



## **The Mediating Effect of Physical Activity in the Relationship between Body Image and Life Satisfaction**

**Maya Rashid Al Sulaimi**

University of Malaya, Malaysia, [pva180052@siswa.um.edu.my](mailto:pva180052@siswa.um.edu.my)

**Fonny Dameaty Hutaglung**

University of Malaya, Malaysia, [fonny@um.edu.my](mailto:fonny@um.edu.my)

**Syed Kamaruzaman Bin Syed Ali**

University of Malaya, Malaysia, [syed@um.edu.my](mailto:syed@um.edu.my)

The current study is intended to study the mediating role of physical activity (PA) in the relationship between body image (satisfaction/dissatisfaction) and life satisfaction. Moreover, it is intended to investigate how teachers' BMI, age may vary through body image perception. Participants included 781 teachers ranging in age from 20 to 50 years old from all over Oman. A Google form survey was used to recruit participants. The collected data was analysed using SPSS version 23 statistical tools, and the Partial Least Squares (PLS) approach was used for Structural Equation Modelling (SEM) using Smart-PLS Ver 3. The level of body image satisfaction was higher than dissatisfaction. Body image satisfaction has a positive and significant effect on teacher's life satisfaction, while a negative correlation was found between body image dissatisfaction and life satisfaction. Physical activity was a mediation variable in the relationship between body image (satisfaction/dissatisfaction) and life satisfaction. Policymakers should empower individuals to have a positive body image regardless of their size or appearance and it would improve certain areas of their lives, encouraging them to dedicate more energy and time to other critical aspects of their lives such as work, partnerships, and even leisure and enjoyment, resulting in improved overall life satisfaction.

Keywords: body image, life satisfaction, PLS-SEM, physical activity, mediation

### **INTRODUCTION**

Individuals engage in a myriad of cognitive and behavioral activities in order to find satisfaction and fulfilment, but is there a surefire way? Positive psychology has been researching methods to boost people's well-being in order to prevent or resolve unhappiness (Magnus, Diener, Fujita, & Pavot, 1993). According to a Chapman University report, life satisfaction is associated with a lower risk of mortality, and fluctuating in life satisfaction has been found to be particularly harmful to health and

**Citation:** Al Sulaimi, M. R., Hutaglung, F. D., & Bin Syed Ali, S. K. (2022). The mediating effect of physical activity in the relationship between body image and life satisfaction. *International Journal of Instruction*, 15(2), 349-372. <https://doi.org/10.29333/iji.2022.15220a>

survival (Kawel-Boehm et al., 2015). A dissatisfied person is frequently surrounded by various difficulties, threats, and obstacles while carrying out his responsibilities. Instead of becoming a successful teacher in the future, he becomes irritable. As a result, there must be a sense of fulfilment in one's existence; one's work is the watershed from which one's life flows. An individual who is dissatisfied with his life would be dissatisfied with his job for reasons that have nothing to do with the job (Kumar, 2014). A high level of life satisfaction will contribute to better work performance and have a beneficial impact on others. Teachers with high levels of life satisfaction are more involved with their students and impact on their students in social and academic life (Roth, 2007), are more satisfied with their institute interactions and strong affiliations, and have actively led to professional growth and progress across their careers (O'Connor, 2008). It is recommended that teachers develop their positive life expectations in order to be more successful in their jobs and to have high levels of job satisfaction (Eren & Aşıcı, 2017). Therefore, it benefits students, and is expressed in the standard of their performance.

Due to the devastating repercussions of distorted body image on physical, psychological, and behavioural well-being, there has recently been an increase in global interest in body image perception. Strict diets, obsessive weight control, poor self-esteem, and self-worth are all possible outcomes of a distorted self-body image, and they may have major life and economic ramifications (Keshk, Fahim, Hassan, Boulos, & Sector, 2019). Studying body image perception in a teacher's context has been neglected in previous studies. However, of careful concern is the possibility of the teachers' inappropriate and dangerous and unhealthy attitudes, perceptions and behaviors being intentionally or unintentionally conveyed to their school students (Yager & O'Dea, 2009). Therefore, the internalized standards of the body image in one perception then become part of one's identity and when the standards are unmet, the result is often destroying self-worth and total self-esteem (McKinley, 2006).

The body image was described as "the mental image we form of our own body" (Schilder, 1936). Over the last 81 years, this understanding of self-perception has expanded to include attitudes, cause, and intellect (Green, 2018). Internalizing one's body image is recognised as an important concept in the field of psychology (Avalos, Tylka, & Wood-Barcalow, 2005). Unfortunately, much of the body image literature focuses on dissatisfaction with one's body (Green, 2018). In recent years, a psychological movement has called for positive outcome action and promotion rather than negative outcome interventions and negative attention. As a result, we will concentrate our research on both sides of body image satisfaction and dissatisfaction.

Examining the literature revealed that there are disparities in knowledge regarding body image perception, owing to the fact that this perception has mostly been examined in Western countries (Rodgers, Neville, & La Grow, 2017), with less research performed in Eastern Mediterranean Region (EMR) nations (Keshk et al., 2019). Furthermore, the majority of these Eastern Mediterranean Region studies centred on eating disorders or dieting, leading to the conclusion that more research in this field among Arabs was required (Yahia et al., 2011). Few studies have measured body image problems in adults in the Eastern Mediterranean Region (Keshk et al., 2019) and less study has been done

in the Arabian sample or the general teachers' group until now. This highlights the importance of researching body image from various socio-cultural perspectives, as no such studies have been conducted in Arab countries, and there is a lack of research in the Omani context, especially in the educational context. Since much of body image research focuses on pathologies associated with body dissatisfaction, non-pathological body image theories are lacking in the literature (Green, 2018). Moreover, few studies have been conducted to investigate the causes of body dissatisfaction, especially in active young adults and educated people. As a result of seeing Omani teachers' intense concern about relevant body appearance. According to researchers' long-term experience in the Omani school environment, the most frequently occurring situation in schools revolves around facial beauty and a perfect body. The most common topic of discussion among the teachers' community in their spare time is body image and attractive appearance.

Body image perception in the current lifestyle is among the influential factor that may lead an individual to be satisfied and feel a sense of well-being. Negative body perception, according to Miha Kaucic et al. (2017), will affect national lifestyle decisions, raising the likelihood of obesity and making negative habits difficult to shift (Bassett & Martin Ginis, 2009; Mériaux, Berg, & Hellström, 2010). Body image will affect the form of physical exercise you prefer and how much you enjoy it. As a result, social expectations of beauty can decide participant participation in physical exercise, particularly for those who have been judged for their weight (More et al., 2019). People who are self-conscious or concerned about their looks tend to work out alone and have lower amounts of pleasure. As a result of the lower perceived behavioural regulation and higher perceived obstacles to exercising, a detrimental focus on attractiveness raises the desire to consciously delay exercise. People are more inclined to engage in physical activities because they have social encouragement and appreciate the activity. Bandura (2004) related perceived behavioural influence and perceived inhibitors as determinants of activity initiation and maintenance, which is reinforced by ongoing studies. People who are frustrated feel they are not qualified enough to engage in physical activities, and, as a result, they delay activity owing to a lack of perceived behavioural regulation. As a result, it is critical to place a premium on feeling positive about being physically healthy and leading an active lifestyle, regardless of body shape. Meanwhile, literature shows that employees who participate in vigorous-intensity physical exercise are less prone to skipping work. Overall, physical inactivity was linked to increased healthcare costs, posing a significant financial burden on institutions and health-care providers. Employers agree that encouraging and sustaining good behaviour such as physical fitness in the workplace will boost high-quality employees (Fronstin & Werntz, 2004; Kahn et al., 2002). Therefore, the objective of the research is that this research specifically investigates the associations between Body Image (body image satisfaction, body image dissatisfaction) and overall life satisfaction and the possible mediation role of physical activity in those relationships. Furthermore, the research question of the study is:

RQ1: What is the level of body image (satisfaction and dissatisfaction) for teachers working in government schools in Oman?

