THE ASSOCIATION BETWEEN PHYSICAL ACTIVITY AND
PERCEIVED BODY IMAGE IN HONG KONG COLLEGE
STUDENTS

WONG CHUN WAI
14686589
Dr. DUAN Yanping

APRIL, 2016
Honours Project Release Form

Thesis Title: The Association Between Physical Activity And Perceived Body Image In Hong Kong College Students

Author: Wong Chun Wai

Student No.: 14686589

Department: Physical Education

Programme: Bachelor of Social Sciences (Honours) in Sport and Recreation Leadership

Declaration:

I agree that the full text of my thesis may be consulted by the HKBU community users in print version in the Hong Kong Baptist University Library according to the circulation regulations currently in force. All Rights are reserved and governed by the Hong Kong Copyright Ordinance.

Signature of Author: ___________________________ Date: 25th April, 2016
We hereby recommend that the Independent Project by Wong Chun Wai entitled
“THE ASSOCIATION BETWEEN PHYSICAL ACTIVITY AND PERCEIVED BODY IMAGE IN HONG KONG COLLEGE STUDENTS” be accepted in partial fulfillment of the requirement for the Bachelor of Social Science (Honours) in Sport and Recreation Leadership.

__________________________
Dr. DUAN Yanping
Advisor
DECLARATION

I hereby declare that this honours project “THE ASSOCIATION BETWEEN PHYSICAL ACTIVITY AND PERCEIVED BODY IMAGE IN HONG KONG COLLEGE STUDENTS” represents my own work and had not been previously submitted to this or other institution for a degree, diploma or other qualification. Citations from the other authors were listed in the references.

_________________________
Wong Chun Wai

25th APRIL, 2016
I would like to express my deepest gratitude to my supervisor, Dr. DUAN Yanping for guiding and supporting me throughout the entire study and providing me valuable suggestions in my thesis. In addition, I would like to thank the participants, the school principal and teachers. My project would have not been conducted smoothly without their participations and supports.

________________________
Wong Chun Wai
Department of Physical Education
Hong Kong Baptist University
Date: 25th APRIL, 2016
ABSTRACT

AIMS: This cross-sectional study aimed to preliminarily investigate the association between perceived body image (PBI) and the stage of change for physical activity (PA), weight status, and gender among college students in Hong Kong.

METHODS: College students in Hong Kong were selected to be the samples of this study. Participants completed a set of questionnaires including (1) Demographic characteristics, (2) Stage of Change for Physical Activity, and (3) the Multidimensional Body-Self Relations Questionnaire-Appearance Scales (MBSRQ-AS). Students’ height (m) and weight (kg) were obtained from the questionnaires to calculate their body mass index (BMI, kg/m^2) and weight status. The PBI of participants were obtained from two subscales of MBSRQ-AS. Participants were divided into stages, active stages and inactive stages, according to their reported stage of change for PA. IBM SPSS Statistic 22 was used for data analysis. Pearson Coefficient Correlation (r) was used to determine the correlation between the subjects’ BMI and PBI. In addition, Independent-Sample T Test was used to test whether there were main effects of gender and stage of change for PA on PBI. Also, One-way ANOVA was used to test whether there were main effects of weight status on PBI. The alpha level was at P< .05.

RESULTS: A total of 100 Hong Kong college students (male=50, aged 17–25 years old, mean age=20.69, SD=1.85) were invited and participated into the study, with a participation rate of 100%. There was no significant correlation between BMI and PBI (r = -0.84, P = 0.408). However, there was a significant difference among different weight statuses on PBI (F = 3.53, p<0.05) that the participants in normal weight status reported the highest mean score in PBI (mean = 3.35). Significant difference in PBI was also found
between genders ($t = 2.28, P<0.05$) that male students reported higher mean score in PBI. In addition, significant difference in PBI was found between the active and inactive stages of change for PA ($t = -4.06, P<0.01$) that active participants scored higher in PBI.

**CONCLUSIONS:** PBI of college students in Hong Kong was closely related to weight status, gender and PA behavior. Future research in a large-sized random sample should be conducted to confirm the finding of this study. In addition, effective interventions for obtaining higher PBI should be investigated in the future studies.

**Keywords:** physical activity (PA); stage of change for physical activity; gender, body weight statuses, perceived body image; Hong Kong; college students
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Study Aims and Objectives</td>
<td>4</td>
</tr>
<tr>
<td>Significance of the Study</td>
<td>5</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>5</td>
</tr>
<tr>
<td>2. LITERATURE REVIEW</td>
<td>6</td>
</tr>
<tr>
<td>Body Image</td>
<td>6</td>
</tr>
<tr>
<td>Gender and Body Image Concerns</td>
<td>8</td>
</tr>
<tr>
<td>Stage of Change for Physical Activity</td>
<td>9</td>
</tr>
<tr>
<td>Association between stage of change for PA and Body Image</td>
<td>12</td>
</tr>
<tr>
<td>Association between body weight statuses and PBI</td>
<td>13</td>
</tr>
<tr>
<td>3. METHODS</td>
<td>14</td>
</tr>
<tr>
<td>Subjects and Sampling</td>
<td>14</td>
</tr>
<tr>
<td>Measurements</td>
<td>14</td>
</tr>
<tr>
<td>Data Collection Procedures</td>
<td>17</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>17</td>
</tr>
</tbody>
</table>
### LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Distribution of Demographic Information, Stage of Change for PA and Body Weight Status of the Participants</td>
<td>19</td>
</tr>
<tr>
<td>2. Perceived Body Image by Gender and Stage of Change for PA</td>
<td>20</td>
</tr>
<tr>
<td>3. Perceived Body Image by Weight Status</td>
<td>21</td>
</tr>
</tbody>
</table>
INTRODUCTION

Body image is a multidimensional construct encompassing self-perceptions and attitudes regarding one’s physical appearance (Cash, Morrow, Hrabosky, & Perry, 2004). In adulthood, three components of body image requiring evaluation are appearance, competence, and physical health. (Cash & Pruzinsky, 2002)

Research on body image has been abundant in recent years, partly due to its role in the development of eating disorders, such as anorexia nervosa and bulimia nervosa (Cohen & Petrie, 2005). Societal norms within unique ethnic and social communities have significant influence on ideal body shape (Cheung, Cheng, Mak, Wong, Wong, & Yeung, 2011). Previous studies on body image dissatisfaction among Asian women suggested that thinness and fragility were crucial components of feminine beauty throughout traditional Chinese society. (McLaren & Gauvin, 2002) Chinese women were showed higher levels of body dissatisfaction and disordered eating than women in the United States and it appears as if in parts of Asia, the ideals of thinness have become more extreme than those in the United States. (Cash & Linda, 2011) The cultural feminine “thin is beautiful” ideal is as unattainable for the average woman as the overly muscled, six-pack abs “big is beautiful” masculine ideal is for the average man (Bloch & Richins, 1992). Previous research indicated that muscle belittlement in men was positively correlated with depression (Olivardia, Pope, Borowiecki & Cohane, 2004).

