

Investigating the importance of self-acceptance and self-efficacy on weight management in a developing country

Author

Arli, Denni, Sutanto, Nadia

Published

2018

Journal Title

International Journal of Nonprofit and Voluntary Sector Marketing

Version

Accepted Manuscript (AM)

DOI

[10.1002/nvsm.1583](https://doi.org/10.1002/nvsm.1583)

Rights statement

© 2017 John Wiley & Sons, Ltd. This is the peer reviewed version of the following article: Investigating the importance of self-acceptance and self-efficacy on weight management in a developing country, International Journal of Nonprofit and Voluntary Sector Marketing, 2017, which has been published in final form at 10.1002/nvsm.1583. This article may be used for non-commercial purposes in accordance with Wiley Terms and Conditions for Self-Archiving (<http://olabout.wiley.com/WileyCDA/Section/id-828039.html>)

Downloaded from

<http://hdl.handle.net/10072/348937>

Griffith Research Online

<https://research-repository.griffith.edu.au>

INVESTIGATING THE IMPORTANCE OF SELF-ACCEPTANCE AND SELF-EFFICACY ON WEIGHT MANAGEMENT IN A DEVELOPING COUNTRY

ABSTRACT

The growing rates of obesity in both developed and developing countries are alarming. Most studies on obesity mainly focus on individuals in developed countries with ready access to food. Limited studies explore obesity in developing countries with limited access to healthier foods. In addition, studies show self-acceptance and self-efficacy is essential to healthier well-being. The purpose of this study is (a) to explore the impact of self-acceptance on individuals' self-efficacy to weight management and (b) to investigate the impact of self-efficacy on individuals' attitude and intention in regards to weight managements. Using data from Indonesia (N=499), the respondents are divided based on their Body Mass Index (BMI). The results show self-acceptance significantly influenced individuals' self-efficacy, especially for individuals who are obese. Furthermore, self-efficacy did not influence individual attitude toward weight management. Finally, attitude toward weight management only influenced people who are obese and not individuals who are overweight. The results of this study will have significant implications to government, social marketers, and not-for-profit organisations in fighting the epidemic in developing countries.

Keywords: obesity, self-efficacy, self-acceptance, weight management

The prevalence of obesity has been increasing significantly in both developed and developing nations (Bhusory & Jeewon, 2014; Grammatikopoulou et al., 2008; Li et al., 2010; Mcleay & Oglethorpe 2013; Usfar, 2010). In 2014, more than 1.9 billion adults 18 years old and over are overweight; 600 million are obese (WHO 2015). Obesity is responsible for about 5% of all deaths a year globally with an estimated cost of \$2 trillion annually (McKinsey, 2014). In addition, people's diets have been significantly changed with significantly more fat, meat, sugars, and bigger portion sizes (Bhurosy & Jeewon, 2014; Previte & Gurrieri 2015; Kempt & Grier 2013)

Between 1980 and 2008, the number of people affected in developing countries rose from 250 million to 904 million (Overseas Development Institute, 2014). Studies on obesity prior to 1989 suggest obesity in the developing countries is essentially a disease of the socioeconomic elite (Carlos et al., 2004; Michaelidou et al., 2012; Sobal & Stunkard, 1989;

1
2
3 Stunkard et al., 2000). Nonetheless, recent studies show that obesity in the developing world
4
5 can no longer be considered a disease of people with higher socio economic status (SES)
6
7 (Carlos et al., 2004). For example, in Brazil, obesity is increasing faster among people with
8
9 lower SES (Gupta et al., 2012; Monteiro et al., 1995; Monteiro et al., 2004). Improved access
10
11 to food and decreased physical activity level has been considered the main cause of
12
13 overweight and chronic metabolic diseases in developing countries (Hoffman, 2004; Bhurosy
14
15 & Jeewon, 2014).
16
17

18
19 To make matters worse, in the last few years, childhood obesity is now much higher
20
21 in developing countries than in developed countries (World Health Organization, 2009).
22
23 Nonetheless, the number of studies conducted in the developing countries is minimal. Studies
24
25 show strengthening an individual's self-acceptance beliefs is essential to the psychological
26
27 well-being of that individual (McInnes, 2006; Ellis, 1995). Unconditional self-acceptance
28
29 means individuals are able to accept themselves unconditionally whether other people
30
31 approve of them or they behave correctly (McInnes, 2006; Elly, 1977). People's inability to
32
33 unconditionally accept themselves sometimes extends to their inability to accept other people
34
35 (Flett et al., 2003). Thus, the purpose of this study is: (a) to explore the impact of self-
36
37 acceptance on individuals' self-efficacy to weight management and (b) to investigate the
38
39 impact of self-efficacy on individuals' attitudes and intentions regarding to weight
40
41 management. This study will make several contributions: (1) investigating the influence of
42
43 self-acceptance as a precursor to self-efficacy and subsequently, testing the impact of self-
44
45 efficacy to weight management; (2) this is one of the few studies, exploring wight
46
47 management in a developing country (i.e. Indonesia). The results of this study will have
48
49 significant implications for governments, social marketers, and not-for-profit organisations in
50
51 fighting the weight epidemic in developing countries.
52
53
54
55
56
57
58
59
60

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Based of self-efficacy theory (Bandura, 1977), the study proposes that self-acceptance will influence individuals' self-efficacy. Subsequently, self-efficacy will influence individuals' attitude and intentions. Figure 1 summarized the conceptual framework of this study. The next section will discuss the hypotheses development of this study.

Insert Figure 1 About Here

Self-Acceptance

Derived from self-concept, self-acceptance can be defined as to what extent the self-concept is congruent with the individual's description of the individual's 'ideal self' (Crowne and Stephends, 1961). Rubin (1967, p. 234) describes self-acceptance as 'a willingness to confront ego-alien as well as ego-syntonic aspects of the self and to accept rather than deny their existence'. One key aspect of self-acceptance is the ability and willingness to let others see one's true self (Carson & Langer, 2006). It results in an individual feeling about him or herself as one who has 'unique worth' (Rogers, 1951; Shepard, 1979). The self-rejecting individuals often consider themselves of little worth and are likely to have other symptom of maladjustment (Shepard, 1979). Self-acceptance is critical to mental health (Carson and Langer, 2006). Subsequently, lower levels of unconditional self-acceptance correlate with higher levels of depression, anxiety (Carson & Langer, 2006; Chamberlain & Haaga, 2001; Flett et al., 2003; Shepard, 1979), and parental workaholism (Chamberlin and Zhang, 2009). Greenspon (2000) suggested that feelings of conditional self-acceptance are central to both the cause and tendency of perfectionism. It is feasible to suggest that self-acceptance will influence people's self-efficacy in regards to weight management. Hence, this study hypothesizes:

H1_{NORMAL}: Self-Acceptance has a direct, positive influence on: (a) negative Emotions; (b) available; (c) social; (d) physical and (e) positive Self-Efficacy.

