

**NEAR EAST UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES
CLINICAL PSYCHOLOGY
MASTER'S PROGRAMME**

MASTER'S THESIS

**COMPARISON OF BODY IMAGE, SELF-ESTEEM AND
PSYCHOPATHOLOGY OF INDIVIDUALS WHO ARE ENGAGED IN
BODY BUILDING SPORTS AND INTENSE BODY BUILDING SPORT**

EMİN BUĞRA YOLDAŞ

**NICOSIA
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DECLARATION

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I Emin Bayra Yoldas, hereby declare that this dissertation entitled
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ABSTRACT

Comparison Of Body Image, Self-Esteem And Psychopathology of Individuals Who Are Engaged in Body Building Sports And İntense Body Building Sport

Emin Buğra Yoldaş

June 2017, 56 Page

The goal of this study is to compare body perception, self-esteem and symptoms of psychopathology of people who spend too much time doing bodybuilding sports (BBS) and those who spend enough time doing BBS. Thirty-two male subjects living in the TRNC, who spent 5 per day and up time for body development, and 50 male subjects living in the TRNC who had less than 7 hours of VGS per week participated in the research. Demographic information form, Rosenberg self-esteem scale(RSES), Body image sclace(BIS, Symptom checklist(SCL-90-R) were applied as data collection tools. According to the results of the research,(considering the results of BIS) it was found that the body satisfaction of bodybuilding group was significantly higher than that of the intense bodybuilding group. When the SCL-90-R scale is examined; The subscales of obsessive compulsive, depression, anxiety, phobic anxiety and psychoticism were significantly higher in the severe bodybuilding group than in the bodybuilding group. When the RSES was examined, no significant difference was found between the bodybuilding group and the intense bodybuilding group. In clinical setting, when working with clients engaged in intense BBS, the clinician should be aware of high risk of accompanying psychological symptoms.

Keywords: *Body Image, Self-Esteem, Body Building Sport, Psychopathology.*

ÖZ

Vücut Geliştirme Sporunu Yapan Ve Ağır Vücut Geliştirme Sporunu Yapan

Bireylerin Benlik Saygısı, Beden Algısı Ve Psikopatolojik Belirtilerinin

Karşılaştırılması

Emin Buğra Yoldaş

Haziran 2017, 56 Sayfa

Bu çalışmanın amacı Vücut geliştirme sporuna (VGS) aşırı zaman ayıran ve normal düzeyde VGS sporu yapan bireylerin beden algısında, benlik değerinde ve psikopatoloji belirti sıklığında farklılığı karşılaştırmaktır. Araştırmaya KKTC’de yaşayan, vücut gelişimi için günde 5 saat ve yukarısında zaman ayıran 32 erkek birey ve KKTC’de yaşayan ve haftada 7 saatten az VGS yapan, 50 erkek birey katılmıştır. Veri toplama aracı olarak, demografik bilgi formu, Rosenberg benlik saygısı ölçeği (RBSÖ), Beden algısı ölçeği (BAÖ), Belirtili tarama listesi (SCL-90-R) uygulanmıştır. Araştırmanın sonucuna göre, BAÖ incelendiğinde vücut geliştirme grubunun beden memnuniyeti ağır vücut geliştirme grubuna göre anlamlı ölçüde yüksek bulunmuştur. SCL-90-R ölçeği incelendiğinde; Obsesif kompulsif, depresyon, kaygı, fobik kaygı ve psikotizm alt ölçekleri ağır vücut geliştirme grubunda vücut geliştirme grubuna göre anlamlı derecede daha yüksek bulunmuştur. Rosenberg benlik saygısı ölçeği incelendiğinde, vücut geliştirme grubu ve ağır vücut geliştirme grubu arasında anlamlı bir fark bulunamamıştır. Klinik ortamda, ağır VGS yapan danışanlarla çalışırken, klinisyene eşlik edebilecek psikolojik semptom riskinin farkında olmalıdır.

Anahtar Kelimeler: *Beden algısı, Benlik saygısı, Vücut geliştirme sporu, Psikopatoloji.*

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ABBREVIATIONS

BAÖ: Beden algısı ölçeği

BBG: Body building group

BBS: Body building sport

BIS: Body image scale

DSM: Diagnostic and statistical manual of mental disorder

RBSÖ: Rosenberg benlik saygısı ölçeği

RSES: Rosenberg self-esteem scale

SCL-90-R: Symptom Checklist

SPSS: Statistical Package Social Science

TRNC: Turkish Republic of North Cyprus

CHAPTER I

INTRODUCTION

1.1. Aim of the Study

In this study, the frequency of self-esteem, body image, and psychopathology are compared between people who do BBS on normal level and those who do BBS too much.

1.2. Significance of the Study

Studies in the literature show that sports activities have a positive effect on self-esteem and body perception. But there is limited research on the people who do BBS. BBS sport is thought to be a negative effect on the self-worth and body sensation, especially for advanced athletes, as opposed to other sporting activities.

1.3. Hypothesis and Research Questions

Individuals who devote too much time to BBS should have more psychopathological evidence of lower body sensation and self-esteem than BBS who do for less than 7 hours per week.

Is there any difference in the body image who devote excessive time to BBS sport and perform normal BBS sports?

Is there any difference in the self-esteem who devote excessive time to BBS sport and perform normal BBS sports?

Is there any difference in the psychopathology symptom frequency of individuals who devote excessive time to BBS sports and perform normal BBS sports?

