



ICP - HESOS

PROCEEDINGS BOOK

of

**International Conference on Psychology
in Health, Educational, Social, and Organization Settings**

Universitas Airlangga, Surabaya, 21 - 23 November 2013

“Psychology in Changing Global Contexts”



**Faculty of Psychology
Universitas Airlangga**

PROCEEDINGS BOOK

International Conference on Psychology in Health, Education, Social and Organizational Settings (ICP-HESOS)

“Psychology in Changing Global Contexts”

Board of Reviewers:

Prof. Dr. Fendy Suhariadi, MT
Prof. Dr. Suryanto, M.Si.
Dr. Seger Handoyo, M.Si. (Chief)
Dr. Dewi Retno Suminar, M.Si
Dr. Hamidah, M.Si.
Veronika Supratiknya, MS.Ed.
Endang R. Surjaningrum, S.Psi., M.Appl.Psy.

Chief Editor:

Herison Purba, S.Psi., M.Sc.

Cover Design:

Vito Daryfauzi

Cover Picture:

google.com

Layout:

Nur Rachmah A. P.	Dita Ayu
Musrifatul Jannah	Nido Dipo
Evryanti Rasari	Lukman Faizin
Kamelia Widyati	Annisa S
Aini Nadhifah	Dwika Puspita
Vinny josephine	Ribka Mutiara

Publisher:

Unit Penelitian dan Publikasi (UP3)
Psychology Faculty Universitas Airlangga

All rights reserved. No part of this book may be reproduced, in any form or by any means, without permission in writing from the publisher

First Edition:

2013, 1015 pages. 15 X 21 cm
ISBN: 978-979-99555-7-9

Printed by:

Psychology Faculty Universitas Airlangga
Printed in: Surabaya, Indonesia

All articles in the proceedings of International Conference on Psychology in Health, Education, Social and Organizational Settings (ICP-HESOS) year of 2013 are not the official opinions and standings of editors. Contents and consequences resulted from the articles are sole responsibilities of individual writers, and it is protected by the law

Body Dissatisfaction and Body Change Behaviors among Indonesian and Chinese College Students

Monique Elizabeth Sukamto
University of Surabaya, Faculty of Psychology,
Surabaya, Indonesia
lizbeth_monique@yahoo.co.id

Nurlita Endah Karunia
University of Surabaya, Faculty of Psychology,
Surabaya, Indonesia
litzcurly@yahoo.com

Jiasheng Zhong
Zhejiang University of Technology, Applied
Psychology, Hangzhou, China
574346207@qq.com

Shiyao Zhang
Zhejiang University of Technology, Applied
Psychology, Hangzhou, China
403831580@qq.com

Sylvia Santoso
University of Surabaya, Faculty of Psychology,
Surabaya, Indonesia
sylvi.justsylvi@gmail.com

ABSTRACT

Being in transition period between adolescent and adulthood, college students are still affected by physical, psychological, and socio-emotional changes. The physical changes during adolescence give rise to great concern about body shape and size until they enter adulthood, so they tend to feel dissatisfied and try some efforts to change their body shape and size. The dissatisfaction toward one's body or specific body parts is called body dissatisfaction, whereas efforts to change one's body shape or size refers to body change behavior. The aim of this study was to investigate the correlation between body dissatisfaction and body change behavior among Indonesian and Chinese college students. Subjects are both female and male college students from University of Surabaya (N=50) and Zhejiang University of Technology (N=50), aged 17-25 years. This is a quantitative study and data are collected using questionnaires. The results showed that: (1) there was a significant correlation between body dissatisfaction and body change behavior (to lose weight) among Indonesian college students ($r = .407$, $sig. = .003$ ($< .01$)), whereas there was no significant correlation among Chinese ($r = .158$, $sig. = .272$ ($> .05$)); (2) there was no significant correlation between body dissatisfaction and body change behavior (to increase muscle bulk) either among Indonesian ($r = .086$, $sig. = .552$ ($> .05$)) or Chinese college students ($r = .054$, $sig. = .707$ ($> .05$)). The results will be discussed later.