1
2
3 **H1_{OVERWEIGHT}**: Self-Acceptance has a direct, positive influence on: (a) negative emotions;
4 (b) available; (c) social; (d) physical and (e) positive self-efficacy.
5

6 **H1_{OBESSE}**: Self-Acceptance has a direct, positive influence on: (a) negative emotions; (b)
7 available; (c) social; (d) physical and (e) positive Self-Efficacy.
8
9

10
11 Moreover, a significant relationship exists between self-acceptance and self-esteem.

12
13 Meisenhelder (1985) suggested self-esteem is essential to maintaining mental and physical
14 health. Individuals with high self-acceptance are more confident in their ability to accomplish
15 their efforts. Consequently, they are more likely to have positive attitudes toward weight loss.
16
17 Flett et al. (2003) found higher levels of unconditional self-acceptance correlated with lower
18 levels of depression. Hence, the study suggests:
19
20
21
22

23
24 **H2_{NORMAL}**: Self-Acceptance has a direct, positive influence on attitudes.
25

26 **H2_{OVERWEIGHT}**: Self-Acceptance has a direct, positive influence on attitudes.
27

28 **H2_{OBESSE}**: Self-Acceptance has a direct, positive influence on attitudes.
29
30
31
32

33 **Self-Efficacy**

34
35 Self-efficacy theory is an integrative cognitive-social learning framework empirically tested
36 in a variety of treatment contexts (Bandura, 1977). The theory suggests all processes of
37 psychological change operate through the adaptation of the individual's expectancies of
38
39 personal mastery or efficacy (Bandura, 1982). Self-efficacy can be defined as an individual's
40 judgement of her or his ability to cope effectively in a situation (Bandura, 1977; Clark et al.,
41
42 1991). It does not reflect an individual's skills; instead, it reflects to an individual's
43 judgement of what he or she can do with the skills they possesses (de Vries et al., 1988).
44
45
46
47
48
49

50
51 Self-efficacy is different from perceived behavioral control. Self-efficacy is related to
52 factors internal to the individual while perceived behavioral control is related to external
53 factors (e.g. cooperation of other people, availability of time and money) (Ajzen & Timko,
54
55 1986). Individuals' persistence and efforts to adopt specific behaviour are closely correlated
56
57
58
59
60

1
2
3 to the individuals' level of perceived self-efficacy (Bandura, 1977; Lee et al., 2011).
4
5 Studies show that individuals with low efficacy expectations are unlikely to resist temptation
6
7 to use the substance (Abrams & Niaura, 1987), less likely to perform physical activity (Pan et
8
9 al., 2009; Lee et al., 2011; Strachan et al., 2005; Sweet et al., 2012), more likely to suffer
10
11 from postnatal depressive symptomatology (Leahy-Warren, 2009), experience phobias
12
13 (Bandura et al., 1980), smoke (Stuart et al., 1994), and engage in problem drinking (Burling
14
15 et al 1989). In the context of weight loss, there are inconclusive results. Few studies found
16
17 that self-efficacy is predictor of success of weight loss (Bernie & Avard, 1986; Bradley et al.,
18
19 1980; Brownell and Cohen, 1995). In contrast, other studies found self-efficacy is not a
20
21 significant predictor of weight loss (e.g., Chao et al., 2000; Dennis & Goldberg, 1996;
22
23 Fontaine & Cheskin, 1997). Considerable support exists for the role of self-efficacy as a
24
25 determinant of intention (Fishbein & Yzer, 2003; Sheeran et al., 1999; Sheppard et al., 1998).
26
27 Theoretically, self-efficacy will have a direct effect on an individuals' attitude toward weight
28
29 management. Thus, the study proposes:
30
31
32

33
34 **H3_{NORMAL}**: (a) negative Emotions; (b) available; (c) social; (d) physical and (e) positive self-
35
36 efficacy has a direct positive influence on attitude.

37
38 **H3_{OVERWEIGHT}**: (a) negative emotions; (b) available; (c) social; (d) physical and (e) positive
39
40 Self-Efficacy has direct positive influence on attitude.

41
42 **H3_{OBESE}** : (a) negative Emotions; (b) available; (c) social; (d) physical and (e) positive self-
43
44 efficacy has direct positive influence on attitude.

45 46 **Attitude**

47
48 The attitude toward behaviour, either positive or negative, is a function of the beliefs
49
50 concerning the perceived consequences of performing a specific action and a personal
51
52 evaluation of each of those consequences (Deshpande et al. 2009; Godin, 1993). An
53
54 individual who holds strong beliefs that positively valued outcomes will result from
55
56 performing the behaviour (e.g., physical exercise) will have a positive attitude toward the
57
58
59
60

behaviour. On the contrary, an individual who holds strong belief that negatively valued outcomes will result from the behaviour will have a negative attitude (Ajzen & Fishbein, 1980; Montano & Kasprzyk, 2008).

Studies have validated that attitude influences individuals' intentions toward various health-related behaviour in general (Conner & Godin, 2007; Godin & Kok, 1996) and in specific behaviour such as eating a low fat diet (Armitage & Conner, 1999), exercise (Blue, 1995; Hausenblas et al. 1997; Hagger et al. 2002), leisure participation (Ajzen and Driver, 1991), family planning (Fishbein et al., 1980), smoking (Davey et al., 2013), using condoms (Chan and Fishbein, 1993; Trafimow, 2000), mammography utilization (Montono et al. 1997), sustainable consumption (De Pelsmacker et al., 2003; Tanner and Kast, 2003; Vermeir and Verbeke, 2006), and weight loss (Sejwacs et al., 1980; Schifter & Icek, 1985). Studies show that attitude displays satisfactory reliability and validity toward intentions (Chatzisarantis et al., 2005; Ajzen & Fishbein, 1980; Theodoraki, 1994). Despite their weight, individuals' attitudes toward weight lost will significantly influence their intention to exercise, lose weight, and eat healthy. Hence, the study proposes:

H4_{NORMAL}: Attitude to lose weight has a direct, positive influence on (a) intention to exercise, (b) intention to lose weight, and (c) intention to eat healthy.

