

Self-Concept Differences between Obese and Non-Obese Adolescents: A Comparative Study of Senior High School Students in Medan City

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Abstract–The study explored self-concept differences of obese and non-obese adolescents. The sample was 234 senior high school students in Medan City, equally divided with 117 of them were obese, and 117 were non-obese students. Data was collected using self-concept scale designed by researchers based on a theory proposed by Fitts (1971). Afterward, the data were analyzed using independent t-test. The results found that there were no self-concept differences between obese and non-obese adolescents.

Keyword: *Self-Concept; Obese Adolescents*

INTRODUCTION

Adolescence is one of an important phase in human development; it is a time of change. The most visible change is physical changes, including height and weight growths (Hurlock, 2010). Teens become anxious about their body profile, and appearance compares to other aspects. Teens often feel horrid of their physical presence. The consciousness of social reactions to the appearance and physical appeal may trigger anxious about imperfection body profile. Moreover, Hurlock (2010) said that adolescence is a period of attention to physical development, appearance, peers, and the opposite sex.

Also, adolescent's views of physical change depend on their environment as well as how they see their-self (Monks, 1999). Therefore, most of the teenagers become anxious about their body shape and appearance. Santrock (2013) described that a very substantial physical change in adolescence increases several unwanted psychological effects. Teenagers often feel anxious, fearful and worried about their physical appearance that is considered as not ideal. This situation may affect adolescent self-concept. They become more easily influenced by feedbacks and reactions of the social environment.

Self-concept is a term used to refer to how a person thinks about, evaluates or perceives themselves (Calhoun & Accocella, 1990). These views were based on social interaction in their

social environment. The environment is an important aspect of self-concept development. Positive feedback from environment tends to enhance self-concept and vice versa. A teenager who had positive self-concept tend to boost individuals to behave positively. On the contrary, a person who has a negative self-concept, believes and views that he is weak, powerless, incompetent, disliked and failed (Santrock, 2013).

Weight issues can also have affected adolescent's self-concept. An ideal body weight tends to be more welcome to the environment. Hurlock (2010) also claimed that excessive weight could be a basis of concern during the early years of adolescence.

At present, Obesity among adolescents has arisen as one of the most serious health concerns. The global frequency of adolescence obesity has increased remarkably over the past 3 periods. In the Indonesian setting, Riskesdas (2013) informed that the occurrence of obesity in the age group of 13-15 years in Indonesia is almost 2.5%. Obesity in adolescents is a significant concern, since most of the obese youths, around 80% of them tend to experience obesity in adulthood as well (Suryaputra & Nadhiroh, 2012). This is a cause of less active adolescent. They are more involved in less physical activities such as playing computer, internet basis games and watching television.

This less dynamic adolescent may lead to obesity (Obesitas Picu Kanker, 2010).

Clinically, obesity is an abnormal body condition. There is fat accumulation in adipose tissue to the extent it interferes with health. Excessive energy savings in the form of fat can have adverse health effects (Soegih, 2009). In addition to the impact on physical health, being overweight can also affect mental health. According to a study by Schater, it is said that obese people tend to be more sensitive in their social interactions than those who are not obese (in Sarafino, 2011). Similarly, the development of self-esteem of obese adolescents is considered lower than the non-obese adolescents. The dissatisfaction fairly makes adolescents feel not self-confident and consider their appearance as something 'scary' (Conger & Petersen in Sarafino, 2011). This situation may also lead to lower self-concept (Rini, 2002).

To conclude, obesity is considered as one of the problems in adolescence that might cause negative psychological development. Thus, it is important to examine self-concept differences between obese and non-obese adolescents.

A. Self-Concept

Fitts (1971) described self-concept as *"The self as seen, perceived and experienced by him. This is perceived self or the individual's self-concept"*

How a person was seen, perceived, and experienced their-self later became a self-concept.

Fitts (1971) categorized self-concept into two elements; internal and external.

1) Internal

- a) **Self as identity**
Identity is an essential feature of self-concept. This feature aims to reply question of "who am I?". The identity self can influence the way a person relates to his environment as well as him/herself.
- b) **Self as the actor**
The self as the actor is a person's awareness of his or her conduct or way of acting. It also regulates whether a behavior is abstracted, symbolized and incorporated into identity.

- c) **Self as observer**
This self-assist as a typical observer and a benchmarker, and particularly as a self-assessor. Valuation is given to current labels in identities or actors distinctly, for example: "I am beautiful," or "I can do it." A self-valuation like "I am pretty," means that the individual labels the total self and not on an explicit behavior. Similarly, when a person says, "I can do," means that the person approves of his/her behavior.

2) External

- a) **Physical self**
It is a person's opinions and feelings about the physical presence, health, skills, and motor movement.
- b) **Moral ethics self**
It discusses a person's awareness of him/herself regarding ethical and moral considerations such as a person's connection with God.
- c) **Personal self**
It is an individual's sense of own values nevertheless of his physical appearance and his affiliation with others. It also discusses the degree to which he/she feels adequate as a person, for example: sense as a happy person.
- d) **Family self**
Displays how far an individual senses about himself as a member of the family and to the role and role he/she runs as a member of the family.
- e) **Social self**
This characteristic discusses a person's judgment concerning his/her relations with others and the broader environment.

B. Adolescents

Papalia et al. (2007) defined that adolescents are: "developmental transition between childhood and adulthood entailing major physical, cognitive, and psychosocial changes." Furthermore, Yusuf (2004) detailed that adolescent is a critical developmental phase begins with physical maturation, especially sexual organs and ready to reproduce. Also, Hurlock (2010) described that adolescence periods includes: (a) early adolescence: age 13-16 /17, (b) late teens: age 16/17 - 18. In this

study, the sample was adolescents in late teens stage, ranging from age 16 / 17-18.

