

Attitude of Physical Therapy Students Towards Fat People

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Abstract: *Weight management is becoming more widely recognized as a part of physiotherapists' scope of practice in order to enhance patient outcomes by reducing joint load or alleviating chronic pain, for example. Interactions with patients about weight, on the other hand, might lead to a patient's perception of a negative judgment from health professionals, which can lead to poorer health outcomes. The current study aimed to evaluate the attitude of physical therapy students towards fat people. A cross-sectional study design was used, 377 questionnaires were filled out by undergraduate DPT students from different universities in Karachi. The sample size was 377. According to the data majority of the participants had a positive attitude towards fat people while a few participants had weight-based stereotypes. This impression should be recognized by physical therapy students since it may lead to lower patient outcomes and avoidance of physiotherapy consultations.*

Key Words: Weight Management, Practice, Health, Fat, Patient

Introduction

Physical therapy is a healthcare profession that helps people recover, maintain, and maximize their strength, function, exercise, and overall health. (Trask, C., & Bath, B. 2019) Physiotherapists are movement experts who improve the quality of life through prescribed exercise, physical care, and patient education (Stoner, T. 2022). In order to increase mobility, lessen or control pain, restore function, and avoid impairment, a physical therapist will first examine patients before creating a treatment plan (EUROPE, O. I. 2016) Weight: An individual's mass or degree of heaviness. It is expressed in pounds or kilograms (Groome, M., & Mowat, C. 2018). Body mass index (BMI), also referred to as the Quetelet index, serves as a proxy for a person's nutritional status in adults. The ratio of a person's height in square metres to their weight in kilos is used to represent it. Your body's composition is defined as the proportion of fat to lean tissue (muscles, bones, body water, organs, etc). Because it is so helpful for assessing health, the body fat percentage is the one that draws the most attention from the public. In order to determine the body's general composition, especially when giving health advice, one must determine their body fat percentage because muscular tissue is thicker

than fat tissue. The body's overall functioning, including digestion and energy metabolism, depends on fats and lipids. Fat provides the body with energy, and it also controls body temperature and acts as a source of reserve energy (Sanchez-Romero, 2019). Lipids and fats play a role in the synthesis and regulation of several hormones, particularly steroid hormones. They are essential for regulating the body's water balance as well as sexuality, reproduction, and the growth of the sex organs. Obesity is the term for an unnatural or excessive accumulation of fat that is harmful to one's health. (Parrino, C. 2019). Excessive body fat is a component of the severe condition known as obesity. It is a medical disorder that raises the chance of multiple conditions and maladies, including cardiovascular disease, diabetes, hypertension, and various cancers. (Leyco, T., & Ponce, A., 2021). Food and activity: People will gain weight when they consume more calories than they expend via activity. This imbalance is the main factor contributing to weight gain. The environment has an impact on our capacity to keep to a healthy weight. Because the area lacks easily accessible parks, walkways, and gyms, for example, it is difficult for individuals to exercise. A large food portion will increase calorie consumption, necessitating greater exercise in order to keep a healthy body weight. Obesity may be influenced by

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heredity, according to a genetic study. If somebody has a condition like Prader-Willi disease, their genes may be the direct cause of their overweight. Also influenced by the gene is the propensity to gain weight. Medication and health: Being overweight and obese can be brought on by certain hormonal issues, such as hypothyroidism, Cushing's disease, and polycystic ovarian syndrome (Robbins, M. [2020](#)). Moreover, several corticosteroids, antidepressants, and epileptic drugs can also result in weight gain. When bored, agitated, upset, or stressed, some people eat more than normal. Stress and a lack of sleep are two other emotional triggers. The study additionally showed that people who receive less sleep are more likely to be overweight or obese. This is mostly caused by the hormones released during sleep, which help to control your body's metabolism and appetite. (Murli, S. [2020](#)).

