# PERCEIVED IMPACT OF IDEAL THIN MODELS IN TV ADVERTISEMENT AND BEHAVIORAL INTENTION: A CASE STUDY OF CHINA NATIONAL UNDERGRADUATE STUDENTS IN MALAYSIA

# Ruolan Deng

University of Vienna, Austria a11948895@unet.unive.ac.at

# **ABSTRACT**

Globally, the influx of Western mass media in non-Western societies has coexisted with the beauty standard of the thin ideal. Therefore, body-image disturbance becomes an emerging issue in Chinese culture as well. Using surveys, this research investigated the perceptual discrepancy between the perceived impact of idealized thin models on self and on others according to the third-person effect theory among mainland Chinese overseas undergraduate female students in Malaysia. It found that respondents perceived that the thin models in TV advertisements exerted a greater impact on others than on themselves. The role of social difference and gender was demonstrated in determining the size of the perceptual gap. This perceptual gap could lead to dieting, excessive exercising, and the likelihood of liposuction undertaking as well as body dissatisfaction. Theoretically, it expands third-person effect theory in body image field in mainland China context. It also gives practical implications to solve body image disturbance among Chinese females.

Keywords: third-person effect, thin female models, China National Undergraduate Students, body dissatisfaction, gender, Malaysia

# INTRODUCTION

Researchers, marketers, and social scientists have reached a consensus that TV advertisements not only exert influence on product evaluation but also on audiences' beliefs, values, attitudes, and behaviors (Read, van Driel, & Potter, 2018). When they are exposed to the media content which uses the same type of portrayal repeatedly, they will believe that is the normal standard of reality in society. Thus, TV advertisements have been widely criticized for promoting standards of beauty which are dangerously thin by repeated exposure of ideally thin models (Sandhu, 2018).

In the commercials, the ideal of thinness is continually emphasized as the beauty standard through progressively thinner female models in the past few decades (Sandhu,

2018) where "women are generally portrayed as beautiful, thin, young, and decorative". For particular concern, contemporary female models are already much thinner than most average women but advertisers still apply digital alteration technologies to reduce body size (Paraskeva, Lewis-Smith, & Diedrichs, 2017). However, the promoted level of thinness like the models in ads is not something most women possess, nor something they can achieve even with maximum effort (Paraskeva et al., 2017).

The foremost aim of advertisement is to persuade audiences to like and consume their products and internationally, the advertisement is now considered as one of the key factors for the success of any business (Dutt, Zaheer, & Salim, 2017). Unintentionally instilling a sense of inadequacy upon women's self-concepts is the most often used way to achieve this on female consumers (Hsu, 2018). For example, studies have shown that advertising plays an important part in creating and promoting ideal thinness which most average women lack (Barcaccia et al., 2017; Perloff, 2014; Tiggemann, Slater, & Smyth, 2014).

From another aspect, consumers also positively evaluate a product if the advertisements present young and thin female models (Kim & Sohn, 2016). It means that consumers are more likely to purchase if the ads adhere to the social standard of beauty interacted with the model's body size. Marketers also assume that idealized thin models are perceived as more credible because they reach the standard of beauty in society (Sandhu, 2017). Due to the perception that thin models help to sell products, it is reasonable that advertisers will prefer using thin models and even transform models to perfectionism by digital enhancement.

Failure to achieve this ideal of thinness may result in body dissatisfaction and even eating disorders as well as unhealthy weight control behaviors (Mayer-Brown et al., 2016). Researchers asserted that TV advertisements which has been entrenched with ideal thin female models should be blamed for the negative consequences of deducted self-esteem, increased depression, body dissatisfaction, disordered eating, and other unhealthy weight control behaviors (Boyce & Kuijer, 2014; Bruns & Carter, 2015; Pounders, Rice, & Mabry-Flynn, 2017). The impacts of thin models on women have been validated across a number of research in Western countries (Frederick et al, 2016; Tiggemann, Slater, & Smyth, 2014).

Globally, the influx of Western mass media in non-Western societies has coexisted with beauty standard of the thin ideal (Noh, Kwon, Yang, Cheon et al., 2018; Shagar, Donovan, Loxton, Boddy et al., 2019). For example, Malaysian Chinese, Australian women have shown body dissatisfaction and desires for ideal thinness (Shagar et al., 2019). The body-image disturbance is not limited or bound in Western cultures any more, but becomes an emerging issue in "Eastern" cultures as well (Bernardo & Liu, 2018). Similarly, in Asian cultures, eating disorders and body dissatisfaction become pervasive and common. In East Asian countries, nearly all females reported a high level of fear toward fatness (Noh et al., 2018).

More recently, China is increasingly opulent with rapid economic development. Meanwhile, the influence of Western culture is also rising (Qi & Cui, 2018). Westernization penetrates Chinese society from all aspects. The promotion of beauty standard of thin ideal is perceived as the main cause of eating disorders and desire for thinness in China (Yan, et al., 2018). This can be evidenced by the study which showed that the college females in mainland China were also pre-occupied with weight, dissatisfied with their body, and engaged with disordered eating (Tong et al., 2014).

Since the reform and opening up the economy, China has gradually entered into the information age. Due to the continuous improvement of family conditions, every household

has a television. With the development of economy and technology, Chinese TV advertising has developed rapidly as well in terms of the total number of TV commercials and the quality of TV commercials (Chen & Wang, 2014). Because of its feature to combine voices and moving images, TV commercials become an important and popular market sources for advertisers in China (Shi, 2017). In 2018, the market size of television advertising in China reached over 20 Billion US dollars (Statista, 2021). Due to the fact that all satellite TV stations are supported and supervised by Chinese government, TV media received a stable perceived credibility and TV advertising was more prevalent and persuasive to the mass public (Chen & Wang, 2014). Xu (2018) found that college students are also fully exposed to and influenced deeply by television advertising and that among all types of advertisements, TV advertisement has the greatest impact on college students.

It has become a common practice for advertisers to apply ideal thin models and people also expect to see ideal thin models in commercials because thin female models are considered as idealized beauty (Liu, 2016; Liu & Li, 2017; Mao, 2018). The analysis studies of TV commercials in China, across advertising types, advertised products, and satellite channels, have reached a consensus that the female models have the characteristic to be young and ideal thin, which is considered as sexy and beautiful to watch (Mao, 2018; Shao, Desmarais, & KayWeaver, 2014; Shuang, 2019). With a deep root in partratic history, Chinese culture still view women as the object to be "watched" by men (Liu, 2016; Liu & Li, 2017; Suang, 2019).

The frequent exposure to unrealistic ideal thin models in TV advertising led to the internalization of unrealistic thin ideal and the wrong perceptions and desires for the ideal thin. For example, a study found that 72.7% of Chinese students perceived themselves as too fat But in fact, only 5.3% of them were objectively overweight with BMI ≥ 230 (Ro & Hyun, 2012). The exposure to TV advertisements which was dominated by the image of thin ideal was also highly correlated with the eating disorders and other unhealthy weight control behaviors (Qi & Cui, 2018; Yan et al., 2018). A study conducted on Taiwanese adolescents reported that they were exposed to thin-ideal images in TV advertising very often, which contributed to negative body weight related consequences like eating disorders and body dissatisfaction (Chang et al., 2013). In Hong Kong, the pervasive ideal thinness in TV advertising had been found to be linked with low self-esteem, depression, weight anxiety, and body dissatisfaction (Lai et al., 2013). The similar phenomenon has also been validated in mainland China. The study reported that the exposure to TV advertisements which was dominated by ideal thinness was highly correlated with the eating disorders and other unhealthy weight control behaviors (Yan et al., 2018).