Perceived body image acts an important role in people’s mind, especially in young adult. The drive for thinness was higher in younger women than older women (Pruis &
Janowsky, 2010). People satisfy in their body image when the discrepancy between ideal body image and perceived body image were narrowed down (Cash & Pruzinsky, 2002). Having a better physical appearance would help in career satisfaction, it has been found that higher levels of body image predicting higher levels of job satisfaction (Jackson, Madewell, & Kennison, 2011). However, when people dissatisfied in their body image, it may put pressure on people to engage in disordered eating that cause physical and mental health problems. (Olivardia et al., 2004) Since the satisfaction in body image is important for physical health, mental health, and even in future career opportunity, people choose various ways for achieving their perceived ideal body image.

Participating in physical activity (PA) is one of the major ways for the university students in Hong Kong to achieve their ideal body image. Physical activity is recognized as an essential component of healthy lifestyle (Lorraine & Buckworth, 2002). Regular physical activity is known to confer physical and mental health benefits, which can make an important contribution to improving physical and psychological quality of life. (Kopcakova, Veselska, Geckova, van Dijk & Reijneveld, 2014) There were growing evidences show that the frequencies in intensity of physical activities were related to physical health, mental health, and social health. The dose-response relations between physical activity and health that were observed in several observational studies suggest that the more physical activity people do, the greater the health benefits they have. (Janssen & Leblanc, 2010) Those who maintained their physical activity from adolescence to young adulthood significantly lower risk of cardiovascular disease and certain cancers, and better mental health, when compared to inactive maintainers. (Rangul, Bauman, Holmen, & Midthjell, 2012)
As participation in physical activity can confer physical benefits, there seems to be an inherent assumption within the exercise and body image literature that exercise produces changes in fitness, which, in turn, leads to changes in body image (Cash & Pruzinsky, 2002). According to the previous research, overall greater leisure time physical activity participation was associated with a better body image (Bassett & Martin, 2009). Perceived body attractiveness was found to mediate the relationship between body fat % and physical self-worth among boys and girls, and the physical self-worth is associated with different components of health-related fitness in adolescent girls and boys (Lubans & Cliff, 2011). As there is a strong relationship between motor skill competence and health related physical fitness in adolescence and adulthood (Stodden, Langendorfer & Roberton, 2009), the higher participation rate in physical activity would contribute to the components of body images in adulthood. For the satisfaction to body image, women who exercised and watched appearance-focused video clips felt more attractive than women watching the same clips who did not exercise (Prichard & Tiggemann, 2012). Physical activity participation has been shown to be significantly correlated with perceived body image and health in female adolescent in Hong Kong (Cheng et al., 2003). However, some studies failed to show a significant relationship between changes in body fitness and changes in body image (Cash & Pruzinsky, 2002). Another study indicated that the appearance body image was not related to leisure time physical activity for men with spinal cord injury. (Bassett & Martin, 2009) Moreover, some studies indicated that sufficient physical activity was more likely in adolescents perceiving themselves as fat (Kopcakova et al., 2014) and may produce negative consequences of increasing concerns about thinness in women (Zabinski, Calfas, Gehrman, Wilfley, & Sallis, 2001).
Overall, various researches suggested different effects of physical activities on the perceived body image and there were few studies about the related topic on the college students in Hong Kong. It is of essential importance to have further study on the association between these two variables. It might help to investigate whether participation in physical activity is an effective way for college students in Hong Kong to enhance perceived body image or not.

Study Aims and Objectives

This study aimed to examine the association between the stages of change for physical activity and the perceived body image (PBI), the association between genders and PBI, and the association between body weight statuses and PBI of college students in Hong Kong. Specifically, the objectives of this study were:

(1) To investigate the stage of change for PA among the college students in Hong Kong.

(2) To investigate the PBI among the college students in Hong Kong.

(3) To investigate the body weight statuses among the college students in Hong Kong.

(4) To investigate the association between the stages of change for PA and PBI.

(5) To investigate the association between genders and PBI.

(6) To investigate the association between body weight statuses and PBI.
Significance of the Study

This study provided more information about the association between genders and PBI, the association between body weight statuses and PBI, and the association between stages of change for PA and PBI among college students in Hong Kong. In addition, since there is knowledge gap about the association between the stages of change for PA and PBI among Hong Kong college students, this study provided new vision for academic research.

Hypotheses

The hypotheses of this study were:

Hypothesis 1: There would be no significant difference of PBI between genders

Hypothesis 2: There would be no significant difference of PBI across the stage of change of PA

Hypothesis 3: There would be no significant difference of PBI among different body weight statuses
Chapter 2

REVIEW OF LITERATURE

This chapter examines the body image concerns and physical activity level of college students in Hong Kong. This chapter divided in the following sections: (1) body image, (2) gender and body image concerns, (3) stages of change for PA, (4) association between stages of change for PA and PBI, (5) association between body weight statuses and PBI.

Body Image

Body image is more than the physical appearance, weight and body size of a person. Body image is a multidimensional concept that encompasses perceptual, attitudinal, and affective components. (Cash & Pruzinsky, 2002) Body image has been defined as a person’s perception, feelings, and thoughts about his or her body, usually conceptualized as incorporating body size estimation, evaluation of body attractiveness and emotions associated with body shape and size (Garrusi, Garousi & Baneshi, 2013).

According to Cash (2002), there were four factors playing the role in the development of one’s body image: cultural socialization, interpersonal experiences, physical characteristics, and personality attributes.