H4_{OVERWEIGHT}: Attitude to lose weight has a direct, positive influence on (a) intention to exercise, (b) intention to lose weight, and (c) intention to eat healthy.

H4_{OBESE}: Attitude to lose weight has a direct, positive influence on (a) intention to exercise, (b) intention to lose weight, and (c) intention to eat healthy.

METHODOLOGY

Sample

The research context for this study is Indonesia. Indonesia is the fourth most populous nation with 255 million people (CIA, 2015). Indonesian gross domestic product per capita is around US\$ 10,700 (CIA, 2015). A recent report reveals Indonesia has just become the tenth most

1
2
3 obese country with the number of overweight and obese adults doubling in the last decade
4
5 (Ng et al., 2014; UNICEF, 2014). While successfully reducing malnutrition, Indonesia is now
6
7 facing the problem of obesity (Faizal, 2012). Obesity often coexists with undernutrition with
8
9 the percentage of obese people aged 18 and over at 21.7%. What is more, 14% of Indonesia's
10
11 children are overweight, increase from 11% in 2007 (Usfar et al., 2010).
12
13

14 The researcher collected data for this study from a large university in three different
15
16 cities in Indonesia: Surabaya, Yogyakarta, and Solo. Several research assistants distributed
17
18 the survey to the students and staff in those universities. In addition, the researcher also
19
20 distributed the survey to the staff in a large private hospital in Surabaya, Indonesia. A total of
21
22 575 surveys were distributed. Incomplete surveys with too many missing values were
23
24 removed from the sample. Overall, 499 samples were usable. Respondents had to fill in their
25
26 height and weight to calculate their BMI. Subsequently, the sample was divided to three BMI
27
28 levels. Normal weight with a BMI of 18.5-24.9, overweight with a BMI of 25-29.9, and
29
30 obese with a BMI of 30 or greater. In this study, 55% were normal weight, 27% were
31
32 overweight and 18% were obese. In the sample, 29% are male, 67% are female, and 4% were
33
34 undeclared. Regarding age, 50% of the respondents were between 18-24 years, 28% were
35
36 between 25-34, 14% were between 35-44% and 8% were above 45 years old. Moreover,
37
38 52% of the respondents had an income lower than 20 million rupiah, around US\$1467 (1USD
39
40 = 13632 Rupiah, as of 18 May 2016) and only 7% had an income above 81 million rupiah,
41
42 around US\$5941). Finally, 40.9% of the respondents had high school degree, followed by
43
44 Undergraduate (29.3%) and Diploma (14.8%). (Table 1 summarized the demographic profile
45
46 of the respondents.
47
48
49
50

51
52 *Insert Table 1 About Here*
53
54
55

56 **Measurement items**

57
58
59
60

1
2
3 Self-acceptance was measured using Ryff's (1995) psychological well-being scales (e.g. *in*
4 *general, I feel confident and positive about myself*). Self-efficacy was measured using
5 'Weight Efficacy Life-Style Questionnaires' from Clark et al. (1991). The self-efficacy scale
6 consists of five constructs: (a) negative emotions (e.g. *I can resist eating when I am anxious*
7 *(nervous)*); (b) availability (e.g. *I can control my eating on the weekends*); (c) social pressure
8 (e.g. *I can resist eating when I have to say "no" to others*); (d) physical discomfort (e.g. *I can*
9 *resist eating when I feel physically run down*); and (e) positive activities (e.g. *I can resist*
10 *eating when I am watching TV*). The constructs were measured using Likert scales with
11 *1=strongly agree; 7=strongly disagree*.

12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
Attitude toward losing weight and intention to lose weight, intention to exercise, and
intention to eat healthy were measured using Ajzen's (1991) scales. Attitude (e.g. *for me to*
lose weight in the next six month is; 1=good; 7=bad) and intention to lose weight (e.g. *I*
intend to lose weight in the next six months; 1=strongly agree; 7=strongly disagree);
intention to exercise (e.g. *I intend to exercise in the next 7 days; 1=extremely likely;*
7=extremely unlikely), and intention to eat healthy (e.g. *I intend to eat more healthfully in the*
next 7 days; 1=extremely likely; 7=extremely unlikely).

Data Analysis

Using Structural Equation Modelling, the analysis followed Andersen and Gerbing's (1988)
two-stage procedure. First, the goodness of the measurement instruments was analysed by
Confirmatory Factor Analysis (CFA). Second, the structural relations among the theoretically
proposed latent variables were analysed through SEM. Both the measurement model and the
causal relations model were estimated for the model fit using the Maximum Likelihood
Methods (Satorra and Bentler, 1994). The goodness-of-fit indicator for the measurement

1
2
3 instrument (NFI=0.850; TLI=0.926; CFI=0.936; IFI=0.937; RMSEA=0.036, easily exceeds
4
5 the commonly accepted critical values (Andersen and Gerbing, 1988).
6

7
8 Table 2 shows the measurement instrument reliability can be confirmed as
9
10 Cronbach's alpha exceeds the critical value of 0.8 (Cronbach, 1951) and Composite
11
12 Reliability and Average Variance Extracted indexes also exceed the critical value of 0.7 and
13
14 0.5 respectively, except for positive activities (Fornell & Larckler, 1981). In addition to the
15
16 goodness-fit indicators, the researcher used two criteria to verify convergent validity. The
17
18 results show the observed variables were significant and the average loads were above 0.7
19
20 (Hair et al., 2005).
21

22
23 *Insert Table 2 About Here*
24

25
26 Finally, the researcher checked the measurement model to ensure discriminant
27
28 validity, First, inter-factor correlation was significant below 1. Second, for each pair of
29
30 factors, the researcher verified the difference of χ^2 between the proposed measurement model
31
32 and a restricted model where the correlation between said factors was set at 1 (Fornell &
33
34 Larcker, 1981) was significant. The researcher conducted the variance extracted test and
35
36 found that AVE for each factor was higher than the square of the correlation coefficient with
37
38 each of the other factors (see Table 3). Thus, the test confirms the measurement model
39
40 discriminant validity (Fornell and Larcker, 1981)
41

42
43 *Insert Table 3 About Here*
44
45

46 47 **RESULTS**

48 49 **Normal weight**

50
51 The results show self-acceptance significantly influenced negative self-efficacy ($\beta = 0.277$, p
52
53 < 0.01), available self-efficacy ($\beta = 0.149$, $p < 0.01$) and social self-efficacy ($\beta = 0.310$, $p <$
54
55 0.01). Thus, H1a-NORMAL, H1b-NORMAL and H1c-NORMAL are supported. Nonetheless, self-
56
57
58
59
60

