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The Role of Appearance Self-schema in the Perceived Impact of Fitspiration Images on the Self and Others: A Study on Body Image

Peranan Skema Diri Penampilan dalam Dampak yang Dipersepsikan dari Gambar *Fitspiration* terhadap Diri dan Orang Lain: Kajian pada Citra Tubuh

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ABSTRACT

Exposure to Instagram Fitspiration images creates negative perceptions toward one's body. Drawing on third-person effect (TPE) theory, this study aims to explain such feelings among viewers and examine the effect of appearance self-schema as an underlying cause of negative body image and the perceived impact of Fitspiration images on the self and others. A total of 301 university students who were viewers of Fitspiration images were recruited to complete a survey on demographic characteristics, body image, appearance self-schema, and the perceived impact of Fitspiration images on the self and others. Results show that the perceived effect of Fitspiration is greater on others than on the self. Appearance self-schema and the perceived impact of the media on others are negatively correlated with body image. Moreover, appearance self-schema positively counts for the perceived impact of Fitspiration images on the self and others. The robustness of TPE theory was confirmed in the context of Fitspiration images. Theoretically, TPE theory was expanded by introducing appearance self-schema as a predictor of first- and third-person perceptions. Some practical recommendations were made for young viewers and educationalists about the physical and mental health education related to the findings of this study.

ABSTRAK

Paparan gambar *Fitspiration* di Instagram menimbulkan perasaan negatif terhadap tubuh seseorang. Berdasarkan teori efek orang ketiga atau *third-person effect* (TPE), studi ini bertujuan untuk menjelaskan perasaan seperti itu di antara penonton (*viewer*), dan mengkaji efek dari skema diri penampilan sebagai penyebab yang mendasari citra tubuh yang negatif dan dampak yang dipersepsikan dari gambar *Fitspiration* terhadap diri dan orang lain. Sebanyak 301 mahasiswa yang menjadi penonton gambar *Fitspiration* direkrut untuk menyelesaikan survei tentang karakteristik demografi, citra tubuh, skema diri penampilan dan dampak yang dipersepsikan dari gambar *Fitspiration* terhadap diri dan orang lain. Hasil penelitian menunjukkan bahwa efek yang dirasakan dari *Fitspiration* lebih besar pada orang lain berbanding diri sendiri. Skema diri penampilan dan dampak yang dipersepsikan dari media terhadap orang lain berkorelasi negatif dengan citra tubuh. Selain itu, skema diri penampilan berkorelasi secara positif dengan dampak yang dipersepsikan dari gambar *Fitspiration* terhadap diri dan orang lain. Kekokohan dari teori TPE terkonfirmasi dalam konteks gambar *Fitspiration*. Secara teoritis, teori TPE telah diperluas dengan memperkenalkan skema diri penampilan sebagai prediktor dari persepsi orang pertama dan ketiga. Beberapa rekomendasi praktis telah dibuat untuk penonton muda dan pendidik tentang pendidikan kesehatan fisik dan mental yang berkaitan dengan temuan studi ini.

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1. Introduction

Fitspiration, a consolidation of the words “fitness” and “inspiration,” brought Instagram to the fore in promoting fitness. Fitspiration has become the de-facto channel for users to share their photos promoting healthy living with a focus on diet and exercise (Boepple et al., 2016; Tiggemann & Zaccardo, 2018). However, most Fitspiration images contain thin and toned bodies (Simpson & Mazzeo, 2017; Tiggemann & Zaccardo, 2018) and tend to encourage “appearance-related body image standards and weight management behaviors more frequently than health-related standards and behaviors” (Simpson & Mazzeo, 2017, p. 1). Exposure to Fitspiration images intensifies body dissatisfaction and negative emotions among users (Anixiadis et al., 2019; Davies et al., 2020; DiBisceglie et al., 2019; Fatt et al., 2019; Griffiths & Stefanovski, 2019; Prichard et al., 2020; Prichard et al., 2018; Robinson et al., 2017; Simpson & Mazzeo, 2017; Tiggemann & Zaccardo, 2015).