Keywords: Body dissatisfaction, body change behavior, Indonesian and Chinese college students

INTRODUCTION

College student is in the transition from adolescence to young adulthood, which is a risky period for the development of excess weight gain, as well as unhealthy diet and physical activity practices (Nelson, Story, Larson, Neumark-Sztainer, & Lytle, 2008). Research has shown that compared to men, female undergraduates have more negative body image evaluations, stronger investments in their looks, and more frequent body image dysphoria (Muth & Cash, in Green & Pritchard, 2003). However, men were also dissatisfied with body image, wanting to be either thinner or more muscular (Muth & Cash), whereas the majority of women desired a thinner physique (Vartanian, Giant, & Passino, in Green & Pritchard, 2003).

Body image is a multi dimensional construct that represents how individuals think, feel, and behave

with regard to their own physical attributes (Muth & Cash, in Esnaola, Rodriguez, & Goni, 2010). According to Rice (1995), body image is always developing through interactions with other people and the social environment, changing across the life span in response to changing feedback from the environment. The most common body image problem is body (image) dissatisfaction, which is characterized by one's dissatisfaction or disliking of his/her body or specific body parts and one's inability to accurately judge the size of his/her body.

Various research groups argued that the thin ideal in socioeconomically develop settings had negative effects on women's physical, psychological, and social wellbeing, however the available evidence suggested that body dissatisfaction might not be as

pronounced in less economically developed or non-Western societies (in Swami, Frederick, Aavik, Alcalay, Allik, Anderson, et al., 2010). It has been suggested that in non-Western countries exposure to Westernized media leads to the adoption of Western beauty ideals, which in time override traditional or previously held body type ideals (e.g., Becker, Burwell, Gilman, Herzog, & Hamburg; Williams, Ricciardelli, McCabe, Swinburn, Waqa, & Bavadra, in Xu, Mellor, Kiehne, Ricciardelli, McCabe, & Xu, 2010).

Contemporary research suggests that body image dissatisfaction is indeed a prevalent concern with approximately 30% of boys and 60% of girls showing a desire to change their shape or size (Ricciardelli & McCabe; Stice & Whitenton, in Lawler & Nixon, 2011). Previous research either with Western or Asian samples has demonstrated that females are more likely than males to engage in behaviors aimed to lose weight, particularly dieting or food restriction, because there is greater sociocultural pressure on females than on males to conform to a thin ideal body type (Chen & Jackson; Mellor, Ricciardelli, McCabe, Yeow, Daliza, & Binti Mohd Hapidzal; Ricciardelli & McCabe, in Xu et al., 2010). On the other hand, adolescent boys and young adult men pursue the muscular mesomorph ideal (Luciano; McCabe & Ricciardelli; Muris, Meesters, van den Blom, & Mayer; Smolak, in Mellor, McCabe, Ricciardelli, & Merino, 2008) and tend to engage in behavior such as muscle building activity and the use of steroids aimed to increase their muscularity (McCabe & Ricciardelli; McCreary & Sasse, in Mellor, Ricciardelli, McCabe, Yeow, Binti Mamat, & Binti Mohd Hapidzal, 2010). Males may use the different strategies to achieve the "masculine ideal of lean muscularity" (Leon, Fulkerson, Perry, Keel, & Klump, in Ricciardelli & McCabe, 2002). That is boys may use one type of strategy to achieve slimness with certain body areas, whilst they may use other strategies to achieve muscle mass in the upper body areas.

There were several studies about body dissatisfaction and body change behaviors conducted in Indonesia (Ongkowitzo, 2010; Swami et al., 2010; Husniyati, 2012; Yuanita, 2013) and China (Xu et al., 2010; Jung, Forbes, & Chan, 2010; Swami et al., 2010; Chen & Jackson, 2012). The current study aimed to investigate the correlation between body dissatisfaction and body change behavior among Indonesian and Chinese college students. Moreover, we also investigated levels of body dissatisfaction and engagement in body change behaviors to lose weight and increase muscle bulk among males and females college students in Indonesia and China.

