

Physical Activity Behaviour of Working Women with High Body Mass Index: An Interpretative Phenomenological Analysis

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Abstract. The aim is to find out the habits of career women who have a high BMI. The method used is a survey with IPA (Interpretative Phenomenological Analysis) analysis. The IPA analysis itself is used to conduct an in-depth examination of the direct experience experienced by a person. The essence of IPA itself lies in the focus of analysis, where this focus directs our analysis attention to the statements submitted by respondents to interpret the experiences they have experienced. The research was conducted at the Gym Performance Laboratory, Faculty of Sports Science, State University of Malang. Of the 48 respondents, only 28 respondents met the criteria determined by the researcher. The Tanita test (Body Composition Test) found that of the 28 working women, 12 of them had a BMI above 25.00 which was obtained from the weight divided by the height of each person. And from 28 working women, 14 people have a physical rating of obese. Obesity criteria itself is a person who has high body fat but with moderate muscle mass.

Keywords: body mass index · working women · physical activity

1 Introduction

A person's body is always viewed differently in each era. In the era of Greek philosophy, the thought of the body was related to the dualism of body and soul. For Socrates, the body is a prison for the soul, while Plato argues for the duality between body and soul. Plato argued that the soul is superior to the body because absolute beauty lies in the soul. Nevertheless, Plato also does not reject the beauty of the body, but the beauty of the body is a bridge to the true beauty of the beauty of the soul. Aristotle considered that body and soul are inseparable dualities.

According to Merleau-Ponty, the body will give form and meaning, the body unites itself with the object in an intentional arc that creates a body chart (corporeal scheme) in which the body becomes the instrument of a common and hidden knowledge. The experience of the world as a unity with the body cannot arise without bodily experience. The unity of the subject with the object can be understood only through the body. The object will always store meaning, but the subject's act of perception will give meaning through its bodily nature. Without us realizing it, we always ignore the body as a basic element in life in this world. The body is a place where we exist (being) in the world, the body is a place to feel, experience and live the world. Fundamentalism gives a discourse about the body that the world is a temporary life, the body is only a vessel in mortal life, and only the soul is immortal which will live in eternal life after this world.

Body dissatisfaction and body image problems, including dissatisfaction with body size or physical differences such as skin colour, are common in young women [1, 2]. Body image is a multidimensional attitude towards a person's body, especially its size, shape and aesthetics. Body image refers to a person's evaluation of and affective experiences regarding their physical attributes as well as investment in appearance as a domain for self-evaluation. Evaluation of body image and emotions stems in part from differences in self-perception of internalized physical ideals. Body image investment includes the degree to which attention focuses on one's appearance, the importance or schematic of one's feelings and behaviour for managing or improving appearance.

Gender is an important factor in the development of body image. A review [3] concluded that over the life span, women are more dissatisfied with their bodies because women often see themselves as being overweight which is unacceptable even at an already average weight level. Body image is also a mental picture of a person, because society places more emphasis on the appearance of women than men in building their identity, women are more often evaluated by their body attractiveness than their abilities or achievements. This emphasis is evidenced by the increasing interest in the diet industry and the increasing use of advanced medical technology to improve appearance. Body size is a significant part of the human experience, but there is disagreement about how to define body size or weight. The medical device commonly used is BMI (Body Mass Index). BMI is a calculation that compares a person's weight with height. A person's BMI classifies that person as underweight, normal, overweight, or obese. Different categories of a person's BMI are associated with different levels of medical risk. Although it is much lower than the standard BMI calculation, non-medical categories (clothing size) can also determine large or small body sizes [4].

In addition to body size categorization by measuring BMI and clothing size, there are also complex social factors of body size regardless of BMI or clothing size. Jaffe [4] argues that body size is generally and widely understood as a dual construction: as an objective state and a subjective social concept [5]. The objective size of a person's body is only one part of the equation of social narratives around the ideal body size (which body size is considered desirable, and which is not desirable) affects the meaning of living in a large or small body. Body size varies across cultures and times, these preferences are determined by several factors such as wealth, media narratives, availability of resources and gender roles in society [6]. The ideal body of a dominant woman in modern western culture is small and slim. This is often called the thin ideal, which is a concept that has influenced body size ideals in many cultures and shaped body size preferences globally. A person who is considered to live in a large body violates the dominant cultural norms in a society that follows the preference of a thin ideal body. The existence of individuals who do not conform to the cultural preferences of small bodies leads to the stigmatization of large individuals, especially women, which is commonly referred to as weight stigma.