Body image driven by exposure to Instagram Fitspiration images is underpinned by cognitive theories, such as social comparison, self-schema, and self-discrepancy (Ahadzadeh et al., 2017; Fatt et al., 2019; Kim & Chock, 2015; Rodgers et al., 2015; Tiggemann & Anderberg, 2019; Yu & Jung, 2018). The relevance of third-person effect (TPE) theory, where individuals perceive that the media content has a greater effect on others than on themselves (Davison, 1983), was documented in several studies elucidating the effect of idealized images in magazines on body image (Chia, 2007; Chia & Wen, 2010; David & Johnson, 1998). However, the application of TPE theory as the primary cause of body perception remains unknown among the viewers of Instagram Fitspiration images.

Scholars called for further research on TPE theory for theoretical advances (Sun et al., 2008). Perloff (1993) pointed out the importance of studying the underlying mechanism in TPE theory. David and Johnson (1998) initially responded to Perloff’s (1993) call by identifying self-esteem as a predictor of the perceived effect of idealized images in advertisements on the self and others. Since then, literature on the predictors of the TPE regarding body images in the media remains insufficient. Thus, the current study proposes appearance self-schema as a possible correlate of the TPE about image perception posted on Instagram. The TPE entails a self-serving bias, and appearance self-schema can provide a cognitive-driven explanation for such a bias (Shepperd et al., 2008).

Body image varies by culture (Gramaglia et al., 2018). Therefore, every context is worth attention. Many young Malaysian adults are concerned with their body image (Khor et al., 2009) which can lead to body

dissatisfaction, poor self-esteem, social anxiety, depression, and eating disorders (Chin et al., 2020; Levinson & Rodebaugh, 2015; Liao et al., 2010). Instagram is one of the most popular social networking sites (SNSs) in Malaysia with approximately 11.68 million users as of March 2020 (Müller, 2020) and dominantly young users aged 18–34 (NapoleonCat, 2019). This SNS is attractive to this group as it provides a platform for socialization, photo sharing, entertainment, and visualized product descriptions (Ting et al., 2015). Exposure to idealized body images on SNSs, specifically Instagram, influences the perception of young Malaysian adults on their body (Ahadzadeh et al., 2017; Sai et al., 2018).

Issues in the Malaysian context regarding the influence of Fitspiration images on SNSs can lead to dejected feelings about one’s body as well as the theoretical gap in the literature of the TPE and its underlying causes. Thus, the current study aims to determine the following: 1) the difference between the perceived impact of Fitspiration images on the self and others, 2) the relationship between the perceived impact of Fitspiration images on the self, others, and body image; and 3) the relationship between appearance self-schema with body image and the perceived impact of Fitspiration images on the self and others.

Perceived impact of the media on the self and others

TPE theory posits that individuals tend to overestimate the impact of mass media on others rather than on themselves, compelling them to behave in a biased manner (Davison, 1983). The TPE takes effect when the media’s influence is perceived negative (Cohen & Davis, 1991). However, when a message is perceived positive, individuals may perceive themselves to be equally susceptible or more susceptible, given that they are smart enough to recognize the value of the positive message (Gunther & Thorson, 1992). The belief of the media’s impact on others may motivate individuals to respond to the media content, not because they themselves are influenced, but because they think others might be influenced (Connors, 2005).

One explanation for the TPE, which is particularly relevant to the media context of idealized body image, entails optimistic bias (Chia, 2007; Perloff, 1993). Optimistic bias delineates that individuals perceive that they are less likely to experience a negative event compared with others (Weinstein, 1980). The central assumption underlying “optimistic bias is ego enhancement, wherein people have a positive self-image and are motivated to reinforce that positive self-image by thinking that they are better than others” (Chia, 2007, p. 678). This self-serving bias triggers individuals to evaluate others more vulnerable to media messages (David & Johnson, 1998). Optimistic bias along with ego enhancement are accounted responsible for

individuals' resistance to the media's effects as greater than others' resistance to the media's effects.