Cultural socialization represented the social valued expectation and standard of physical appearance. Cultural messages not only articulate normative notions about attractiveness and unattractiveness but also express gender-based expectations that tie “femininity” and “masculinity” to certain physical attributes (Cash & Pruzinsky,
Cultural values foster the acquisition of basic body image attitudes, which predispose them to construe and react to life events in particular ways (Cash & Pruzinsky, 2002).

Interpersonal experiences occur not only with the media, but also expectation, opinions, verbal and nonverbal communication among an individual’s social network such as family members, friends and other peers, and even strangers (Buckley, 2011). Interpersonal teasing and criticism would predispose the recipient to body dissatisfaction (Cash & Pruzinsky, 2002).

Body image development is also affected by one’s actual physical characteristics. The physical attractiveness and social acceptability of the person’s physical appearance depended on how well one’s appearance matches social standards (Cash & Pruzinsky, 2002). Physical appearance included numerous aspects of body, which play role in the body image formation. Body weight is not the only physical factors affecting body image formation, stature and muscularity, skin’s elasticity and even hair density also affect one’s body image (Cash & Pruzinsky, 2002). As people growth, physical change because of aging can affect body image development (Levine & Smolak, 2002).

Personality attributes also influence the formation of body image. Self-esteem plays important role in the body image formation. According to Cash (2002), “A positive self-concept may facilitate development of a positive evaluation of one’s body and serve as a buffer against events that threaten one’s body image”. Conversely, poor self-esteem may heighten one’s body image vulnerability. Other than self-esteem, public self-consciousness and the need for social approval also plays role in the development of body image (Cash & Pruzinsky 2002).
Gender and Body Image Concerns

According to Strigel-Moore and Franko (2002), the disturbances in perceptual, attitudinal, and affective components about body image are termed “body image concerns”. These disturbances may entail a negatively distorted view of one’s appearance, body image dissatisfaction, or overvaluation of one’s appearance in defining sense of self. For both men and women, being beautiful and attractive is important for social success and many of them would put efforts on reaching their ideal body image. Body image concerns created when there are disturbances between perceived body image and ideal body image. When comparing between different genders, females are much more likely than males to experience body image concerns, regardless of age (Strigel-Moore & Franko, 2002).

In recent years, weight dissatisfaction is the commonly studied component of body image concern (Strigel-Moore & Feanko, 2002; Lowery, Robinson Kurpius, Befort, Elva, Sollenberger & Nicpon&Huser, 2005), while women are trying to lose their weight to be thinner and less noticeable (in order to be noticed) but men are trying to gain weight to be larger and more muscular (Lowery et al, 2005). Females have a significantly thinner figure and higher dissatisfaction toward their weight status than males (Zaccagni, Masotti, Donati, Mazzoni & Gualdi-Russo, 2014). Due to globalization, the female beauty ideal in both Western industrialized nation and non-Western countries has become increasingly thin (Striegel-Moore & Feanko, 2002). Most post-pubertal females are dissatisfied with their body shape and weight, despite being of “normal” weight or even underweight (Levine & Smolak, 2002). Body image disturbance would also occur in male, some studies note that males are facing complex body image concerns. According to Corson
and Andersen (2002), men are susceptible to a greater variety of weight concerns than females because the ideal to which men aspire is much more complex than the thinness embrace. Body shape and muscularity concerns, lack of exercise versus compulsive exercise, and “appearance obsession” are common problems faced by today’s man (Corson & Andersen, 2002).

Stage of Change for Physical Activity

Physical Activity

According to World Health Organization, physical activity is defined as any bodily movement produced by skeletal muscles that require energy expenditure. Regular participating in physical activity has been recognized as health promotion and disease prevention approach. Scientific evidence clearly demonstrates that regular, moderate-intensity physical activity provides substantial health benefit (Pate, Pratt, Blair, et al, 1995). Experimental studies show that exercise training improves CHD risk factors and other health-related factors, including blood lipid profile, resting blood pressure, body composition, glucose tolerance and insulin sensitivity, bone density, immune function and psychological function (Pate et al. 1995). According to Pate et al. (1995), 30 minutes or more of moderate-intensity physical activity is recommended on most, preferably all, days of the week.

Participating in physical activity can contribute to weight control and improve body and physical appearance satisfaction. Data from population-based surveys and longitudinal studies indicate that moderate to vigorous exercise may be an important
strategy for weight gain and it is effective for enhancing long-term weight loss (Jakicic, 2002) College women regularly participate in wellness classes and fitness classes resulted in increased satisfaction with body and physical appearance, more positive assessment of physical fitness and health, higher orientation toward fitness and health, and reported positive changes in lifestyle behaviors (Koff & Bauman, 1997). Williams and Cash (2001) investigated the effects of a six-week circuit training program on college students, and their result showed that even a relatively brief program reduced social physique anxiety and improved appearance evaluation and body dissatisfaction among both males and females.

The physical activity patterns of college students have been investigated by numerous studies. Kilpatrick, Hebert, & Bartholomew (2005) noted the college student participation rate in exercise was average 3.58 days per week. According to Buckworth and Nigg (2004), 30.6% US students engaged in adequate levels of moderate activity (not less than 5 of the previous 7 days) and 53.2% in vigorous activity (not less than 3 of the previous 7 days) even they spent almost 30 hours in a typical week engaged in sedentary behaviors. It noted that most of the US college students were physically active since 73.1% of them would participate in vigorous or moderate exercise at least 3 times a week (Buckworth and Nigg, 2004).