Although often discussed as a single cohesive phenomenon, weight stigma manifests in many different forms. Weight stigma includes (a) negative attitudes toward large individuals; (b) stereotypes about large individuals; (c) places, tools or objects that do not accommodate large body sizes or (d) discrimination based on body weight such as commenting subtly or explicitly about the behaviour of large individuals [7]. Weight stigma is one of the most prominent types of stigmas in industrial society and is increasingly prominent in countries that previously had a neutral or positive view of large bodies [6, 8, 9].

The results from 2019–2021 [10] show that Indonesian women work as career women and continue to increase from year to year. This is also marked by an increase in obesity from the previous 19.1 to 34.5% in 2018. This increase occurs due to the length of time a person works just by sitting and not doing other activities and is supported by unhealthy and irregular eating patterns. These problems can be seen from a person's Body Mass Index (BMI). The relationship between BMI has been consistently observed in various studies. It is shown that people with a high BMI can be considered a determinant and result of a sedentary lifestyle. Based on the problems and facts in the field, this study aims to determine the physical activity carried out by women who work with high BMI (Body Mass Index).

2 Method

The design of this study used a survey method with IPA (Interpretative Phenomenological Analysis) analysis. The IPA analysis itself is used to conduct an in-depth examination of the direct experience experienced by a person. The essence of IPA itself lies in the focus of analysis, where this focus directs our analysis attention to the statements submitted by respondents to interpret the experiences they have experienced. The purpose of this study was to determine the physical activity performed by women who work with high BMI (Body Mass Index). Data collection uses a questionnaire which is given questions related to physical activity for female members who work.

The research was conducted at the Performance Laboratory gym located in Building C6, Faculty of Sports Science, State University of Malang. The population in this study were female members of the Performance Laboratory gym with a total of 43 respondents with the status of working women totalling 28 respondents. Research respondents have the following criteria: (1) The respondent is a career/working woman, (2) The respondent is a member of the Performance Laboratory, (3) Willing to be a research respondent.

The data collection process is carried out by giving a questionnaire with questions related to the research theme. Data analysis technique followed the steps, namely (1) Reading the transcript repeatedly, (2) Initial noting, the researcher checked the meaning of the words contained and the language used in the exploratory stage, (3) Developed emerging themes, (4) Looking for relationships that the same between themes, (5) Looking for similar patterns between cases, (6) Describing the main theme.

3 Results

Out of 48 respondents, only 28 respondents met the criteria set by the researcher.

Variable	Description	Frequency
Age	20 – 23 years	2
	24 – 27 years	7
	28 – 31 years	9
	32 – 35 years	5
	36 – 39 years	5
Work	Lecturers (lecturers/teachers)	15
	Office staff	6
	Others (Entrepreneurs, employees, etc.)	7
BMI	< 18.50	2
	18.50 – 24.99	9
	≥ 25.00	12
	≥ 30.00	5
Physique rating	Hidden obese	3
	Obese	14
	Solidly built	7
	Under exercised	3
	Standard	_
	Standard muscular	-
	Thin	-
	Thin and muscular	-
	Very muscular	-

Table 1.	Characteristics	of respondents
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From the results of Table 1. The female test (Body Composition Test) it was found that of the 28 working women, 12 of them had a BMI above 25.00 which was obtained from the weight divided by the height of each person. And from 28 working women, 14 people have a physical rating of obese (Tables 1 and 2).

4 Discussion

The media play a dual role in relations with the wider culture, including both influencing the culture of those who consume it and being influenced by the creation of a culture [11]. An understanding of media related to body size is important to the concept of body identity because it relates to the wider media and culture. The media shape the ideal body size and stigmatization of the non-ideal body and reproduce cultural narratives about the stigmatization of body size and weight that already exist in the wider culture. Although weight stigma is similar in severity and prevalence to other stigmas, it is not true in some

Theme Super-ordinate	Description	
The purpose of practicing or exercising in the fitness center/gym	To be healthier and having an ideal body	
The purpose of training at the Performance Laboratory	burn fat, be able to exercise safely and with the right technique, improve mood and reduce stress and build muscle (beautify body shape	
Jobs that require sitting too long	24 Respondents answered "Yes" which requires sitting too long at work	
Stress levels in the work environment (range 1–5)	Has stress levels ranging from 3	
The largest portion of eating in one day	The portion of food soared at lunchtime	
Drinking consumption in one day	Consumption of drinking only around 1–2 L in one day	
Target time/goals needed to achieve exercise goals	Target 3 months—1 year	

Table 2. The description of theme super-ordinate

countries, including North America. One reason is the lack of challenge to weight stigma that it can motivate weight loss and possibly improve the health of large individuals. On the other hand, the stigma can be detrimental to the health and well-being of individuals who consider themselves to be living in large bodies. Instead of motivating for weight loss or healthy lifestyle behaviours, the stigma can increase unhealthy behaviours such as binge eating and avoiding physical activity [12, 13]. This stigma has been documented in every corner of society, including the media, work, health care, interpersonal settings to education [14].