C. Obesity

According to Sjarif (2002), obesity and overweight are two languages to direct body weight. These two terms fundamentally have, unlike meanings. The term of obesity stemmed from Latin means eat too much. Though, nowadays obesity is specified as an abnormality or disease that is considered by disproportionate fat accumulation.

Measurement of Obesity

WHO (2006) suggested Body Mass Index (BMI) as a normal quantity of obesity. BMI is the easiest technique to approximate obesity. The rule of Body Mass Index is:

$$\text{BMI} = \frac{\text{Weight (kg)}}{\text{Height(m)} \times \text{Height(m)}}$$

Classification		BMI
THIN	Underweight	< 17.0
	Light underweight	17.0 - 18.5
NORMAL	Healthy weight	18.6-25.0
OVERWEIGHT	Overweight	25.1 - 27.0
	Obesity	>27.0

METHODS

This research was a comparative study aimed to inspect self-concept differences between obese and non-obese adolescent. The participants were 117 obese and 117 non-obese senior high school students in Medan City. The study employed random sampling to select the participants.

RESULTS

A. Obese Participants

Based on age, height, body weight, and BMI, obese participants were mostly on 15.99 years old, 1.59 meters height, average body weight was 73.21 kg, and BMI was 29.01. 58 or 49,5% of them were female, and 59 or 50,5% were male.

B. Non-Obese Participants

Also based on age, height, body weight, and BMI. Non-obese students participated in this study were 16.13 years old on average, 1,61 meters height, average body weight was 56,19 kg, and BMI were 21,74. 67 or 57,2 % of them were female, and 50 or 42,8 % were male.

C. Self-Concept Differences between Obese and Non-Obese Adolescent

This study aimed to explore self-concept differences between obese and nonobese adolescent. Independent sample t-test was employed to analyze the data. Unpredictably, the result showed that there were no self-concept differences between obese and non-obese adolescents ($t=0,236$, $p > 0.05$). However, when exploring the dimensions that form self-concept, the dimension of physical satisfaction and social satisfaction ($\alpha = 5\%$) showed that obese and non-obese teenagers had a different self-concept.

DISCUSSIONS

The key result of this study showed that there were no self-concept differences between obese and non-obese adolescents in Medan City's High School students. This unexpected outcome showed that self-concept may be affected by other variables, such as the possibility of positive support received by adolescents from the surrounding environment, namely parents, peers and society (Calhoun and Acocella, 1990). This is in line with the results obtained by Yuliana (2012) that obese teenagers today tend to have a positive self-concept. Adolescents tend to be confident about their ability to overcome problems, be able to accept and understand the reality of himself, feel equal with others, able to form a positive image, able to improve themselves and have the talent and ability that then encourages to express their potential more confidently. Along with the development of the current era, physical form is also no longer the main aspect of the goal achievement. Self-knowledge and skills become more important than physical appearance. Also, openness and public acceptance of 'individual physical differences' encourage one to be more courageous in presenting their abilities.

Moreover, this unpredicted result can also be affected by other aspects that happen through the research process. Suryabrata (2010) sated that, there are some aspects that may lead the

research could not prove the hypothesis projected, including theoretical foundation, samples, data gaining techniques, research design, and statistical problems, and dependent variables. One of the weaknesses in this study is the use of the self-concept scale. This study used self-report to obtain the data, therefore, the possibility of social desirability may cause how the respondent answers the questions. According to Salkind (2010), when a study utilize a self-report, the participants tend to choose higher score (faking good). Moreover, unclear items may also cause social desirability.

However, further investigation showed there were two dimensions of self-concept that have differences between obese and non-obese teenagers, namely physical self-satisfaction and social self-satisfaction. According to Fitts (1971), the dimension of physical self is a person's perceptions and feelings towards the physical state, health, skills, self-appearance and motor movement. Dion in his research (in Hurlock 2010) showed that physical appearance satisfaction is the most important personal trait in interacting, so a sense of satisfaction with physical appearance will contribute positively to success in establishing social interaction. Physical self-satisfaction is also closely related to the individual's self-esteem. Teenagers who are dissatisfied with their physical appearance tend to have low self-esteem (Furhmann, 2000). Self-esteem is part of the formation of self-concept, so adolescents with low self-esteem tend to have low self-concept as well (Fitts, 1971). Furthermore, differences in the dimensions of social self-satisfaction can occur because these dimensions are closely related to the perception that teenagers formed to assess the environment against him/her so that the assessment of different environment will positively be able to influence on his/her satisfaction. This is by Baldwin and Holmes (in Calhoun and Acocella, 1995) claimed that, that self-concept is a social formation and a person's learning outcomes through his/her relationship with others.

CONCLUSIONS

This study concluded that, in general, were no self-concept differences between obese and non-obese adolescents in Medan City's High School students. However, In the dimensions that form self-concept, there were two aspects that have differences between obese and non-obese

teenagers, there were physical self-satisfaction and social self-satisfaction

RECOMMENDATIONS

Methodological Recommendations

- Further research should focus on social environment influence on self-concept development since the study showed that social environment has the greatest influence on the formation of adolescent self-concept.
- To acquire more in-depth outcomes, further research is suggested to employ mixed methods procedures by merging quantitative and qualitative methods. It is vital to determine subjects' emotional state and opinions by doing an interview, so other features that can not be gained through quantitative questionnaire may be revealed.

Practical Recommendations

- **Parents**
Parents should fully offer constructive support to all activities that assist their teens, pay attention to their development and accept their-self as they are.
- **Teenagers**
For teenagers, especially those who are obese should continue to accept and take a positive view of themselves and continue to develop their abilities.

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