The motivations for participating physical activity are different among genders. Male college students reported higher levels of motivation than did female for challenge, competition, social recognition, and strength and endurance, while female college students rated weight management as the first motive, higher than did male (Kilpatrick, Hebert, & Bartholomew, 2005).
Stage Model: Four Steps from Inactivity to Health-enhancing Physical Activity Model

The process of progressing from sedentary behavior to habitual health-enhancing physical activity (HEPA) can be understood as a behavioral change process that substitutes old behaviors or patterns and replaces them with new behavior or patterns (Duan, Brehm, Strobl, Tittelbach, Huang, & Si, 2013). The process of behavior change from sedentary to physically active can be described as stages. For investigating the behavior stages for physical activity of adults, there are various types of stage models. Four Steps from Inactivity to Health-enhancing Physical Activity (FIT) model is one of the stage model which includes 6 stages: (1) Not considering (i.e., not being physically active and not thinking about it); (2) Considering (i.e., thinking about being physically active); (3) Preparing (i.e., have intention and plans to start with physical activity); (4) Exploring (i.e., being physically active regularly, at least 120 minutes per week, but not longer than 12 months); (5) Fluctuating (i.e., Being physically active, but not regularly); (6) Maintaining (i.e., being physically active regularly for more than 1 year) (Duan et al, 2013). People in the first stage would be defined as not being physically active and not thinking about it, while the people in the sixth stage would be defined as being physically active regularly for more than one year. According to Duan (2013), Four Steps from Inactivity to Health-enhancing Physical Activity (FIT) model was found to be valid for understanding German and Chinese adult health-enhancing physical activity behavior where the weekly energy consumption was significantly and positively correlated with the PA stages.
Active Stages and Inactive Stages in FIT model

Stages in the FIT model can be divided into two main categories, active stages and inactive stages, according to the involvement of physical activity. People in Not Considering Stage, Considering Stage, and Preparing Stage would be categorized into inactive category since the absent of involvement in regular physical activity in subjects’ daily life. People in Exploring Stage, Fluctuating Stage, and Maintaining Stage would be categorized into active category since the present of involvement in physical activity for at least 120 minutes per week in subjects’ daily life. By using the category of active stages and inactive stages, comparison between active people and inactive people would be relatively easier and more obvious.

Association between stage of change for PA and Perceived Body Image

Numerous studies were found to investigate the association between physical activity and body image. Positive relationship was found between the physical activity and body image (Lowery et.al. 2005; William and Cash, 2011). In contrast, another study suggested that physical activity may have some negative consequences of increasing concerns about body image (Zabinski et al., 2001). For investigating the association between stage of change for physical activity and body image, few studies were conducted in the past 10 years. A recent study has indicated that lower exercise stage of change is associated with higher body weight, higher body dissatisfaction, and/or lower self-esteem, while higher exercise stage of change is associated with lower body weight, lower body dissatisfaction, and/or higher self-esteem (Kahrs, 2014). Inconsistent results
about the association between physical activity and body image were found from various studies, and it might be affected by other demographic variables such as gender, weight, and height.

Association between body weight statuses and PBI

In different countries, various studies were found to investigate the association between body weight statuses and body image satisfaction. Most of the studies suggested that body weight status was related to the perceived body image no matter in children, adults, or elder (Streeter, Milhausen & Buchholz, 2012; Watkins, Christie & Chally, 2008; Sira & White, 2010). However, the results were different from studies to studies. Some studies found perceived body image were negatively associated with body weight that people with heavier body weight statuses (people who were overweight or obesity) had relatively lower satisfaction towards their bodies when compared with people with lighter body weight status (Pallan, Hiam, Duda & Adab, 2011; Watkins, Christie & Chally, 2008). However, a previous research suggested an inverted U relationship between the body weight and perceived body image that people with too light or too heavy body weight would have lower perceived body image (Sira & White, 2010). Since the founding about the association between perceived body image and body weight statuses were different from studies to studies, it would be a need for doing further studies to find out more information in this area.
Chapter 3

METHODS

The study was a cross-sectional study.

Subjects and Sampling

This study was targeted college students in Hong Kong. College students from 4 universities, Hong Kong Baptist University, City University of Hong Kong, Hong Kong Polytechnic University, and Chinese University of Hong Kong, were selected to be the samples of this study. Conveniences sampling method was adopted to recruit subjects in 4 universities. A set of questionnaires was distributed to the subjects and a written informed consent was obtained from the participants in advance.

Measurements

Demographic variables of the subjects were collected by the questionnaires. Participants were asked to give information regarding gender, age, height, and weight. BMI was computed by using the height and weight of the participants.

Two self-reported written questionnaires, (1) the Multidimensional Body-Self Relations Questionnaire-Appearance Scales (MBSRQ-AS) and (2) Stage of Change for Physical Activity, were developed to collect the information of the participants.

The MBSRQ-AS focused on the self-reported body image of the subjects and it is a short version of the Multidimensional Body-Self Relations Questionnaire (MBSRQ).
MBSRQ-AS is composed of 34 items which consist of five sub-scales: (1) Appearance Evaluation (overall satisfaction with appearance) consists of 7 items, such as “I like my looks just the way they are.”; (2) Appearance Orientation (overall investment in appearance) consists of 12 items, such as “I am careful to buy clothes that will make me look my best.”; (3) Overweight Preoccupation (fat anxiety, weight vigilance, dieting, and eating restraint) consists of 4 items, such as “I constantly worry about being or becoming fat.”; (4) Self-Classified Weight (self-perception of weight) consists of 2 items, such as “from looking at me, most other people would think I am…”; and (5) Body Areas Satisfaction Scale (satisfaction with different aspects and areas of the body) consists of 9 items, such as “Upper torso”. The items are rated on a 5-point Likert-type scale: some items evaluate agreement (from 1: Definitely disagree to 5: Very often) or satisfaction (from 1: Very dissatisfied to 5: Very satisfied). The Self-Classified Weight scale has a specific response format and the possible answers are from 1: Very underweight to 5: Very overweight (A. Untas et al. 2009). The MBSRQ-AS generally have good psychometric qualities: the internal consistency ranges from .70 to .89. Test-retest reliability ranges from .74 to .91 (Cash, 2000). The scale has been used in numerous studies for assessing subjects’ perceived body image (Jung et al., 2010; William and Cash, 2001; Cash, Hrabosky, and Perry, 2004; Koff and Benavage, 1998; Chen, 2010). This study was mainly focused on two sub-scales, Appearance Evaluation and Body Areas Satisfaction Scale, of the MBSRQ-AS for investigating the perceived body image. The score of PBI was represented by the mean score of Appearance Evaluation and Body Areas Satisfaction Scale of each participant.
The Stage of Change for Physical Activity Questionnaire focused on assessing the processes of behavioral change for doing physical activity. The stage algorithm divides behavior change process into six stages. Each stage would comprise a statement: (1) Not-Considering: “I am not physically active, and I am not thinking about being physically active in the future”; (2) Considering: “I am not physically active, but I am thinking about being physically active soon”; (3) Preparing: “I am not physically active, but I am just making decisions and building up plans to start physical activity”; (4) Exploring: “Yes, I am physically active every week, and have accumulated at least 120 minutes, but for less than twelve months”; (5) Fluctuating: “Yes, I am physically active, but not regular every week, or have not accumulated at least 120 minutes every week”; and (6) Maintaining: “Yes, I am physically active every week and have accumulated at least 120 minutes, and I have done this for twelve months or more”. Participants are required to select any one out of six statements. This questionnaire has been used in previous studies for assessing the PA stages of Hong Kong college students (Duan et al. 2013). The first three stages, Not-Considering, Considering and Preparing, were regarded as inactive stages of change for PA, whether the latter three stages, Exploring, Fluctuating and Maintaining were regarded as active stages of change for PA.