But before the economy open up and the influx of Western culture, Chinese traditional culture favored more on fuller body figures as the beauty ideal of females, which symbolised health, wealth, higher social hierarchy, and fertility (Han, 2003; Jung, 2018; Jung & Lee, 2006). Traditionally, Eats Asian body ideals have included round faces and mildly plump bodies, but the emphasis of female beauty is more on facial features than body shapes and sizes. According to the analysis of traditional Chinese art (Lee & Lee, 2000), this is believed to protect females from the desire of an unrealistic thin ideal and the negative feelings if being unable to achieve that ideal thin.

The mechanism of these negative impact of ideal thin models has been explored using social comparison theory (Chen, Gao, & Jackson, 2017), thinness internalization theory (Klaczynski & Felmban, 2019), and self-objectification theory (Teng, et al., 2017) in mainland China. However, the mechanism of how these models exert influence on audiences from the

third-person effect is understudied in mainland China. How female undergraduate students from mainland China perceive others and themselves being subject to these effects and the potential consequences of users' perception has not been fully studied.

Drawing from the third-person effect theory, this study explored the discrepancy between how individuals perceive the effect of thin models on themselves and how they anticipate the effect on others. Furthermore, the role of social distances and gender to differentiate the subcategories of others was explored in determining the size of perceptual gap between the perceived impact on self and on different specific others. And whether this perceptual gap of general others has certain behavioral consequences (unhealthy dieting, excessive exercising, and the likelihood of liposuction undertaking) or negative feeling consequence (body dissatisfaction) were tested, based on the presumptions of the third person effect theory.

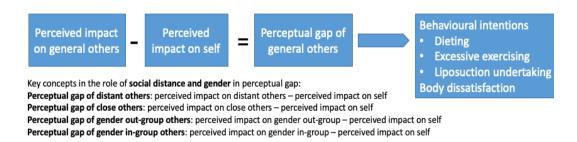


Figure 1: Research Framework

#### LITERATURE REVIEW

In view of the analysis of traditional Chinese arts, researchers found that before the influx of Western culture, Chinese culture tended to appreciate fuller body as the ideal body figures which is associated with "beauty, wealth, and higher social hierarchy" (Wang, Liang, Ma, Chen et al., 2018). However, the culture of ideal body figure has gone through striking changes in the past 40 years (Wang et al., 2018). In tandem with the modernization process, the Western culture involving the ideal of thinness permeates through Chinese society step by step. The ideal of thinness has become dominant in modern culture as the symbol of femininity and it is "heavily promoted in China's beauty industry and media" (Hua, 2013, p. 82). Under this backdrop, females' body has been objectified under scrutiny and the discrepancy between the actual body and the ideal of thinness leads to behavioral changes.

Indeed, Chinese females who internalize the beauty standard of thinness are likely to attempt "disordered eating and body dissatisfaction" (Jackson & Chen, 2015; Jackson, Zheng, & Chen, 2016). This can be evidenced by the body size misperception and identified as a prevalent problem in mainland China. For example, a study by Ro and Hyun (2012) revealed that the majority of Chinese middle-school students perceived themselves as too fat, even though only a few of them were objectively overweight. Luo, Parish, and Lauman (2005) implied that "the nation's opening to the West also embraced mass media and commercials that diffused new sexual attractiveness ideals including ideal thinness and increased body dissatisfaction levels".

# THEORETICAL FRAMEWORK

The third-person effect is an important theory in communication research articulated by Davison (1983). It consists of perceptual and behavior element. In Davison's definition, the audiences have a potential to perceive that the negative media message will influence others (third person) more than me (first person). In other words, if the media message is anticipated to be able to evoke negative effect, the individuals will project others to be more effected than themselves, which is called third-person perception. And this perception could exert influence on themselves to evoke related behavior.

Applied in the field of body size, the third-person effect implies that the exposure to ideal thin models arouses individuals to anticipate that others will adopt this image to judge women's (both themselves and others) body. Previous research has consistently shown that young women will project the effect of thin-ideal models is greater on others than on themselves, which exists in both western and eastern culture (Chia, 2007; Chia, 2009; Wan, 2002; Wan, Faber & Fung, 2003).

The behavior element of third-person effect explained that the negative media messages impose effect on individuals through their anticipation of other people's responses to media rather than their direct exposure to media (Davison, 1983). This theory implies the two-step mechanism of how negative media messages effected audiences. The individuals still tend to conform to the standards set by the media because they believe that others are influenced by this beauty standard. Engaging in these behaviors to achieve ideal thinness like the models could bring social rewards such as the popularity among peers or more affectations from romantic partners (Xie, 2016; Xie & Johnson, 2015).

The common behaviors include pre-occupation of ideal thinness, eating disorders, extreme dieting, liposuction, excessive exercise, and other weight loss methods (Chia, 2009; Wan et al., 2003). Mostly, undertaking these behaviors would harm people's health status, both physically and mentally (Mayer-Brown et al., 2016).

Previous research results have shown that different categorizations of "others" can impact the size of the third-person perceptual gap. The study found that social distance is one of the factors which can influence the perceptual gap (Corbu, Oprea, Negrea-Busuioc, & Radu, 2020; Liu & Huang, 2020; Ştefăniță, Corbu, & Buturoiu, 2018). They found that the perceptual gap of the negative impact of media message is smaller between closer others than more distant others and self. In other words, people had a tendency to predict a greater impact of media message on those who were socially distant from themselves than those who were close to themselves like friends and family.

Similarly, some studies also defined the social distance of others in terms of gender (Jang & Kim, 2018) where people with the same gender are attributed as closer to oneself then the opposite gender. Thus, people will predict a greater impact of negative media content on gender out-group members (men in general) than on gender-in group members (women in general). The same thing will happen for male respondents with greater perceived influence on gender out-group members (women in general) than gender in group members (men in general).

# **Hypotheses**

Previous studies on third-person effect theory within a year of 1992 to 2015 show the perceptual gap of the negative impact of media on self and others has been validated across

the world with a surprising degree of consistency (McLeod, Wise, & Perryman, 2017). The third-person perceptual gap has also been observed for a variety of advertising types, such as manipulative marketing techniques (Xie & Johnson, 2015), violent video games (Hong, 2015), media websites (Antonopoulos et al., 2015), and so on. Chia (2007; 2009) also found females in Singapore thought that the negative impact of thin models is greater on others than on themselves. In mainland China, the perceptual gap of the negative effect of media has also been found in many contexts like the internet pornography (Chen et al., 2015) and alcohol advertising (Xue, 2015). Thus, a classical third-person perceptual gap would be expected:

H1: Thin female models in advertising will be perceived to have a greater impact on others than on self.