### **Literature Review**

Body image is now commonly referred to as a multidimensional construct that involves perception, affect, and behaviour (Joo et al., 2018). Satisfaction with body image has recently emerged in academic literature. Research indicates that it is a multifaceted phenomenon that involves body consciousness, an emotional attitude toward the body, and satisfaction with the functionality of the body. Body image and life satisfaction are intimately connected to a person's physical and mental well-being. The study of the correlates and features of positive body perception has significant consequences for intervention and therapy since it teaches clinicians and therapists what body-related beliefs and habits to aim for rather than only what to avoid. Functional body satisfaction is described as agreement with and satisfaction with the physical capability of the body (Frisén & Holmqvist, 2010; Wood-Barcalow et al., 2010). Yet, being valued for appearance rather than function can put people at risk of developing an eating disorder. Many people have the perception that societies and countries have a hard time sending signals about the importance of a positive body image (this is true around the globe) (Anderson-Fye, 2012). When people of Western culture care about having thinner bodies, they may consider excess weight as a character flaw (Vilhjalmsson, Kristjansdottir, & Ward, 2012). One can be defined as being handsome or ugly within a group based on appearance, which may make them good or bad, attractive or undesirable (Anderson-Fye, 2012). In order to combat stigmatized appearances, an increasing number of people will resort to various cosmetic methods over time. In other words, societal appearance is culturally imposed, and once they have already experienced injustice, the weight they put on their body shapes their perception of themselves and their needs (Trekels & Eggermont, 2017). Culture, according to the sociocultural theory of body perception, plays a key role in explaining how people perceive their bodies, with race shaping appropriate body image expectations as well as the importance of such norms for individuals (Abrams & Stormer, 2002). In Egypt, an Arab country, it was discovered that women's exposure to fashion on television and in magazines was significantly correlated with body dissatisfaction and the desire to be slimmer (Keshk et al., 2019). Madanat et al. (2011) discovered that the media has a huge impact on obtaining smaller bodies in Jordanian women. While, obesity, on the other hand, is one of the most important appearance characteristics for a woman in Mauritanian society "as an Arab country". Mauritians claim that a thin girl is a sign of neglect, ugliness, and deprivation. As a result, men in Mauritania choose to marry obese women, as the obese bride is a symbol of wealth and is often believed to be a member of one of the ancient families. Thus, if an individual's body image is one of the attributes determined by the society in which he lives, it is difficult to generalise the results of previous Western studies to our eastern and Gulf societies in particular, where practises, traditions, and Islamic religion all play a role in influencing individuals' perceptions.

They believe that Western beauty ideals are necessary for achieving life fulfillment and success within Western culture (Warren, 2014). Even females did show a desire to simplify their lives in order to maintain an attractive weight and physical appearance. Schooler, Lowry, and Biesen (2012) discovered a connection between Latinas' negative body image and lower life satisfaction. However, according to Davis, Fowler, Best, and

Both, (2019) body discomfort does not seem to be a statistically significant predictor of female life satisfaction. As a consequence, the inconsistency of study findings necessitated further investigation. People who are concerned with their bodies are more likely to engage in unhealthy behaviours such as increased smoking and other undesirable habits (Kilpela et al., 2015), potentially raising the high-risk occurrence of chronic health problems, physical injury, and decreased life expectancy. Women, in particular, are often faced with issues of insecurity about their bodies and low self-esteem (Henn et al., 2019; Kang et al., 2019). Teachers, on the other hand, are expected to be true role models for their students. The possibility of teachers' inappropriate and negative behaviours, thoughts, and actions being intentionally or unintentionally transmitted to their school students is cause for concern (Yager & O'Dea, 2009). In the number of educations, however, less concertation has been studied. As a result, the aim of this research is to gather empirical data from Omani teachers. Previous research examined body image satisfaction/dissatisfaction and its effect on life satisfaction. However, the results of this collaboration are unclear in the context of teachers.

Higher activity levels are related to lower levels of life satisfaction and enjoyment. The study found that sedentary lifestyles were connected to poorer health. People who exercised their physical capacities to an intermediate degree (heavier) and an extreme (vigorous) recorded higher levels of satisfaction and physical enjoyment. Programs that encourage individuals to be more healthy will help the person to enhance their emotional well-being and mental wellbeing as well as encouraging them to be more physically fit (Pengpid & Peltzer, 2019). Moreover, existing research has shown a relationship between general happiness and a preference for social interaction related to physical activity (Hrafnkelsdottir et al., 2018). Body dissatisfaction has been proposed as both a motivator and a detriment to exercise. Individuals who participate in any kind of exercise are said to be motivated by the need to improve their physical attractiveness (Brudzynski & Ebben, 2010) and typically to get in shape for a brief period of time, while others engage in long-term exercise for health reasons (More et al., 2019). The literature revealed that there are differences in our understanding of body image interpretation, since the majority of research on the subject was performed in western countries (Rodgers et al., 2012), although fewer studies were conducted in countries in the south-eastern Mediterranean Region (Musaiger & Al-Mannai, 2014). Thus, this study will research the impact of PA as a mediation role in the relationship between body image and life satisfaction. There has been no previous research that has illustrated this variable as a mediation, although it has been mentioned as a mediation variable in the study by Zayed et al. (2018), but with a different related variable in the field of psychology. Yet no previous research has used it as mediation in the relationship between body image and life satisfaction.

According to Ingledeew and Markland's (2008) Self Determination Theory (SDT), people perceive their bodies and direct them to engage in healthy acts to fulfil their body and psychological needs, and that they are usually motivated to exercise to meet their body needs in order to maintain a sufficient quality of living status. People who are comfortable with their self-image have control over their appearance, sexuality, and physical functioning, and they like how their body looks and functions. Physical

exercise and satisfaction have been well documented in the literature, and the impact of physical exercise in the workplace has been seen to alleviate psychological issues associated with job pressures and increase employee satisfaction (Arundell et al., 2018). Unfortunately, much of the body image literature continues to concentrate on pathologies associated with body dissatisfaction. A recent trend in psychology has called for positive outcome avoidance and enhancement rather than negative outcome approaches (Green, 2018). Thus, studying both negative and positive body images fits well into a preventative model, since positive body image promotion promotes good, positive outcomes. Surprisingly, no empirical research has been conducted to date on body image satisfaction/dissatisfaction among teachers in educational settings. Further, body image ideals differ in terms of attractiveness, appraisal, and norms across cultures and even within the same population.

## **METHOD**

A cross-sectional study approach was used to gather data for this report. The cross-sectional research design, a method of quantitative study design that includes a diverse range of participants, is the most popular type of survey design used in the field of schooling. The data and cross-sectional study were obtained at a given period before being analysed for related/associated patterns (Fraenkel, Wallen, & Hyan, 2012). The sample size of the current study is 781 participants, and their responses were gauged to seek the examination of hypothesized relationships which are:

H1: There will be no statistical relationship between body image satisfaction and life satisfaction

H2: There will be no statistical relationship between body image dissatisfaction and life satisfaction.

H3: Physical activity will not mediate the relationship between body image satisfaction and life satisfaction.

H4: Physical activity will not mediate the relationship between body image dissatisfaction and life satisfaction.

### **Development of Questionnaire:**

The Body Self-Image Questionnaire-Short Form (BSIQ-SF) (Joo et al., 2018) is a validated and accurate instrument for recommending a multidimensional measure of body image. It was created by a multistage phase that involved four elements that reduced the initial version of the BSIQ from 51 items to 27 items to 21 items. As a consequence, the questionnaire has been validated to fit the Omani context as well, in order to recognise cultural, environmental, linguistic, and lifestyle variations between Southeast Asian and Arab populations. This scale has two dimensions including measuring positive body image or satisfaction with one body image and the second is dissatisfaction with body image. 19 items for the whole scale in the Omani context were considered valid and reliable to use in the current study.