Weight status categories were determined according to the Body Mass Index of the participants. According to the cut-off point for overweight and obesity in Hong Kong population, participants with BMI less than 18.50 were regarded as underweight category; participants with BMI ranged from 18.50 to 22.99 were regarded as normal weight category; and participants with BMI equal or more than 23.00 were regarded as
overweight or obesity (Barba, C., Cavalli-Sforza, T., Cutter, J., Darnton-Hill, I., & al. e., 2004).

Data Collection Procedures

Questionnaires were directly distributed to the participants for collecting the data. Participants were allowed to finish the questionnaires immediately or bring it back to their home for finishing. All the complete questionnaires were collected by the researcher after the participants finished all the questions.

Data analysis

All the data collected in the questionnaire were coded for further analysis and were inputted into the Statistical Package for the Social Science program (IBM SPSS Statistic 22). Those original data were regrouped into the categories of dependent variables and independent variables. Independent variables consist of gender, BMI, and stage of change for PA, whether the dependent variable consists of PBI. Pearson Coefficient of Correlation (r) was used to determine the correlation between the subjects’ BMI and the score of perceived body image. In addition, Independent-Sample T Test was used to test whether there were main effects of gender and stage of change for PA on PBI. Also, One-way ANOVA was used to test whether there were main effects of weight status on PBI. The alpha level was at P< .05.
Chapter 4

RESULTS

Participations

A total of 100 Hong Kong college students (aged 17–25 years old, mean age=20.69, SD=1.85), from 4 universities, Hong Kong Baptist University, City University of Hong Kong, Hong Kong Polytechnic University, and Chinese University of Hong Kong, were invited and participated into the study, with a participation rate of 100%.

Distribution of Variables

Table 1 presents the distribution of demographic characteristics (gender and age group), stage of change for PA, and body weight status of the participants. Half of the participants were males (N=50) and half of the participants were females (N=50). Forty five percent of the participants aged 17-20 years old; the others were aged 21-25 years old. More than half of the participants (57%) were classified into inactive stages that they were in the first three stages of change for PA, ‘Not-Considering’, ‘Considering’ and ‘Preparing’, and they were not physically active for at least accumulated four hours (240 minute) per week within one year; the others (43%) were classified into active stages that they were in the last three stages of change for PA, ‘Exploring’, ‘Fluctuating’ and ‘Maintaining’, and they were physically active for more than accumulated four hours (240 minutes) per week within one year. In addition, according to their BMI, 17% of the participants (N=17) were classified as underweight that their BMI were lower than 18.50; 63% of the participants (N=63) were classified as normal weight that their BMI were
from 18.50 to 22.99; 20% of the participants (N=20) were classified as overweight that their BMI were equal or higher than 23.00. (Table 1)

Table 1

*Distribution of Demographic Information, Stage of Change for PA and Body Weight Status of the Participants*

<table>
<thead>
<tr>
<th>Gender</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>50</td>
<td>50.00</td>
</tr>
<tr>
<td>Female</td>
<td>50</td>
<td>50.00</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17-20</td>
<td>45</td>
<td>45.00</td>
</tr>
<tr>
<td>21-25</td>
<td>55</td>
<td>55.00</td>
</tr>
<tr>
<td>Stage of change for PA*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inactive stages</td>
<td>57</td>
<td>57.00</td>
</tr>
<tr>
<td>Active stages</td>
<td>43</td>
<td>43.00</td>
</tr>
<tr>
<td>Weight Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Underweight</td>
<td>17</td>
<td>17.00</td>
</tr>
<tr>
<td>Normal Weight</td>
<td>63</td>
<td>63.00</td>
</tr>
<tr>
<td>Overweight/obesity</td>
<td>20</td>
<td>20.00</td>
</tr>
</tbody>
</table>

*Inactive stages consist of not-considering, considering and preparing stages. Active stages consist of exploring, fluctuating and maintaining stages.
PBI, gender and stage of change for PA

Independent t-test was used to test whether there were main effects of gender and stage of change for PA on PBI. The finding showed that there was a significant difference between male and female in PBI ($t = 2.28$, $P<0.05$). Male participants have a relatively higher mean score in PBI than female participants. And, the finding shown that there was a significant difference between inactive stages of change for PA and active stages of change for PA in PBI ($t = -4.06$, $P<0.01$). Participants in active stages have a relatively higher mean score in PBI than the participants in inactive stages. Hence two of the null hypotheses were rejected that there would be significant difference in PBI between genders and across the stage of change for PA. The result of the independent t-test could be presented in Table 2.

Table 2

*Perceived Body Image by Gender and Stage of Change for PA*

<table>
<thead>
<tr>
<th></th>
<th>Perceived Body Image</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>50</td>
</tr>
<tr>
<td>Female</td>
<td>50</td>
</tr>
<tr>
<td>Stage of Change for PA*</td>
<td></td>
</tr>
<tr>
<td>Inactive Stages</td>
<td>43</td>
</tr>
<tr>
<td>Active Stages</td>
<td>57</td>
</tr>
</tbody>
</table>

*p<.05
***p<.001
PBI and Weight Status

Pearson Correlation (r) was used to find out the correlation between Body-mass Index and Perceived Body Image. The result has shown that there was no significant correlation between BMI and PBI (r = -0.84, P = 0.408).