Optimistic bias toward the impact of idealized images is evident in western and eastern cultures and is not gender specific (Chia & Wen, 2010; David & Johnson, 1998; David et al., 2002; Park et al., 2007; Wan et al., 2003). College women in the United States and Singapore consistently reported that Fitspiration images in the media influence their peers, and that the media affects their peers greater than the media affects themselves (David & Johnson, 1998; David et al., 2002; Wan et al., 2003). College men from the same settings were capable of realizing the socially undesirable outcomes of being affected by the idealized images in the media. They reported that the effects of such images on their peers, i.e., female friends, were greater than the effects on themselves (Chia & Wen, 2010; Park et al., 2007).

Individuals' perception of the effect of idealized images on the self can create and strengthen the negative feeling toward their body. This postulate is drawn from social comparison theory which posits that people learn from the media what is ideal and compare their bodies with the ones exhibited by the media as ideal (Fatt et al., 2019; Rodgers et al., 2015; Tiggemann & Anderberg, 2019). Due to the comparison, individuals fail to resist the media's influence on themselves and thus they are likely to report negative body image. College students' "perception of media effects on themselves was significantly and positively associated with their body dissatisfaction and intention to go on diet, go to the gym regularly and have cosmetic surgery" (Chia & Wen, 2010, p.549).

The perceived effects of media messages on others can also create or strengthen body dissatisfaction. Individuals may believe that the idealized body images depicted in the media significantly influence others and that others' perception of such images is close to the media portrayals and others evaluate their body on the basis of the ideal body images portrayed in the media (Chia & Wen, 2010; Hargreaves & Tiggemann, 2006). "This belief would produce a considerable impact on how they feel about their own body and make them compelled to engage in body image behavior to conform to others' standards of ideal body image" (Chia & Wen, 2010, p. 545).

In light of the above literature, the lack of positive feelings toward one's body in viewers of Fitspiration images (Prichard et al., 2018; Robinson et al., 2017; Simpson & Mazzeo, 2017; Tiggemann & Zaccardo, 2015) can be associated with TPE theory. The viewers would assess themselves as less affected by the images or they might assume themselves more resistant and deem only others to be negatively affected by the images. The reason may be because when assessing

their body image on the basis of the perceived effect of images on the self, viewers are more likely to estimate themselves as "guarded" against the impact of images (David & Johnson, 1998). Resultantly, viewers gain positive feelings toward their body. Meanwhile, when assessing their body image on the basis of the perceived effect of images on others, they are more likely to have negative feelings toward their own body because their feelings derive from what they assume about the other viewers' vulnerability to images (David & Johnson, 1998).

Thus, the following hypotheses are developed:

H1: The perceived effect of Instagram Fitspiration images on others is greater than the perceived effect of images on the self.

H2: A negative relationship exists between the perceived effect of Instagram Fitspiration images on the self and body image.

H3: A negative relationship exists between the perceived effect of Instagram Fitspiration images on others and body image.

David and Johnson (1998) advanced the TPE literature regarding idealized images. They identified self-esteem as a predictor of the perceived effect of the media on the self and others, as well as social physique anxiety (a feeling of distress associated with the perceived evaluation of one's physical self) and physique monitoring (the attention that is paid to height, diet, physical appearance, and physical exercise) as determinants of the effect of images on the self but not on others (David & Johnson, 1998). Although David and Johnson (1998) paved the way for further investigations, literature regarding the predictors of the TPE of idealized images in media remains scarce. Therefore, the current study proposes appearance self-schema as a predictor of the TPE regarding the perception of Instagram Fitspiration images.

Appearance self-schema, body image, and the perceived impact of media on the self and others

The perceived effect of ideal media images on the self can somehow hinge on self-schema (Markus, 1977). A self-schema is "cognitive generalizations about self" and "guides the processing of self-related information" (Markus, 1977, p. 64). A self-schema is also "a person's construction of those traits that make the person distinctive and constitute the sense of me" (Myers & Biocca, 1992, p. 115). Schemas exist in different behavioral domains, such as appearance evaluation (Cash et al., 2004). Appearance schemas are "a cognitive component of body image and specifically refer to generalizations about the role of appearance, particularly the importance and meaning placed on appearance, in an individual's life." (Sinton & Birch, 2006, p. 166). Individuals for whom appearance matters

are “schematic” for body image, whereas “aschematic” for those whom appearance does not carry weight (Markus et al., 1987). Appearance-schematic people tend to capitalize on their appearance as a self-worth measure and are more likely to attend selectively to appearance information in themselves and others because they believe that appearance is the main source of attraction (Cash et al., 2004). Appearance schemas are activated by appearance-relevant stimuli (Markus et al., 1987), such as exposure to idealized bodies in the media (Ahadzadeh et al., 2017). They can develop cognitive and behavioral investment in appearance (Jung & Lennon, 2003) and induce individuals’ body dissatisfaction, negative mood, anxiety, and depression (Mulgrew et al., 2014; Sinton & Birch, 2006; Yu & Jung, 2018). Having synthesized the literature, the following hypothesis is developed:

