for Chinese female and male selfies

	Female (n = 200)		Male (n = 200)		
	Total	% of total	Total	% of total	X^2
Feminine touch					11.04 **
Present	72	36.0	42	21.0	
Not present	128	64.0	158	79.0	
Body display					.04
Sparse clothing	11	5.5	12	6.0	
Complete clothing	188	94.5	188	94.0	
Gaze aversion					.15
Looking at the camera	154	81.5	139	79.9	
Not looking at the camera	35	18.5	35	20.1	

X^2 = chi-square value: ** $p < .01$.

Hypothesis 1 stated that Chinese women's selfies show more cuteness than selfies of Chinese men. In order to examine differences in the level of cuteness shown in Chinese female and male selfies, an independent samples t-test was conducted. Given a violation of Levene's test for homogeneity of variances, $F(1, 398) = 16.40$, $p < .001$, a t-test not assuming homogeneous variance was calculated. This test was found to be statistically significant, $t(373.97) = 3.39$, $p = .001$, $d = .34$. This result indicated that Chinese women ($M = .66$, $SD = .79$) show a higher level of cuteness than Chinese men ($M = .42$, $SD = .61$). See Table 2. Hypothesis 1 was supported.

Considering that for both genders, cuteness scores were highly skewed to the right, Mann-Whitney Test (2 independent samples) was also conducted to test hypothesis 1. The test indicated that selfies by Chinese women ($Mdn = .00$) showed a higher level of cuteness than those by Chinese men ($Mdn = .00$), $U = 16941.50$, $p = .003$, $r = .15$. Hypothesis 1 was also supported by Mann-Whitney test.

RQ4 asked whether Chinese women imbedded more selfies in each post than Chinese men. An independent samples t-test was conducted to address this research question. Given a violation of Levene's test for homogeneity of variances, $F(1, 398) = 21.18$, $p < .001$, a t-test not assuming homogeneous variance was calculated. This test was found to be statistically significant, $t(374.17) = 4.60$, $p < .001$, $d = .46$. The test showed that Chinese women ($M = 3.27$, $SD = 2.54$) imbedded more selfies in each Weibo post than Chinese men ($M = 2.22$, $SD = 1.96$). See Table 2.

Table 2

Cuteness, number of selfies in each post, and face-ism for Chinese female and male

selfies

	Female (n = 200)		Male (n = 200)		
	Mean	SD	Mean	SD	t-value
Cuteness	.66	.79	.42	.61	3.39**
Number of selfies in each post	3.27	2.54	2.22	1.96	4.60***
Face-ism	.54	.17	.52	.20	1.23

t-value: **$p < .01$; ***$p < .001$.

Considering that the number of selfies per Weibo post for both genders was highly

skewed to the right, Mann-Whitney Test (2 independent samples) was also conducted to

address RQ4. The test indicated that selfies by Chinese women (*Mdn* = 2.00) showed a

higher level of cuteness than those by Chinese men (*Mdn* = 1.00), *U* = 14816.00, *p*

< .001, *r* = .24. Therefore, the results of Mann-Whitney test also indicated that Chinese

women included significantly more selfies in each Weibo posts than Chinese men.

RQ5 asked whether Chinese men's selfies how greater facial prominence than

those by Chinese women. To answer this question, an independent samples *t*-test was

conducted. Given a violation of Levene's test for homogeneity of variances, *F* (1, 398) =

5.33, *p* < .05, a *t*-test not assuming homogeneous variance was calculated. The test was

not found to be significant, t (389.04) = 1.23, p = .22, d = .12. The results indicated that

there were not statistically significant differences in face-ism between selfies of Chinese

men (M = .52, SD = .20) and those of Chinese women (M = .54, SD = .17). See Table 2.

Discussion

The present study examined whether Chinese women and men's selfies posted on

Weibo exhibited gender stereotypes. The results showed that many of the gender

stereotypes found in non-Chinese samples did not exist in Chinese selfies.