The dimension reflecting dissatisfaction with body image is further divided into two sub-sections namely: Negative Affect, which assesses the impact of body perception on negative emotional well-being; and B-Height Dissatisfaction, which measure the degree of dissatisfaction with height. Positive body Image Satisfaction is further divided into two sub-sections namely: Attractiveness Evaluation which is the Self-Evaluation of Aspects of Appearance and Physical functionality which determine an individual's awareness of his or her own physical functionality.

The original HPAI (Habitual Physical Activity Index) questionnaire developed by Baecke, Burema, and Frijters, (1982) was refined by Burns and Froman, (1997). Many prior studies have used the scale (Gleeson-Kreig, 2008; Lee, 2011). The HPAI measures adults' levels of physical activity. The HPAI is a self-administered questionnaire with three subscales: Work, Sport, and Leisure-time. The HPAI is widely used to assess habitual physical activity in healthy adults and to develop useful physical activity indices. Both things used a 5-point self-report system varying from 1 to 5, with 1 meaning "never" and 5 being always".

The dependent variable is measured by Life Satisfaction Scale (SWLS). In 1985, Diener created the SWLS as a global indicator of a cognitive-judgmental method (Diener et al., 1985, p. 71). It is made up of five elements that measure one's feeling of satisfaction in life and is concerned with emotional well-being. The Satisfaction with Life Scale helps participants to judge their overall satisfaction based on factors that they feel are important, rather than measures that the investigator believes are important (Pavot & Diener, 1993). The responses to the Satisfaction with Life Scale were graded on a seven-point Likert scale, with 1 indicating strongly disagree and 7 indicating strongly accept.

## FINDINGS

In order to use and validate the instruments Partial least squares were used in structural equation modelling (SEM). The convergent and discriminant validity suggests that the variables were fine (Mehmood & Najmi, 2017). Bootstrapping was then utilized to test the effects of body image satisfaction/contentment and exercise on life satisfaction. The results revealed that age was not statistically significant for self-image satisfaction or dissatisfaction. Furthermore, the table revealed that BMI was negatively linked to body image satisfaction and positively with body image dissatisfaction. Body image dissatisfaction and BMI had a positive association ( $r = .343$ ,  $p < 0.01$ ), while body mass index and body image satisfaction had a negative correlation ( $r = -.122$ ,  $p < 0.01$ ).

Table 1  
Correlation coefficients for body image based on age, BMI, and governorate

Demographic IV	Spearman's rho	BID	Satisfaction
Age	r	-0.018	0.018
	p value	0.621	0.62
BMI	r	.343**	-.122**
	p value	<0.001	0.001

\*\* Significant at 1% level of significance

Body mass index was calculated by the following formula  $BMI = \text{weight (kg)}/\text{height (cm)}^2$ .

#### **Convergent Validity:**

Hair et al., (2016), recommended four measures to evaluate the convergent validity. These are factor loading, Cronbach's Alpha and Composite Reliability (which should be  $\geq 0.7$ ), alongwith the Average Variance Extracted (which should be  $\geq 0.5$ ). Table 2 summarize the assessment of Convergent Validity.

Table 2  
Convergent validity Table 2

	Original Sample	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
AE1 <- Attractiveness	0.698	0.808	0.867	0.566
AE2 <- Attractiveness	0.782			
AE3 <- Attractiveness	0.713			
AE4 <- Attractiveness	0.810			
AE5 <- Attractiveness	0.754			
HD1 <- Height Dissatisfaction	0.952	0.893	0.949	0.903
HD2 <- Height Dissatisfaction	0.948			
NA1 <- Negative Affect	0.789	0.913	0.931	0.66
NA2 <- Negative Affect	0.703			
NA3 <- Negative Affect	0.847			
NA4 <- Negative Affect	0.822			
NA5 <- Negative Affect	0.838			
NA6 <- Negative Affect	0.851			
NA7 <- Negative Affect	0.827			
PF1 <- Physical Functionality	0.617	0.851	0.888	0.534
PF2 <- Physical Functionality	0.796			
PF3 <- Physical Functionality	0.725			
PF4 <- Physical Functionality	0.615			
PF5 <- Physical Functionality	0.782			
PF6 <- Physical Functionality	0.822			
PF7 <- Physical Functionality	0.731			
PL1 <- Leisure	0.696	0.806	0.861	0.511
PL3 <- Leisure	0.844			
PL4 <- Leisure	0.620			
PL5 <- Leisure	0.761			
PL6 <- Leisure	0.680			
PL7 <- Leisure	0.668			
PW1 <- Workplace	0.696	0.688	0.81	0.517
PW3 <- Workplace	0.647			
PW6 <- Workplace	0.775			
PW7 <- Workplace	0.751			
life1 <- Life Satisfaction	0.658	0.782	0.852	0.539
life2 <- Life Satisfaction	0.825			
life3 <- Life Satisfaction	0.823			
life4 <- Life Satisfaction	0.743			
life5 <- Life Satisfaction	0.592			

#### **Discriminant validity (HTMT)**

According to Hair et al. (2016), the HTMT value must be less than 0.85 (0.90), indicating that the two constructs are distinct. Table shows the HTMT values for all of

the constructs studied in this study. As a result, the constructs demonstrated sufficient discriminant validity.

Table 3  
The HTMT values

	Height Attractiveness	Height Dissatisfaction	Life Leisure	Life Satisfaction	Negative Affect	Physical activity	Workplace
Attractiveness							
Height Dissatisfaction	0.142						
Leisure	0.54	0.136					
Life Satisfaction	0.36	0.35	0.456				
Negative Affect	0.384	0.347	0.182	0.317			
Physical Functionality	0.628	0.075	0.369	0.266	0.214		
Workplace	0.212	0.057	0.232	0.169	0.108	0.907	

#### Multicollinearity Analysis

The variance inflation factor (VIF) was used to evaluate the multicollinearity of the variables. When the collinearity of the VIF value is less than 10.00 (Hair et al., 2016), no multicollinearity problems occur. Although a VIF value of 10 indicates difficult. In this study, two endogenous variables were used, and as seen in table, the highest VIF for the first endogenous variable (Physical activity) was 1.017, all of which were well below the cut-off of 10, and even below the conservative cut-off of 2.5.

#### Structural Model and Hypotheses Testing:

The  $R^2$  values in this analysis are calculated using the Smart-PLS algorithm function. The  $R^2$  for physical activity in this model was 0.196, indicating that the two endogenous latent variables (body image satisfaction/body image dissatisfaction) might describe 19.6% of physical activity. The  $R^2$  for life satisfaction in the model was 0.215, indicating that body image satisfaction and dissatisfaction and physical activity, can explain 21.5% of improvements in life satisfaction among respondents. The results revealed that the  $Q^2$  values for physical activity, the  $Q^2$  values (0.105) and  $Q^2$  values of Life Satisfaction (0.110) are greater than zero, indicating that the independent constructs had predictive relevance for the mediator (PA) and dependent constructs under consideration in this study (Hair et al., 2016). The  $f^2$  finding showed that the impact size of all exogenous constructs for physical exercise is small for body image satisfaction ( $f^2=0.209$ ) and small for body image dissatisfaction ( $f^2=0.016$ ). Physical activity has the impact size ( $f^2=0.067$ ) for Life satisfaction, accompanied by body image dissatisfaction ( $f^2=0.078$ ), body image satisfaction ( $f^2=0.078$ ). Thus, the effect size:  $f^2$  reflect small effects sizes of an exogenous construct (Cohen, 1988).