H4: Appearance self-schema negatively relates to body image.

In addition, this research sets forth the following question to identify the stronger variable predicting body image:

Q1: What variable (among appearance self-schema, the perceived effect of Instagram Fitspiration images on the self, and the perceived effect of Instagram Fitspiration images on others) is the stronger predictor of body image?

Several studies attempted to empirically examine the influence of media schemas on the perceived media effects on the self and others. For example, Price et al. (1997) found that “two schemas, powerful media (news media are powerful) and gullible media audiences (people are vulnerable to media influence), were positively related to third-person perceptions, mainly due to their impacts on perceived effects on others, rather than effects on self.” Meirick (2006) set a research question on the relationship between media schemas and the perceived media effects on the self following Price et al.’s (1997) failure to find a significant relationship between these two constructs. Results varied depending on the type of content and the type of media schema. For example, while the powerful media schema is positively related to the perceived effects of cigarette ads on the self, the avoidance schema “(people do not want to watch things that make them feel bad about themselves) had a negative relationship with perceived effects of alcohol ads on self” (Meirick, 2006).

However, evidence regarding the influence of appearance self-schema on perceived impact of media on the self and others is nonexistent. Drawing from attribution theory, two different explanations exist for the TPE in the context of idealized images: motivational explanation and cognitive explanation. Motivational explanation entails self-serving bias which is based on

the downward comparison of others. Individuals tend to engage in downward comparison to maintain or boost self-esteem. The cognitive bias explanation indirectly involves the self (David & Johnson, 1998). The self has been conceptualized as a system of cognitive structures about the self or self-schemas (Markus et al., 1987). The self is able to soften the media’s effects on the self by filtering them through schemas (David & Johnson, 1998). Ultimately, schemas make individuals susceptible to the media’s impact.

Moreover, “having a self-schema for a particular trait will make people perceive others as likewise having that trait” (Baumeister, 1999, p. 11). Individuals tend to evaluate others on the dimensions that are important to themselves (Hirschberg & Jennings, 1980). Appearance-schematic individuals have substantial experience in evaluating people on the same dimension and thus are more confident than appearance-aschematic individuals when judging another person’s appearance investment (Fong & Markus, 1982). In addition, “having a self-schema for a particular trait will make people perceive others as likewise having that trait” (Baumeister, 1999, p. 11). A generalization takes place where people evaluate others on the basis of the important features of their own personalities (Hirschberg & Jennings, 1980). Therefore, self-relevant traits are commonly employed in describing others, and even others are assessed more extremely when self-relevant traits are used (Fong & Markus, 1982). Therefore, self-relevant traits are crucial when evaluating others’ vulnerability to the media’s influence. Moreover, self-schemas increase the confidence in judgments and inferences about others that are based on self-relevant information (Fong & Markus, 1982).

How appearance-schematic individuals evaluate themselves and others in terms of the impact of idealized bodies in the media remains unknown. Does appearance schematicity involve a self-serving bias when assessing the perceived impact of the media on the self and on others? This study attempts to explore these uncovered areas and fill this literature gap by answering the following research questions:

Q2: Does appearance self-schema relate to the perceived effect of Instagram Fitspiration images on the self?

Q3: Does appearance self-schema relate to the perceived effect of Instagram Fitspiration images on others?