Previous studies have found that when "others" are classified in terms of relative closeness to oneself, people inclined to project that the media effects on the close others are more similar to the media effects on themselves while the distant others received a more discrepant media effect (Corbu, Oprea, Negrea-Busuioc, & Radu, 2020; Liu & Huang, 2020; Ştefăniţă, Corbu, & Buturoiu, 2018). Because when "others" are relatively closer to oneself (like friends or families), people tend to perceive that the close "others" are more like themselves in terms of abilities or thoughts, thus less affected by the negative media content. As the different sets of others categorized in terms of social distance have been found the role in the size of the third-person perceptual gap, this research seeks to investigate whether the social distance can play a role in determining the size of the third-person perceptual gap of the perceived impact of ideal thin models for females in mainland China. Thus, this study would predict a consistent result with the prior study that:

H2: The gap between perceived impact of thin female models in advertising on self and others is smaller when the "others" are close to self (female friends, male friends, romantic partner, family) than when "others" are more distant from self (most men, most women).

Moreover, gender is another factor under social distance corollary which can influence the perceptual gap in third-person effect where the people with same gender are attributed as closer to oneself than the opposite gender (Jang & Kim, 2018). Thus, the individuals assigned more similarities to gender in-group members than gender out-group members, therefore gender in-group others would be similarly less influenced by media messages. That would decrease the third-person perceptual gap if the others belong to gender in-group. Thus, it would be expected that:

H3: The gap between the perceived impact of thin female models in advertising on self and others is greater when others belong to one's gender out-group (male friends, most men) than when others belong to gender in-group (female friends, most women).

The majority of the recent research utilized the "subtractive approach" to represent the third-person perception when testing the relationship between the third-person perceptual gap and its consequence (e.g., Bi, Zhang, & Ha, 2019; Chen et al., 2018; Corbu et al, 2020; Jang & Kim, 2018; Liu & Huang, 2020; Ştefăniţă, Corbu, & Buturoiu, 2018). In other words, most studies use the discrepancy of the perceptual impact on others and self to test the correlation between

the perceptual element and the behavior element in the third-person effect theory. Therefore, this study will choose the subtractive approach to represent the third-person perception.

As predicted earlier by Davison (1983), the third-person perception will shed lights on how we behave in the social world. In the context of body image, third-person perception is the projection of how other people are influenced by idealized thinness in TV advertising. People's assumptions about media influences on others may have a sequential effect on self. The previous research has found third-person perception will lead to body dissatisfaction, eating disorders, excessive exercising or the likelihood of liposuction undertaking (Chia, 2009; Wan, 2002). Therefore, we would expect that:

H4: Third-person perceptual gap will predict the negative consequence of body dissatisfaction and weight-loss behavior (dieting, excessive exercising, the likelihood of liposuction undertaking).

# **METHODOLOGY**

The cross-sectional survey was selected to study a cross sample of a population at a single point in time. The cross-sectional survey is an excellent vehicle for measuring attitude and orientations in a large population with reasonable cost and it can be used to investigate problems on naturally occurring phenomena in a realistic setting (Roger & Joseph, 2013, p. 192). Therefore, this study utilized a cross-sectional survey as the research method to gather the views and opinions of undergraduate females student in China on the perceived impact of ideally thin models in TV ads. The cross-sectional survey could be conducted more easily and quickly on a large sample as well.

The respondents were chosen from Xiamen University Malaysia, the first Chinese University overseas. Based on the statistics from the Admission Department, there are 710 females from mainland China in total. Therefore, according to Krejcie and Morgan's table (1970), with a population of 710, the respective sample size should be 250. The result will have 95% of confidence with 5.0% margin of error. The questionnaires were spread and collected in December 2018. The actual response rate was 83.3%.

The questionnaire was divided into 4 sections: 1) demographic questions 2) perceived impacts of thin female models on self and various others 3) behavior measures of dieting, exercising, and the likelihood of liposuction undertaking 4) body satisfaction. The demographic questions include the basic personal information of age, height, weight, major, and etc. Their general attitude towards weight was measured by a three-choices question: "I want to lose weight"; "I want to maintain current weight"; "I want to gain weight".

The perceived impact of thin female models in TV advertising was measured by two statements: Seeing thin female models in TV advertising influences how \_\_\_think women should look; \_\_\_ believe that thin female models in TV advertising affect how \_\_\_ evaluate myself/me. These two statements originated from Wan (2002). The essence of the statement remained the same but it has been adapted in this study context. The respondents needed to grade their agreement level towards the statement by using a 5-point scale where 1 referred to "strongly disagree" and 5 meant "strongly agree". Various others included general others and six specific others (their female friends, male friends, most women, most men, current/potential romantic partner, their family). Both gender identity and social distance were used to define and categorize "general others".

Six items adopted from Wan (2002) were used to measure the respondents' dieting level, namely cutting out items of food, trying to eliminate junk food, reducing overall food intake, eating, low-calorie food, taking diet pills, and skipping meals. They graded the frequency of undertaking these activities by using a 5-point scale where 1 meant "never" and 5 referred to "always".

The frequency of exercise was measured by 6 items of activities and 1 question, which were derived from the questionnaire developed by Nassar, Hodges, and Ollendick (1992). These 6 items were jogging/running, doing yoga, doing sit-ups, swimming, going to the gym to work out, and working out more than one hour one day. The 6-point scale was used to grade their frequency to undertake each activity where 1 referred to "never" and 6 meant "everyday". Another question was "On average, how many hours per week do you spend exercising?" The answer needed to be represented by the 6-point scale where 1 referred to less than one hour per week and 6 referred to more than 5 hours per week.

Two items were used to measure their likelihood of undertaking liposuction. These two were derived from the previous study (Wan, 2002). The first one was used to measure their acceptability of liposuction where 1 meant "not acceptable at all" and 5 meant "very acceptable". The second one was to measure their willingness level of liposuction by using 5-point scale: If I didn't like my body size, I would consider having liposuction to change it. The answer ranged from strongly disagree (1) to strongly agree (5).

The last section was to measure the respondents' body dissatisfaction. The respondents had to grade their satisfaction level towards the size of their four body parts by using a 5-point scale where 1 referred to "strongly satisfied" and 5 referred to "strongly dissatisfied". These four body parts were stomach, hips, buttocks, and thighs, which was originated from Bailey, Goldberg, Swap, Chomitz et al.'s (1990) study.

A pilot study was conducted among 30 respondents beforehand to check the validity and reliability of the questionnaire. Cronbach's test was used in this research to measure the instrument's reliability. A Cronbach's  $\alpha$  value above .7 is considered as acceptable in social science research. The pilot study was conducted before the actual data collection among 30 respondents. The respondents were obtained via convenience sampling from the targeted population.

The results of the pilot study showed that the instrument used in the research had an acceptable level of reliability. Nearly all of the measures obtained the Cronbach's  $\alpha$  of more than .7. Table 1 showed that the measures of perceived impact, excessive exercising, and body dissatisfaction had an acceptable level of reliability. Even though the measure for dieting was slightly lower than .7, it reached the most optimum status with these 6 items. Without anyone item, the Cronbach's  $\alpha$  value will become lower. And in the actual data collection, the Cronbach's  $\alpha$  value reaches .85. Therefore, the measure for dieting was reliable. It was less than .7 in the pilot study because of the insufficient number of samples. As for the measure for the likelihood of liposuction undertaking, the Cronbach's  $\alpha$  value was .454 in the pilot study and .588 in the actual data collection. Although the generally agreed upon lower limit for Cronbach's  $\alpha$  was .7, it may decrease to around .6 in some studies because of its positive relationship to the number of items in scale (Hair et al, 2006, p. 124). Considering the number of items was only 2, the reliability was acceptable for the measure of liposuction undertaking with the lower  $\alpha$  value.