Not only the media that affect a person's weight gain, but job also demands, and social demands can trigger stress which will have an impact on increasing food consumption levels. Stress and obesity are connected through several interaction pathways that include cognition, behaviour, physiology, and biochemistry. Daubenmier et al [15] testing a conscious stress eating intervention conducted for 4 months found that reductions in perceived stress and cortisol were associated with lower visceral obesity in the treatment group. However, eating caused by stress may be difficult to eliminate because food is easy to obtain and eating is a pleasurable activity and can reduce psychological [16, 17] and physiological [16, 17] stress. The stress levels experienced by career women vary from low to high levels. Career women who exercise at the Performance Laboratory gym on average have stress levels ranging from 3 due to work that takes a long time to sit. The thing to reduce stress is to eat and sleep. This was emphasized by one member that:

"One way to reduce stress is to eat and sleep. Eating here is defined as snacking on light or heavy food. Sleep is also one of them, the day off from work is used to sleep or stay at home with the family" The colloquial term "eating comfortably" signifies the importance of food in calming the consumer when stressed. Eating is a common comfort against stress and negative emotions [18] and is a behaviour that is conserved in all circles [19]. Humans also increase their food intake, especially "high-fat and high-sugar foods" when they are under stress [20]. Stress can also interfere with self-regulation. Being the target of discrimination can interfere with self-regulation efforts such as ego depletion [21]. Major et al. [22] revealed that women who had a high BMI experienced a decrease in executive control compared to those who were not exposed to weight stigma/discrimination, participants who were exposed to the three weight categories reported less dietary self-efficacy than those in the control condition.

Not only stress that causes a higher appetite, along with this physical activity is also getting lower. Stress can disrupt activity patterns, either by reducing physical activity or by increasing sedentary behaviour. In other words, people may voluntarily exercise less because of stress and simultaneously or independently spend more time sedentary. It was also revealed by a female member of the Performance Laboratory that:

"When I take a break from work, I usually sleep at home, gather with my family"

Of the two, the evidence is stronger for a decrease in physical activity. A survey of more than 12,000 participants found that higher stress was associated with less exercise [23].

Environmental factors associated with physical activity and obesity also tend to be related to people and their overall health. Direct associations have been found between various aspects of the social and physical environment and various general health outcomes. The importance of social support and social capital for the physical and psychological well-being of people is well established in the socio-epidemiological literature [24]. Gym Performance Laboratory is one of the fitness facilities that offers various sports facilities starting from the gym, aerobics class and even Muaythai class. The importance of physical activity or exercise that is needed for women who are obese needs to be done. Various demands directed at women trigger physical activity or sports and these sports activities are carried out at the Performance Laboratory, this is expressed:

"I want to burn fat, to be healthy, I want to have an ideal body"

Career women who exercise at the Performance Laboratory also many who target to achieve goals from a period of 3 months even 1 year.

5 Conclusion

A person's body is always viewed differently in each era. Gender is an important factor in the development of body image. Body dissatisfaction and body image problems, including dissatisfaction with body size or physical differences such as skin colour, are common in young women. Things that affect a woman's body to be obese can be in the form of environmental factors such as the scope of work, lack of physical activity, high appetite, and many demands on women that make women stressed, and the transfer of stress is mostly done by eating and sleeping.