2. Methods

Samples and data collection

Using a convenience sampling method, a survey was administered to 340 Instagram users who were students in a Malaysian private university. They were informed

about the study’s purpose, and the consent of interested participants was obtained before conducting the study. The Review Board of Xiamen University Malaysia approved the protocol of the study to ensure the principles of research ethics (Reference number: REC-1912.01). Visiting Fitspiration images on Instagram was the screening criterion for inclusion from analysis. Incomplete questionnaires with more than 10% missing response were also excluded from analysis. Given these criteria, 301 responses were included in the analysis. Respondents were between the ages of 18 and 37 ($M = 21.58$; $SD = 2.44$), mostly female (66.8%), single (73.1%), and Chinese (50.8%). Meanwhile, 38.4% checked their Instagram every few hours, and 42.5% “sometimes” viewed Instagram Fitspiration images. Table 1 shows the participants’ demographic information. Table 2 summarizes the information related to Instagram usage.

Table 1. Demographic profile of the respondents (N = 301)

	<i>n (%)</i>
Gender	
Male	100 (33.2%)
Female	201 (66.8%)
Ethnicity	
Malay	66 (21.9%)
Chinese	153 (50.8%)
Indian	64 (21.3%)
Others	18 (6.0%)
Marital Status	
Single	220 (73.1%)
Married	8 (2.7%)
Single but in a relationship	71 (23.6%)
Others	2 (0.6%)
Religion	
Islam	74 (24.6%)
Buddhism	112 (37.2%)
Christianity	39 (13.0%)
Hinduism	48 (15.9%)
Atheist	5 (1.7%)
No religion preference	17 (5.6%)
Others	6 (2%)
	Mean (SD)
Age	21.58 (2.44)
Height	164.06 (8.63)
Weight	59.20 (13.04)
BMI	21.90 (4.02)

Measurements

Perceived impact of the media on the self and others

In this study, Wan and Fung’s (2003) multi-item scale was used. The respondents were asked to estimate the impact of Instagram Fitspiration images on other girls

and boys. For the self and others, the perceived impact of Instagram Fitspiration images was measured with four separate questions: a) “Fitspiration images on Instagram have a powerful impact on _____;” b) “Seeing Fitspiration images on Instagram makes _____ feel that boys and girls should have the same idealized body;” c) “Seeing Fitspiration images on Instagram influences _____ the perception of how other boys and girls should look;” and d) “Seeing Fitspiration images on Instagram makes _____ feel less satisfied with how they look.” For each item, respondents indicated their level of agreement using a 5-point Likert scale ranging from “strongly disagree” to “strongly agree.” The four items assessing the perceived impact on the self had an acceptable level of reliability ($\alpha = 0.832$). Therefore, “these items were combined into a single scale. Similar reliability analyses were computed for the four items assessing the impact on other.” In both cases, acceptable levels of reliability were obtained ($\alpha = 0.826$).

Table 2. Using Instagram and viewing Fitspiration images (N = 301)

	<i>n (%)</i>
How often do you check your Instagram?	
Every few days	35 (11.6%)
Once a day	39 (13.0%)
Every few hours	116 (38.4%)
Every hour	45 (15.0%)
Every 30 minutes	38 (12.6%)
Every 10 minutes	27 (9.0%)
Every 5 minutes	1 (0.3%)
How long do you spend on Instagram on a typical day?	
<1 hour	165 (54.8%)
1 hour ≤ Time ≤ 3 hours	60 (19.9%)
4 hours ≤ Time ≤ 6 hours	54 (17.9%)
7 hours ≤ Time ≤ 9 hours	15 (5%)
10 hours ≤ Time	7 (2.3%)
How much do you view the Fitspiration images on Instagram	
Rarely	81 (26.9%)
Sometimes	128 (42.5%)
Often	69 (22.9%)
Always	23 (7.6%)

Appearance self-schema

The beliefs about Appearance Questionnaire (ASI-R) was used to measure appearance self-schema (Cash & Labarge, 1996). The questionnaire comprises 20 items asking the participants’ beliefs on their physical appearance and its influence on life. Responses were

Table 3. Correlations between the study variables (N = 301)

Variables	1	2	3	4
1. Appearance self-schema	-			
2. Perceived effect of Instagram Fitspiration images on the self	0.202***	-		
3. Perceived effect of Instagram Fitspiration images on others	0.355***	0.276***	-	
4. Body image	-0.211***	-0.053	-0.225***	-