Table 1 Results of Reliability Testing (Pre and Actual)

Variables	n(pilot)	Cronbach's α	n(actual)	Cronbach's α
Perceived impact on self	30	0.856	250	0.740
Perceived impact on all others	30	0.780	250	0.824
Dieting	30	0.660	250	0.850
Excessive exercising	30	0.708	250	0.872
Liposuction undertaking	30	0.454	250	0.588
Body dissatisfaction	30	0.793	250	0.730

# RESULTS

From the records of respondents' BMI (Mean=18.53, SD=4.8), nearly half of them are underweight. Only a few of them (0.8%) is slightly overweight. The majority of the female respondents are classified into the normal BMI group (53.2%). And the rest of them are all underweight. This is consistent with the result of the previous study where most Chinese female students have a normal weight and the prevalence of being overweight was very low in the study sample (Yan et al., 2018). They claimed that this is because young female students had a great desire to be thinner and expressed significant anxiety about becoming fat. Their habits involving regular eating patterns and vegetable intake were found and represent practices that ought to be encouraged. They usually skipped breakfast, which has been associated with lower nutritional status. That is why many female students are underweight and why obesity is not a prevalent phenomenon in mainland China.

However, even though most of them have a healthy and normal weight and only a few are a little overweight, the majority of the female respondents expressed the intention to lose weight. 79.6% of the female respondents reported the desire to lose weight. Although most of the respondents express the desire to lose weight, the recorded results of dieting frequency are not very high (M=2.912, SD=1.98). Most of them engage in dieting sometimes. The most frequent activities are eliminating junk food and reducing overall food intake while the least frequent activities are taking diet pills and skipping meals. And the respondents' exercising frequency is not very high as well (M=3.194, SD=2.40). On average, they take exercise 3 to 4 hours a week. And they engage in these exercise activities twice or three times a week. The Chinese population has been specifically attributed to increased sedentary levels and decreased physical activity levels (Reynolds et.al., 2017). Their lifestyle also determines less time spending on exercising. And for liposuction undertaking, the respondents reported the lowest score (M=2.360, SD=3.89). In Chinese traditional culture, they are not encouraged to take any plastic surgery because their body is the inherence from their parents and they are not recommended to alter it without the permission from their parents (Xun, 2017).

Generally, their body dissatisfaction level is moderate (M=3.495, SD=2.45). With regard to the sociocultural factors, the perception of teasing and social pressure to be thin were robust predictors of body dissatisfaction (Chen, Gao, & Jackson, 2017). In Chinese cultures, the sociocultural influences contribute to body dissatisfaction among young females. Meanwhile, study also proved that BMI was a significant indicator of body dissatisfaction (Buckingham-Howes et.al., 2018). Since the respondents have a generally normal weight and

are even underweight, their body dissatisfaction level is relatively moderate even if they are under great pressure from the society to be thin.

Table 2: Descriptive Statistics for Respondents' Behavioural Intentions and Body Dissatisfaction (n = 250)

	Mean	SD
Dieting	2.912	1.98
Exercising	3.194	2.40
Liposuction undertaking	2.360	3.89
Body dissatisfaction	3.495	2.45

# Perceptual Gap in Third-person Effect

H1: Thin female models in advertising will be perceived to have a greater impact on others than on self.

According to Table 2, there is a significant difference in the scores for the perceived impact on self (M = 4.78, SD = 1.72) and perceived impact on others (M = 7.176, SD = 1.52; t (498) = -16.484, p = .000), suggesting that a third-person effect is found because the mean for the perceived impact of idealized thin models in TV advertising on self (4.78) is much lower than the mean of the perceived impact on others (7.176). The difference range (-2.396) is quite prominent. Moreover, this perceptual gap is quite strongly presented (p = .000). Therefore, H1 is supported.

Table 3 Independent t-Test Result for Perceived Impact of Idealized Thin Models in TV Advertisements on Self and General Others (n = 250)

Variable	Mean (SD)	Mean difference	t	<i>p</i> -value
Perceived impact on self	4.78 (1.72)	-2.396	-16.484	.000
Perceived impact on general others	7.176 (1.52)			

# **Role of Social Distance**

H2: The perceptual gap of distant others (most men, most women) is larger than that of close others (female friends, male friends, romantic partner, family).

Based on Table 4 there is a significant difference in the scores for the perceptual gap of distant others (M = 6.959, SD = 4.18) and perceptual gap of close others (M = .884, SD = 8.75; t (498) = 9.904, p = .000). The mean of the perceptual gap of the impact of idealized thin models in TV advertising between self and distant others is remarkably higher than the gap between self and close others. Therefore, the difference range is significantly great at 6.072. Furthermore, the significance level (p = .000) of the result is notably high. Therefore, H2 is supported.

Table 4: Independent t-Test Result for the Perceptual Gap of Distant Others and Close Others (n = 250)

Variable	Mean (SD)	Mean difference	t	<i>p</i> -value
Perceptual gap of distant others	6.956 (4.18)	6.072	9.904	.000
Perceptual gap of close others	.884 (8.75)			

#### **Role of Gender**

H3: The perceptual gap of one's gender out-group (male friends, most men) is larger than that of gender in-group (female friends, most women).

According to Table 5, there is a significant difference in the scores for the perceptual gap of gender out-group others (M = 5.928, SD = 4.41) and perceptual gap of gender in-group others (M = 3.112, SD = 4.51; t (497.76) = 7.055, p = .000). The mean of the perceptual gap of the impact of idealized thin models in TV advertising between self and gender out-group others is relatively higher than the gap between self and gender out-group others. Therefore, the difference range is quite great at 2.816. Furthermore, the significance level (p = .000) of the result is notably high. Therefore, H3 is supported.

Table 5: Independent t-Test Result for the Perceptual Gap of Gender Outgroup Members and Gender In-group Members (n = 250)

Variable	Mean (SD)	Mean difference	t	p-value
Perceptual gap of gender out-group others	5.928 (4.41)	2.816	7.055	.000
Perceptual gap of gender in-group others	3.112 (4.51)			

# Relationship between Perceptual Gap and Negative Consequences (Behavioral and Feeling)

H4: Third-person perceptual gap will predict the negative consequence of body dissatisfaction and weight-loss behavior (dieting, excessive exercising, the likelihood of liposuction undertaking).

According to Table 6, a high positive correlation between the perceptual gap and dieting (r = .873, p = .000) is seen. Based on the rule of thumb for interpreting the size of a correlation coefficient (Hinkle & Wiersma, 2003), when r value belongs to .70 and .90, a high positive correlation can be interpreted. This suggests that as the perceptual gap of the impact on self and others increases, so does the dieting frequency. The strength of the correlation is strong. And the results were statistically significant at .000 level. Therefore, one part of H4 is supported.

Table 6; Bivariate Correlations between Perceptual Gap of the Impact on Self and on Others and Dieting (n = 250)

Independent Variable	Dependent Variable (dieting)	
	r	<i>p</i> -value
Perceptual gap of the general others	.873**	.000

<sup>\*\*</sup> Significant at .01 level (one-tailed)

According to Table 7, the correlation between these two variables was a high positive correlation (r = .897, p = .000). Based on the rule of thumb for interpreting the size of a correlation coefficient (Hinkle & Wiersma, 2003), when r value belongs to .70 and .90, a high positive correlation can be interpreted. This indicates that excessive exercising likelihood increases with the perceptual gap of the impact between self and others. The strength of the correlation is statistically strong. The results were also significant at the .000 level. As such, another part of H4 was supported and it can be said that the bigger the individual's perceptual gap is, the more likely she will undertake excessive exercising.