1
2
3 acceptance did not influence physical self-efficacy and positive self-efficacy. Hence, H1d-
4
5 NORMAL and H1e-NORMAL are not supported. Moreover, the results support H2NORMAL, self-
6
7 acceptance significantly influence people's attitude toward weigh loss ($\beta = 0.148, p < 0.05$).
8

9
10 Furthermore, self-efficacy significantly influenced positive self-efficacy. Thus, H3e-
11
12 NORMAL is supported. However, negative self-efficacy, available self-efficacy, social self-
13
14 efficacy, and physical self-efficacy did not influence attitude toward losing weight.
15
16 Therefore, H3a-NORMAL, H3b-NORMAL, H3c-NORMAL and H3d-NORMAL are not supported. Finally,
17
18 attitude toward losing weight significantly influenced individuals' intention to lose weight (β
19
20 = 0.845, $p < 0.01$) but not intention to exercise and eat healthy. Thus, H4a - NORMAL is
21
22 supported but not H4b - NORMAL and H4c - NORMAL. Positive value means that individuals who
23
24 have a negative attitude toward losing weight are more likely to have less intention to lose
25
26 weight in the next six months.
27
28

31 32 **Overweight**

33
34 For individuals who are overweight, self-acceptance significantly influenced negative self-
35
36 efficacy ($\beta = 0.215, p < 0.05$) and available self-efficacy ($\beta = 0.214, p < 0.05$). Hence H1a-
37
38 OVERWEIGHT and H1b-OVERWEIGHT are supported. However, self-acceptance did not
39
40 significantly influence social self-efficacy, physical self-efficacy, and positive self-efficacy.
41
42 Therefore, H1c-OVERWEIGHT, H1d-OVERWEIGHT, and H1e-OVERWEIGHT are not supported.
43
44 Moreover, self-acceptance did not support people's attitude toward weight loss. Thus,
45
46 H2OVERWEIGHT is not supported.
47
48

49
50 All self-efficacies did not significantly influence attitude toward losing weight.
51
52 Hence, H3a-OVERWEIGHT, H3b-OVERWEIGHT, H3c-OVERWEIGHT, H3d-OVERWEIGHT and H3e-
53
54 OVERWEIGHT are not supported. Finally, attitude toward losing weight significantly influenced
55
56 intention to lose weight ($\beta = 0.866, p < 0.01$) but not intention to exercise and eat healthy.
57
58
59
60

Therefore, H4a-OVERWEIGHT is supported while H4b-OVERWEIGHT and H4c-OVERWEIGHT are not supported.

Obese

The results for this group show that, except for physical self-efficacy, self-acceptance significantly influenced negative self-efficacy ($\beta = 0.523$, $p < 0.01$), available self-efficacy ($\beta = 0.400$, $p < 0.01$), social self-efficacy ($\beta = 0.421$, $p < 0.01$), and positive self-efficacy ($\beta = 0.407$, $p < 0.01$). Thus, H1a-OBESE, H1b-OBESE, H1c-OBESE, and H1e-OBESE are supported while H1d-OBESE is not supported. Moreover, for individuals who are obese, self-acceptance significantly influenced people's attitude toward weight loss ($\beta = 0.366$, $p < 0.01$).

Furthermore, the finding supports H3a-OBESE and H3d-OBESE. Negative self-efficacy ($\beta = -0.342$, $p < 0.01$) negatively influenced individuals' attitudes toward losing weight. It shows individuals with high emotion self-efficacy are more likely to perceive weight loss negatively. In contrast, physical self-efficacy positively influenced an individual's attitude toward weight loss ($\beta = 0.313$, $p < 0.01$). It shows that individuals with high physical self-efficacy are more likely to have positive attitude toward weight loss. However, available self-efficacy, social self-efficacy, physical self-efficacy, and positive self-efficacy did not influence individuals' attitudes toward weight loss. Hence, H3b-OBESE, H3c-OBESE, H3d-OBESE, and H3e-OBESE are not supported. Finally, individuals' attitudes toward losing weight significantly influenced their intention to lose weight ($\beta = 0.779$, $p < 0.01$), intention to exercise ($\beta = 0.218$, $p < 0.05$), and intention to eat healthy ($\beta = 0.238$, $p < 0.05$). Therefore, H4a-OBESE, H4b-OBESE and H4c-OBESE are supported. Obese individuals who have negative attitude toward losing weight are more likely to have less intention to lose weight, exercise, and eat healthy in the future. Table 4 summarizes the structure equation model results for all weight categories.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Insert Table 4 About Here

DISCUSSION AND IMPLICATIONS

The results show self-acceptance significantly influences individuals' self-efficacy, especially for individuals who suffer obesity. Individuals with low self-acceptance are more likely to have low self-efficacy and are thus unlikely to resist temptation. People with low self-acceptance will suffer from excessive focus on evaluation, which includes social comparisons with other people (Ellis, 1995).

Self-acceptance in this study does not focus on physical acceptance but focuses on having a positive self-image and being more confident about one's self. In the context of Indonesia, this study shows low self-acceptance resulted in low self-efficacy. The study supports other research that suggests obese women tend to eat more in response to emotional arousal and tend to have more of a negative self-image than their non-obese counterparts (Hooker & Conviser, 1983; Dennis & Goldberd, 1996). Therefore, social marketers need to train individuals to first accept themselves in spite of their deficiencies. Individuals need to understand their strengths and weaknesses and learn to accept themselves. The positive self-image will eventually improve their self-efficacies. Confidence is needed to support people's ability to accomplish the behaviors required to lose weight.

Moreover, not all self-efficacy significantly influences people's attitude toward losing weight. For people who suffer from obesity, negative emotions self-efficacy has a negative impact of their attitude. Obese individuals with low self-efficacy on emotions tend to perceive losing weight as unpleasant and painful. Moreover, obese individuals with high physical self-efficacy are more likely to see the positive aspects of weight loss.