Note. *** $p < 0.001$

Table 4. Multiple regression for body image (N = 301)

Variables	B	SEB	β	t
Appearance Self-schema	-0.049	0.021	-0.140*	-2.291
Perceived effect of Instagram Fitspiration images on the self	0.046	0.065	0.042	0.707
Perceived effect of Instagram Fitspiration images on others	-0.227	0.077	-0.182**	-2.938

Note. $R = 0.257$, $R^2 = 0.066$, $F(3, 297) = 7.00$; * $p < 0.05$, ** $p < 0.01$.

rated on a 5-point Likert scale (from 1 = strongly disagree to 5 = strongly agree). In accordance with the scoring instruction of the measurement, out of 20 items, the score of six items were reversed prior to the analysis. The level of internal consistency obtained was acceptable ($\alpha = 0.855$).

Body image

The respondents were asked to rate their feelings toward their four body parts, namely, stomach, hips, buttocks, and thighs, by using a 5-point Likert scale where 1 refers to “strongly satisfied” and 5 refers to “strongly dissatisfied.” The four parts were included as they are highlighted in Fitspiration images (Carrotte et al., 2017). These four items demonstrate an acceptable level of reliability ($\alpha = 0.845$).

Data analysis plan

This study aimed to investigate the factors predicting body image. First, paired samples t-test was used to compare the differences between the perceived effect of Instagram Fitspiration images on the self and others (H1). Next, partial correlation was used to determine the relationships between all the variables in this study while controlling for viewing of Instagram Fitspiration images (H2, H3, H4, Q2, and Q3). Last, multiple regression analysis was conducted to investigate the predicting effects of the perceived effect of Instagram Fitspiration images on the self and others, and appearance self-schema on body image (Q1).

3. Result

The perceived effect of Instagram Fitspiration images on others was compared with the perceived effect of the images on the self using a paired samples t-test. A significant difference [$t(300) = 12.67$, $p < 0.001$] existed

between the perceived effect of the images on others and the self where the perceived effect of the images on others ($M = 14.43$, $SD = 2.85$) was greater than the perceived effect of the images on the self ($M = 11.78$, $SD = 3.23$). The mean difference was 2.65 with a 95% confidence interval ranging from 2.24 to 3.06. Therefore, H1 is supported.

The relationships between the perceived effect of Instagram Fitspiration images on the self, others, appearance self-schema, and body image while controlling for viewing of Instagram Fitspiration images were determined using partial correlation analysis to answer H2, H3, and H4. However, H2, where the perceived effect of Instagram Fitspiration images on self was not correlated with body image, is not supported ($r = -0.053$, $p = 0.364$). Meanwhile, the perceived effect of Instagram Fitspiration images on others was negatively correlated with body image ($r = -0.225$, $p < 0.001$), thus supporting H3. As displayed in Table 4, a significant negative relationship existed between appearance self-schema and body image ($r = -0.211$, $p < 0.001$), thus supporting H4.

Multiple regression analysis was conducted to investigate the predicting effects of the perceived effect of Instagram Fitspiration images on the self, others, and appearance self-schema on body image (Q1). As displayed in Table 4, a significant prediction model existed [$F(3, 297) = 7.00$, $p < 0.001$], with a R value of 0.257 and $R^2 = 0.066$. This result indicates that all the predicting variables predicted 6.6% of the variability in body image. Specifically, the perceived effect of Instagram Fitspiration images on others was the strongest predictor ($\beta = -0.182$, $t = -2.938$, $p = 0.004$), followed by self-schema ($\beta = -0.140$, $t = -2.291$, $p = 0.023$). However, the perceived effect of images on

Instagram Fitspiration on the self failed to predict body image ($\beta = 0.042$, $t = 0.707$, $p = 0.480$). Therefore, as self-schema and the perceived effect of Instagram Fitspiration images on others increase, satisfaction with body image will decrease.

The relationships between appearance self-schema, the perceived effect of Instagram Fitspiration images on the self and others while controlling for viewing of Instagram Fitspiration images were determined using partial correlation analysis to answer Q2 and Q3. Table 3 reveals a significant positive relationship between appearance self-schema and the perceived effect of Instagram Fitspiration images on the self ($r = 0.202$, $p < 0.001$). Similarly, appearance self-schema was significantly positively correlated with the perceived effect of Instagram Fitspiration images on others ($r = 0.355$, $p < 0.001$).