Table 7: Bivariate Correlations between Perceptual Gap of the Impact on Self and on Others and Excessive Exercising (n = 250)

Independent Variable	Dependent Variable (excessive exercising)	
	r	<i>p</i> -value
Perceptual gap of the general others	.897**	.000

<sup>\*\*</sup> Significant at .01 level (one-tailed)

The results from Table 8 show that the correlation between the two variables is a high positive one (r = .871, p = .000), indicating that an increase in the perceptual gap would lead to an increase in the likelihood of liposuction undertaking. According to the rule of thumb for interpreting the size of a correlation coefficient (Hinkle & Wiersma, 2003), when r value belongs to .70 and .90, a high positive correlation can be interpreted. Based on the p value, the results are statistically significant at .000 level. As such, another part H4 was supported. And it can be said that the greater the perceptual gap becomes, the more these individuals will be likely to undertake liposuction.

Table 8: Bivariate Correlation between Perceptual Gap of the Impact on Self and on Others and the Likelihood of Liposuction Undertaking (n = 250)

Independent Variable	Dependent Variable (the likelihood of liposuction undertaking)	
	r	p-value
Perceptual gap of the general others	.871**	.000

<sup>\*\*</sup> Significant at .01 level (one-tailed)

The results from Table 9 show that there is a high positive and strong relationship (r = .849, p = .000) between these two variables. Based on the rule of thumb for interpreting the size of a correlation coefficient (Hinkle & Wiersma, 2003), when r value belongs to .70 and .90, a high positive correlation can be interpreted. The results are statistically significant at the .000 level. As such, the rest part of H4 is supported. It can be said that the greater the individual's perceptual gap is, the more she will feel body dissatisfaction.

Table 9: Bivariate Correlation between Perceptual Gap of the Impact on Self and on Others and Body Dissatisfaction (n = 250)

Independent Variable	Dependent Variable (body dissatisfaction)	
	r	<i>p</i> -value
Perceptual gap of the general others	.897**	.000

<sup>\*\*</sup> Significant at .01 level (one-tailed)

# DISCUSSION

From the records of respondents' BMI, nearly one of college females from mainland China are overweight. But the majority of them expressed a high level of body dissatisfaction and the intention to lose weight. The prior study also found the similar situation where the female Chinese respondents still have a desire to lose weight even if they have a normal weight or unhealthily low weight (Hadipour et al., 2015; Tanenbaum et al., 2016). Hadipour et al. (2015) found that approximately 66.5% of the female respondents (18-25 years old) wanted to be thinner, even though the majority of students were of normal weight. The study suggests that weight misperceptions exist in a considerable proportion of the samples. In other words, it is a prevalent phenomenon for Chinese females to generate a gap between actual weight status and perception because they have an excessive focus on body weight. Therefore, even if they have a normal weight status, they still perceive themselves to be overweight/obesity.

And the result demonstrated the gap between the weight goals and the actions undertaken to achieve these goals, which shows the lack of self-control of young adults (Tanenbaum et al., 2016). They are not powerful enough to supervise themselves and refuse the temptations of delicious food. In addition, even if they take actions to achieve their ideal thinness, they tend to choose healthy diet activities rather than extreme activities. This proved a certain level of health awareness among female students.

The results also find that the female respondents perceived a low impact of idealized thin models on themselves and moderate impact on others. They perceive that other tend to be more vulnerable than themselves when facing the negative impact of idealized thin models in TV advertising. This can be explained by ego enhancement tendency of the individuals who try to downplay the negative effect on themselves for a self-serving strategy to bolster their ego (Eisend, 2017). Other research also explained this phenomenon from an optimistic bias (Wei & Lo, 2015). To present themselves in a positive way, the individuals will perceive an optimistic bias to minimize the vulnerability of themselves and exaggerate the vulnerability of others. Therefore, to make themselves look better, they tend to perceive a greater impact of negative media content on others than on themselves.

The first hypothesis expresses a classic third-person perception where people should perceive the impact of idealized thin models in TV advertising to be greater on others in general than it is on themselves. This hypothesis can fill in the gap of the theory because it has not been conducted on the topic of body image in mainland China. The result supported this hypothesis, consistent with the previous studies conducted in both Western and Eastern countries regarding body image (Chia, 2007; Wan et al., 2003), where the negative media messages are perceived to have a greater impact on others than on themselves in China context. However, this third person perception is not always true for all persuasive media content. A reversed third person perception, also named as first person perception, occurs when in common sense, the media content is perceived as socially desirable (Golan & Day, 2008). For example, respondents reported a greater impact of anti-smoking campaigns on themselves than on others (Henriksen & Flora, 1999) because being more impacted by anti-smoking campaigns may help bolster their ego and make them look better than others. Thus, it suggests that the third-person perception is robust on the impact of negative media messages only in cross-cultural contexts around the world.

The findings suggest that the more distant the others become, the more vulnerable these others will be when facing the negative impact of idealized thin models in TV advertising. The results show that the perceived impact of idealized thin models on most women and most men is relatively higher than the impact on female friends, male friends, families, and romantic partner. Scholars (Corbu et al, 2020; Liu & Huang, 2020) explained that one reason for this finding is that as the third-person perception comparison group gets more socially distant from (or more unlike) the individual respondent, the less ego-enhancing utility they will have. Therefore, the individuals will assign less similarity to the distant respondents. Another study indicates that individuals may invoke judgments about the perceived exposure of these comparison groups to the content in question (Lambe & McLeod, 2015). For the negative messages, the individuals tend to predict the similar exposure of close comparison groups while heavy exposure of distant comparison groups. They then reason that the more exposed individuals in a given third-person perception comparison group are to the content, the more affected they are perceived to be.

The second hypothesis predicts the role of social distance in this third-person perception. The more distant the others become, the greater the third-person perceptual gap will be. This can provide some useful insights regarding third-person effect. By exploring the third-person perception, the results supply practical implications to prevent the negative impact. The data imply that this hypothesis is supported as well where the social distance plays a positive role in the size of the perceptual gap. It is consistent with the previous studies of the predictor of third person perception in China (Liu & Huang, 2020; Chen et al., 2018). Therefore, it suggests that for Chinese females in general, they tend to protect the close others from the negative impact of thin models so that they will feel less pressured and anxious to lose weight. And they may be able to reduce their fear of being poorly evaluated by these important others in their mind. This hypothesis can expand the third-person effect theory by providing possible indicators of the perceptual element in the Chinese context. It provides a richer understanding of the relationship between the third-person perception and social distance.

The results show that the perceived impact of idealized thin models in TV advertising on most men is greater than the perceived impact on most women. The same thing is found for male friends and female friends. The gender out-group others are perceived to be more influenced by this media content. This is because gender in- group members are perceived

to be more similar to others, and therefore would be similarly influenced by media messages than gender out-group members (Jang & Kim, 2018). Another possible explanation is gender stereotype. Research has found that men assign more importance to the physical attractiveness of women than women assign to the physical attractiveness of men (Coyne, Linder, Rasmussen, Nelson, et.al., 2016). In the society values, women are regarded as dependent and their attractiveness is one of the important assets for marriage. Therefore, when asked about the impact of thin models in TV advertising, the female respondents will refer to the gender stereotype which concludes that men value the external attractiveness of women more than women do. This stereotype makes female respondents perceive a greater impact of idealized thin models on gender out-group others than on gender in-group others.