Six different forms of obesity exist. The most prevalent type of obesity worldwide is related to food. Due to a high calorie and sugar intake. Nervous system-related thickness: This kind of thickness is brought on by stress, anxiety, and depression. Those with a "nervous system" frequently have a sweet tooth (Christie, J., & ND, C. [2019](#)). The most crucial thing is to manage anxiety with stress-relieving physical activities. Gluten diet: Often found in adolescent girls, women going through menopause, and people who have hormonal imbalances. Avoiding prolonged sitting, using tobacco products, drinking alcohol, and starting activities are especially crucial. Individuals with genetic metabolic obesity tend to store fat in the middle of their bodies, where their stomachs are frequently bloated like balloons. Those who drink alcohol and have breathing difficulties are impacted by this thickness. Obesity with venous circulation is typically inherited genetically. It occurs in persons with swollen legs and during pregnancy. More physical activity, such as frequent exercise, running, or stair climbing, is the answer to this. Obesity caused by inactivity: This type of obesity affects body areas that were previously very active in athletes. The secret to losing these sorts of fats is to walk more and avoid going for extended periods without eating. By doing so, we can increase metabolism and hasten the burning of fat (Salve, A. R., & Rahul, S. [2020](#)). Obesity health risks: Obesity and type 2 non-insulin-dependent diabetes are closely associated. Compared to those who have not gained weight, those who have a doubled risk of developing type 2 diabetes. Up to 80% of patients find they no longer need diabetic meds or experience symptoms after decreasing weight. Those who are obese but do not yet have diabetes will see a considerable reduction in their chance of developing the disease (Rich, E. [2020](#)). Obesity raises the chance of developing heart disease, which increases the risk of sudden death, congestive heart failure, angina or chest discomfort, irregular heart rhythms, and heart attacks.

Hypertension is at risk due to obesity (hypertension). Even without prescription drugs, shedding pounds frequently lowers blood pressure. Since their fat tissue alters the quantities of estrogen normally found in the body, many highly obese women are unable to become pregnant. The ovaries no longer release eggs as a result. A person's chances of becoming pregnant can considerably increase after losing weight. Pregnant women who are obese run a

higher chance of dying as well as their unborn children. Obese pregnant women are more prone to experience labour and delivery issues as well as gestational diabetes. Obesity-related complications such as sleep apnea, which interrupts breathing while sleeping, are very prevalent and significant. It can harm the heart and lungs and, in some cases, result in sudden death if untreated. Uterine cancer, colon cancer, gallbladder cancer, prostate cancer, kidney cancer, and breast cancer are among the cancers that are more likely to develop in people who are obese. The risk of arthritis rises by 9–13% for every 2 pounds you acquire in weight. With gastroesophageal reflux disease, which is sometimes referred to as severe heartburn or acid indigestion, the stomach's contents flow back into the oesophagus. That has something to do with the burning in your chest. The oesophagus can become inflamed and harmed over time and on rare occasions, the lungs and vocal cords as well. According to estimates, 25 million people suffer from GERD for a variety of causes.

The majority of patients respond well to non-surgical interventions, such as dietary changes, weight loss, and antacid medication; nonetheless, it can occasionally be challenging to obtain long-lasting symptom control. When medicine and lifestyle changes are ineffective, a minimally invasive procedure called fundoplication can deliver outstanding outcomes.

Urinary incontinence, leg vein issues, low back discomfort, rheumatoid arthritis, and disc disease-related impairment are among the additional side effects of excessive obesity. With weight loss, other issues including joint discomfort and hypoventilation, or shortness of breath, greatly improve or go away (Foster, G. D. [2020](#))

Materials and Method

This cross-sectional descriptive research. It was carried out in various physical therapy facilities. Following the clearance of the summary, the study was conducted for 6 months. The study's sample size was 377. Purposive sampling without probability was used. Other healthcare students and first and second-year students were omitted, but third, to the fifth year male and female PT students were included. A questionnaire was used to gather the information. The survey is split into two sections: the demographic section and the one on attitudes toward obesity (22). The explicit anti-fat attitude (AFA) is comprised of 13 comments on the weight that Crandall (23), on three domains, established. (1) "Dislike" prejudice towards obese people 7 items; for example, "I do not really like overweight people that much". (2) "Fear of gaining weight" prejudice towards one's own fears of gaining weight 3 items and 3 fortitude prejudice towards one's viewpoint that one can control their weight (3 items; for example, "Most of the time, obese folks are there because of their own fault") (23). Likert scale ratings go from 0 to 9, with 0 denoting extremely strong disagreement and 9 denoting very strong agreement. Scores for each of the three domains and the AFA's overall score were computed. Scores greater than zero suggests stigmatization of weight, and higher scores reflect more extreme anti-fat beliefs (23). Also, it was claimed that the three questionnaire elements