In general, the results of this study show that specific self-efficacies affected individuals differently and not all self-efficacies correlated well with weight loss (Edell et al., 1987). Social marketers can focus on increasing emotional self-efficacy. Training and weight

1
2
3 loss workshop can be designed to specifically train individuals to handle their emotional
4
5 situations while trying to lose weight. In addition, tips and strategies to maintain healthy
6
7 weight when obese individuals are unwell or unfit is also crucial to maintain a positive
8
9 attitude toward weight loss.
10

11 Finally, individuals who are obese tend to have a negative perception toward weight
12
13 loss and will be less likely to lose weight, exercise, and eat healthy. Individuals who are
14
15 overweight are also less likely to have intentions to lose weight. Obese individuals' efforts to
16
17 reduce body weight usually meet with very limited success. The findings support Schifter &
18
19 Ickek's (1985) study that found people who have positive attitude toward losing weight and
20
21 also believed that they were capable of doing so were more likely to succeed. This is a
22
23 challenge faced by social marketers and public policy makers in developing countries. They
24
25 need to focus on educating about the benefit and importance of losing weight, which may
26
27 increase their intention to lose weight, exercise more and eating healthier.
28
29
30

31 To conclude, this study has several limitations. First, the study used samples from
32
33 large cities in Indonesia which offer more access to healthier foods and sport facilities. Future
34
35 studies should investigate people living in rural area with less access to healthier food. The
36
37 study may investigate their food choice behaviour and physical activities. Second, despite the
38
39 value of using BMI, it has some limits. The scale may overestimate body fat in individuals
40
41 who have a muscular build and may underestimate body fat in individuals who have lost
42
43 muscle (National Heart, Lung and Blood Institute, 2016). Third, similar to other studies, it is
44
45 difficult to determine whether self-efficacy affects weight loss or whether weight loss affect
46
47 self-efficacy (Bandura, 1977; Dennis & Goldberg, 1996). Future research may facilitate an
48
49 experiment to explore the effect of reciprocal interaction among behavioural, cognitive-
50
51 personal, and environmental components of individuals to determine the main cause of
52
53 weight loss.
54
55
56
57
58
59
60

References

- Abrams, D. B., & Niaura, R. S. (1987). Social learning theory. *Psychological theories of drinking and alcoholism, 1*, 131-178.
- Ajzen, I. and Driver, B.E. (1991). Prediction of leisure participation from behavioral, normative, and control beliefs: an application of the theory of planned behavior. *Leisure Sciences, 13*, 185 – 204
- Ajzen, I., Fishbein, M., (1980). *Understanding attitudes and predicting social behaviour*. Prentice-Hall, Englewood Cliffs NJ.
- Ajzen, I., & Timko, C. (1986). Correspondence between health attitudes and behavior. *Basic and Applied Social Psychology, 7*(4), 259-276.
- Armitage, C. and Conner, M. (1999). The theory of planned behavior: assessment of predictive validity and perceived control. *British Journal of Social Psychology, 38*, 35 – 5
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological review, 84*(2), 191.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist, 37*, 122-147.
- Blue, C. L. (1995). The predictive capacity of the theory of reasoned action and the theory of planned behavior in exercise research: An integrated literature review. *Research in Nursing and Health, 18*, 105–121
- Bradley, I., Poser, E., & Johnson, J. (1980). Outcome expectation rating as predictors of success in weight reduction. *Journal of Clinical Psychology, 36*, 500-502.
- Brownell, K. D., & Cohen, L. R. (1995). Adherence to dietary regimens: 2. Components of effective interventions. *Behavioral Medicine, 20*, 155– 164.
- Chamberlain, J. M., & Haaga, D. A. (2001). Unconditional self-acceptance and psychological health. *Journal of Rational-Emotive and Cognitive-Behavior Therapy, 19*(3), 163-176.
- Chamberlin, C. M., & Zhang, N. (2009). Workaholism, Health, and Self-Acceptance. *Journal of Counseling & Development, 87*(2), 159-169.
- Chao, D., Farmer, D. F., Sevick, M. A., Espeland, M. A., Vitolins, M., & Naughton, M. J. (2000). The value of session attendance in a weight-loss intervention. *American Journal of Health Behavior, 24*, 413– 421.
- Chan, D.K.-S. and Fishbein, M. (1993) Determinants of college women's intentions to tell their partners to use condoms. *Journal of Applied Social Psychology, 23*, 1455-1470.
- Conner, M., & Godin, G. (2007). Temporal stability of behavioural intention as a moderator of intention–health behaviour relationships. *Psychology and Health, 22*(8), 875-897.

1
2
3 Crowne, D. P., & Stephens, M. W. (1961). Self-acceptance and self-evaluative behavior: A
4 critique of methodology. *Psychological Bulletin*, 58(2), 104.

5
6 Carson, S. H., & Langer, E. J. (2006). Mindfulness and self-acceptance. *Journal of rational-*
7 *emotive and cognitive-behavior therapy*, 24(1), 29-43.

8
9 Davey, G., McClenahan, C., & Zhao, X. (2014). Smoking intention among Chinese youth
10 and implications for health interventions. *Asia Pacific Journal of Counselling and*
11 *Psychotherapy*, 5(1), 71-86.

12
13
14 Dennis, K. E., & Goldberg, A. P. (1996). Weight control self-efficacy types and transitions
15 affect weight-loss outcomes in obese women. *Addictive behaviors*, 21(1), 103-116.

16
17 De Pelsmacker, P., L. Driesen, & G. Rayp (2003), Are fair trade labels good business? Ethics
18 and coffee buying intentions, Working Paper Ghent University, Faculty of Economics and
19 Business Administration, Ghent.

20
21 Deshpande, S., Basil, M. D., & Basil, D. Z. (2009). Factors influencing healthy eating habits
22 among college students: An application of the health belief model. *Health marketing*
23 *quarterly*, 26(2), 145-164.

24
25 De Vries, H., Dijkstra, M., & Kuhlman, P. (1988). Self-efficacy: the third factor besides
26 attitude and subjective norm as a predictor of behavioural intentions. *Health education*
27 *research*, 3(3), 273-282.

28
29 Edell, B. H., Edington, S., Herd, B., O'Brien, R. M., & Witkin, G. (1987). Self-efficacy and
30 self-motivation as predictors of weight loss. *Addictive Behaviors*, 12(1), 63-66.

31
32 Fishbein, M., Jaccard, J. J., Davidson, A. R., Ajzen, I., & Loken, B. (1980). Predicting and
33 understanding family planning behaviors: Beliefs, attitudes, and intentions. *Understanding*
34 *attitudes and predicting social behavior*, 130-147.

35
36 Fishbein, M., & Yzer, M. C. (2003). Using theory to design effective health behavior
37 interventions. *Communication theory*, 13(2), 164-183.

38
39 Flett G., Besser A., Davis R. & Hewitt P. (2003) Dimensions of perfectionism, unconditional
40 self acceptance and depression. *Journal of Rational Emotive and Cognitive Behavior Therapy*
41 21, 119-138

42
43 Fontaine, K. R., & Cheskin, L. J. (1997). Self-efficacy, attendance, and weight loss in obesity
44 treatment. *Addictive Behaviors*, 22(4), 567-570.