Table 4  
Mediation effects

	Original Sample (O)	SE	T Statistics (O/STDEV)	P Values	
<b>path a</b>					
Body image dissatisfaction -> Physical activity	-0.114	0.032	3.572	<0.001	
Body image satisfaction -> Physical activity	0.414	0.034	12.302	<0.001	
<b>path b</b>					
Physical activity -> Life Satisfaction	0.257	0.035	7.401	<0.001	
<b>path c'</b>					
	Original Sample (O)	SE	T Statistics (O/STDEV)	P Values	
Body image dissatisfaction -> Life Satisfaction	-0.251	0.035	7.105	<0.001	
Body image satisfaction -> Life Satisfaction	0.148	0.036	4.142	<0.001	
<b>Indirect effect</b>					
	Original Sample (O)	SE	T Statistics (O/STDEV)	P Values	
Body image satisfaction -> Physical activity -> Life Satisfaction	0.106	0.016	6.496	<0.001	
Body image dissatisfaction -> Physical activity -> Life Satisfaction	-0.029	0.009	3.171	0.002	
<b>Total effect</b>					
	Original Sample (O)	SE	T Statistics (O/STDEV)	P Values	
Body image dissatisfaction -> Life Satisfaction	-0.281	0.036	7.827	0	
Body image satisfaction -> Life Satisfaction	0.254	0.032	7.821	0	
outer weight					
SE t value					
P Values					
<b>2nd order model</b>					
Attractiveness -> Body image satisfaction	0.496	0.018	27.859	0	
Height Dissatisfaction -> Body image dissatisfaction	0.194	0.014	13.704	0	
Negative Affect -> Body image dissatisfaction	0.922	0.013	72.686	0	
Physical Functionality -> Body image satisfaction	0.643	0.016	39.454	0	
<b>Formative Model For Physical Activity</b>					
	Outer weight	SE	T Statistics (O/STDEV)	P Values	vif
Leisure -> Physical activity	0.208	0.072	2.879	0.004	1.031
Workplace -> Physical activity	0.943	0.029	32.72	0	1.031

**Second order Model (Formative model)**

Since three constructs, including body image satisfaction, dissatisfaction, and physical activity, were second-order Formative latent variables, the bootstrap method was used to measure the significant contribution of all first order latent variables. Collinearity of first order structures has also been evaluated. The findings for body image dissatisfaction with two subscales revealed that both subscales greatly correlated to body image dissatisfaction as a second order latent variable, namely negative affect ( $\beta = 0.922, p < 0.001$ ) for the maximum outer loading, accompanied by Height Dissatisfaction ( $\beta = 0.194, p < 0.001$ ). The results for physical activity with two subscales showed that both subscales, namely Workplace physical activity (occupational) ( $\beta = 0.943, p < 0.05$ ), with the maximum outer loading, accompanied by Leisure time physical activity ( $\beta = 0.208, p = 0.004$ ), substantially added to the physical activity scale as second order latent variables. The uniform route coefficient (outer weight) was important for all subscales. (Table).

Body image dissatisfaction has a negative and significant impact on physical activity ( $\beta = -0.114, p < 0.001$ ). Body image satisfaction has a positive and statistically meaningful impact on physical activity ( $\beta = 0.414, p < 0.001$ ). Physical exercise has a strong and important ( $\beta = 0.283, p < 0.001$ ) effect on Life Satisfaction, according to the results in Table of bootstrapping in route b. (path b). Finally, the bootstrapping findings revealed that the causal impact (path c') of both independent variables, body image dissatisfaction and body image satisfaction, on life satisfaction is statistically important. As a result, the total impact of dissatisfaction with one's body image on life satisfaction was negative and significant ( $\beta = -0.281, p < 0.001$ ). Body image satisfaction has a positive and meaningful impact on life satisfaction ( $\beta = 0.254, p < 0.001$ ).

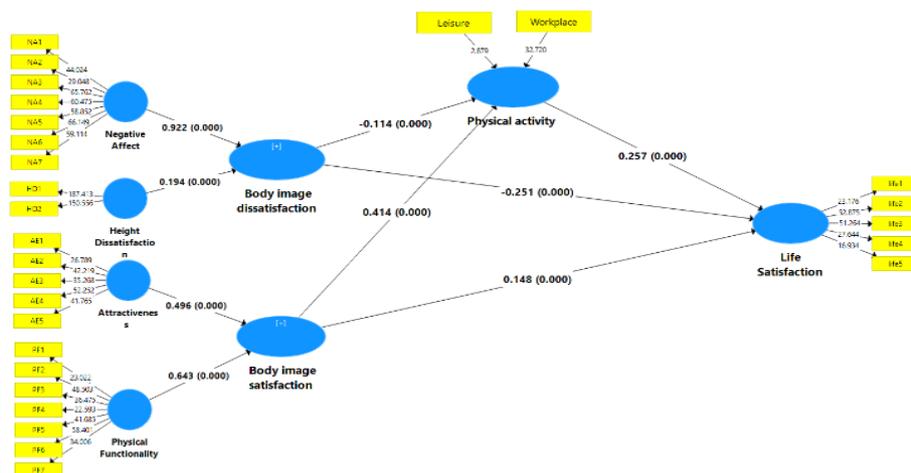


Figure 1 Model of the study

## **DISCUSSION, CONCLUSION AND RECOMMENDATIONS**

In the literature, it is strongly advised to identify factors that can contribute to life satisfaction levels. While the majority of these studies have been conducted in the medical community and with sick people, they are lacking in educational settings. As important in popularising this research among educated people, as well as its role and impact in shaping our students' thoughts and even rewiring negative affects in a positive way. Omani teachers had low body image dissatisfaction and a high level of body image satisfaction. This result was also observed among African Americans, who reported a higher level of body image satisfaction (Byrd, 2007). In addition, adolescent students in Brazil reported a high level of body satisfaction during their adolescent years (Lemes et al., 2018). However, the current finding contradicts the findings of del Mar Bibiloni et al., (2017), who found that the majority of their sample were dissatisfied with their body image.

The physical functionality (PF) subscale was higher than the mean of the Attractiveness Evaluation (AE) subscale. Teachers assumed they had high satisfactory levels of physical function awareness. Current findings emphasize that teachers are more satisfied with their bodies than dissatisfied. This finding was also supported by previous research, which found that Muslim women were more satisfied with their body image than other religious women. Female Muslims had a more positive self-image than Christians, and they had less skinny-ideal internalisation and expectation to be thin (Wilhelm et al., 2019). Previous research in African people, which found a positive relationship between attractiveness and obesity, supported this conclusion (Carter-Edwards et al., 2010). A higher BMI, on the other hand, is regarded as a symbol of prosperity, secure employment, and social economic status in some Arab and African countries. Because social pressure is less prevalent in these circumstances, most women may be less stressed about losing weight and eating more openly.

According to current findings, the prevalence of high BMI among teachers is high. Most teachers are classified as overweight to obese, and a small percentage are classified as underweight or normal weight. This high prevalence of overweight and obesity among teachers' participants is primarily due to inactive lifestyles. Which in turn is linked to health issues associated with serious comorbidities such as hypertension, cardiovascular disease, and mortality (Ahadzadeh et al., 2018). As a result, policymakers should always emphasize promoting an active lifestyle in any concept. However, sociocultural beliefs about beauty signs differ across countries. In the current study, BMI was found to be significantly associated with body image (satisfaction and dissatisfaction). Body image dissatisfaction and BMI correlated positively, while BMI and body image satisfaction correlated negatively. According to the current findings, there is a negative relationship between BMI and body image satisfaction. According to the negative correlation, body image satisfaction was negatively associated with rising BMI. Our current finding is consistent with previous research findings that higher BMI causes women to be dissatisfied with their bodies (Burrowes, 2013). Current findings indicate that the majority of our participants are overweight or obese, despite the fact that their level of satisfaction is higher than their level of dissatisfaction. It can be attributed to the fact

that BMI is regarded as a symbol of wealth (Leung et al., 2013) and prosperity in African and Arab cultures.