Among gender stereotypes proposed by Goffman (1979), only the stereotype of

feminine touch was found in Chinese selfies. No significant differences in the frequency

of *gaze aversion* and the degree of *body display* were found. Goffman's theorization was

based on his analysis in 1970s of printed advertisements. However, studies have found

that gender stereotypes observed by Goffman also existed in people's online self-

presentation on Instagram (Döring et al., 2016; Smith & Sanderson, 2015). Thus, the

findings of this study called the applicability of Goffman's theory of gender display to

Chinese people.

Specifically, only 5.5 % of women's selfies showed sparse clothing (exposing

cleavage, midriff, buttock or thigh), lower than that of Chinese men's selfies (6.0 %).

This, however, might not have been due to strict censorship on Weibo. A search for

"#sexy women" on Weibo retrieves loads of sexualized images most of which would

have been categorized as showing "sparse clothing". This indicated that although beauty

standards for Chinese women had Westernized (Luo, Parish, Laumann, 2005), Chinese

women are conservative in dressing.

The findings also showed that on average Chinese women included significantly more selfies (3.27) in each Weibo post than Chinese men (2.22). This is consistent with the findings that women are more active in selfie related behaviors (Dhir, Pallesen, Torshein, & Andreassen, 2016). This is also consistent with the finding that women are more active in using photos for impression management (McAndrew & Jeong, 2012).

Although face-ism bias between genders was found to exist cross-culturally (Babič et al., 2018; Smith and Cooley, 2015), this type of gender bias was not found in Chinese selfies. This finding has two important implications. First, Dodd et al. (1989) argued that intellect which was related to face was valued by men and physical attractiveness which was related to their bodies was paid more attention to by women. The present study, however, suggested that this difference might not exist for Chinese men and women. It might have been the case that physical attractiveness is increasingly valued by Chinese men. Average face-ism for Chinese men in this study was .52, lower than that of men in all six countries reported by Babič et al., (2018)—Thailand (.68), Germany (.67), UK (.58), Russia (.58), USA (.62), and Brazil (.58).

The implication is about the importance of face for Chinese women. Scholars have consistently shown that while Western women focus on their bodies, Asian women pay more attention to their facial features (Frederick et al., 2016; Firth et al., 2005). Although face-ism for Chinese women ($M = .54$) was higher than that of Chinese men, the difference was not significant. In addition, face-ism shown in Chinese women's

selfies was lower than that of women in all the above listed countries except for the UK (.53). This meant that beauty ideals for Chinese women might have been changing, from "ideal face, skin and hair" to "ideal body".

Cuteness was shown popular among East Asian women (Abidin, 2016). Few studied have explored gender differences in cuteness shown in online presentation. The results of this study indicated that Chinese women shown a higher degree of cuteness in their selfies than Chinese men, supporting the claim that cuteness was more frequently employed by women (Yueh, 2013).

In summary, two important findings emerged from the present study. First, many of the gender stereotypes found in Western samples of online self-presentation, i.e., Goffman's (1979) gender display, Kang's (1997) body display, and facial prominence, were not found in Chinese selfies. Second, significant differences in cuteness, which was popular among East Asian women, was found between selfies of Chinese women and men.

Limitation

The study managed to conduct random sampling of selfies on Weibo, which was rarely done in previous studies. However, it was not without its limitations. First, in Chinese context, WeChat, rather than Weibo, is the place where most people share their selfies. Most selfies on Weibo did not even generate any likes or comments. Also, selfies on Weibo were dominated by women. In the database of the present study, 200 selfies of Chinese women were found in the first 500 posts; in contrast, the same number of selfies

for Chinese men were selected in the first 4000 posts. Therefore, although random sampling was made possible, samples could not have been representative of all Chinese men, considering a small number of selfies identified.

Another limitation was that not all selfies were hashtaged with "#selfie". Selfies without this hashtag were then ignored. Also, selfies posted by Weibo users who set their account as private were not accessed neither.

Finally, the study failed to operationalize "posture", "head/body canting", and "smiling", which were theorized by Goffman (1979) and studied by Döring et al. (2016). This made it difficult to investigate the applicability of Goffman's theory and make comparisons with studies done in Western samples.

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