45
46 Godin, G., (1993). The theories of reasoned action and planned behavior: Overview of
47 findings, emerging research problems and usefulness for exercise promotion. *Journal of*
48 *Applied Sport Psychology*, 5(2): 141-157.

49
50 Godin, G., & Kok, G. (1996). The theory of planned behavior: A review of its applications to
51 health-related behaviors. *American Journal of Health Promotion*, 11, 87-98

- 1
2
3
4 Grammatikopoulou, M. G., Panayiotoglou, A., & Hassapidou, M. (2008). Evaluation of
5 commercial weight-loss programmes in Greece. *International Journal of Consumer*
6 *Studies*, 32(1), 59-64.
7
8
9 Greenspon, T. S. (2000). 'Healthy perfectionism' is an oxymoron! Reflections on the
10 psychology of perfectionism and the sociology of science. *Journal of Secondary Gifted*
11 *Education*, 11, 197-208.
12
13 Gupta, N., Goel, K., Shah, P., & Misra, A. (2012). Childhood obesity in developing
14 countries: epidemiology, determinants, and prevention. *Endocrine Reviews*, 33(1), 48-70.
15
16 Hagger, M., Chatzisarantis, N., & Biddle, S. (2002). A meta-analytic review of the theories of
17 reasoned action and planned behavior in physical activity: Predictive validity and the
18 contribution of additional variables. *Journal of Sport and Exercise Psychology*, 24, 3-32.
19
20
21 Hausenblas, H. A., Carron, A. V., & Mack, D. E. (1997). Application of the theories of
22 reasoned action and planned behavior to exercise behavior: A meta-analysis. *Journal of Sport*
23 *and Exercise Psychology*, 19, 36-51.
24
25 Hoffman, D.J. (2004). Upper limits in developing countries: warning against too much in
26 lands of too little. *Journal of the American College of Nutrition*, 23(6), 610S-615S.
27
28
29 Hooker, D., & Convisser, E. (1983). Women's eating problems: An analysis of a coping
30 mechanism. *Personnel and Guidance Journal*, December, 236-239.
31
32 Kemp, E., & Grier, S. (2013). When food is more than nutrition: Understanding emotional
33 eating and overconsumption. *Journal of Consumer Behaviour*, 12(3), 204-213.
34
35
36 Leahy-Warren, P., McCarthy, G., & Corcoran, P. (2012). First-time mothers: social support,
37 maternal parental self-efficacy and postnatal depression. *Journal of Clinical Nursing*, 21(3-
38 4), 388-397.
39
40 Lee, L. L., Kuo, Y. C., Fanaw, D., Perng, S. J., & Juang, I. F. (2012). The effect of an
41 intervention combining self-efficacy theory and pedometers on promoting physical activity
42 among adolescents. *Journal of Clinical Nursing*, 21(7-8), 914-922.
43
44
45 Li, M., Dibley, M. J., Sibbritt, D. W., & Yan, H. (2010). Dietary habits and
46 overweight/obesity in adolescents in Xi'an City, China. *Asia Pac J Clin Nutr*, 19(1), 76-82.
47
48 MacInnes, D. L. (2006). Self-esteem and self-acceptance: an examination into their
49 relationship and their effect on psychological health. *Journal of Psychiatric and Mental*
50 *Health Nursing*, 13(5), 483-489.
51
52 McKinsey (2014). Obesity is one of the top three social burdens generated by human beings.
53 Source:
54 [http://www.mckinsey.com/insights/economic_studies/how_the_world_could_better_fight_ob](http://www.mckinsey.com/insights/economic_studies/how_the_world_could_better_fight_obesity)
55 [esity](http://www.mckinsey.com/insights/economic_studies/how_the_world_could_better_fight_obesity) (Accessed: 8 January 2016).
56
57
58
59
60

1
2
3
4 Mcleay, F. J., & Oglethorpe, D. (2013). Social marketing, parental purchasing decisions, and
5 unhealthy food in developing countries: A Nigerian typology. *Journal of Consumer*
6 *Behaviour*, 12(3), 232-242.

7
8 Meisenhelder J. (1985) Self esteem: a closer look at clinical interviews. *International Journal*
9 *of Nursing Studies*, 22, 127-135.

10
11 Michaelidou, N., Christodoulides, G., & Torova, K. (2012). Determinants of healthy eating: a
12 cross-national study on motives and barriers. *International Journal of Consumer Studies*,
13 36(1), 17-22.

14
15 Montano, D. E., Kasprzyk, D. 2008. Theory of reasoned action, theory of planned
16 behavior, and the integrated behavioral model. *Health behavior and health education: Theory,*
17 *Research, and practice*, 4, 67-95.

18
19 Monteiro CA, Mondini L, Souza ALM, Popkin BM. (1995). The nutrition transition in
20 Brazil. *European Journal of Clinical Nutrition* , 4, 105-13.

21
22 Monteiro CA, Conde WL, Popkin BM. (2004). The burden of disease from undernutrition
23 and overnutrition in countries undergoing rapid nutrition transition: a view from Brazil.
24 *American Journal of Public Health*, 94, 433-4

25
26 National Heart, Lung and Blood Institute (2016). Assessing Your Weight and Health and
27 Risk. Source: http://www.nhlbi.nih.gov/health/educational/lose_wt/risk.htm#limitations
28 (Accessed: 18 January 2016).

29
30 Overseas Development Institute (2014). Overweight and obese adults reaching almost a
31 billion in developing countries, as numbers continue to grow in richer nations. Source:
32 [http://www.odi.org/news/703-overweight-obese-adults-reaching-almost-billion-developing-](http://www.odi.org/news/703-overweight-obese-adults-reaching-almost-billion-developing-countries-as-numbers-continue-grow-richer-nations)
33 [countries-as-numbers-continue-grow-richer-nations](http://www.odi.org/news/703-overweight-obese-adults-reaching-almost-billion-developing-countries-as-numbers-continue-grow-richer-nations) (Accessed: 8 January 2015).

34
35 Previte, J., & Gurrieri, L. (2015). Who Is the Biggest Loser? Fat News Coverage Is a Barrier
36 to Healthy Lifestyle Promotion. *Health marketing quarterly*, 32(4), 330-349.

37
38 Ryff, C. D. (1995). Psychological well-being in adult life. *Current directions in*
39 *psychological science*, 99-104.