were strong. Internal consistency (Fear of gaining weight = 0.66-0.80, fear of fat = 0.79-0.88, and dislike of portion = 0.84-0.86) (23). Physical therapy students who met the inclusion requirements as well as licensed physical therapists were given the questionnaire. The signed informed consent form. Every participant completed the survey and gave it to the researcher. SPSS 24 was used to analyze the data. For a quantitative variable, mean and SD were determined. For qualitative variables, frequency and percentages were determined. The review committee of the organization approved the request. The secrecy was preserved. Participants signed an informed consent form before completing the questionnaire. Data were codified. The budget for this study was roughly 10,000 Pakistani rupees. In order to acquire primary data, the researcher devised a useful questionnaire. Five response options were provided in the survey's design, along with a Likert-type scale. The replies ranged from Strongly Agree (SA), Agree (A), Neither Agree (NA), Disagree (DA), to Strongly Disagree (SDA).

Results

When we asked the participants if they do not like big people at all. Out of 377 (100%) participants. 152 (40.3) strongly disagree 98 (26.0) disagree 81 (21.5) neither agree nor disagree 33 (8.8) agree and 13 (3.4) strongly agree. (Table IV-4)

When participants were asked if they don't have many friends that are fat out of 377 (100%) participants. 91 (24.1%) were strongly agree 109 (28.9%) were disagree 58 (15.4%) neither agree nor disagree 99 (26.3) agreed and 20 (5.3) were strongly agree. (Table IV-5)

The participants were questioned that Those who are overweight often come off as a little unreliable in opinion Out of 377 (100%) participants. 187 (49.6%) strongly disagree 100 (26.5%) disagree 62 (16.4%) neither agree nor disagree 27 (7.2%) agree and 1 (0.3%) strongly agree. (Table IV-6)

Participants responded when asked Although some obese people are undoubtedly intelligent, I believe that on the whole, they tend to be less intelligent than those of average weight out of 377 (100%) participants. 110 (29.2%) strongly disagree 78 (20.7%) disagree 100 (26.5%) neither agree nor disagree 82 (21.8%) agree and 7 (1.9%) strongly agree. (Table IV-7)

Participants responded that they find it difficult to take overweight people seriously when asked out of 377 (100%) participants. 154(40.8%) strongly disagree 121 (32.1) disagree 68(18.0%) neither agree nor disagree 30 (8.0%) agree and 4 (1.1%) strongly agree. (Table IV-8)

When participants were asked do not like it when folks are fat out of 377 (100%) participants. 177 (46.9%) strongly disagree 114 (30.2%) disagree 56 (14.9%) neither agree nor disagree 22 (5.8%) agree and 8 (2.1%) strongly agree. (Table IV-9)

Participants responded when asked they a big individual might not be someone they would choose to hire if they were the employer out of 377 (100%) participants. 185 (49.1%) strongly disagree 101 (26.8%) disagree 63 (16.7%) neither agree nor disagree 23 (6.1%) agree and 5 (1.3%) strongly agree. (Table IV-10)

When participants were asked what they whenever to put on weight or feel ashamed of themselves out of 377 (100%) participants 110 (29.2%) strongly disagreed 81 (21.5%) disagreed 79 (21.0%) neither agree nor disagree 64 (17.0) agreed and 43 (11.4%) strongly agreed (Table IV-11)

When questioned, participants said that one of the worst things that might happen to them was gaining 25 pounds out of 377 (100%) participants. 97 (25.7%) strongly disagreed 77 (20.4%) were disagree 88 (23.3%) neither agreed nor disagree 74 (19.6%) were agree and 41 (10.9%) were strongly agree. (Table IV-12)

When participants were asked if they fear gaining weight out of 377 (100%) participants. 70 (18.6%) strongly disagree 57 (15.1%) disagree 74 (19.6%) neither agree nor disagree 108 (28.6%) agree and 68 (18.0%) strongly agree. (Table IV-13)

Participants responded when asked overweight individuals may be able to drop at least a portion of their weight by engaging in some light exercise out of 377 (100%) participants. 36 (9.5%) strongly agreed 30 (8.0%) were disagree 66 (17.5%) neither agreed nor disagree 166 (44.0%) were agree and 79 (21.0%) were strongly agree. (Table IV-14)