4. Discussion

This study examined whether 1) the perceived effect of Instagram Fitspiration images on others is greater than the perceived effect of the images on the self; 2) appearance self-schema and the perceived effect of Fitspiration images on the self and others are significantly correlated with body image; 3) appearance self-schema has a significant relationship with the perceived effect of Instagram Fitspiration images on the self and others.

The results show that the perceived effect of Fitspiration images on others is greater than on oneself (H1), implying the negative connotations attached by the respondents to the Fitspiration images. In this regard, Perloff (1993) argued that socially undesirable content will likely lead to a discrepancy between the perceived impact of images on the self and others. Such a discrepancy is also compatible with the notion that the media is powerful, given that media exposure affects individuals' own perceptions and their perceptions of the media's effect on others (Meirick, 2006). Viewers of Fitspiration images assess themselves as less vulnerable toward such images compared with others, suggesting that viewers tend to make downward comparison of others. These results lend credibility to previous studies which indicated the greater perceived effect of ideal images in advertisements on others than on themselves (David & Johnson, 1998; David et al., 2002; Wan et al., 2003). The perceptual bias found in this research and past studies substantiates the self-serving bias in the TPE where predisposition to oneself becomes central in judging others' resistance to the media's effect (David & Johnson, 1998).

Furthermore, H3 was supported, indicating that the effect of Fitspiration images perceived on others produces negative feelings toward one's body.

However, this study failed to identify any significant relationship between the perceived effect of Fitspiration images on the self and body image (H2). Fundamentally, the impact of images on others makes Fitspiration viewers experience poor body image. The impact of Fitspiration images on others becomes the reference to respond to these images, but not the impact on themselves. This result echoes that of Chia and Wen's (2010) who unveiled that the impact of thin ideals on male friends affects body dissatisfaction. These results confirm the postulate of the TPE where the perception of media content on others, especially when a negative overtone is given to the content, steers feelings and behaviors (Davison, 1983). The failure in finding the significant association between the perceived effect of Fitspiration images on the self and body image can be attributed to the participants' physical state, specifically BMI. The burgeoning literature demonstrated that higher levels of BMI lead to negative body image (Ahadzadeh et al., 2018; Kantanista et al., 2015; Paxton et al., 2006; Stice & Whitenton, 2002). Generally, the average BMI of the study's participants was not high, which might have affected the relationship between the perceived effect of Fitspiration images on the self and body image.

Appearance self-schema is negatively associated with body image (H4). This suggests that appearance schematicity develops Fitspiration viewers' negative feelings toward their body, i.e., the greater importance is placed on the body, the greater the unfavorable feeling toward it. The results confirm past studies which demonstrated that those schematic on physical appearance reported lower levels of contentment with their appearance than those aschematic on appearance (Jung & Lennon, 2003; Mulgrew et al., 2014). The perceived impact of Fitspiration images on others is the stronger variable predicting body image, followed by appearance self-schema (Q1), suggesting the strong influence of the TPE in driving feelings about one's body. Individuals' media messages on others can also create or strengthen body dissatisfaction. Individuals may believe that others' perception of ideal bodies is compatible with the ones portrayed in the media and others perceive their body according to the ideal bodies the media introduces (Hargreaves & Tiggemann, 2006). Such a belief may impact how individuals perceive and evaluate their own appearance which may trigger them to act and behave in accordance with the standards of the ideal body image set by others (Chia & Wen, 2010).

The effect of the perception of Fitspiration images on the self and others is associated with self-schema (Q2 and Q3) which would establish one of the main theoretical contributions of this study in furtherance to the existing literature. Fitspiration viewers' cognitive generalizations about their body can partake in the formation of the first-person effect. These results imply

that schematicity is not tied with the tendency to perceive oneself in an overly favorable manner which may avert an individual from a sincere evaluation. Fitspiration viewers perceived themselves vulnerable to images and this perception is linked with the salience placed on appearance. This finding is comparable with that of Meirick's (2006) who showed that the powerful media schema and the savvy audience schema (most people have the ability to judge the accuracy of what they see and hear) were positively related to the perceived effects of cigarette ads on the self and the perceived effects of drunk-driving public service announcements.