METHODS

Participants

Participants were female and male college students from University of Surabaya (N=50) and Zhejiang University of Technology (N=50) whose ages ranged from 17 to 25 years.

Measures

Body Change Strategies (Ricciardelli & McCabe, 2002)

Two abbreviated scales, Body Change Strategies to Lose Weight (e.g., How often do you change the types of food you eat to lose weight?) and Body Change Strategies to Increase Muscle Bulk (e.g., How often do you change the type of physical activity you do to make your muscles bigger?) from the Body Image and Body Change Questionnaire (Ricciardelli & McCabe, 2002) were used to assess participants' body change behaviors. Originally, each scale was comprised of four items designed to evaluate participants' use of diet and exercise behaviors to lose weight or increase muscle bulk, but in this study the researchers added two more items to evaluate participants' use of food supplement either to lose weight (e.g., How often do you change the type of food supplement you consume to lose weight?) or increase muscle bulk (e.g., How often do you change the dose of food supplement you consume to make your muscles bigger?). For each item, participants were required to indicate the frequency of the behavior on a five point Likert scale ranging from "never" (1) to "always" (5). Scores ranged from 6 to 30, with higher scores indicating higher levels of each construct. In the present study, internal consistency as assessed by Cronbach's alpha for Body Change Strategies to Lose Weight for Indonesian was $\alpha = .869$ and Chinese was $\alpha = .943$, whereas Cronbach's alpha for Body Change Strategies to Increase Muscle Bulk for Indonesian was $\alpha = .943$ and Chinese was $\alpha = .954$.

Satisfaction and Dissatisfaction with Body Parts Scale (Stice, in Chen & Jackson, 2012)

In the present study, the researchers modified Satisfaction and Dissatisfaction with Body Parts Scale (Stice, in Chen & Jackson, 2012). The original version of this scale asked "How satisfied are you with your waist, height, thighs, body shape, buttocks, hips, stomach, and legs", then the researchers changed "body build" with "muscles" and added four body part items "weight, chest, arms, and shoulders", so the total items were 13. Total body dissatisfaction scores were calculated by summing ratings of personal dissatisfaction with 13 body parts. Each of the items was rated on a 5-point Likert scale with responses ranging from "extremely satisfied" (1) to "extremely dissatisfied" (5). Possible scores ranged from 13 to 65, with higher scores indicating greater body dissatisfaction. In the new sample, satisfactory alphas were obtained for Cronbach's alpha for Indonesian samples was $\alpha = .932$ and Chinese was $\alpha = .915$.

Procedure

All questionnaires originally were in English and translated into Indonesian and Chinese by the researchers. Indonesian researchers distributed the Body Change Strategies Scales and Satisfaction and

Dissatisfaction with Body Parts Scale to the college students from University of Surabaya, Indonesia, whereas Chinese researchers distributed the scales to the college students from Zhejiang University of Technology, China.

RESULTS

Correlation between Body Dissatisfaction and Body Change Behaviors (to lose weight and to increase muscle bulk) among Indonesian and Chinese College Students

The results showed that there was a significant correlation between body dissatisfaction and body change behaviors (to lose weight) among Indonesian college students ($r = .407$, $sig. = .003$ ($< .01$)), whereas there was no significant correlation among Chinese ($r = .158$, $sig. = .272$ ($> .05$)). More detail results showed that: (1) there was a significant correlation between body dissatisfaction and body change behaviors (to lose weight) either among Indonesian female ($r = .397$, $sig. = .050$ ($= .05$)) or male ($r = .428$, $sig. = .033$ ($< .05$)) college students; (2) there was no significant correlation between body dissatisfaction and body change behaviors (to lose weight) either among Chinese female ($r = .280$, $sig. = .175$ ($> .05$)) or male ($r = .153$, $sig. = .464$ ($> .05$)) college students.

