Exploring the Underpinnings of Ethnicity, Gender and Body Image as Determinants of the Eating Habits of Malaysian Youth

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ABSTRACT

This study investigated relationship between gender, ethnicity, and body image with eating habits of Malaysian youth aged 17-35 years (Malays 148, Chinese 103, Indians 53, Others 5). Of 309 respondents, 195 were female and 114 were male. Questionnaire was adapted from the Eating Attitude Test-26 (EAT-26), the Body Shape Questionnaire (BSQ), the Body Image-Acceptance and Action Questionnaire (BI-AAQ) and the Figure Rating Scale (FRS) to explore the differences in perceptions among ethnicity and gender regarding body image as well as eating habits. The association between body image and eating habits was also explored. Findings showed that females preferred slimmer bodies and youth of Indian descent had a higher body satisfaction. Respondents’ fear of gaining weight do not determine their practice of unhealthy eating habits such as skipping meals or eating less as other studies have suggested. For future research, Body Mass Index (BMI) of the respondents to be taken into consideration.

Keywords: Body Image, Eating Habits, Ethnicity, Gender, Malaysian Youth

Introduction

This cross-sectional study was carried out in Malaysia. The respondents included from states of Perak, Seremban, Melaka, Melaka, Selangor and federal territory of Kuala Lumpur, the six most populous stated of Malaysia. The study aimed to investigate the how gender, ethnicity and body image play as determinants of the eating habits of the Malaysian youth. The study tried to understand how their body image perceptions or dissatisfaction could affect their eating behaviour. Total 309 respondents of three main descents i.e. Malay, Chinese and Indian participated in the study (148 Malays, 103 Chinese, 53 Indians and 5 from other ethnicities e.g. Iban).
Literature Review

Several studies have discussed the body image satisfaction among gender, especially among women where the Western ideals has become an embedded among the young generation as the media has become globally accessible. The pursuit for beauty can even be traced back to the time of the Ancient Egyptians where it was common to wear makeup as a way to show good health and status (Maps, 2008). Beauty standards change from one region to the other however, the Western beauty standards have spread to many different cultures and ethnicities. They present with the idea that being thin or slim is what is considered as beautiful for females and a muscular and toned figure is what males should have (Fawkner, 2012, & Grogan, 2012). Given these ideals, there have been several studies on how they have affected the mind set and eating behaviour of youths as they pick up several negative eating habits that could lead to eating disorders (Chisuwa & O'Dea, 2010). These media influences have also created a unrealistic imagery for youths in how their body image should be which affects their confidence and self-esteem which may lead to several emotional disorders (Ura & Preston, 2015).

Preester & Knockaert, (2005), talking about the body image say that “the picture of your own body which we form in our mind, that is to say, the way in which the body appears to ourselves is the three-dimensional image everyone has about himself”. From this, we can conclude the concept of body image as something that is abstract and unique to each individual, which is shaped by one’s own environment and experiences. This, however, allows the influence of various factors in forming one’s body image, whether from age, gender, media influences, cultural and societal attitudes, and many more.

According to Healy J (2014), there are four aspects to body image: the way you see yourself (perceptual), the way you feel about the way you look (affective), the thoughts and beliefs you have about your body (cognitive) and the things you do in relation to the way you look (behavioural). Individuals perceive their own self in many different ways which may not be the actual representation of their own body, and this plays a part in how they feel about the way they look, whether they are satisfied or dissatisfied. Our perceptions and feelings about our body are determined by the beliefs and principles that are preconceived within us. This, in turn will drive us to behave and act in according to fulfil that desire and aspiration (Healy, 2014).

Being male and female, there is a significant difference about what is desired by each. For men, in general, muscularity is highly desired. This is associated with the desire for strength and fitness as men are usually more involved with physical activities and jobs that would require a great deal of strength and fitness. In adult men, it is an ideal to have a mesomorphic body as in one that is athletic, muscular yet slender. This ideal image is to be seen among the various age groups. With this in mind, men would have a tendency to want to gain
weight in order to have a larger and more muscular body (Fawkner, 2012 & Grogan, 2012).