40
41 Rubin, I. M. (1967). Increased self-acceptance: A means of reducing prejudice. *Journal of*
42 *Personality and Social Psychology*, 5(2), 233.

43
44 Schifter, D. E., & Ajzen, I. (1985). Intention, perceived control, and weight loss: an
45 application of the theory of planned behavior. *Journal of personality and Social*
46 *Psychology*, 49(3), 843.

47
48 Sejwacz, D., Ajzen, I., & Fishbein, M. (1980). Predicting and understanding weight loss:
49 Intentions, behaviors, and outcomes. *Understanding attitudes and predicting social behavior*,
50 101-112.

- 1
2
3 Sheeran, P., Abraham, C., & Orbell, S. (1999). Psychosocial correlates of heterosexual
4 condom use: a meta-analysis. *Psychological bulletin*, 125(1), 90.
5
6 Shepard, L. A. (1979). Self-acceptance: The evaluative component of the self-concept
7 construct. *American Educational Research Journal*, 16(2), 139-160.
8
9 Sheppard, B. H., Hartwick, J., & Warshaw, P. R. (1988). The theory of reasoned action: A
10 meta-analysis of past research with recommendations for modifications and future
11 research. *Journal of Consumer Research*, 15, 325-343.
12
13 Sobal J. & Stunkard AJ (1989). Socioeconomic status and obesity: a review of the
14 literature. *Psychological Bulletin* 105, 260–275.
15
16
17 Strachan, S. M., Woodgate, J., Brawley, L. R., & Tse, A. (2005). The relationship of self-
18 efficacy and self-identity to long-term maintenance of vigorous physical activity. *Journal of*
19 *Applied Biobehavioral Research*, 10, 98 –112. doi:10.1111/j.1751-9861.2005.tb00006.x
20
21
22 Stunkard AJ. (2000) Factors in obesity: current views. In: Peña M, Bacallao J, editors.
23 Obesity and poverty: a new public health challenge. Washington, DC: Pan American Health
24 Organization, 23-8.
25
26
27 Sweet, S. N., Fortier, M. S., Strachan, S. M., & Blanchard, C. M. (2012). Testing and
28 integrating self-determination theory and self-efficacy theory in a physical activity
29 context. *Canadian Psychology/Psychologie canadienne*, 53(4), 319.
30
31 Tanner, C. and S. W. Kast (2003), “Promoting Sustainable Consumption: Determinants of
32 Green Purchases by Swiss Consumers. *Psychology and Marketing*, 20(10), 883–902
33
34 Theodorakis, Y. (1994). Planned behavior, attitude strength, role identity, and the prediction
35 of exercise behavior. *The Sport Psychologist*, 8, 149 – 165.
36
37 Trafimow, D. (2000). Habit as both a direct cause of intention to use a condom and as a
38 moderator of the attitude-intention and subjective norm-intention relations. *Psychology and*
39 *Health*, 15(3), 383-393.
40
41
42 Usfar, A. A., Lebenthal, E., Achadi, E., & Hadi, H. (2010). Obesity as a poverty-related
43 emerging nutrition problems: the case of Indonesia. *Obesity reviews*, 11(12), 924-928.
44
45 Vermeir, I., & Verbeke, W. (2006). Sustainable food consumption: Exploring the consumer
46 “attitude–behavioral intention” gap. *Journal of Agricultural and Environmental Ethics*, 19(2),
47 169-194.
48
49 Wang, Y., & Lim, H. (2012). The global childhood obesity epidemic and the association
50 between socio-economic status and childhood obesity. *International Review of*
51 *Psychiatry*, 24(3), 176-188.
52
53
54 World Health Organization. (1998). Obesity: preventing and managing the global epidemic.
55 Working Group on Obesity. Geneva, World Health Organization.
56
57
58
59
60

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

World Health Organization (2009). Population-based prevention strategies for childhood obesity: report of a WHO forum and technical meeting. Geneva: World Health Organization.

For Peer Review

Appendix

Figure 1. Conceptual Framework

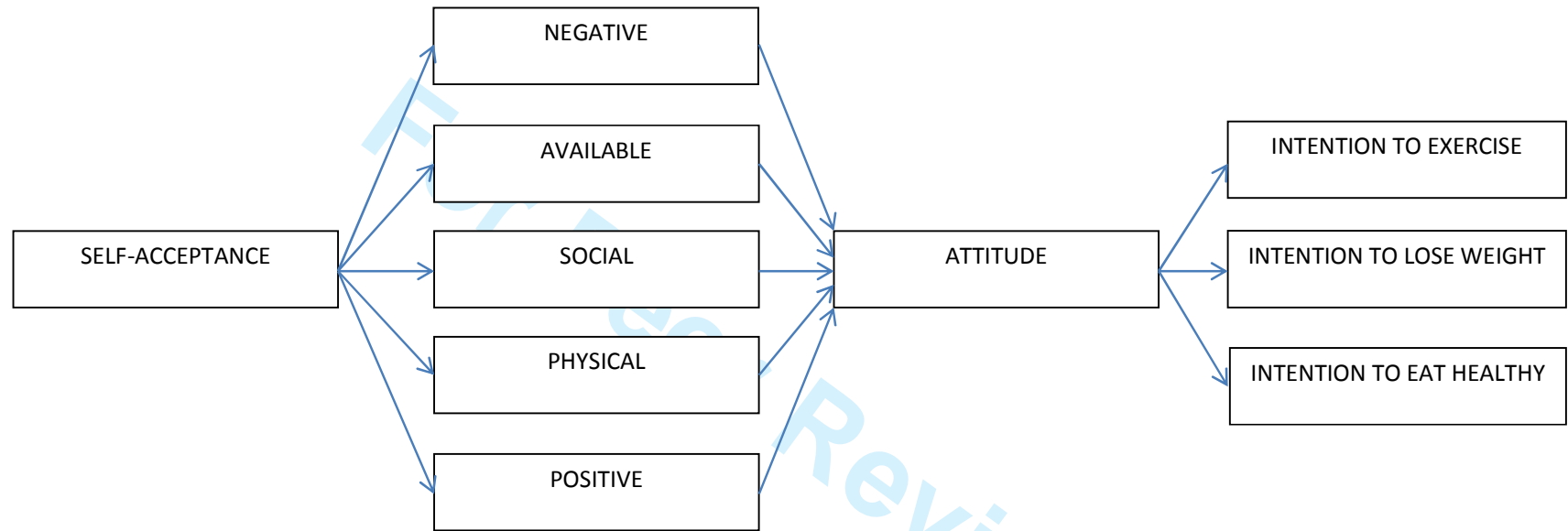


Table 1. Demographic Profile of Respondents.