The third hypothesis suggests the role of gender in this third-person perception. The gender out-group members are perceived to be more affected by the idealized thin models in TV advertising than the gender in-group others. Therefore, the size of the perceptual gap will be influenced by the gender of these others. This provides an interesting point on the third-person perception where the gender acts as an indicator of the size of the third-person perceptual gap. However, the result is inconsistent with the research done in Hong Kong (Wan et al., 2003) but quite consistent with the one conducted in Singapore (Chia, 2007). The inconsistency emerges because of the classification of gender out-group others. In Wan et al.'s study (2003), they classified romantic partner, male friends, and most men into gender outgroup others and compare them with gender in-group others (female friends, most women). The closeness and intimacy of romantic partner make it difficult for respondents to expose them to negative impact. Thus, the hypothesis is not supported. That's why in this study, only male friends and most men were classified into gender out-group others in order to prevent this situation. While, in Chia's study (2007), he only compares female friends with male friends. Therefore, they can predict the role of gender in third-person perception. The results suggest that the role of gender can be predicted since the two comparison groups are classified properly.

The last hypothesis expects the behavioral and feeling consequence of third-person perceptual gap of the impact of the idealized thin models in TV advertising. This hypothesis is significant to determine whether this third-person perception has actual consequences on female individuals and how much attention the third-person perception need. It finds that this perceptual gap can lead to the related weight loss behaviors (dieting, exercising, and the likelihood of liposuction undertaking) and body dissatisfaction, which is inconsistent with the previous study in Hong Kong and Singapore (Chia, 2007; Wan et al., 2003). Therefore, it suggests that the third-person perceptual gap can lead female respondents to engage in weight loss behaviors and body dissatisfaction because they value the positive evaluations of others towards their external attractiveness more than those in Hong Kong and Singapore. Therefore, even though they perceive themselves not being impacted a lot, they will still try to conform to norms perceived to be held by others. Because conforming to others' beauty standards could bring social rewards such as the popularity among peers or more affectations from romantic partners (Xie, 2016; Xie & Johnson, 2015). This hypothesis makes the thirdperson effect theory more sound and robust. And it also gives a different perspective from a different cultural context regarding the behavior element of the third-person effect theory.

# **IMPLICATION**

Theoretically, it contributes to the third-person effect and presumed influence literature by exploring its role in people's body size-related behavioural intention and body dissatisfaction. It also fills the gap in effects of thin ideal in TV advertising on college females in mainland China by expanding the underling mechanism from third person effect theory. By defining "others" along multiple dimensions (gender identity and social closeness), this study also unfolds the complex nature of the third-person effect. The findings suggest that the direction and magnitude of the third-person effect could hinge upon both the perceived valence of the impact of media content and the psychological and social relationships between self and others.

Practically, the findings suggest the need for strategies designed to improve young females' media literacy. The education institutions should demonstrate that the media is not the representation of reality but the constructed representation. Moreover, the findings imply that psycho-educational interventions for young adults should focus on reinforcing a critical stance toward beauty standards. The society as a whole has to change their beauty standard for women because all of them can put pressure on young females to pursue the idealized body size. Everyone should be educated that it is not right to criticize others' appearance, especially females.

Furthermore, the findings show the urgency to break feminism stereotype through media intervention. Women should be advocated to march for the right to do with the body whatever they please without the interfering of males, and the right to basic health care. The stereotype which emphasizes the beautiful outlook and family-centered orientation of women should be smashed by various media campaigns. Also, the findings suggest that TV practitioners should take social responsibility by deemphasizing the value of thinness and diverting the concentration of young adults from superficial appearance to inner capabilities. And they should inform people that slim models portrayed by TV advertising have been modified by computer and that degree of thinness is not realistically attained by healthy methods.

The suggestions also include efforts to strengthen college women's resistance to media effects and open discussions concerning media effects, body image, and peer norms. These discussions would enhance both the quantity and the accuracy of information on peer norms and body-image issues. The correct perception of the impact of idealized thin models in TV advertising on others could help minimize the third-person perceptual gap and decrease the peers' pressure to become thin for individuals. Accordingly, female students will lower their tendency to pursue idealized thinness and decrease their body dissatisfaction level.

# LIMITATION AND RECOMMENDATION

This study also has some limitations as well. First, the setting of the research is limited in Xiamen University Malaysia campus. The generalizability of findings is compromised because of the restricted setting of study. In addition, the samples include only college women because they are at higher risk for the negative impact of media on body image than men. Future research would benefit from samples that include both genders. The impact on college men from third-person effect also needs to be explored.

The model applied in this research is also parsimonious. It only figures out whether the perceptual gap could lead to weight loss behaviors and body dissatisfaction or not and the

role of social distance and gender on the size of third-person perception. While the influential factors of the third-person perceptual gap like self-esteem are not included in the model. Neither do the mediators between the third-person perceptual gap and the consequences. Therefore, future research could contribute more to this theory and body image by expanding the model.

# CONCLUSION

This study examines the third-person effect theory in the context of the impact of idealized thin models on college females from mainland China in Xiamen University Malaysia (XMUM). In addition to testing the perceptual element and behavior element of third-person effect theory, this study also expands the theory by testing the role of social distance and gender in the size of the perceptual gap.

The study is one of the first attempts to employ the third-person effect framework to explain how the idealized images in media might exert an influence on college females in mainland China. It suggests that idealized images in the media may influence young people's dieting, exercising, the likelihood of liposuction undertaking, and body dissatisfaction not only through self-objectification as previous researchers argued (e.g., Teng et.al., 2017), but also through the third-person perception.

Moreover, this is the first research which succeeds to address the relationship between the third-person perception and behaviors. Most of the studies explained the relationship from either the perceived impact on self or the perceived impact on others (Chia, 2007; Wan, 2002; Wan et al., 2003). But none of them can address this relationship from the aspect of the perceptual gap. However, the originally proposed theory states the relationship directly between the third-person perceptual gap and the related behaviors. And explorations into the behavioral components of the third-person effect have been met with far more limited success.

# REFERENCES

- Bailey, S. M., Goldberg, J. P., Swap, W. C., Chomitz, V. R., & Houser Jr, R. F. (1990). Relationships between body dissatisfaction and physical measurements. *International Journal of Eating Disorders*, 9(4), 457–461.
- Bi, N. C., Zhang, R., & Ha, L. (2019). Does valence of product review matter? The mediating role of self-effect and third-person effect in sharing YouTube word-of-mouth (vWOM). *Journal of Research in Interactive Marketing*, 13 (1), 79–95.
- Boyce, J. A., & Kuijer, R. G. (2014). Focusing on media body ideal images triggers food intake among restrained eaters: A test of restraint theory and the elaboration likelihood model. *Eating Behaviors*, 15(2), 262–270.
- Barcaccia, B., Balestrini, V., Saliani, A. M., Baiocco, R., Mancini, F., & Schneider, B. H. (2017). Dysfunctional eating behaviors, anxiety, and depression in Italian boys and girls: the role of mass media. *Revista Brasileira de Psiquiatria*, 40(1), 72–77.
- Bernardo, A. B., & Liu, J. H. (2018). Socially engaged social psychology in Asia: sustaining research progress in diverse directions. *Journal of Pacific Rim Psychology*, 12(6), 1–5.