Besides, the results showed that there was no significant correlation between body dissatisfaction and body change behaviors (to increase muscle bulk) either among Indonesian ($r = .086$, $sig. = .552$ ($> .05$)) or Chinese college students ($r = .054$, $sig. = .707$ ($> .05$)). In more detail, it was known that: (1) there was no significant correlation between body dissatisfaction and body change behaviors (to increase muscle bulk) either among Indonesian female ($r = -.067$, $sig. = .749$ ($> .05$)) or male ($r = .362$, $sig. = .076$ ($> .05$)) college students; (2) there was no significant correlation between body dissatisfaction and body change behaviors (to increase muscle bulk) either among Chinese female ($r = .094$, $sig. = .654$ ($> .05$)) or male ($r = .036$, $sig. = .865$ ($> .05$)) college students.

Differences in Body Dissatisfaction between Indonesian and Chinese College Students

The results showed that: (1) there was no significant difference in the level of body dissatisfaction between Indonesian (mean = 39.84) and Chinese (mean = 41.08) female college students ($t = -.496$, $sig. = .622$ ($> .05$)); (2) there was no significant difference in the level of body dissatisfaction between Indonesian (mean = 38.88) and Chinese (mean = 41.28) male college students ($t = -.891$, $sig. = .377$ ($> .05$)). Although there was no significant difference in the level, but there might be some differences in specific body parts that caused dissatisfaction between Indonesian and Chinese college students.

Using item analysis, the researchers found out that more than half of Indonesian female college students

felt dissatisfied and extremely dissatisfied with their stomach (64%), thighs (56%), weight (52%), and nearly half of them showed dissatisfaction with their arms (44%), buttocks (44%), body shape (40%), and hips (40%), whereas nearly half of Chinese female college students showed dissatisfaction with their buttocks (48%), legs (48%), height (44%), hips (44%), thighs (44%), stomach (40%), and waist (40%). Item analysis on male college students showed that less than half of Indonesian male college students felt dissatisfied and extremely dissatisfied with their stomach (32%), thighs (32%), height (28%), arms (28%), buttocks (28%), and legs (28%), whereas about half of Chinese male college students showed dissatisfaction with their stomach (52%), and nearly half of them were dissatisfied with their height (44%), chest (36%), and shoulders (36%).

Differences in Body Change Behaviors (to lose weight) between Indonesian and Chinese College Students

The results showed that: (1) there was significant difference in the level of body change behaviors (to lose weight) between Indonesian (mean rank = 37.70) and Chinese (mean rank = 13.30) female college students ($z = -5.936$, $asympt. sig. = .000$ ($< .01$)). Indonesian females showed higher level of body change behaviors (to lose weight) than Chinese; (2) there was no significant difference in the level of body change behaviors (to lose weight) between Indonesian (mean rank = 24.60) and Chinese (mean rank = 26.40) male college students ($z = -.439$, $asympt. sig. = .661$ ($> .05$)).

Item analysis on female college students described that about a quarter of Indonesian female college students always and often did some efforts to lose their weight, such as: changing the types of food they eat (28%), changing the type of physical activity (24%), and missing meals (20%), whereas there were only a very small amount of Chinese who did such efforts, i.e. doing more physical activity than usual (12%). Among males, less than half of Indonesian male college students always and often showed behaviors to lose weight, such as: changing the types of food they eat (36%), changing the type of physical activity (24%), missing meals (16%), and doing more physical activity than usual (16%), whereas about a quarter of Chinese male college students demonstrated changing the type of physical activity (20%) and doing more physical activity than usual (20%) to lose their weight.