Contrary to expectations, no significant age associations have been discovered in current research. As a result, neither body image satisfaction nor dissatisfaction was statistically significant with age variation, according to the current findings. One possible explanation is that the rationale for people growing older is not that they are more dissatisfied with their appearance despite physiological improvements that occur with age, but rather that they become more accepting of their appearance as they gain wisdom and maturity. Body shape, weight, and other appearance issues are less common at this age because they may have other issues, such as fitness (Tiggemann et al., 2013). Our findings are consistent with those who discovered that age was not a significant predictor of body image dissatisfaction (Ward, 2011). del Mar Bibiloni, et al. (2017) discovered that people in their forties and fifties were dissatisfied with their bodies and lost weight more than people in their twenties and thirties. In addition, Webster and Tiggemann (2003) discovered that body dissatisfaction did not actually decrease as women aged.

The purpose of this study is to present body image satisfaction as a significant factor leading to a teacher's overall satisfaction in life. As a result of having high levels of life satisfaction, a number of subjective well-being outcomes, such as high self-esteem, self-concept, and self-mastery, will flow (Gilman & Huebner, 2006; Gilman, 2001). Indeed, as stated in the literature, people with a high level of life satisfaction are more likely to be satisfied with their institute experiences and close affiliations than people with a low level of life satisfaction (Gilman, 2001). As a result, a decrease in satisfaction increases the likelihood of negative phenomena, such as increased absenteeism or changing careers, to varying degrees (Uchmanowicz et al., 2019). There is also a link between workplace burnout and life satisfaction, according to research. Life satisfaction enables an individual to be more capable of coping with the situations and dissatisfactions that he encounters on a regular basis. Because it is implied that a person who is satisfied with his life enjoys mental well-being and reassurance, it has a positive impact on long-term success and increases optimism and potential ambitions. As a result, improving a teacher's life satisfaction by understanding the factors (e.g., positive body image) that influence their satisfaction is advised. Furthermore, people with a high level of life satisfaction are more likely to be satisfied with their institute experiences and close affiliations than people with a low level of life satisfaction (Gilman, 2001). Teachers who are satisfied with their jobs are also satisfied with their lives, which is reflected in the quality of their performance and has a positive impact on students.

One who has a high level of life satisfaction, has self-acceptance and a stronger ability to deal with negative emotions (Gillen, 2015). Previous studies have found that teachers' job satisfaction and academic motivation also are influenced by life satisfaction (Sari & Yetkiner, 2020). As a result, current findings indicate that Omani teachers have a high level of life satisfaction. According to our findings, Body Image Satisfaction should be given more attention as a reliable predictor of life satisfaction. Existing research among Romanian participants has discovered that life satisfaction is positively correlated with

body appreciation, and that higher levels of family life satisfaction predict higher levels of body appreciation among students (Maguran, 2018). Furthermore, Dotse and Asumeng (2015) discovered a strong positive relationship between body image satisfaction and psychological well-being, implying that the happier one is with one's body image, the more likely one is to experience higher or better psychological well-being. Similarly, a medical study discovered that people with low self-esteem had the lowest levels of life satisfaction (Rzeszutek, Podkowa, Pięta, Pankowski, & Cyran-Stemplewska, 2021). The majority of research on body dissatisfaction and its relationship to well-being and ill-health has been conducted on female adolescent populations (Ferreiro, Seoane, & Senra, 2014). As a result, little is known about the role of body dissatisfaction in the relationship to psychological well-being in adults in general (Molina Garca et al., 2019), though some academic studies have suggested that body dissatisfaction is associated with lower well-being (Green et al., 2009).

There was no statistically significant relationship between gender deference base and body image in the current study. del Mar Bibiloni et al. (2017) discovered that women were more unhappy than men when they were overweight, less unhappy when they were underweight, and more concerned about weight gain. Our findings also contradicted those of Deshmukh and Kulkarni (2017), who discovered that girls had significantly higher levels of body dissatisfaction and preferred significantly narrower desirable body forms than males (Deshmukh & Kulkarni, 2017).

The findings revealed that the path coefficient of the direct path body image satisfaction life satisfaction is significant, and physical activity had a mediating effect on this path. Thus, the null hypothesis (H0): 'the relationships between body image satisfaction and life satisfaction will not be mediated by physical activity' was rejected. Further, the null hypothesis (H0): 'the relationships between body image dissatisfaction and life satisfaction will not be mediated by physical activity' was rejected as well. It has been shown that people with a positive body image can improve their sense of and value for their bodies by engaging in adaptive activities that meet their needs on a regular basis (Cook-Cottone, 2015). Being aware of one's basic physiological and emotional needs, as well as designing one's environment, relationships, and daily routine to meet these needs (Cook-Cottone, 2015). Supportive correlations between body recognition and exercise evidence demonstrating a positive connection between positive body image and exercise (Wood-Barcalow et al., 2010).

It is critical to examine each direction in this model in order to investigate this mediation. The relationship between body image satisfaction and physical exercise was significant and positively correlated, but it was deemed mild. Our results are consistent with previous research (Wood-Barcalow et al., 2010; Frisé & Holmqvist, 2010) with positive body image reported engaging in physical exercise as a way to care for their body. Although these qualitative findings suggest a potentially beneficial link between positive body image and exercise behavior, few studies have looked at this relationship quantitatively (Ramsey, 2018), so future research is suggested (Ramsey, 2018). Homan and Tylka (2014) discovered that women who had the healthiest body positivity were the most involved. As a result, the current results are consistent with the previously

recommended report. Furthermore, interest and participation in activities promote a more positive perception of physical ability, which may contribute to a positive self-image and sense of identity. Physical exercise, on the other hand, has been shown to have a positive effect on body image, especially among females (LePage & Crowther, 2010). For example, a high exercise rate was linked to having a more positive body image. Women who engaged in regular physical exercise (PA) had higher levels of body recognition and practical body satisfaction (Homan & Tylka, 2014). Physical exercise courses are often thought to help reduce or prevent body image problems (Kerner et al., 2018).

Further, More et al. (2019) found that a high level of satisfaction with Body Area Measures projected a lower BMI indirectly, with higher Moderate to Vigorous Physical Activity mediating this impact. Individuals who engage in fitness have the ability to participate in a broad range of enjoyable activities, and they listen to their bodies to determine the duration of exercise, which may help prevent injuries (Calogero & Pedrotty-Stump, 2011). Physical exercise, according to del Mar Bibiloni et al. (2017), will help you feel better about yourself and your health. Furthermore, those who were physically active were happier with their bodies than those who were sedentary. Furthermore, current research findings show that physical activity is significantly and negatively correlated with body image dissatisfaction. Dissatisfaction with one's appearance makes it difficult to engage in healthier lifestyle behaviours such as exercise (Pop, 2017; Shaban et al., 2016). Suicidal ideation or attempt is frequently associated with low body image satisfaction. The relationship between body image and suicide is dependent on a person's longevity and physical development (Pisetsky et al., 2017). As a result, addressing negative body image early on would be preferable and timely. The second path explains how physical activity and life satisfaction are related. Physical activity appears to play an important role in life satisfaction, according to an increasing body of evidence. This finding adds to the growing body of evidence in the literature (Maher et al., 2013) on the importance of physical activity in evaluating positive outcomes. Maher et al. (2013), for example, measured life satisfaction and physical activity by requiring participants to exercise on a daily basis (Maher et al., 2013). On days when they engaged in more physical activity, people rated their life satisfaction as higher.