- Boyle, M. P., Schmierbach, M., & McLeod, D. M. (2013). Preexisting factors or media effect? understanding the third-person perception. *Atlantic Journal of Communication*, 21(4), 230–246.
- Bruns, G. L., & Carter, M. M. (2015). Ethnic differences in the effects of media on body image: The effects of priming with ethnically different or similar models. *Eating Behaviors*, 17(1), 33–36.
- Buckingham-Howes, S., Armstrong, B., Pejsa-Reitz, M. C., Wang, Y., Witherspoon, D. O., Hager, E. R., & Black, M. M. (2018). BMI and disordered eating in urban, African American, adolescent girls: The mediating role of body dissatisfaction. *Eating Behaviors*, 29(3), 59–63.
- Chang, F. C., Lee, C. M., Chen, P. H., Chiu, C. H., Pan, Y. C., & Huang, T. F. (2013). Association of thin-ideal media exposure, body dissatisfaction and disordered eating behaviors among adolescents in Taiwan. *Eating Behaviors*, 14(3), 382-385.
- Chen, H., Gao, X., & Jackson, T. (2007). Predictive models for understanding body dissatisfaction among young males and females in China. *Behaviour Research and Therapy*, 45(6), 1345–1356.
- Chen, L., Yang, Y., Su, W., Zheng, L., Ding, C., & Potenza, M. N. (2018). The relationship between sexual sensation seeking and problematic Internet pornography use: A moderated mediation model examining roles of online sexual activities and the third-person effect. *Journal of Behavioral Addictions*, 7(3), 565–573.
- Chen, H. Y., & Wang, N., (2014) Analysis of the status quo of China's TV advertising development. *Cooperative Economy and Technology*, 23(1), 90–91.
- Chia, S. C. (2007). Third-person perceptions about idealized body image and weight-loss behavior. *Journalism & Mass Communication Quarterly*, 84(4), 677–694.
- Chia, S. C. (2009). When the east meets the west: An examination of third-person perceptions about idealized body image in Singapore. *Mass Communication and Society*, 12(4), 423–445.
- Corbu, N., Oprea, D. A., Negrea-Busuioc, E., & Radu, L. (2020). 'They can't fool me, but they can fool the others!'Third person effect and fake news detection. *European Journal of Communication*, 35(2), 165-180.
- Coyne, S. M., Linder, J. R., Rasmussen, E. E., Nelson, D. A., & Birkbeck, V. (2016). Pretty as a princess: Longitudinal effects of engagement with Disney princesses on gender stereotypes, body esteem, and prosocial behavior in children. *Child Development*, 87(6), 1909–1925.
- Davison, W. P. (1983). The third-person effect in communication. *Public Opinion Quarterly*, 47(1), 1–15.
- Dutt, R., Zaheer, A., & Salim, M. (2017). Influence of advertising on attitude of young Indian consumers: An empirical study. *International Journal of Contemporary Research and Review*, 8(4), 146–155.
- Eisend, M. (2017). The third-person effect in advertising: A meta-analysis. *Journal of Advertising*, 46(3), 377–394.
- Frederick, D. A., Sandhu, G., Morse, P. J., & Swami, V. (2016). Correlates of appearance and weight satisfaction in a U.S. national sample: Personality, attachment style, television viewing, self-esteem, and life satisfaction. *Body Image*, *17*(1), 191–203.

- Golan, G. J., & Day, A. G. (2008). The first-person effect and its behavioral consequences: A new trend in the twenty-five year history of third-person effect research. *Mass Communication and Society*, 11(4), 539–556.
- Hadipour, R., Muda, W. A. M. W., & Leng, S. K. (2015). Weight status, body image perception and physical activity of Malay female college students in Kota Bharu, Kelantan. *Malaysia*. *JJO*, *1*(1), 1–8.
- Hair, J. F. J., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (7<sup>th</sup> Ed). New Jersey, NJ: Pearson Education, Inc.
- Han, M. (2003). Body image dissatisfaction and eating disturbance among Korean college female students: Relationship to media exposure, upward comparison, and perceived reality. *Communication Studies*, 54, 65–78.
- Henriksen, L., & Flora, J. A. (1999). Third-person perception and children: Perceived impact of pro-and anti-smoking ads. *Communication Research*, 26(6), 643–665.
- Hinkle, D. E., & Wiersma, W. Jurs. SG (2003). *Applied statistics for the behavioral sciences* (5<sup>th</sup> ed.). Boston: Houghton Mifflin.
- Hsu, C. K. J. (2018). Femvertising: State of the art. Journal of Brand Strategy, 7(1), 28–47.
- Hua, W. (2013). Buying beauty. Hong Kong: Hong Kong University Press.
- Jackson, T., & Chen, H. (2015). Features of objectified body consciousness and socio-cultural perspectives as risk factors for disordered eating among late adolescent women and men. *Journal of Counseling Psychology*, 62(3), 741–751.
- Jackson, T., Zheng, P., & Chen, H. (2016). Features of objectified body consciousness and sociocultural perspectives as predictors of eating and body image disturbances among young women and men in China. *Journal of Gender Studies*, 25(5), 599–612.
- Jang, S. M., & Kim, J. K. (2018). Third person effects of fake news: Fake news regulation and media literacy interventions. *Computers in human behavior*, 80, 295-302.
- Jung, J. (2018). Young women's perceptions of traditional and contemporary female beauty ideals in China. *Family and Consumer Sciences Research Journal*, 47(1), 56–72.
- Jung, J., & Lee, S.-H. (2006). Cross-cultural comparisons of appearance self-schema, body image, selfesteem, and dieting behavior between Korean and U.S. women. *Family and Consumer Sciences Research Journal*, 34, 350–365.
- Kim, H., & Sohn, S. H. (2016). Impact of advertising model's body size on perceived product quality: Category-based induction approach. *Journal of Promotion Management*, 22(1), 151–174.
- Klaczynski, P. A., & Felmban, W. S. (2019). Thin idealization and causal attributions mediate the association between culture and obesity stereotypes: An examination of Chinese and American adolescents. *British Journal of Developmental Psychology*, 11(1), 16–35.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607–610.
- Lai, C. M., Mak, K. K., Pang, J. S., Fong, S. S., Ho, R. C., & Guldan, G. S. (2013). The associations of sociocultural attitudes towards appearance with body dissatisfaction and eating behaviors in Hong Kong adolescents. *Eating Behaviors*, 14(3), 320–324.
- Lambe, J. L., & McLeod, D. M. (2005). Understanding third-person perception processes: Predicting perceived impact on self and others for multiple expressive contexts. *Journal of Communication*, 55(2), 277–291.