For women, the ideal body is generally to look youthful and slender with a toned and full breasted body. It is mainly considered a Western ideal where to be thinner is to look more attractive. This ideal body is moulded by what is shown in the media where many prominent celebrities are shown to have such bodies and their general appearances are youthful, wrinkle-free and without flaw. (Grogan, 2012) In a study in Medellin, Columbia, the girls who were interviewed expressed desire to look like a beauty queen who are generally thin. (Ochoa, 2011) Gaining weight is also seen as something unwanted along with having deformities such as scars and stretch marks (Grogan, 2012).

Globally, there has been different perception about having a thinner body or otherwise. Obesity has increased worldwide due to diversity of food products, increased affordability and availability. But these ideals are not necessarily the same in Western and non-Western countries. For example, Anne Becker highlights in her study in Fiji, the people prefer a robust body shape. However, with exposes to Western media, their aesthetics have also become westernized in the sense of taking efforts in attaining a type of body shape (Becker, 2004). The effects of westernization can be evidently seen in the Asian region also, such as South Korea and Japan, where cosmetic surgery rates are high (Edmonds, 2012).

In Malaysia itself, these westernized perceptions have not escaped the local community as in studies conducted among college students in University Malaya Sarawak, females preferred to look smaller than they are whereas the males wanted a larger figure (Kuan et al. 2011). Although there are not many comprehensive studies regarding body image and eating habits in Malaysia, the ones that were conducted mainly focused on university students or adolescents (Kuan et al. 2011; Edman & Yates, 2004; Gan et al. 2011; Wahida et al. 2011) These studies have highlighted the thin idealisation among females where a study revealed a high prevalence of underweight female university students (Gan et al. 2011).

Although the influence of Westernisation is widening, it doesn’t however mean that all Western countries have the same ideals. In a study that compares the difference eating habits in Ireland and the United States of America (U.S.), it showed that the U.S. respondents had a higher average Eating Attitude Test (E.A.T.) score as compared to those in Ireland. The E.A.T. evaluates an individual’s preoccupation with food where it can be indicate a risk of one’s tendency to develop an eating disorder. This finding displays that the Irish culture, despite being considered Western, is more encouraging of a positive eating attitude (Jansen & Morgan, 2008). Even in terms of body image, Irish women were shown to have little dissatisfaction with their current body image as opposed to their US counterpart that had the typical findings of women wanting thinner bodies. It
does, however, support the notion of males wanting larger bodies as the average Irish bodies wanted larger bodies (Jansen & Morgan, 2008).

Regarding eating behaviour, a study shows that female students are more conscious about the food they are eating (Li et al. 2012). They tend to have a more cautious attitude towards what is in their food content by checking the food labels and were shown to consume less fatty foods. However, despite being more cautious and conscious, in two separate studies, it was shown that females tend to eat less of vegetables and fruits (Li et al. 2012, Ramos et al. 2013). This gives us an insight that even as individuals are more aware of their food content, they might not be practicing the recommended diet that encompasses the required daily nutrients (Ramos et al. 2013).

To correlate whether one’s body image had an effect on eating habits, one study discusses the eating habits among adolescent girls and boys who had different categories of body weight with different ideals for the body they wanted (Grogan, 2012). It showed that overweight adolescents that wanted to be thinner reported to eat less than three meals a day, especially among the girls where more of them skip breakfast as compared to girls who were of normal weight. This finding is supported in another study where dieting adolescents tend to have irregular or skip breakfast when compared to those who aren’t dieting (Chisuwa & O’Dea, 2010). This depicts a link in eating behaviour with the pursuit of wanting to achieve an ideal body. This also shows that the route taken by these individuals are not always the healthiest way of changing one’s body image. Between genders, females are seen to be more involved in dieting than males are (Chisuwa & O’Dea, 2010).

**Material and Methods**

This study is a cross-sectional study to investigate the body image perceptions and eating habits of the Malaysian youth aged 17-35 year old. Total 309 respondents were selected through non-probability sampling method where convenience sampling was done by including willing participants. The data was collected by the questionnaire, both by self-administration and through online forms.