Fitspiration viewers evaluated others permeable toward images based on their own cognitive structures with regard to physical appearance (Hirschberg & Jennings, 1980). Therefore, the greater the schematicity, the greater the flimsiness is associated to others toward Fitspiration images. For individuals who pay more attention to appearance, Fitspiration images are perceived influential not only on themselves but also on others. This result corroborates Price et al. (1997) who found that those who believe that the media is powerful and people are vulnerable to media influence are more likely to perceive others' attitudes toward news coverage to be influenced.

This study provides several theoretical contributions. This study examined the impact of the TPE associated with the images of bodies presented in a new media platform, i.e., Instagram Fitspiration. The relevance of the TPE was attested where the respondents evaluated their vulnerability to the Fitspiration images compared to others. The Fitspiration images were mainly perceived negative where the TPE has a cause to be established, thus forming the perception and behavior. In addition, the current study theoretically expanded the TPE by introducing self-schema as a predictor of the first- and third-person perceptions, responding to the call for further research on the advancement of the TPE (Perloff, 1993; Sun et al., 2008). The results contribute to the knowledge by supporting the importance of cognitive processing mechanism driven by self-schema for understanding the development of body image and TPE of Fitspiration images.

The results also yield practical implications. Given that Instagram Fitspiration is a growing source of fitness and diet-related education and affects the disposition about health, viewers should be reminded of how this source can inspire yet "sabotage" them. Self-schema affects Fitspiration viewers' feelings negatively about their body image, thus it can have a practical contribution for media psychologists who espouse personal development by deconstructing the wrong beliefs about physical appearance. Such wrong beliefs may lead to self-perpetuating and unpleasant feelings driven by the

media and/or cultural stimuli, such as Instagram Fitspiration images. Thus, media psychologists must deemphasize the outer beauty. Instead, they must emphasize self-actualization which enables Fitspiration viewers to be realistic and accept themselves as they are. Practically, the consequences of poor body image driven by exposure to idealized bodies on SNSs, such as Instagram, can be serious, resulting in various psychological problems (such as anxiety, depression, loneliness, and psychological distress) and behavioral warning signs (such as eating disorders) (Tiggemann & Anderberg, 2019). Some interventions can be enacted to raise users' awareness about the effects of Fitspiration on the self and on others, for instance about the continuously changing "norms," definitions, and expectations of style among individuals, or when photos of people are digitally manipulated to look "better" than they become unrealistic. These solutions related to mental health are important issues in today's lifestyle, research, and practice which can help empower individuals about their body image and the associated perceptions, or even help them resist the other negative impacts of social media. Therefore, educating about safe social media can play a key role in facilitating such practice by constantly enhancing health education syllabi at schools and universities.

This study holds possible limitations that must be discussed. First, the sample of this study was limited only to university students from the private sector in the capital of Malaysia, thus limiting the generalizability of the findings to other groups of students in other contexts. Future researchers can replicate the study in secondary school students, as they are also vulnerable to SNSs content and reported poor body image (de Vries et al., 2016; Tiggemann, 2013). Therefore, the replication of this study with a larger and more inclusive and heterogeneous sample will be worthwhile. The use of self-report measurements in this study can create social desirability bias, thus jeopardizing the accuracy of the results. Future research can enhance the validity of the results by controlling participants' social desirability. This study failed to find a significant relationship between first-person effect and body image. Therefore, more empirical research is warranted to determine the possible confounding variables which buffer this relationship. Three independent variables in this study only predicted 6.5% variance in body image, suggesting the existence of other constructs which can contribute to body image but not examined in this study. Therefore, future researchers can expand this study's research framework by incorporating more variables to enhance the models' predictive power.

5. Conclusion

Individuals perceive that Instagram Fitspiration images have a greater effect on others than on self. Appearance

self-schema and the perceived effect of Fitspiration images on others negatively affect individuals' feelings and moods toward their body. Ultimately, appearance self-schema drives first- and TPEs.

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Conflict of Interest

The authors declare no conflict of interest.

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