Differences in Body Change Behaviors (to increase muscle bulk) between Indonesian and Chinese College Students

The results showed that: (1) there was significant difference in the level of body change behaviors (to increase muscle bulk) between Indonesian (mean rank = 20.08) and Chinese (mean rank = 30.92) female college students ($z = -2.840$, $asympt. sig. = .005$ ($< .01$)). Chinese female students showed higher level of body change behaviors (to increase muscle bulk) than

Indonesian; (2) there was no significant difference in the level of body change behaviors (to increase muscle bulk) between Indonesian (mean rank= 23.84) and Chinese (mean rank= 27.16) male college students ($z = -0.815$, asymp. sig.= .415 ($> .05$)).

Item analysis showed that only one Indonesian female college students who always and often did an effort to increase her muscles by changing the types of food she eats (4%), whereas there were a small number but more Chinese females who did some efforts to increase their muscles, such as: changing the types of food she eats (4%), eating less than usual (4%), changing the type of physical activity (4%), doing more physical activity (4%), and changing the type of food supplement she consumes (4%). Item analysis on males showed that a small number of Indonesian college students always and often changed the type of physical activity (24%), changed the types of food they eat (16%), and did more physical activity (16%), whereas about the same number of Chinese also did efforts, such as: changing the types of food they eat (28%), changing the dose of food supplement (20%), and changing the type of physical activity (16%) to make their muscles bigger.

Differences in Body Dissatisfaction and Body Change Behaviors (to lose weight and to increase muscle bulk) between Indonesian Male and Female College Students

The results showed that: (1) there was no significant difference in the level of body dissatisfaction between Indonesian male (mean= 38.88) and female (mean= 39.84) college students ($t = -.342$, sig.= .734 ($> .05$)); (2) there was no significant difference in the level of body change behaviors (to lose weight) between Indonesian male (mean= 13.84) and female (mean= 12.76) college students ($t = .663$, sig.= .511 ($> .05$)); (3) there was a significant difference in the level of body change behaviors (to increase muscle bulk) between Indonesian male (mean rank= 31.58) and female (mean rank= 19.42) college students ($z = -3.154$, asymp. sig.= .002 ($< .01$)). Indonesian male college students showed higher level of body change behaviors (to increase muscle bulk) than females.

Differences in Body Dissatisfaction and Body Change Behaviors (to lose weight and to increase muscle bulk) between Chinese Male and Female College Students

The results showed that: (1) there was no significant difference in the level of body dissatisfaction between Chinese male (mean= 41.28) and female (mean= 41.08) college students ($t = .084$, sig.= .933 ($> .05$)); (2) there was a significant difference in the level of body change behaviors (to lose weight) between Chinese male (mean rank= 30.36) and female (mean rank= 20.64) college students ($z = -2.379$, asymp. sig.= .017 ($< .05$)). Chinese male college students showed higher level of body change behavior (to lose weight) than females; (3) there was no significant difference in the level of body change behaviors (to increase muscle bulk) between Chinese

male (mean rank= 28.24) and female (mean rank= 22.76) college students ($z = -1.355$, asymp. sig.= .176 ($> .05$)).

DISCUSSION

The correlation between body dissatisfaction and body change behaviors (to lose weight) among Indonesian and Chinese college students might be related to the level of obesity of the participants. Based on Body Mass Index (BMI) classification for Asians (as cited in Prasad, Kabir, Dash, & Das, 2011), it was known that the level of obesity between Indonesian and Chinese female college students were quite different. Although about half (56%) of Indonesian female college students' weight were in normal range and some (24%) were even underweight, but there were some female students whose weight was classified as overweight: at risk (16%) and obese I (4%). Quite differently, most (64%) of Chinese female college students were in normal weight and the rest (36%) were underweight, so no Chinese female students whose weight were classified as overweight (at risk and obese). In addition, item analysis showed that about half of Indonesian female college students felt dissatisfied and extremely dissatisfied with their weight, whereas there were only a small number of Chinese students who reported dissatisfaction with their weight. This might explain why there was a significant correlation between body dissatisfaction and body change behaviors (to lose weight) among Indonesian female college students, but not among Chinese females.