The questionnaire used in this study is customised using the validated questionnaires such as the Eating Attitude Test-26 (EAT-26), adapted from Garner et al. (1982), the Body Shape Questionnaire (BSQ), adapted from Cooper et al. (1987), and the Body Image-Acceptance and Action Questionnaire (BI-AAQ). The Figure Rating Scale (FRS) or the Stunkard scale was also adopted into our survey to investigate the perceived and ideal body images of the respondents.

The questionnaire was pre-tested to see whether respondents would understand the statements and could finish it in the suggested time allotted. Consent was asked verbally from each respondent if they would like to partake in
the study we were conducting. The respondents were mainly comprised of university students of several different local public and private universities and also, members of the general public with whom the sessions were held in several shopping malls. The data was analysed using SPSS to generate the simple frequencies, percentages and p-values for data analysis.

Results and Discussion

| Table 1 | Characteristics of the respondents |
|---------|-----------------------------------|
|         | Male (%) (n=114) | Female (%) (n=195) | Total |
| Age (years) |              |                        |       |
| 17 – 21   | 78 (68.4) | 151 (77.4) | 229 |
| 22 – 26   | 24 (21.1) | 34 (17.4)  | 58  |
| 27 – 31   | 10 (8.8)  | 8 (4.1)    | 18  |
| 32 – 35   | 2 (1.8)   | 2 (1.0)    | 4   |
| Ethnicity |              |                        |       |
| Malay     | 54 (47.4)  | 94 (48.2)   | 148 |
| Chinese   | 45 (39.5)  | 58 (29.7)   | 103 |
| Indian    | 14 (12.3)  | 39 (20.0)   | 53  |
| Other     | 1 (0.9)    | 4 (2.1)     | 5   |
| Marital Status |            |              |       |
| Single    | 105 (92.1) | 189 (96.9)  | 294 |
| Married   | 9 (7.9)    | 6 (3.1)     | 15  |
| Occupation |              |                        |       |
| Student   | 97 (85.1)  | 179 (91.8)  | 276 |
| Employed  | 12 (10.5)  | 15 (7.7)    | 27  |
| Other     | 5 (4.4)    | 1 (0.5)     | 6   |

Following 17 questions were asked to explore relation of body image with ethnicities and gender. The close-ended questionnaire had the options of: strongly disagree, disagree, neutral, agree & strongly agree.

1. I feel very satisfied with the way I look.
2. I would like to lose weight.
3. I would like to gain weight.
4. I think people judge others from the way they look.
5. Food has a direct effect on my body shape.
6. I take supplements (e.g. vitamins, protein shakes) to keep my preferred body image.
7. I am afraid that I might become overweight.

8. Being with thinner people has made me feel self-conscious about my body shape.

9. I have avoided wearing clothes that made me

10. I have not gone out to social occasions (e.g. parties) because I felt bad about the way I looked.

11. I have felt ashamed of my body.

12. I get on with my life even when I feel bad about my body.

13. Many things are more important to me than feeling better about my weight.

14. To control my life, I need to control my weight.

15. My worries and fears about my weight are true.

16. Feeling fat causes problems in my life.

17. My relationships would be better if my body weight and/or shape did not bother me.

Following 17 questions were asked to explore relation of eating habits and gender. The close-ended questionnaire had the options of: strongly disagree, disagree, neutral, agree & strongly agree.

1. I read the nutritional fact labels on grocery items.

2. I pay a lot of attention to eating vegetables every day.

3. If I put on weight, I would eat less than I usually do.

4. I often refuse food or drink offered because I am concerned about my weight.

5. I deliberately eat foods that are slimming.

6. I deliberately eat less in order not to become heavier.

7. I take my weight into consideration with what I eat.

8. If food smells and tastes good, I would eat more than usual.
9. I find myself preoccupied with food.
10. I feel extremely guilty after overeating.
11. I avoid food with sugar in them.
12. I feel that food controls my life.
13. I feel that others pressure me to eat.
14. I enjoy trying new rich foods.
15. Advertisements/media influences my choice of food.
16. I always choose the food that helps to make my looks great.
17. I would fast/skip meals to make my body looks good.