The impact of mediating is the fourth direction to be investigated. Physical activity, according to current research, significantly and positively mediates the relationship between body image satisfaction and life satisfaction. While it has a negative impact on body image dissatisfaction, it does have an impact. This demonstrates the significance of physical activity in this relationship. A study conducted by Fraguera-Vale et al., (2016) confirmed that physical exercise was positively related to Body Image Satisfaction and Life Satisfaction. Regular physical activity is beneficial in maintaining people's bodily functions and their psychosocial health. Reigal et al., (2014) discovered that people who are physically active have higher levels of general self-efficacy and life satisfaction, and that there is a positive relationship between these constructs.

A broader concept of functional perspective of personal appearance was examined by an investigation which focused on identifying possible risk factors in female college students' body dissatisfaction (Cook-Cottone & Phelps, 2003). Declining levels of body satisfaction were observed among participants in the college women in this study). In contrast, improvements in physical abilities (such as becoming more active or participating in sport) may reduce participants' levels of body dissatisfaction, allowing the focus to shift away from their physical appearance and toward psychological training and activities. Physical activity programmes will produce a broad variety of substantial programme gains by recruiting and keeping high-quality staff, as well as motivating such workers to remain safe and profitable (Fronstin & Werntz, 2004; Kahn et al., 2002). Adults can partake in vigorous-intensity physical activity each week to achieve substantial health benefits (Piercy et al., 2018). Yet, physical activity (PA) of fewer than 150 minutes a week is called sedentary behaviour and is related to a number of chronic diseases, including stroke, cancer, and diabetes (Healy, Winkler, Owen, Anuradha, & Dunstan, 2015) as well as other health concerns. This case has been observed in academy workplaces where individuals typically engage in sedentary lifestyle behaviours due to their work demands, (Gyurcsik, Spink, Bray, Chad, & Kwan, 2006), and the risks of obesity, poor physical fitness, hypertension, and low self-esteem (Atlantis et al., 2006), as well as anti-social conduct (De Rezende, Lopes, Rey-López, Matsudo, & do Carmo Luiz, 2014). Thus, motivating teachers to do habitual physical exercise in the workplace and leisure time would be easier to achieve general life satisfaction. We can not overlook the importance of maintaining a positive physical image and its role in revitalising one's existence. However, it must be balanced with the demands of life, especially the workplace, and control is required in today's lifestyle.

Based on the limitations, there are several potential future recommendations. Firstly the current study explore the Omani context which shares its culture with other Arabian countries, whereas exploration of Asian in general and South Asian in particular could also be a potential contribution because of its historical, cultural and ethnic significance. Secondly, a further in-depth exploration of the data should be done by the application of machine learning (Najmi, Kanapathy & Aziz, 2021a) and artificial intelligence based technique (Najmi, Kanapathy & Aziz, 2021b). Lastly, further exploration need to be done by qualitative research design in which multicriteria decision making technique involving experts' opinoin (Najmi, Kanapathy & Aziz, 2019) will be helpful in exploring the phenomena further.

## REFERENCES

- Abrams, L. S., & Stormer, C. C. (2002). Sociocultural variations in the body image perceptions of urban adolescent females. *Journal of Youth and Adolescence*, 31(6), 443-450.
- Ahadzadeh, A. S., Rafik-Galea, S., Alavi, M., & Amini, M. (2018). Relationship between body mass index, body image, and fear of negative evaluation: Moderating role of self-esteem. *Health Psychol Open*, 5 (1),

- Anderson-Fye, E. P. (2012). Anthropological perspectives on physical appearance and body image. *Encyclopedia of body image and human appearance*, 1, 15-22.
- Arundell, L., Sudholz, B., Teychenne, M., Salmon, J., Hayward, B., Healy, G. N., & Timperio, A. (2018). The impact of activity based working (ABW) on workplace activity, eating behaviours, productivity, and satisfaction. *International journal of environmental research and public health*, 15(5), 1005.
- Atlantis, E., Barnes, E. H., & Singh, M. F. (2006). Efficacy of exercise for treating overweight in children and adolescents: a systematic review. *International journal of obesity*, 30(7), 1027-1040.
- Avalos, L., Tylka, T. L., & Wood-Barcalow, N. (2005). The body appreciation scale: Development and psychometric evaluation. *Body Image*, 2(3), 285-297.
- Baecke, J. A., Burema, J., & Frijters, J. E. (1982). A short questionnaire for the measurement of habitual physical activity in epidemiological studies. *The American journal of clinical nutrition*, 36 (5), 936-942.
- Bandura, A. (2004). Health promotion by social cognitive means. *Health education & behavior*, 31(2), 143-164.
- Bassett, R. L., & Ginis, K. M. (2009). More than looking good: impact on quality of life moderates the relationship between functional body image and physical activity in men with SCI. *Spinal cord*, 47(3), 252-256.
- Brudzynski, L. R., & Ebben, W. (2010). Body image as a motivator and barrier to exercise participation. *International Journal of Exercise Science*, 3(1), 3.
- Burns, K. J., & Froman, R. D. (1997). Refinement of the Habitual Physical Activity Index for use with American adults. *Journal of nursing measurement*, 5(1), 17-32.
- Burrowes, N. (2013). Body image—a rapid evidence assessment of the literature. *A project on behalf of the Government Equalities Office*.
- Byrd, S. L. (2007). *Self-esteem, body image satisfaction, and self-perception level differences in relation to body mass index among African American and Caucasian females*. Stephen F. Austin State University.
- Calogero, R. M., & Pina, A. (2011). Body guilt: Preliminary evidence for a further subjective experience of self-objectification. *Psychology of Women Quarterly*, 35(3), 428-440.
- Carter-Edwards, L., Bastian, L. A., Revels, J., Durham, H., Lokhnygina, Y., Amamoo, M. A., & Ostbye, T. (2010). Body image and body satisfaction differ by race in overweight postpartum mothers. *Journal of Women's Health*, 19(2), 305-311.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). New York: Academic Press

- Cook-Cottone, C. P. (2015). Incorporating positive body image into the treatment of eating disorders: A model for attunement and mindful self-care. *Body image, 14*, 158-167.
- Cook-Cottone, C., & Phelps, L. (2003). Body dissatisfaction in college women: Identification of risk and protective factors to guide college counseling practices. *Journal of College Counseling, 6* (1), 80-89.
- Davis, L. L., Fowler, S. A., Best, L. A., & Both, L. E. (2020). The role of body image in the prediction of life satisfaction and flourishing in men and women. *Journal of Happiness Studies, 21*(2), 505-524.
- De Rezende, L. F. M., Lopes, M. R., Rey-López, J. P., Matsudo, V. K. R., & do Carmo Luiz, O. (2014). Sedentary behavior and health outcomes: an overview of systematic reviews. *PLoS One, 9* (8), e105620.
- del Mar Bibiloni, M., Coll, J. L., Pich, J., Pons, A., & Tur, J. A. (2017). Body image satisfaction and weight concerns among a Mediterranean adult population. *BMC Public Health, 17*(1), 1-11.
- Deshmukh, V. R., & Kulkarni, A. A. (2017). Body Image and its Relation with Body Mass Index among Indian Adolescents. *Indian Pediatr, 54*(12), 1025-1028. doi:10.1007/s13312-017-1205-0
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The life satisfaction scale. *Journal of personality Assessment, 49*(1), 71-75.
- Dotse, J., & Asumeng, M. (2015). Relationship between body image satisfaction and psychological well-being: The impact of Africentric values. *Journal of Social Science Studies, 2*(1), 320-342.
- Eren, K. A., & Aşıcı, A. A. (2017). The determinants of happiness in Turkey: Evidence from city-level data. *Journal of Happiness Studies, 18* (3), 647-669.
- Ferreiro, F., Seoane, G., & Senra, C. (2014). Toward understanding the role of body dissatisfaction in the gender differences in depressive symptoms and disordered eating: a longitudinal study during adolescence. *Journal of adolescence, 37*(1), 73-84.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How to Design and Evaluate Research in Education*, 8th.
- Fraguela Vale, R., Varela Garrote, L., & Sanz Arazuri, E. (2016). Ocio deportivo, imagen corporal y satisfacción vital en jóvenes españoles. *Revista de psicología del deporte, 25* (4), 0033-0038.
- Frisén, A., and Holmqvist, K. (2010): What characterizes early adolescents with a positive body image? A qualitative investigation of Swedish girls and boys. *Body Image, 7*, 205-212.
- Fronstin, P., & Werntz, R. (2004). The 'Business Case' for Investing in Employee Health: A Review of the Literature and Employer Self-Assessments. *EBRI issue brief* (267).