References

- 1. S. J. Javier and F. Z. Belgrave, "An examination of influences on body dissatisfaction among Asian American college females: Do family, media, or peers play a role?," J. Am. Coll. Heal., vol. 63, no. 8, 2015, https://doi.org/10.1080/07448481.2015.1031240.
- S. C. Want and A. Saiphoo, "Social comparisons with media images are cognitively inefficient even for women who say they feel pressure from the media," Body Image, vol. 20, 2017, https:// doi.org/10.1016/j.bodyim.2016.10.009.
- 3. L. A. Jackson, "Review: Physical Appearance and Gender: Sociobiological and Sociocultural Perspectives," Wayne State Univ. Press, vol. 40, no. 3, 1994.
- 4. K. Jaffe, "Forming fat identities," 2008.
- D. Carr and K. Jaffe, "The psychological consequences of weight change trajectories: Evidence from quantitative and qualitative data," Econ. Hum. Biol., vol. 10, no. 4, 2012, https:// doi.org/10.1016/j.ehb.2012.04.007.
- V. Swami, "Cultural influences on body size ideals: Unpacking the impact of Westernization and modernization," Eur. Psychol., vol. 20, no. 1, 2015, https://doi.org/10.1027/1016-9040/ a000150.
- R. A. Carels and J. Latner, "Weight stigma and eating behaviors. An introduction to the special issue," Appetite, vol. 102. 2016. https://doi.org/10.1016/j.appet.2016.03.001.
- A. A. Brewis, A. Wutich, A. Falletta-Cowden, and I. Rodriguez-Soto, "Body norms and fat stigma in global perspective," Curr. Anthropol., vol. 52, no. 2, 2011, https://doi.org/10.1086/ 659309.
- 9. R. M. Puhl and C. A. Heuer, "Obesity stigma: Important considerations for public health," Am. J. Public Health, vol. 100, no. 6, 2010, https://doi.org/10.2105/AJPH.2009.159491.
- 10. BPS Statistics Indonesia, "Persentase Tenaga Kerja Formal Menurut Jenis Kelamin (Persen), 2019–2021," 2021.
- M. Taskin, "The effects of media on societal culture," Int. J. Econ. Perspect., vol. 11, no. 3, 2017.
- 12. J. M. Hunger and J. Tomiyama, "Weight labeling and obesity: A longitudinal study of girls aged 10 to 19 years," JAMA Pediatrics, vol. 168, no. 6. 2014. https://doi.org/10.1001/jamape diatrics.2014.122.
- R. Puhl and Y. Suh, "Health Consequences of Weight Stigma: Implications for Obesity Prevention and Treatment," Current obesity reports, vol. 4, no. 2. 2015. doi: https://doi.org/10. 1007/s13679-015-0153-z.
- R. M. Puhl and C. A. Heuer, "The stigma of obesity: A review and update," Obesity, vol. 17, no. 5, 2009. https://doi.org/10.1038/oby.2008.636.
- J. Daubenmier et al., "Mindfulness intervention for stress eating to reduce cortisol and abdominal fat among overweight and obese women: An exploratory randomized controlled study," J. Obes., vol. 2011, 2011, https://doi.org/10.1155/2011/651936.
- L. E. Finch and A. J. Tomiyama, "Comfort eating, psychological stress, and depressive symptoms in young adult women," Appetite, vol. 95, 2015, https://doi.org/10.1016/j.appet.2015. 07.017.
- M. S. Tryon, R. DeCant, and K. D. Laugero, "Having your cake and eating it too: A habit of comfort food may link chronic social stress exposure and acute stress-induced cortisol hyporesponsiveness," Physiol. Behav., vol. 114–115, 2013, https://doi.org/10.1016/j.physbeh. 2013.02.018.
- T. C. Adam and E. S. Epel, "Stress, eating and the reward system," Physiol. Behav., vol. 91, no. 4, 2007, https://doi.org/10.1016/j.physbeh.2007.04.011.
- M. F. Dallman et al., "Chronic stress and obesity: A new view of 'comfort food," Proc. Natl. Acad. Sci. U. S. A., vol. 100, no. 20, 2003, https://doi.org/10.1073/pnas.1934666100.

- J. Rezitis, H. Herzog, and C. K. Ip, "Neuropeptide Y interaction with dopaminergic and serotonergic pathways: interlinked neurocircuits modulating hedonic eating behaviours," Progress in Neuro-Psychopharmacology and Biological Psychiatry, vol. 113. 2022. https://doi.org/10. 1016/j.pnpbp.2021.110449.
- M. Inzlicht, L. McKay, and J. Aronson, "Stigma as ego depletion: How being the target of prejudice affects self-control," Psychol. Sci., vol. 17, no. 3, 2006, https://doi.org/10.1111/j. 1467-9280.2006.01695.x.
- 22. B. Major, D. Eliezer, and H. Rieck, "The psychological weight of weight stigma," Soc. Psychol. Personal. Sci., vol. 3, no. 6, 2012, https://doi.org/10.1177/1948550611434400.
- D. M. Ng and R. W. Jeffery, "Relationships between Perceived Stress and Health Behaviors in a Sample of Working Adults," Heal. Psychol., vol. 22, no. 6, 2003, https://doi.org/10.1037/ 0278-6133.22.6.638.
- S. Cummins, M. Stafford, S. Macintyre, M. Marmot, and A. Ellaway, "Neighbourhood environment and its association with self rated health: Evidence from Scotland and England," J. Epidemiol. Community Health, vol. 59, no. 3, 2005, https://doi.org/10.1136/jech.2003. 016147.

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