From the statistical tests, only four statistically significant associations were found which are between gender and those who would like to lose weight \((p=0.000)\), those who would like to gain weight \((p=0.000)\), those who take supplements to keep their preferred body image \((p=0.009)\), and those who feel their relationships would be better if their body weight and/or shape did not bother them \((p=0.005)\). No statistically significant associations were shown between ethnicities and body image. Apart from this, the other three statistically significant associations found were between gender and those who eat less when the put on weight \((p=0.007)\), those who eat more if the food smells or tastes good \((p=0.034)\), those who feel extremely guilty after eating \((p=0.021)\).

**Ethnicities: Body Image Satisfaction**

Results show that more respondents are satisfied with the way they look regardless whether they are Malay (49.3%), Chinese (48.5%) or Indian (64.2%); though Indians showing a higher satisfaction level of their body image. It is also shown that a high percentage of Malays (57.5%), Chinese (49.5%), Indians (60.3%), and other ethnicities (60%) expressed that they have never felt ashamed of their own body. However, this doesn’t mean that they do not wish to change their current body image as more than half of Malays (57.5%), Chinese (56.3%) and Indians (54.7%) wished to lose weight whereas a smaller percentage of Malays (23.0%), Chinese (29.1%) and Indians (17.0%) would actually like to gain weight.

**Attitudes towards Body Image**

Findings show that a majority of Malays (71.0%), Chinese (67.0%) and Indians (75.4%) agree that people judge others from the way they look. A high number of Malays (60.2%), Chinese (59.3%) and Indians (66.0%) believe that food
has a direct effect on their body shape. All ethnicities, Malays (60.8%), Chinese (48.5%), Indians (47.1%), and others (80.0%), also displayed being afraid of becoming overweight. This could be due to the rising number of cases of obesity in the country and the chronic diseases associated with it. In comparison, regarding whether they believed feeling fat cause problems, Malays (35.8%) were shown to have slightly higher percentages of agreeing to the statement whereas more Chinese (34.0%) and Indians (45.3%) disagreed. Other than that, Malays (35.8%) and Indians (43.4%) disagree that their relationships with others would be better if their body did not bother them but the Chinese, however, showed a higher percentage in agreement (34.0%).

**Preoccupation with Body Image**

This study also explored how much one is preoccupied with their own body image and how it influences their daily life and interaction with other people. Findings showed near equal distribution among the three races where they both agree, Malays (37.9%), Chinese (34.9%) and Indians (26.4%), and disagree, Malays (33.8%), Chinese (31.1%) and Indians (32.1%), to feeling self-conscious when being around people who are thinner than them.

Chinese (38.8%) and Indians (41.5%) agree that to control life, they need to control their weight which is opposite of the Malays where a higher percentage who disagreed (32.4%). Since the differences in agreement and disagreement are slight, it can be discussed that the differences among the ethnicities are due to their cultural and religious practices, and lifestyles. There is a higher percentage that disagree that their worries and fears about their weight are true among Malays (34.5%), Chinese (33.0%), and Indians (37.3%), which could mean they are more aware about the reality of their own body. More than half of the Malays (56.8%), Chinese (50.5%), and Indians (54.8%) do not agree on taking supplements to keep their preferred body image.

Moreover, we can see a general trend of majority of all the ethnicities showing a more positive perception of life in relation to their body image. Malays (56.8%), Chinese (42.7%), and Indians (49.1%) would get on with their life even when they feel bad about their bodies. And they agree, Malays (71.6%), Chinese (60.2%), and Indians (54.7%) respectively, that many things are more important to them than feeling better about their weight. It shows that despite on an individual level, they might feel not confident about their own body but body image itself isn’t a main concern of their lives.

In another aspect of preoccupation with one’s body image, we delve on how it affects people’s interaction with others. From the responses, there was a high percentage of those who agreed, Malays (50.0%), Chinese (41.5%) and Indians (45.3%) to avoiding wearing clothes that make them aware of their own body, but more than a quarter of Indians (37.8%) reported of disagreeing to it. About a quarter of Malays (22.3%), Chinese (27.2%), and Indians (20.8%) felt neutral about
not going to social occasions due to the way they looked. This generally depicts that body image plays a less influential role in their social lives and their interaction with others.