One-way ANOVA was used to test whether there were main effects of weight status on PBI. The finding showed that there was a significant difference among different weight statuses on PBI (F = 3.53, p<0.05). The mean score of PBI of the participants in normal weight status (mean = 3.35) was relatively higher than that of the participants in underweight status (mean = 3.17) and overweight status (mean = 3.06). Hence the null hypothesis was rejected that there would be significant difference in PBI among different weight status. The result of the One-way ANOVA could be presented in Table 3.

Table 3

*Perceived Body Image by Weight Status*

<table>
<thead>
<tr>
<th>Weight Status</th>
<th>N</th>
<th>Mean (SD)</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight</td>
<td>17</td>
<td>3.17 (.48)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normal weight</td>
<td>63</td>
<td>3.35 (.43)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overweight</td>
<td>20</td>
<td>3.06 (.46)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.05
Chapter 5

DISCUSSION AND CONCLUSIONS

Summary of the Main Results

One hundred students (50 male, 50 females, and aged 17 – 25 years) in four universities in Hong Kong were invited and participated into the study, with a participation rate of 100%. No significant correlation was shown between BMI and PBI. However, a significant difference in PBI was found among different weight status; that normal weight participants responded the highest mean score in PBI and overweight / obesity participants responded the lowest mean score in PBI. Between male and female, a significant difference in PBI was also found that male participants have a relatively higher mean score in PBI than female participants. In addition, a significant difference between active stages of change for PA and inactive stages of change for PA was found that participants in active stages responded a higher mean score in PBI.

PBI and Gender

After analyzing the association between PBI and gender, the result of this study showed a significant difference in PBI between different genders that female college students in Hong Kong had a lower mean score in PBI than male college students in Hong Kong. This result is in line with other studies (Levine and Smolak, 2002; Venkat&Ogden, 2002; Najam&Ashfaq, 2012; Zaccagni, et al., 2014), suggesting that young adult females had relatively greater dissatisfaction toward their bodies and appearances than young adult males.
About the gender differences in PBI, female college students in Hong Kong have responded a greater dissatisfaction towards their bodies and appearances than male college students. The gender difference in PBI might due various reasons. First, it might due to the current trend towards thinness that the female beauty ideal has becoming increasingly thin in both western and non-western countries which includes Hong Kong (Striegel-Moore and Feanko, 2002). Therefore, the trend of chasing thinness might strengthen the desire of female college students in Hong Kong towards thinner bodies and it would affect their PBI when there was a discrepancy between their actual body size and ideal body size. Other than the trend of thinness, the difference in PBI between female students and males students might due to the gender differences in body image-related issue that women were more likely to compare their bodies to those of others (Murnen, 2011). As women were found that they were more likely to compare their bodies with others, it would be a major way causing them to have lower satisfaction towards their bodies hence lower score in PBI. Besides, the higher dissatisfaction towards body image in female might be caused by the higher body image concern of females that females were more emphasized on good body image than male. A previous study has shown that the 57% of female were expressed body image concerns while only 20% of males were expressed (El Ansari, Dibba& Stock, 2014). Since females have relatively higher body image concerns, they would be more likely to paid additional attention on their body and appearance and it might lead them to perceived lower body image satisfaction. As there were numerous possible reasons for causing the lower PBI in female college students, further research would be required to figure out the cause of low PBI in female college students in Hong Kong.
PBI and Stage of Change for PA

The result of this study showed a significant difference in PBI between the active stages of change for PA and inactive stages of change for PA where participants in active stages reported higher mean score in PBI than the mean score in PBI of the participants in inactive stages. It means that Hong Kong college students in the exploring, fluctuating, and maintain stages of change for PA had a relatively greater satisfaction towards their body image than those in the not-considering, considering, and preparing stages of change for PA. The result supports the findings of other studies that there was a positive relationship between physical activity and perceived body image (Lowery et.al. 2005; William and Cash, 2011). The reason of relative higher PBI in the active participants might be related to the benefits of doing PA, since previous study suggested that engaging in exercise behaviors that promote good health and a youthful appearance could enhance people’s physical attractiveness (Jackson, 2002). Therefore, PBI of college students could also be increased due to the enhancement in physical attractiveness.

According to the result of this study, regularly participate in physical activity would contribute to a relatively higher perceived body image for the college students in Hong Kong.

Numerous studies showed that body image dissatisfaction was associated with low or negative self-esteem (Clay, Vignoles &Dittmar, 2005; Lawrence &Thelen, 1995). In addition, significant positive correlation was found between body satisfaction and self-esteem that people with higher self-esteem would have relatively higher body satisfaction (Cohane& Pope, 2000). Since body satisfaction was related to self-esteem, it might be related to the benefit of participating PA. Based on the previous researches, participating
in PA would help people increase their self-esteem (Li, Xu & Liu, 2014; Cockerill, 1995, Kenneth, 2012). As the self-esteem was enhanced by doing PA, perceived body image would also be increased. Therefore, increased self-esteem by doing physical activities might be another reason of more active college students in Hong Kong having relative higher PBI score.

Since the active participants had a relatively higher PBI than the inactive participants, it rejected the result of previous study which stated that physical exercise has negative association with body image (Ase, Diaz & Meland, 2014). According to the result of this study, college students who regularly participated in physical activities were more likely to have positive effect on their body image rather than generating negative effects on body image. However, as the body image concerns of the participants were not involved in this study, it was difficult for testing whether there were negative consequences of increasing concerns about body image caused by participating in physical activity (Zabinski, 2001).

**PBI and Body Weight Statuses**

In this study, no significant correlation between BMI and PBI was found in the Hong Kong college students. The result was in line with one of the previous researches which suggested that there was a parabolic (inverted U) association between BMI and body satisfaction for males college students that both underweight and overweight students reported lower body satisfaction (Sira & White, 2010). However, this result was different from other researches which found negative correlation between BMI and
PBI. In those studies, significant negative correlation was found between BMI and body image satisfaction (Watkins, Christie & Chally, 2008), appearance esteem, and weight esteem (Streeter, Milhausen & Buchholz, 2012) in young adults. There might be some reasons causing the distinctive result in this study. Since this study was only involved 100 college students in Hong Kong, insufficient sample size might be the main cause of this unique result. In addition, since the previous researches were conducted in western countries or other Asian countries beside Hong Kong, cultural differences among countries might also lead to the differences in the correlation between BMI and PBI.