- Gillen, M. M. (2015). Associations between positive body image and indicators of men's and women's mental and physical health. *Body Image, 13*, 67-74.
- Gilman, R. (2001). The relationship between life satisfaction, social interest, and frequency of extracurricular activities among adolescent students. *Journal of youth and adolescence, 30*(6), 749-767.
- Gilman, R., & Huebner, E. S. (2006). Characteristics of adolescents who report very high life satisfaction. *Journal of youth and adolescence, 35*(3), 293-301.
- Gleeson-Kreig, J. (2008). Social support and physical activity in type 2 diabetes a social-ecologic approach. *The Diabetes Educator, 34*(6), 1037-1044.
- Green, A. (2018). *Body Image and Participant Characteristics in Emerging Adults*. (Ph.D.). University of Northern Colorado, Ann Arbor. ProQuest Dissertations & Theses Global database. (10845777)
- Green, M. A., Scott, N. A., Cross, S. E., Liao, K. Y. H., Hallengren, J. J., Davids, C. M., ... & Jepsen, A. J. (2009). Eating disorder behaviors and depression: a minimal relationship beyond social comparison, self-esteem, and body dissatisfaction. *Journal of clinical psychology, 65*(9), 989-999.
- Gyurcsik, N. C., Spink, K. S., Bray, S. R., Chad, K., & Kwan, M. (2006). An ecologically based examination of barriers to physical activity in students from grade seven through first-year university. *Journal of adolescent Health, 38* (6), 704-711.
- Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage Publications.
- Healy, G. N., Winkler, E. A., Owen, N., Anuradha, S., & Dunstan, D. W. (2015). Replacing sitting time with standing or stepping: associations with cardio-metabolic risk biomarkers. *European heart journal, 36* (39), 2643-2649.
- Henn, A. T., Taube, C. O., Vocks, S., & Hartmann, A. S. (2019). Body image as well as eating disorder and body dysmorphic disorder symptoms in heterosexual, homosexual, and bisexual women. *Frontiers in psychiatry, 10*, 531.
- Homan, K. J., & Tylka, T. L. (2014). Appearance-based exercise motivation moderates the relationship between exercise frequency and positive body image. *Body image, 11*(2), 101-108.
- Hrafnkelsdottir, S. M., Brychta, R. J., Rognvaldsdottir, V., Gestsdottir, S., Chen, K. Y., Johannsson, E., ... & Arngrimsson, S. A. (2018). Less screen time and more frequent vigorous physical activity is associated with lower risk of reporting negative mental health symptoms among Icelandic adolescents. *PLoS one, 13*(4), e0196286.
- Ingledeu, D. K., & Markland, D. (2008). The role of motives in exercise participation. *Psychology and health, 23*(7), 807-828.
- Joo, L. C., Ab Hamid, S.-A., Yaacob, N. M., Hairon, S. M., Cheng, K. Y., & Bujang, M. A. (2018). Validation of Malay Version of Body Self-Image Questionnaire-Short

Form among Malaysian Young Adults. *The Malaysian journal of medical sciences: MJMS*, 25 (4), 131.

Kahn, E. B., Ramsey, L. T., Brownson, R. C., Heath, G. W., Howze, E. H., Powell, K. E., Corso, P. (2002). The effectiveness of interventions to increase physical activity: a systematic review. *American journal of preventive medicine*, 22 (4), 73-107.

Kang, H. J., Lee, J. M., Lee, S. M., Yang, H. K., Kim, R. H., Nam, J. G., . . . Han, J. K. (2019). Value of virtual monochromatic spectral image of dual-layer spectral detector CT with noise reduction algorithm for image quality improvement in obese simulated body phantom. *BMC Med Imaging*, 19(1), 76. doi:10.1186/s12880-019-0367-8

Kawel-Boehm, N., Maceira, A., Valsangiacomo-Buechel, E. R., Vogel-Claussen, J., Turkbey, E. B., Williams, R., Bluemke, D. A. (2015). Normal values for cardiovascular magnetic resonance in adults and children. *Journal of Cardiovascular Magnetic Resonance*, 17 (1), 1-33.

Kerner, C., Haerens, L., & Kirk, D. (2018): Understanding body image in physical education: Current knowledge and future directions. *European Physical Education Review*, 24(2), 255-265. Kessler, R. C., Berglund, P. A., Chiu,

Keshk, M. M., Fahim, H. I., Hassan, A. M., Boulos, D., & Sector, P. (2019). Body image perception and self-esteem among university students in Cairo. *Egyptian Journal of Community Medicine*, 37(1), 82-96.

Kilpela, L. S., Becker, C. B., Wesley, N., & Stewart, T. (2015). Body image in adult women: Moving beyond the younger years. *Advances in Eating Disorders: Theory, Research and Practice*, 3(2), 144-164.

Kumar, M. (2014). Study of life satisfaction among primary, middle and secondary schools teachers of district Kathua. *International Journal of Research*, 1(5), 492-498.

Lee, C. (2011). *Self-efficacy and physical activity in older adults*. Ball State University.

Lemes, D. C. M., Câmara, S. G., Alves, G. G., & Aerts, D. (2018). Body image satisfaction and subjective wellbeing among ninth-grade students attending state schools in Canoas, Brazil. *Ciencia & saude coletiva*, 23, 4289-4298.

LePage, M. L., and Crowther, J. H. (2010). The effects of exercise on body satisfaction and affect. *Body image*, 7 (2): 124-130.

Leung, D., Law, R., Van Hoof, H., & Buhalis, D. (2013). Social media in tourism and hospitality: A literature review. *Journal of travel & tourism marketing*, 30(1-2), 3-22.

Madanat, H., Hawks, S. R., & Angeles, H. N. (2011). Obesity and body size preferences of Jordanian women. *Health Education & Behavior*, 38(1), 91-98.

Magnus, K., Diener, E., Fujita, F., & Pavot, W. (1993). Extraversion and neuroticism as predictors of objective life events: a longitudinal analysis. *Journal of personality and social psychology*, 65 (5), 1046.