Participants responded when asked some people gain weight because they lack self-control of 377 (100%) participants, 78 (20.7%) were strongly agree 70 (18.6%) were disagree 94 (24.9%) neither agree nor disagree 106 (28.1%) were agree and 29 (7.7%) were strongly agree. (Table IV-15)

When we asked participants that most of the time, obese folks are there because of their own fault out of 377 (100%) participants. 62 (16.4%) were strongly agree 80 (21.2%) were disagree 118 (31.3%) neither agreed nor disagree 84 (22.3%) were agree and 33(8.8%) were strongly agree. (Table IV-16)

Table 1

Statistics		
Age of participants		
	Missing	0
N	Valid	377
Std. Deviation		1.81211
Mean		21.3103
Maximum		29.01
Minimum		17.01

Table 2

The Participant's Gender					
		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Male	84	22.3	22.3	22.3
	Female	293	77.7	77.7	100.0
	Total	377	100.0	100.0	

Table 3

The Year-wise of Study					
		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	First-year	74	18.9	18.9	18.9
	Second year	76	20.9	20.9	41.8
	Third year	75	19.9	19.9	59.7
	Fourth-year	75	19.9	19.9	79.6
	First-year	74	18.9	18.9	18.9
	Second year	76	20.9	20.9	41.8

Table 4

I do not like Big People at All.					
		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	SDA	152	40.3	40.1	40.3
	DA	98	26.1	26.2	66.3
	NA	81	21.5	21.5	87.8
	A	33	8.8	8.8	96.6
	SA	13	3.4	3.4	100.0
	Total	377	100.0	100.0	

Table 5

There are not many Overweight Pals I have.					
		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	SDA	91	24.4	24.2	24.2
	DA	109	28.5	28.8	53.0
	NA	58	15.3	15.3	68.5
	A	99	26.4	26.4	94.6
	SA	20	5.3	5.3	100.0
	Total	377	100.0	100.0	

Table 6

Those who are Overweight often come Off as a Little Unreliable in my Opinion.					
		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	SDA	187	48.5	48.5	48.4
	3.00	1	.3	.3	49.9
	DA	100	26.5	26.5	76.4
	NA	62	17.8	17.8	93.8
	A	27	7.2	7.2	100.0
	Total	377	100.0	100.0	

Table 7

Although some Obese people are Undoubtedly Intelligent, I believe that on the whole, they Tend to be Less Intelligent than those of Average Weight.					
		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid					

SDA	110	28.3	28.3	29.9
DA	78	21.8	21.8	49.9
NA	100	25.4	25.4	76.4
A	82	22.7	22.7	98.1
SA	7	1.8	1.8	100.0
Total	377	100.0	100.0	

Table 8

I Find it Difficult to take Overweight people Seriously.					
		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	SDA	154	41.5	41.5	40.8
	DA	121	31.2	31.2	72.9
	NA	67	18.1	18.1	91.0
	A	31	8.1	8.1	98.9
	SA	4	1.1	1.1	100.0
	Total	377	100.0	100.0	

Table 9

I do not like it when Folks are Fat.					
		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	SDA	176	46.8	46.8	46.8
	DA	115	31.1	31.1	77.1
	NA	56	14.8	14.8	92.0
	A	22	5.8	5.8	97.9
	SA	7	1.5	1.5	100.0
	Total	377	100.0	100.0	

Table 10

A Big Individual Might not be Someone I would Choose to Hire if I were an Employer.					
		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	SDA	185	49.2	49.2	49.2
	DA	101	26.7	26.7	75.7
	NA	63	16.6	16.6	92.6
	A	23	6.2	6.2	98.6
	SA	5	1.3	1.3	100.0
	Total	377	100.0	100.0	

Table 11

Whenever I put on Weight, I Feel Ashamed of Myself.					
		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	SDA	110	29.3	29.3	29.3
	DA	81	21.4	21.4	50.4
	NA	79	21.0	21.0	71.5
	A	65	18.1	18.1	88.5
	SA	42	10.3	10.3	100.0
	Total	377	100.0	100.0	

Table 12

One of the Worst Scenarios for me would be if I put on 25 Pounds.					
		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	SDA	97	24.7	24.7	24.7
	DA	77	21.4	21.4	46.9
	NA	88	23.3	23.3	69.5

A	74	20.6	20.6	89.6
SA	41	09.9	09.9	100.0
Total	377	100.0	100.0	

Table 13

I Fear Gaining Weight.