**Gender: Body Image Satisfaction**

Males show a higher percentage of being satisfied with their looks (57.1%) whereas the second larger group felt neutral about their looks (34.2%) and only 8.8% were shown to feel dissatisfied of their own looks. This trend is similar for women where 48.2% are agree to feeling satisfied with their looks and another 40.5% felt neutral about how they looked. This is supported when asked about whether they have felt ashamed of their body and both males (45.6%) and females (61.0%) have not felt ashamed of their body. However, both males (44.7%) and females (64.6%) would want to lose weight but males showed a higher percentage when it comes to wanting to gain weight (39.5%) as compared to females where majority did not want to gain weight (69.8%). These findings support the western ideals as mentioned before where females preferred to have a slim figure but it weakly supports the ideal that males wanted larger bodies.

**Attitudes towards Body Image**

A high percentage of both males (62.3%) and females (75.9%) agree that people judge other by their looks where the percentage of females was higher than males. This result is similar to when asked about whether they believed food had a direct effect on their body shape, where females (63.1%) showed a higher percentage than males (57.9%) regarding the matter. Similarly, more females (57.9%) were afraid to be overweight than males (49.2%). There is an equal percentage of 35.9% of males who agree and disagree that feeling fat is a cause of problems in their lives. It is also the same for females with 35.8%. And more than a quarter of both females (30.8%) and males (28.1%) feel neutral about it. However, more males agree (40.4%) that their relationships with others would be better if their body weight/shape did not bother them whereas more females (42.1%) disagreed to it. These attitudes can determine one’s behaviour in relations to their body image and the findings that there are slight differences of perspectives between the genders.

**Preoccupation with Body Image**

A larger proportion of males disagreed (38.6%) or felt neutral (36.8%) feeling self-conscious being around those who are thinner than them whereas more females (41.5%) agreed to it. A higher percentage of males (40.3%) believed that to control one’s life, they would need to control their weight while females (39.5%) mainly felt neutral about it. And more males (37.8%) than females disagreed that their worries and fears about their weight are true. However, both males (43.9%) and females (60.6%) generally disagree with taking supplements to keep their preferred body image.
A significantly higher percentage of females (68.2%) agreed that they have avoided wearing clothes that made them feel aware of their bodies than males (38.6%). This shows that females are more concerned about how they look than males do. But both genders, males (48.2%) and females (58.8%), disagreed that they have not gone to social occasions just simply because they feel bad about their bodies. So it can be said that both genders do not let their body image determine how they interact with others.

But ultimately, the majority of both genders, males (64.9%) and females (64.6%), believe that there are more important things than their weight. This is backed up by the finding that both genders, males (48.2%) and females (52.8%), expressed that they would get on with life even when they felt bad about their body. This explains that despite their own insecurities about their body image, both genders do not let it become their main priority in life.

Perceived vs Ideal Body Image

For this, we had measured the respondents’ perceptions of their current body image and the body image they would prefer to have, also known as the ideal body image.

Between Genders

The results show that almost half of all the male respondents wanted to be thinner (44.7%) as compared to females who displayed a higher percentage of 63.6% of wanting to be thinner. At the other end of the spectrum, however, it shows that more males wanted to be bigger or larger at 38.6% whereas only 12.8% of females wanted larger bodies.

Between Ethnicities

Generally, in accordance to the results above, a majority of Malays (54.7%), Chinese (58.3%) and Indians (54.7%) wanted to be thinner. Only less than 30% of Malays (20.9%), Chinese (26.2%) and Indians (20.8%) described wanting larger bodies. This shows that a common ideal among the ethnicities where most of the respondents, regardless of which ethnicity they belong to, want to be thinner.