Similarly in male, there were more Indonesian male college students whose level of obesity was overweight (BMI ≥ 23) than Chinese. Nearly half (48%) of Indonesian males' weight were classified as overweight, obese I (28%), obese II (16%), and at risk (4%). On the contrary, only a small number of Chinese male students whose weight were classified as obese I (16%) and at risk (4%), instead most (60%) of them weighed in normal range and even underweight (20%). Therefore, body dissatisfaction was significantly correlated with body change behaviors (to lose weight) among Indonesian male college students, but not among Chinese males.

No significant correlation between body dissatisfaction and body change behaviors (to increase muscle bulk) among Indonesian and Chinese college students might be related to which body parts that caused the dissatisfaction. Item analysis of all the participants showed that there were only a small number of Chinese male (32%), Indonesian male (24%), Chinese female (24%), and even Indonesian female (8%) college students who felt dissatisfied and extremely dissatisfied with their muscles. Consequently, they did not show significant effort to increase their muscle. Muscularity is not traditionally held as a cultural standard for masculinity in Asian cultures, as it is in the West (Jackson & Chen; Yang, Gray, & Pope, in Xu et al., 2010).

Interestingly, there was no significant difference in the level of body dissatisfaction between



Indonesian and Chinese college students. Indonesia is located in Southeast Asia, whereas China is in East Asia. A research conducted in 26 countries across 10 world regions reported that women in South America and North America displayed more body dissatisfaction than women in Western Europe, Southeast Asia, Eastern Europe, Oceania, and South and West Asia. Moreover, women in Africa, East Asia, Scandinavia, Western Europe, and Southeast Asia displayed more body dissatisfaction than women in South and West Asia (Swami, et al., 2010). It supports our result that body dissatisfaction experienced by Indonesian and Chinese college students were not significantly different. According to Nasser (in Swami et al., 2010), the effects of Westernization reflect the nature of a globalized world where body dissatisfaction has become an international phenomenon.

Regarding gender differences, there was no significant difference in the level of body dissatisfaction between male and female college students either in Indonesia or China. Other studies also found no gender differences in body attitudes (Wilcox, in Green & Pritchard, 2003), which might relate to a recent increase in body image dissatisfaction in males (Cash; Raudenbush & Zellner, in Green & Pritchard, 2003). A research among Malaysian adolescent boys and girls (Mellor et al., 2010) reported that there were no differences between boys and girls with regard to body dissatisfaction. This finding is not consistent with Western research which has often reported that girls are more dissatisfied with their bodies than boys. It supports our result and suggests that findings from Western contexts may not be relevant to Eastern contexts. Although there was no difference in the level, this current study reported that there were some differences in the focus of body dissatisfaction between males and females in Indonesia and China.

Interesting findings in body change behaviors (to lose weight) were: (1) Indonesian female students showed higher level of behaviors to lose weight than Chinese females and (2) Chinese male students showed higher level of weight lose behaviors than Chinese females. It was known that either Indonesian female or Chinese male college students had higher BMI than Chinese females and Chinese female students demonstrated low efforts to lose weight. Previous study in Malaysia (Mellor et al., 2010) and Indonesia (Ongkowijoyo, 2010) also found that participants with higher BMI were more likely engage in behaviors to lose weight, a finding consistent with many other studies, including those conducted in Asian contexts. Item analysis showed that Indonesian female participants preferred dieting and doing physical exercise to consuming food supplement, whereas Chinese males preferred to do physical exercise.

Also of interest were the findings that Chinese female and Indonesian male college students showed higher level of behaviors to increase muscle than Indonesian female students. These phenomena were mainly due to the very low muscle bulking behaviors among Indonesian female students rather than the high efforts to increase muscle among Chinese female and Indonesian male college students. Item analysis showed that only one Indonesian female college students who did an effort to make her muscles bigger and muscles was the lowest body part that caused dissatisfaction among Indonesian females. It is consistent with the previous study among high school boys and girls in Surabaya, Indonesia (Husniyati, 2012) that reported most of high school girls did very low effort in increasing muscle size. Body part that considered most important by most of the girls was height and they did not mention muscle at all.