Moreover, as underweight participants were involved in this study, it was different from previous research. For those previous studies which showed a significant negative correlation between BMI and body image satisfaction, the participants only consisted of people in normal weight, overweight, and obesity weight statuses, but no underweight participants. Since there was a difference in the range of weight statuses of the participants, it might contribute to a difference in the correlation between BMI and PBI when compared with previous researches.

When weight status was divided into three levels (underweight, normal weight, and overweight/obesity), study results showed a significant difference in PBI among three weight status. Participants in normal weight status responded the highest mean PBI score (mean = 3.35), participants in underweight status responded the second high mean PBI score (mean = 3.17), and the participants in the overweight / obesity status responded the lowest mean PBI score (mean = 3.06). This study result is in line with others that normal weight people had higher satisfaction towards their bodies and appearances than the underweight and overweight people (Watkins et. al., 2008; Ase, Diaz & Meland, 2014)
In this study, 85% of the overweight participants responded that they thought themselves were ‘somewhat overweight’ or ‘very overweight’. For the causes of low PBI in overweight and obese people, social pressures to be thin, lean and muscular bodies would be one of the main reasons. Previous study had stated it was not surprising that overweight youths tend to have higher levels of body image concerns than non-overweight youth under the pressure to be thin, lean and muscular (Neumark-Sztainer, 2011). Since Hong Kong constantly promote the trend to be thin and muscular via different media, overweight college students in Hong Kong would easily have a relatively lower PBI than the non-overweight people. For the underweight participants of this study, 65% of them reported that they thought themselves were ‘somewhat underweight’ or ‘very overweight’. This result showed that more than half of the underweight college students realized their underweight problems. When compared to the previous research from North Delhi which showed only 15% of the underweight young adult participants realized their underweight problems (Rai, Negi& Chopra, 2014), college students in Hong Kong were more inclined to pursue a healthier body weight status. The results of current study reflected that Hong Kong college students were less likely to pursue thinness blindly, but for the healthier weight status.

Limitations of the Study

Although the research has reached its aims, there were some limitations. First, a major limitation of this study was the small sample size (n = 100). The sample size of this study was not large enough for testing the correlation between those variables. For example, the sample size was too small for showing the significance of the negative correlation
between PBI and BMI (r = -0.84, P = 0.408). To cope with this problem, larger sample size should be required. Besides, the validity of PBI score was another limitation of the study. Although the questionnaire of MBSRQ–AS was valid and reliable for testing the appearance and body areas satisfaction of Asian people, the score of PBI (the average score of Appearance Evaluation and Body Areas Satisfaction in MBSRQ-AS) might be not valid enough to test the perceived body image of the university students in Hong Kong since the PBI score has not been used in previous studies for checking the PBI of university students in Hong Kong. Moreover, since BMI and PA behaviors were measured with self-reported questionnaire rather than objective methods, which might lead to measurement bias.

**Future Research Perspectives**

In order to increase the validity of the research, future research with a large-scaled random sample should be conducted to obtain a more comprehensive result. Beside the larger sample size in the future studies, the validity of PBI score should also be checked and enhanced to test the perceived body image of the Hong Kong participants in different age groups. Moreover, in order the increase the objectivity of the data, more objective measurement methods should be used in the future studies for measuring the BMI and PA behavior of the participants. Also, since participants’ PA participation of this study was only illustrated by the time of PA participation without considering the types and the intensity of activities which they participated in, the effects of different types and levels of PA on PBI would be suggested to be the focus in the future researches. More important,
in order to increase people’s perceived body image, effective interventions for obtaining higher PBI should be investigated in the future studies.

Conclusion

It was concluded in this study that the college students in Hong Kong with normal weight status generally had higher PBI. In addition, female college students in Hong Kong had higher PBI than male college students. Moreover, active college students in Hong Kong generally had higher PBI than the inactive students. To sum up, body weight, PA behavior and gender are important factors related to PBI in Hong Kong college students.
REFERENCES


APPENDICE A

Student Questionnaire

---

**Student Questionnaire**

In order to investigate the association between the stage of change for physical activity and perceived body image of college students in Hong Kong, we ask that you complete the following questionnaire as completely as possible. Please answer all questions accurately and honestly. Thank you.

---

**Part A Student Information**

Gender: ___________  Age: ___________  University Year: ___________

School: ____________________________

Major Subject: ____________________________

Height: ___________ (cm)  Weight: ___________ (kg)

---

**Part B Stage of Change for Physical Activity**

How please consider your current physical activities.

*Physical activities include activities of daily life* (such as travel to university or visit friends by bike or by foot, climbing stairs), as well as sport and/or exercise (such as playing football or badminton, jogging or swimming, doing aerobics or Tai chi). But only include activities that you have undertaken with at least moderate intensity (that means with some sweating and/or some breathlessness).

Please tick the statement that best describes your current physical activity situation. (single selection only).

1. Within the last year I was not physically active for at least accumulated four hours (240 minutes) per week, and I am not thinking about being more physically active in the future. 

2. Within the last year I was not physically active for at least accumulated four hours (240 minutes) per week – but I am thinking about being more physically active soon. 

3. Within the last year I was not physically active for at least accumulated four hours (240 minutes) per week, but I am just making decisions and building up plans to become more active in the future. 

4. I am regularly physically active for at least accumulated four hours (240 minutes) per week, but this has been sustained for less than twelve months. 

5. I am regularly physically active for at least accumulated four hours (240 minutes) per week, and this has been sustained or twelve months or more. 