Gender: Eating Behaviour

About 40% of males state that they do read the nutritional fact labels on their grocery items while 38.5% of females (were neutral about it. Both genders, males (40.4%) and females (43.6%), pay attention to eating vegetables every day as part of their daily meals. However, more females (39.5%) disagree in avoiding food in sugar in them while males (38.6%) were neutral. While both genders, males (60.5%) and females (54.8%), enjoy trying new rich foods. This shows that both genders do pay attention to the nutritional contents of their food and do not
simply avoid certain nutrients without reason. This is supported by the finding that both genders, males (43.9%) and females (47.2%), state that they do not deliberately eat slimming foods. And they, males (38.6%) and females (46.2%), were mainly neutral on choosing foods that would help make their looks great. Their behaviour is more driven by the enjoyment of the eating as a majority of males (75.4%) and females (61.6%) agree that they would eat more if food smells and tastes good. With regards to choosing food, both genders, males (48.3%) and females (41.1%), express that advertisements and media do influence their choice of food.

Attitudes towards Food

More females (49.2%) agree that they would eat less when they put on weight but most of the males (41.2%) were neutral on the matter. Conversely, slightly more males (36.9%) agreed that they take their weight into consideration when eating when compared to females (34.3%). When asked about whether they deliberately eat less not to become heavier, more males (43.8%) disagreed and females (34.9%) were mainly neutral. And both genders disagreed on refusing food because they are concerned of their weight where the percentage of males was 49.1% and females were 49.7%. Similarly, both genders, males (51.7%) and females (47.7%), disagree that they would fast or skip meals simply to make their bodies look good. This shows that they would only change their eating behaviour when they notice a physical increase in weight but not to prevent the gaining of weight.

Preoccupation with Food

More males (42.1%) agree that they find themselves preoccupied with food as compared to females (46.2%) who were more neutral regarding the matter. However, both genders disagree that food itself controls their lives with females (42.6%) having a significantly higher percentage than males (38.6%). Both genders also state their disagreement that they feel others pressure them to eat where there is a significantly higher percentage of females (50.7%) than males (39.5%). More females (44.6%) also agree that they would feel extremely guilty after overeating as compared to males (37.7%) who mostly feel neutral.

Association between Body Image and Eating Habits

Analysis was done to see if there are any associations between one’s perception of their own body image and their eating habits. It was shown there was an association in the respondents who wanted to lose weight and those who deliberately ate foods that were slimming. In a similar finding, those who believed that food had effect on their body, they would deliberately eat foods that were slimming and would eat less. So the youth with intention of losing weight or those who believed that their weight was easily changed by eating, actually ate less believing that it would prevent weight gain.
In terms of maintaining their health, those who were taking supplements to keep a preferred body image were also associated to paying a lot of attention to eating vegetables every day. Those who believed that to control their lives, they would need to control their weight, also were shown to feel that food controlled their life. Regarding self-esteem, the respondents who felt ashamed of their own body, it was not associated with choosing food that would help make their looks great.

Conclusion

The study found that Malaysian youth have similar perceptions of body image to those of the global ideals of having thinner bodies; especially among females and more prominently among Malay and Chinese descent. However, the percentage of males to females wanting larger bodies is higher, and it is higher among Chinese descent. The common belief among the youths, regardless of being male or female, is that people judge others from the way they look, which can attributed to the Malaysian cultural fabric. However, it is also common to see that body image does not dictate the lives of the respondents where they do not feel that being overweight would cause problems or affect their relationships with others.

We found that there is a difference in the preoccupation with body image between the genders among Malaysian youth as more males believe that controlling their weight is part of controlling their lives. While more females do feel self-conscious when being around those who are thinner than them and have avoided wearing clothes that made them feel aware of their bodies. This shows that body image becomes highlighted in females when they will be compared to others whereas for males, body image is more of an internalised concept.

For eating habits, the Malaysian youth are generally influenced by the smell and taste of food they eat and are easily swayed by advertisements and media in their choices of food. They generally do not deliberately eat less or refuse food simply to prevent gaining weight, regardless of males or females. Females would feel guilty after eating more. Generally the youth do not stop eating just because of they are displeased with their weight.

Recommendations

There were few limitations during the course of this study; time and resources being one limited. Future studies should also include youths from all the states of Malaysia so that the results can be generalised, as the different states may vary in findings. Also, for future research the Body Mass Index (BMI) of the respondents be taken into consideration so that comparison among underweight, normal weight, and overweight, can be brought into account with their body image and eating habits.
References

Becker A. E. (2004). Television, disordered eating, and young women in Fiji: negotiating body image and identity during rapid social change. *Culture, medicine and psychiatry, 28*(4), 533-559. https://doi.org/10.1007/s11013-004-1067-5.