- Lee, S., & Lee, A. M. (2000). Disordered eating in three communities of China: A comparative study of female high school students in Hong Kong, Shenzhen, and rural Hunan. *International Journal of Eating Disorders*, 27, 317–327.
- Liu, P. L., & Huang, L. V. (2020). Digital disinformation about COVID-19 and the third-person effect: examining the channel differences and negative emotional outcomes. *Cyberpsychology, Behavior, and Social Networking*, 23(11), 789-793.
- Liu, S. Y. (2016). Analysis of female images in Chinese TV advertisements and their causes. *Operation Manager*, 19(3), 371-385.
- Liu, Z., & Li, Y.J. (2017). Diachronic analysis of female images in TV commercials. *Media Observation*, 10(1), 29-31.
- Luo, Y., Parish, W. L., & Laumann, E. O. (2005). A population-based study of body image concerns among urban Chinese adults. *Body Image*, 2(4), 333-345.
- Mao, X. H. (2018). Analysis of Female Images in TV Advertisements. *Communication Research*, 11(5), 156-157.
- Mayer-Brown, S., Lawless, C., Fedele, D., Dumont-Driscoll, M., & Janicke, D. M. (2016). The effects of media, self-esteem, and BMI on youth's unhealthy weight control behaviors. *Eating Behaviors*, 21(3), 59-65.
- Nassar, C. M., Hodges, P., & Ollendick, T. (1992). Self-concept, eating attitudes, and dietary patterns in young adolescent girls. The School Counselor, 39(5), 338-343.
- Noh, J. W., Kwon, Y. D., Yang, Y., Cheon, J., & Kim, J. (2018). Relationship between body image and weight status in east Asian countries: comparison between South Korea and Taiwan. *BMC Public Health*, 18(1), 814-822.
- Paraskeva, N., Lewis-Smith, H., & Diedrichs, P. C. (2017). Consumer opinion on social policy approaches to promoting positive body image: Airbrushed media images and disclaimer labels. *Journal of Health Psychology*, 22(2), 164-175.
- Perloff, R. M. (2014). Social media effects on young women's body image concerns: Theoretical perspectives and an agenda for research. *Sex Roles*, 71(11), 363-377.
- Pounders, K., Rice, D. H., & Mabry-Flynn, A. (2017). Understanding how goal-striving, goal orientation, and shame influence self-perceptions after exposure to models in advertising. *Psychology & Marketing*, 34(5), 538-555.
- Qi, W., & Cui, L. (2018). Being successful and being thin: The effects of thin-ideal social media images with high socioeconomic status on women's body image and eating behaviour. *Journal of Pacific Rim Psychology*, 12(8), 1-9.
- Read, G. L., van Driel, I. I., & Potter, R. F. (2018). Same-sex couples in advertisements: An investigation of the role of implicit attitudes on cognitive processing and evaluation. *Journal of Advertising*, 47(2), 182-197.
- Reynolds, K., Gu, D., Whelton, P. K., Wu, X., Duan, X., Mo, J., ... & InterASIA Collaborative Group. (2007). Prevalence and risk factors of overweight and obesity in China. *Obesity*, *15*(1), 10-18.
- Roger, D.W., & Joseph, R.D. (2013). *Mass media research: An introduction*. Boston, USA: Michael Rosenberg.
- Ro, Y., & Hyun, W. (2012). Comparative study on body shape satisfaction and body weight control between Korean and Chinese female high school students. *Nutrition Research and Practice*, 6(4), 334-339.

- Sandhu, N. (2017). Consumer response to brand gender bending: An integrated review and future research agenda. *Business Perspectives and Research*, 5(2), 151–166.
- Sandhu, N. (2018). Preferred image of women on Indian television: A move from classic stereotypes. *Antyajaa: Indian Journal of Women and Social Change*, 3(1), 19–136.
- Shagar, P. S., Donovan, C. L., Loxton, N., Boddy, J., & Harris, N. (2019). Is thin in everywhere: A cross-cultural comparison of a subsection of Tripartite Influence Model in Australia and Malaysia. *Appetite*, 134(2), 59-68.
- Shao, Y., Desmarais, F., & Kay Weaver, C. (2014). Chinese advertising practitioners' conceptualisation of gender representation. *International Journal of Advertising*, 33(2), 329-350.
- Shi, J. (2017). Talking about the strategy of innovation and development of television advertising in new period. *Learning Weekly*, 12(01), 205-216.
- Shuang, D. (2019). The female stereotype: a case study of Chinese tv commercials in China. Bangkok University. Retrieved from http://dspace.bu.ac.th/handle/123456789/3720
- Statista. 2021. Market size of television advertising in China from 2012 to 2018 with a forecast until 2024. Retrieved from https://www.statista.com/statistics/1092714/china-television-advertising-market-size/
- Ştefăniță, O., Corbu, N., & Buturoiu, R. (2018). Fake news and the third-person effect: They are more influenced than me and you. *Journal of Media research*, 11(3).
- Tanenbaum, H. C., Felicitas, J. Q., Li, Y., Tobias, M., Chou, C. P., Palmer, P. H., ... & Xie, B. (2016). Overweight perception: associations with weight control goals, attempts, and practices among Chinese female college students. *Journal of the Academy of Nutrition and Dietetics*, 116(3), 458-466.
- Teng, F., You, J., Poon, K. T., Yang, Y., You, J., & Jiang, Y. (2017). Materialism predicts young Chinese women's self-objectification and body surveillance. *Sex Roles*, 76(8), 448-459.
- Tiggemann, M., Slater, A., & Smyth, V. (2014). 'Retouch free': The effect of labelling media images as not digitally altered on women's body dissatisfaction. *Body Image*, 11(1), 85-88.
- Tong, J., Miao, S., Wang, J., Yang, F., Lai, H., Zhang, C., ... & Hsu, L. G. (2014). A two-stage epidemiologic study on prevalence of eating disorders in female university students in Wuhan, China. *Social Psychiatry and Psychiatric Epidemiology*, 49(3), 499-505.
- Wan, F. (2002). The impact of idealized images in advertising. *Dissertation Abstract International*, 62(12), 3982.
- Wan, F., Faber, R. J., & Fung, A. (2003). Perceived impact of thin female models in advertising: A cross-cultural examination of third person perception and its impact on behaviors. *Asia Pacific Journal of Marketing and Logistics*, 15(2), 51-73.
- Wang, K., Liang, R., Ma, Z. L., Chen, J., Cheung, E. F., Roalf, D. R., ... & Chan, R. C. (2018). Body image attitude among Chinese college students. *PsyCh Journal*, 7(1), 31-40.
- Wei, R., & Lo, V. H. (2015). Third-person effect. *The International Encyclopedia of Political Communication*, 8(1), 1-6.
- Xie, G. X., (2016). Deceptive advertising and third-person perception: the interplay of generalized and specific suspicion. *Journal of Marketing Communications*, 22(5), 494-512.
- Xie, G. X., & Johnson, J. M. Q. (2015). Examining the third-person effect of baseline omission in numerical comparison: The role of consumer persuasion knowledge. *Psychology & Marketing*, 32(4), 438-449.

- Xu, M. (2018). The impacts of different forms of advertising on the consumption of Chinese university students. *International Journal of Recent Scientific Research*, *9*(7), 27925-27930.
- Xun, L. (2017). Sports as I know. Fujian Education, 2(1), 120-122.
- Yan, H., Wu, Y., Oniffrey, T., Brinkley, J., Zhang, R., Zhang, X., ... & Moore, J. B. (2018). Body weight misperception and its association with unhealthy eating behaviors among adolescents in China. *International Journal of Environmental Research and Public Health*, 15(5), 936-947.