	Frequency	Percentage
Gender		
Male	143	29%
Female	227	67%
Undeclared	19	4%
Age		
18-24 years	248	50%
25-34 years	142	28%
35-44 years	70	14%
45 years <	39	8%
Income		
< Rp. 20 million	257	52%
Rp. 21-40 million	94	19%
Rp. 41-80 million	59	12%
Rp. 81 million	33	7%
Undeclared	56	11%
Education		
High School or lower	204	40.9%
Diploma	74	14.8%
Undergraduate	146	29.3%
Post Graduate	55	11.0%
Others	4	0.8%
Undeclared	16	3.2%
BMI		
Normal Weight	278	55%
Overweight	133	27%
Obese	88	18%

Table 2. Confirmatory Factor Analysis

Factor	Item	Convergent validity			Reliability	
		Factor Loading	Loading average	Cronbach's	CR	AVE
Negative (NEG)	NEG01	0.879	0.818	0.883	0.892	0.676
	NEG02	0.921				
	NEG03	0.755				
	NEG04	0.715				
Availability (AVA)	AVA01	0.751	0.829	0.887	0.900	0.693
	AVA02	0.863				
	AVA03	0.929				
	AVA04	0.774				
Social Pressure (SP)	SP01	0.824	0.803	0.788	0.887	0.610
	SP02	0.761				
	SP03	0.824				
Physical Discomfort (PD)	PD01	0.693	0.783	0.872	0.848	0.585
	PD02	0.891				
	PD003	0.745				
Positive Activities (PA)	PA01	0.606	0.683	0.827	0.726	0.471
	PA02	0.667				
	PA03	0.776				
Self-Acceptance (SA)	ITEH01	0.768	0.749	0.970	0.839	0.569
	ITEH02	0.612				
	ITEH03	0.857				
	ITEH04	0.760				
Attitude (ATT)	ATT01	0.955	0.914	0.958	0.963	0.840
	ATT02	0.946				
	ATT03	0.949				
	ATT04	0.931				
	ATT04	0.790				

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49

Table 2. Confirmatory Factor Analysis (Cont)

Factor	Item	Convergent validity			Reliability	
		Factor Loading	Loading average	Cronbach's	CR	AVE
Intention to Lose Weight (ITLW)	ITLW01	0.972	0.974	0.972	0.983	0.949
	ITLW02	0.969				
	ITLW03	0.982				
Intention to Exercise (ITE)	ITE01	0.955	0.923	0.945	0.903	0.549
	ITE02	0.942				
	ITE03	0.871				
Intention to Eat Healthy (ITEH)	ITEH01	0.943	0.962	0.970	0.971	0.629
	ITEH02	0.969				
	ITEH03	0.973				
		Goodness-of-fit measures				
		BBNFI	TLI	CFI	IFI	RMSEA
χ^2 (1731 df) = 2813.605 ($p = 0.00$)		0.850	0.926	0.936	0.937	0.036

Notes: Measure instrument psychometric properties
CR Composite Reliability, AVE Average Variance Extracted

Table 3. Discriminant Validity – All Constructs

	1	2	3	4	5	6	7	8	9	10
1. Negative	0.676	0.183	0.162	0.123	0.095	0.068	0.007	0.001	0.000	0.002
2. Availability	0.428**	0.693	0.352	0.130	0.294	0.031	0.035	0.010	0.019	0.006
3. Social Pressure	0.402**	0.593**	0.610	0.142	0.212	0.055	0.027	0.011	0.009	0.018
4. Physical Discomfort	0.351**	0.360**	0.377**	0.585	0.279	0.003	0.072	0.063	0.005	0.000
5. Positive Activities	0.309**	0.542**	0.460**	0.528**	0.471	0.010	0.065	0.042	0.015	0.003
6. Self-Acceptance	0.261**	0.176**	0.235**	0.054	0.101	0.569	0.031	0.007	0.000	0.001
7. Attitude	0.082	0.188**	0.163**	0.268**	0.255**	0.176**	0.840	0.648	0.002	0.001
8. Intention to Lose weight	-0.023	0.100*	0.103*	0.251**	0.206	0.085	0.805**	0.949	0.005	0.003
9. Intention to Exercise	-0.015	-0.137**	-0.095	-0.070	-0.121**	0.015	-0.044	-0.072	0.549	0.257
10. Intention to Eat Healthy	0.040	-0.077	-0.134**	-0.018	-0.053	0.038	-0.037	-0.051	0.507**	0.629
Mean	2.95	3.94	3.25	3.27	3.16	2.64	2.95	3.16	4.69	4.94
Std. Dev	1.72	1.81	1.60	1.66	1.60	1.12	1.85	2.19	1.78	1.82

Notes: Values below the diagonal are bivariate correlations between the constructs, bold diagonal elements represents the Average Variance Extracted (AVEs) for the relevant construct; Values above the diagonal represent squared correlations; Values below the diagonal represent correlations

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49

Table 4. Structural Equation Model Results

Hypotheses	Structural relationship	Standardised coefficient		
		Normal	Overweight	Obese
H1a	Self-Acceptance → Negative	0.277**	0.215*	0.523**
H1b	Self-Acceptance → Available	0.149*	0.214*	0.400**
H1c	Self-Acceptance → Social	0.310**	0.167	0.421**
H1d	Self-Acceptance → Physical	0.002	0.049	0.218
H1e	Self-Acceptance → Positive	0.131	0.098	0.407**
H2	Self-Acceptance → Attitude	0.148*	0.134	0.363*
H3a	Negative → Attitude	-0.057	-0.233	-0.566**
H3b	Available → Attitude	0.014	0.092	0.238
H3c	Social → Attitude	-0.168	-0.038	0.237
H3d	Physical → Attitude	0.123	0.377	0.313*
H3e	Positive → Attitude	0.278*	0.046	-0.127
H4a	Attitude → Intention to Lose Weight	0.845**	0.866**	0.783**
H4b	Attitude → Intention to Exercise	-0.035	0.085	0.218*
H4c	Attitude → Intention to Eat Healthy	-0.044	0.133	0.238*

Notes: ** $p < 0.01$; * $p < 0.05$; $\chi^2 (1809 \text{ df}) = 3102.465, p = 0.00$; NFI = 0.835; TLI=0.915; CFI=0.923; IFI=0.924; RMSEA=0.038

--- END OF MANUSCRIPT ---

For Peer Review

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60