REFERENCES

- Eснаоla, I., Rodriguez, A., & Goni, A. (2010). Body dissatisfaction and perceived sociocultural pressures: gender and age differences. *Salud Mental*, 33, 21-29.
- Green, S. P. & Pritchard, M. E. (2003). Predictors of body image dissatisfaction in adult men and women. *Social Behavior and Personality*, 31(3), 215-222.
- Husniyati, U. (2012). *Hubungan antara ketidakpuasan terhadap tubuh dengan perilaku mengubah tubuh pada remaja*. Unpublished final project report. University of Surabaya, Surabaya.
- Jackson, T. & Chen, H. (2012). Gender and age group differences in mass media and interpersonal influences on body dissatisfaction among Chinese adolescents. *Sex Roles*, 66, 3-20
- Jung, J., Forbes, G. B., & Chan, P. (2010). Global body and muscle satisfaction among college men in the United States and Hong Kong-China. *Sex Roles*, 63, 104-117.
- Lawler, M. & Nixon, E. (2011). Body dissatisfaction among adolescent boys and girls: The effects of body mass, peer appearance culture and internalization of appearance ideals. *J Youth Adolescence*, 40, 59-71
- Mellor, D., McCabe, M., Ricciardelli, L., & Merino, M. E. (2008). Body dissatisfaction and body change behaviors in Chile: The role of sociocultural factors. *Body Image*, 5, 205-215.
- Mellor, D., Ricciardelli, L. A., McCabe, M. P., Yeow, J., Binti Mamat, N. H., & Binti Mohd Hapidzal, N. F. (2010). Psychosocial correlates of body image and body change behaviors among Malaysian adolescent boys and girls. *Sex Roles*, 63, 386-398.



- Nelson, M. C., Story, M., Larson, N. I., Neumark-Sztainer, D., & Lytle, L. A. (2008). Emerging adulthood and college-aged youth: An overlooked age for weight-related behavior change. *Obesity, 16*(10), 2205-2211.
- Ongkowijoyo, H. (2010). *Hubungan antara body dissatisfaction dengan perilaku latihan di pusat kebugaran pada laki-laki dewasa awal*. Unpublished final project report. University of Surabaya, Surabaya.
- Prasad, D. S., Kabir, Z., Dash, A. K., & Das, B. C. (2011). Abdominal obesity, an independent cardiovascular risk factor in Indian subcontinent: A clinico epidemiological evidence summary. *Journal of Cardiovascular Diseases Research, 2*(4), 199-205.
- Ricciardelli, L. A. & McCabe, M. P. (2002). Psychometric evaluation of the body change inventory: An assessment instrument for adolescent boys and girls. *Eating Behaviors, 3*, 45-59.
- Rice, C. (1995). *Promoting healthy body image: a guide for program planners*. Retrieved August 20, 2003, from <http://www.opc.on.ca/beststart/bodyimg/httoc.html>
- Swami, V., Frederick, D. A., Aavik, T., Alcalay, L., Allik, J., Anderson, D., et al. (2010). The attractive female body weight and female body dissatisfaction in 26 countries across 10 world regions: Results of the international body project I. *Personality & Social Psychology Bulletin, 36*(3), 309-325.
- Xu, X., Mellor, D., Kiehne, M., Ricciardelli, L. A., McCabe, M. P., & Xu, Y. (2010). Body dissatisfaction, engagement in body change behaviors and sociocultural influences on body image among Chinese adolescents. *Body Image, 7*, 156-164.
- Yuanita, H. (2013). *Perbedaan body dissatisfaction pada perempuan anggota fitness centre ditinjau dari tahapan perkembangan dan tingkat kegemukan*. Unpublished final project report. University of Surabaya, Surabaya.