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	SDA	71	17.5	17.5	18.6
	DA	57	15.1	15.1	33.7
	NA	73	20.2	20.2	53.3
	A	109	28.5	28.5	82.0
	SA	67	14.2	14.2	100.0
	Total	377	100.0	100.0	

Table 14

Overweight Individuals may be Able to Drop at Least a Portion of their Weight by Engaging in some Light Exercise.

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	SDA	36	9.2	9.2	9.2
	DA	30	8.9	8.9	17.9
	NA	66	17.4	17.4	35.0
	A	166	44.1	44.1	79.1
	SA	79	20.4	20.4	100.0
	Total	377	100.0	100.0	

Table 15

Some people Gain Weight because they Lack Self-control.

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	SDA	78	21.0	21.0	21.0
	DA	70	18.6	18.6	39.3
	NA	94	23.6	23.6	64.2
	A	106	26.4	26.4	92.3
	SA	29	10.4	10.4	100.0
	Total	377	100.0	100.0	

Table 16

Most of the Time, Obese Folks are there because of their Own Fault.

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	SDA	62	15.5	15.5	15.5
	DA	80	22.1	22.1	38.7
	NA	118	31.3	31.3	69.0
	A	85	23.3	23.3	91.2
	SA	32	7.8	7.8	100.0
	Total	377	100.0	100.0	

Discussion

In 2020, Elboim-Gbyzon M carried out a cross-sectional study. In this study, licensed physical therapists and PT students in Isra Uni, Karachi were compared and contrasted with regard to their stigmatizing ideas and attitudes. According to the FPS and AFA scores, physical therapists who are certified and in training exhibit average levels of weight stigmatization. Yet, physical therapist students are more convinced than licensed physical therapists that an individual cannot manage their weight. Whereas per current

study about the attitude of physical therapy students towards fat people. Students of both genders were polled, with 22.3% of male students and 77.7% of female students taking part in the data gathering. The mean age of the students from which I have taken the data is 22 years. antifat attitude scale was used in which many students had a positive attitude towards fat people. Whereas others have damaging weight-based prejudices, such as that obese people are untrained, stupid, lethargic, and lacking in self-control (Jones, L. 2018).

In 2016, Jenny Setchell and colleagues carried out a study. The purpose of this study was to investigate the potential therapeutic benefits of physical therapists' interactions with obese patients. According to the findings, physical therapists' opinions on weight may contribute to their unfavourable encounters with patients who are overweight. The results demonstrate the need for physical therapists to have a more nuanced awareness of the intricacy of weight-related reasons, the potential benefits and drawbacks of beginning weight-management talks with patients, how uncomfortable obese individuals might be in a physiotherapeutic setting, and more. (Riediger, N. [2021](#)). Whereas per a current study conducted by Janell L. Mensinger et al in 2018. Determining the processes that connect women's weight status to their healthcare avoidance was the goal of the study. Women (N = 313) were polled from a database of the US health panel. More internalized and externalized weight stigma, which were connected to greater body-related shame, were associated with higher BMI. Increased body-related guilt, which was connected to increased body-related shame, was also related to internalized weight stigma (Puhl, R. M., & Lessard, L. M. [\(2020\)](#)).

Masanori Kuroki conducted a study in 2017. This study looks into the link between body weight and the chance of

unemployed people believing they have been the victims of racial discrimination in the workplace. The association between body weight and reported racial discrimination among unemployed men does not appear to be related to race. Being black and obese increases the likelihood of experiencing racial prejudice for unemployed women (Idris, D. [2012](#)). Whereas per the current study, a study was conducted in 2019 by Afiqah Rajib et al. The study's goal is to find out how students feel about obesity stigmatization. Self-administered questionnaires were used to gather the data, and the results showed that 51 per cent of the students had negative opinions regarding fat. More health promotion and awareness of a balanced diet, as well as a better understanding of the stigmatization of obesity (Godfrey, K. M., [2020](#)).

Conclusion

Negative judgments were made by several physical therapy students. This impression should be recognized by physical therapy students since it may lead to lower patient outcomes and avoidance of physiotherapy consultations. The findings imply that altering the physical atmosphere of the clinic, portraying a grasp of complex determinants of weight, and employing collaborative, nonjudgmental communication techniques are all effective ways to combat weight stigma.

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