- Maguran, B. (2018). The association between family life satisfaction and body appreciation for children. *Agora Psycho-Pragmatica*, 12 (2), 186-195.
- Maher, J. P., Doerksen, S. E., Elavsky, S., Hyde, A. L., Pincus, A. L., Ram, N., & Conroy, D. E. (2013). A daily analysis of physical activity and satisfaction with life in emerging adults. *Health Psychol*, 32 (6), 647-656. doi:10.1037/a0030129
- McKinley, N. M. (2006). The developmental and cultural contexts of objectified body consciousness: a longitudinal analysis of two cohorts of women. *Developmental psychology*, 42 (4), 679.
- Mehmood, S. M., & Najmi, A. (2017). Understanding the impact of service convenience on customer satisfaction in home delivery: evidence from Pakistan. *International Journal of Electronic Customer Relationship Management*, 11(1), 23-43.
- Mériaux, B. G., Berg, M., & Hellström, A. L. J. S. j. o. c. s. (2010). Everyday experiences of life, body and well-being in children with overweight. 24(1), 14-23.
- Miha Kaucic, B., Filej, B., Toplak Perovic, B., & Ovsenic, M. (2017). Spiritual Factor as an Important Element of Life Satisfaction in Old Age. *Informatologia*, 50(3/4), II-III.
- Molina-García, J., Castillo, I., Queralt, A., & Alvarez, O. (2019). Precursors of body dissatisfaction and its implication for psychological well-being in young adults. *Universitas Psychologica*, 18(2), 1-11.
- More, K. R., Phillips, L. A., & Colman, M. H. E. (2019). Evaluating the potential roles of body dissatisfaction in exercise avoidance. *Body image*, 28, 110-114.
- Musaiger, A. O., & Al-Mannai, M. (2014). Association between exposure to media and body weight concern among female university students in five Arab countries: a preliminary cross-cultural study. *Journal of biosocial science*, 46(2), 240-247.
- Najmi, A., Kanapathy, K., & Aziz, A. A. (2019). Prioritising factors influencing consumers' reversing intention of e-waste using analytic hierarchy process. *International Journal of Electronic Customer Relationship Management*, 12(1), 58-74.
- Najmi, A., Kanapathy, K., & Aziz, A. A. (2021a). Understanding consumer participation in managing ICT waste: Findings from two-staged Structural Equation Modeling–Artificial Neural Network approach. *Environmental Science and Pollution Research*, 28(12), 14782-14796.
- Najmi, A., Kanapathy, K., & Aziz, A. A. (2021b). Exploring consumer participation in environment management: Findings from two-staged structural equation modelling-artificial neural network approach. *Corporate Social Responsibility and Environmental Management*, 28(1), 184-195.
- O'Connor, K. E. (2008). "You choose to care": Teachers, emotions and professional identity. *Teaching and teacher education*, 24 (1), 117-126.
- Pavot, W., & Diener, E. (1993). The affective and cognitive context of self-reported measures of subjective well-being. *Social indicators research*, 28(1), 1-20.

- Pengpid, S., & Peltzer, K. (2019). Sedentary behaviour, physical activity and life satisfaction, happiness and perceived health status in university students from 24 countries. *International journal of environmental research and public health*, 16(12), 2084.
- Piercy, K. L., Troiano, R. P., Ballard, R. M., Carlson, S. A., Fulton, J. E., Galuska, D. A.,... Olson, R. D. (2018). The physical activity guidelines for Americans. *JAMA*, 320 (19), 2020-2028.
- Pisetsky, E. M., Crow, S. J., and Peterson, C. B. (2017): An empirical test of the interpersonal theory of suicide in a heterogeneous eating disorder sample. *International journal of eating disorders*, 50 (2), 162-165.
- Pop, C. L. (2017). Association between Body Mass Index and Self Body Image Perception. *Iran J Public Health*, 46(12), 1744-1745. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/29259953>
- Ramsey, N. M. (2018). Exploring Positive Body Image and Motives for Exercise as Predictors of Intuitive Exercise and Exercise Behavior among Women. (M.S.). The University of Wisconsin - Milwaukee, Ann Arbor. Retrieved from <http://ezproxy.um.edu.my:2048/login?url=https://www.proquest.com/disserta/495>
- Reigal, R., Videra, A., & Gil, J. (2014). Physical Exercise, General Self-Efficacy and Life Satisfaction in Adolescence. *Revista Internacional de Medicina y Ciencias de la Actividad Física y del Deporte*, 14 (55).
- Rodgers, R. F., Ganchou, C., Franko, D. L., & Chabrol, H. (2012). Drive for muscularity and disordered eating among French adolescent boys: A sociocultural model. *Body Image*, 9(3), 318-323.
- Rodgers, V., Neville, S., & La Grow, S. (2017). Health, functional ability and life satisfaction among older people 65 years and over: a cross-sectional study. *Contemp Nurse*, 53 (3), 284-292. doi:10.1080/10376178.2017.1319286
- Roth, M. (2007). Review of urban climate research in (sub) tropical regions. *International Journal of Climatology: A Journal of the Royal Meteorological Society*, 27 (14), 1859-1873.
- Rzeszutek, M., Podkowa, K., Pięta, M., Pankowski, D., & Cyran-Stemplewska, S. (2021). Comparative study of life satisfaction among patients with psoriasis versus healthy comparison group: the explanatory role of body image and resource profiles. *Quality of Life Research*, 30 (1), 181-191.
- Sari, H., & Yetkiner, A. (2020). Relationships between Job Satisfaction, Motivation and Life Satisfaction in Teachers: A Structural Equation Modeling Study. *International Journal of Progressive Education*, 16 (3).
- Schilder, P. (1936). The attitude of murderers towards death. *The Journal of Abnormal and Social Psychology*, 31 (3), 348.

- Schooler, D., Lowry, L. S., & Biesen, J. N. (2012). Body image among Hispanics/Latinos. In *Encyclopedia of body image and human appearance* (pp. 108-113). Academic Press.
- Shaban, L. H., Vaccaro, J. A., Sukhram, S. D., & Huffman, F. G. (2016). Perceived body image, eating behavior, and sedentary activities and body mass index categories in Kuwaiti female adolescents. *International Journal of Pediatrics*, 2016.
- Tiggemann, M., Slater, A., Bury, B., Hawkins, K., & Firth, B. (2013). Disclaimer labels on fashion magazine advertisements: Effects on social comparison and body dissatisfaction. *Body image*, 10(1), 45-53.
- Trekels, J., & Eggermont, S. (2017). Beauty is Good: The Appearance Culture, the Internalization of Appearance Ideals, and Dysfunctional Appearance Beliefs Among Tweens. *Human Communication*
- Uchmanowicz, I., Manulik, S., Lomper, K., Rozensztrauch, A., Zborowska, A., Kolasińska, J., & Rosińczuk, J. (2019). Life satisfaction, job satisfaction, life orientation and occupational burnout among nurses and midwives in medical institutions in Poland: a cross-sectional study. *BMJ Open*, 9 (1).
- Vilhjalmsson, R., Kristjansdottir, G., & Ward, D. S. (2012). Bodily deviations and body image in adolescence. *Youth & Society*, 44(3), 366-384.
- Ward, A. K. (2011). *Body image and body mass index: An investigation of preadolescent low-income, urban ethnic minority girls*. Loyola University Chicago,
- Warren, C. S. (2014). Body area dissatisfaction in white, black and Latina female college students in the USA: an examination of racially salient appearance areas and ethnic identity. *Ethnic and Racial Studies*, 37(3), 537-556.
- Webster, J., & Tiggemann, M. (2003). The relationship between women's body satisfaction and self-image across the life span: The role of cognitive control. *The journal of genetic psychology*, 164(2), 241-252.
- Wilhelm, L., Hartmann, A. S., Becker, J. C., Kisi, M., Waldorf, M., & Vocks, S. (2019). Thin media images decrease women's body satisfaction: comparisons between veiled muslim women, christian women and atheist women regarding trait and state body image. *Frontiers in psychology*, 10, 1074.
- Wood-Barcalow, N. L., Tylka, T. L., and Augustus-Horvath, C. L. (2010): "But I like my body": Positive body image characteristics and a holistic model for young-adult women. *Body Image*, 7, 106-116.
- Yager, Z., & O'Dea, J. (2009). Body image, dieting and disordered eating and activity practices among teacher trainees: implications for school-based health education and obesity prevention programs. *Health education research*, 24 (3), 472-482.

Yahia, N., El-Ghazale, H., Achkar, A., and Rizk, S. (2011). Dieting practices and body image perception among Lebanese university students. *Asia Pacific journal of clinical nutrition*, 20 (1): 21.

Zayed, K. N., Ahmed, M. D., Van Niekerk, R. L., & Ho, W. K. Y. (2018). The mediating role of exercise behaviour on satisfaction with life, mental well-being and BMI among university employees. *Cogent Psychology*, 5(1), 1430716.