Chisuwa, N.& O'Dea, J. A. (2010). Body image and eating disorders amongst Japanese adolescents. A review of the literature. *Appetite, 54*(1), 5-15. https://doi.org/10.1016/j.appet.2009.11.008

Edman J. L. Yates A. (2004). Eating attitudes among college students in Malaysia: An ethnic and gender comparison. *Eur Eat Disord Rev. 12*(3), 190-196. https://doi.org/10.1002/erv.567.

Edmonds, A. (2012). Body Image in Non-Western Societies. *Encycl Body Image Hum Appear. 2012;1:238–242.* https://doi.org/10.1016/B978-0-12-384925-0.00036-5.

Farah Wahida, Z.Mohd Nasir, M. T.&Hazizi, A. S. (2011). Physical activity, eating behaviour and body image perception among young adolescents in Kuantan, Pahang, Malaysia. *Malaysian journal of nutrition, 17*(3), 325-336. https://pubmed.ncbi.nlm.nih.gov/22655454/

Fawkner, H. (2012). Body Image Development – Adult Men. *Encycl Body Image Hum Appear. 2012;1:194–200.* https://doi.org/10.1016/B978-0-12-384925-0.00030-4.

Gan, W. Y. Mohd, N. M.Zalilah, M. S.&Hazizi, A. S. (2011). Differences in eating behaviours, dietary intake and body weight status between male and female Malaysian University students. *Malaysian journal of nutrition, 17*(2), 213-228. https://pubmed.ncbi.nlm.nih.gov/22303575/.

Grogan S. (2012). Body image development - Adult Women. *Encycl Body Image Hum Appear. 2012;1:201–6.* https://doi.org/10.1016/B978-0-12-384925-0.00031-6

Healey J. (Edi) (2014). Positive Body Image. The Spinney Press; Australia Volume 372 p. 65. E-book ISBN 9781922084453 https://spinneypress.com.au/product/positive-body-image/.

Jansen, A.& Morgan, B. (2008). A Cross Cultural Study of Body Image and Eating Habits Between Genders. https://www.uwlax.edu/globalassets/offices-services/urch/jur-online/pdf/2008/jansen.pdf.
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Kuan, P. X.Ho, H. L.Shuhaili, M. S.Siti, A. A.&Gudum, H. R. (2011). Gender differences in body mass index, body weight perception and weight loss strategies among undergraduates in Universiti Malaysia Sarawak. *Malaysian journal of nutrition, 17*(1), 67-75.https://pubmed.ncbi.nlm.nih.gov/22135866/.

Li, K. K. Concepcion, R. Y. Lee, H. Cardinal, B. J.Ebbeck, V.Woekel, E.&Readdy, R. T. (2012). An examination of sex differences in relation to the eating habits and nutrient intakes of university students. *Journal of nutrition education and behavior, 44*(3), 246-250.https://doi.org/10.1016/j.jneb.2010.10.002.

Mapes D. Suffering for beauty has ancient roots. Jan, 10, 2008. NBC News. https://www.nbcnews.com/id/wbna22546056.

Ochoa A. M. (2011). Gender, eating habits and body practices in Medellin, Colombia. *Medische Antropolo ;23*(2):343-56.

Preester D. H. Knockaert V. (Edi). (2005) Body Image and Body Schema: Interdisciplinary Perspectives on the Body. Amsterdam/Philadelphia: John Benjamins Publishing Company; 2005.346 p. https://doi.org/10.1075/aicr.62.

Ramos, P. Brooks, F. García-Moya, I. Rivera, F. & Moreno, C. (2013). Eating Habits And Physical Activity In Dieter And Non-Dieter Youth: A Gender Analysis Of English And Spanish Adolescents. *The Social Science Journal, 50*:4, 575-582, https://doi.org/10.1016/j.soscij.2013.09.017.

Ura, M. & Preston, K. (2015). The influence of thin-ideal internalization on women's body image, self-esteem, and appearance avoidance: Covariance structure analysis. *American Communication Journal, 17*(2), pp.15-26.