6. I am often physically active for at least accumulated four hours (240 minutes) per week, but not regularly

---

1 "Regularly" means that being physically active for at least accumulated four hours (240 minutes) per week is something routine for you – and there are very few exceptions (e.g. when you are ill).
<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong></td>
<td>Definitely Disagree</td>
<td>Mostly Disagree</td>
<td>Neither Agree Nor Disagree</td>
<td>Mostly Agree</td>
<td>Definitely Agree</td>
</tr>
<tr>
<td>_____</td>
<td>2. I am careful to buy clothes that will make me look my best.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>_____</td>
<td>3. My body is sexually appealing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>_____</td>
<td>4. I constantly worry about being or becoming fat.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>_____</td>
<td>5. I like my looks just the way they are.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>_____</td>
<td>6. I check my appearance in a mirror whenever I can.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>_____</td>
<td>7. Before going out, I usually spend a lot of time getting ready.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>_____</td>
<td>8. I am very conscious of even small changes in my weight.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>_____</td>
<td>9. Most people would consider me good-looking.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>_____</td>
<td>10. It is important that I always look good.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>_____</td>
<td>11. I use very few grooming products.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>_____</td>
<td>12. I like the way I look without my clothes on.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>_____</td>
<td>13. I am self-conscious if my grooming isn't right.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>_____</td>
<td>14. I usually wear whatever is handy without caring how it looks.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>_____</td>
<td>15. I like the way my clothes fit me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>_____</td>
<td>16. I don't care what people think about my appearance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>_____</td>
<td>17. I take special care with my hair grooming.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>_____</td>
<td>18. I dislike my physique.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*continued on the next page*
19. I am physically unattractive.
20. I never think about my appearance.
21. I am always trying to improve my physical appearance.
22. I am on a weight-loss diet.

For the remainder of the items use the response scale given with the item, and enter your answer in the space beside the item.

23. I have tried to lose weight by fasting or going on crash diets.
   1. Never
   2. Rarely
   3. Sometimes
   4. Often
   5. Very Often

24. I think I am:
   1. Very Underweight
   2. Somewhat Underweight
   3. Normal Weight
   4. Somewhat Overweight
   5. Very Overweight

25. From looking at me, most other people would think I am:
   1. Very Underweight
   2. Somewhat Underweight
   3. Normal Weight
   4. Somewhat Overweight
   5. Very Overweight

continued on the next page
26-34. Use this 1 to 5 scale to indicate how dissatisfied or satisfied you are with each of the following areas or aspects of your body:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very</td>
<td>Dissatisfied</td>
<td>Mostly</td>
<td>Neither Satisfied Nor Dissatisfied</td>
<td>Mostly Satisfied</td>
<td>Very Satisfied</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dissatisfied</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

26. Face (facial features, complexion)
27. Hair (color, thickness, texture)
28. Lower torso (buttocks, hips, thighs, legs)
29. Mid torso (waist, stomach)
30. Upper torso (chest or breasts, shoulders, arms)
31. Muscle tone
32. Weight
33. Height
34. Overall appearance

MBSRQ-AS © Thomas F. Cash, Ph.D.
APPENDICE B

Informed Consent Form

題能活動及自覺身體形象的調查研究
(研究知情同意書)

親愛的先生/女仕

我們是香港浸會大學社會科學學院 – 運動及康樂領袖學系的四年級學生，現正進行有關香港大專生體能活動及自覺身體形象的調查研究。特此邀請閣下參加是項研究。本研究旨在通過了解本地大專生平時體能活動情況以及身高體重情況，以及他們的自覺身體形象，以探討香港大專生體能活動及自覺身體形象的關係。調查內容包括：學生填寫一份有關個人資料，體能活動及自覺身體形象的問卷。

本研究所收集的所有資料絕不泄密，並只用作研究之用。本研究完全遵循自願參加的原則，閣下有權決定是否參加本研究，並隨時可以退出，絕不會影響閣下的學業以及與校方的關係。一經答覆，我們會向閣下提供您的資料以及本研究的主要研究結果，以供參考。

閣下的幫助和支持是本次研究得以順利和達到預期目標的根本和前提。望閣下同意參加本次研究，欲請閣下填妥以下問卷（填寫本問卷大概需要 10-15 分鐘），並連同《研究知情同意書》一起，由閣下交回研究員。

敬請合作，非常感謝。

如有疑問，可查詢：

- 香港浸會大學運動及康樂領袖學系學生裏燕玲
  電話：(852) 64875879
  電郵：14685589@live.hkbu.edu.hk

- 香港浸會大學運動及康樂領袖學系導師段燕燕
  電話：(852) 3413080
  電郵：duanyp@hkbu.edu.hk

（研究知情同意書）

請閣下在下方□打勾：

□ 我已經仔細閱讀過上面的說明，明白本次研究的目的和內容，並同意參加本次研究。
□ 我已經仔細閱讀過上面的說明，明白本次研究的目的和內容，但不同意參加本次研究。

姓名：____________________

簽署：__________________

聯絡電話：_________________

日期：__________________
Research of Physical Activity and Perceived Body Image  
(Informal Consent Form)

Dear Sir/ Madam, we are the year 4 students of Bachelor of Social Science (Honours) in Sport and Recreation Leadership, Hong Kong Baptist University. We are now conducting a study about the association between stage of change for physical activity and perceived body image of college students in Hong Kong. Hereby invite you to participate in this study. This study aims to investigate the association between stage of change for physical activity and perceived body image of college students in Hong Kong through understanding their physical activity behaviors, perceived body images, body height, and body weight. A set of questionnaires will be included in this study.

All information collected in this study will be kept confidential, and used only for research purpose. This study is fully compliance with the principle of voluntary participation that participants are free to choose to participate or not. Participants are also allowed to quit the study without affecting their academic result and the relationship with their schools. Upon request, we will provide your information and the main finding of this study to you for reference.

Your help and support is the fundamental and prerequisite for this study to success. We hope you will agree to participate in this study. Please fill the following questionnaire (around 10 – 15 minutes for filling), and return it with the informed consent form to the researcher.

Thank you.

If you have any questions, please inquire:

- Mr. WONG Chun Wai, students of Bachelor of Social Science (Honours) in Sport and Recreation Leadership, Hong Kong Baptist University  
  Tel: (852) 64875879  
  E-mail: 14686599@life.hkbu.edu.hk

- Dr. DUAN Yanping, lecturer of Bachelor of Social Science (Honours) in Sport and Recreation Leadership, Hong Kong Baptist University  
  Tel: (852) 3411 3080  
  E-mail: duanyp@hkbu.edu.hk

Please tick in the following box:

☐ I have carefully read the instructions above and understand the purpose and content of this study. I agree to participate in this study.

☐ I have carefully read the instructions above and understand the purpose and content of this study. But I don’t agree to participate in this study.

Name: ___________________  
Signature: ___________________

Telephone Number: _______________  
Date: ___________________