1.4. Limitations of the Study

This study is limited to a total of 82 participants. They were adhered to the scales because no clinical interviews were made with the persons. The study is limited to participants engaged in BBS living in the TRNC.

1.5. Definitions

1.5.1. Body Building Sport

Body building sport (BBS) is based on body and body building. Brawniness, strength and durability are supported and aimed. Weight exercise is determined as an effective way to improve muscle-skeleton strength. BBS have been a part of GYM programmes (Grogan, 2008 p.106). Being eroticized and idealized of men bodies in modern society have caused increase of pressure on their bodies. In many societies, characteristics such as youth, beauty and charm can sometimes be regarded as the most important individual characteristics. Generally, the ideal male figure is perceived as muscular and structured. This situation is being made worse by. Written or oral media increase the desire of the society to resemble these ideal figures by making publications that support socially accepted, attractive and fit muscular male figures (Alphan, 2012). In this sense, to get idealised man body, more and more people lean to go to sport centres every day (Gill, Henwood and McLean, 2005 p.4). When we look at the people who do BBS in a normal level, it is thought that their self-esteem is high and body perception is normal. Some people spend too much time doing BBS and it causes forming mistaken body perception and self-esteem which is depended on merely their bodies. When we look at the history of sport, it is known that people had consumed particular food and drinks to become stronger and faster. When desire to reach man body which is precious for socio-culture is added to this

situation, some people spend more than enough time, practise too strict diets and try anabolic-androgenic steroids without caring the side-effect and doctor control (Bora, 2014 p.1).

1.5.2. BBS and Effects

It is determined and acknowledged by many big sport organisations that weight exercises is an effective method of growing muscle-skeleton strength. Weight exercises are used for health, growing fitness level and athletic performance, avoiding orthopaedic injuries and process of rehabilitation. According to these information, it can be said that sportive actions may affect people's life satisfaction in positive way by strengthening their self-esteem, self-belief and body satisfaction (Karaçam, 2015 p. 10).

BBS has also some identified side-effects. A body which responds to intense exercise tempo positively may lead to mostly unrealistic and different body perception which may become harmful for people by time (Olivardia et al., 2000).

1.5. 3. Self-esteem

Individualism is a wide concept which is related to how an individual identify himself and is studied on for years. It is again centre of interest in social and inter cultural psychology again in recent years (Henriques et al., 1999). The body sensation is closely related to how our body is shaped in our minds and how it is to ourselves. People who have high level of self-esteem are seen more creative, successful, healthy, self-reliant, and coherent in social environment and those who can express their own ideas easily (Sarwer et al., 1998).

Self-esteem has an important role in the field of sport. That means that BBS has an impact on the self-esteem as well. It is known that doing sport is related with progress of self in positive way and high level of self-esteem provide success in the field of sport. It is expected that people who have physically enough body image own

high level of concept of positive self. Exercise programmes lead to meaningful increase in the level of self-esteem. It is put forward that doing exercise, self-esteem and body image have an indirect relationship (Erşan et al., 2009).

Self-esteem is perceiving oneself skilful, important, successful and precious. It is situation of self –contentment without seeing lower or higher than being himself/herself. It is feeling of precious, positive and worth being loved and liked. It is a positive mood of providing to agree himself as what he is and trust on himself (Onat, 2015 p.2).

Rosenberg introduced self-esteem as an attitude to himself/herself in positive or negative way. While a person evaluating himself, if he has a positive attitude, it is accepted that his self-esteem is high; if he has a negative attitude, it is accepted that his self-esteem is low. People whose self-esteem is high have some positive features like confidence, goodness, eager to success and durability. People whose self-esteem is low have little confidence and are easy to give up, namely, they tend to grow negative psychological symptoms (Hamarta et al., 2009 p.28).

1.5.4. Body Perception

Individual is a kind of total structure including bodily, spiritual and social parts. Body image is evaluated as a highly complicated and multi-dimensional structure affects this totalitarian structure significantly (Özdemir et al., 2012). The body image is what kind of body we image mentally and it is directly related to self-esteem (Sarwer et al., 1998).

Body image is a form of what individual describe himself. In many societies, features like youth and beauty can be accepted that they are most important ones (Nazik et al., 2014). Being or not being satisfied with his body has an important role in relation with the out-world and inter-personal, growing positive or negative emotion, thought and behaviour towards himself. Body image is subjective and

individual perception of the body and is explained as one of the basic components of the personality.

The body image is identified as what emotions a person feels about his own body. In many societies, physical features like youth, beauty, attraction, being strong and healthy are seen as the most important ones for ideal body image (Tazegül, 2017). Body image is subjective and individual perception of the body and is explained as one of the basic components of the personality (Orsel et al., 2004).

Because people give importance to appearance, attraction, beauty and handsomeness, desire to be liked by everybody existed. That's why they have made effort a lot for the sake of looking more beautiful. The meaning of good appearance can change according to the time and society's culture (Tezcan, 2009).

It is seen that joining to the sport affects the body perception; people who do bodily activities take care of themselves much more; men take care of themselves much more especially when they are teenager; media often gives messages on this way. Sport is seen important to be fit, on the other hand, as a result of intense exercises there is an increase in muscle-mass (Karagöz et al., 2015).

Body perception is a concept covering an individual's perception about his physical appearance, attitudes and behaviours, experiences from the past to now. So it has an important role in terms of formation his self-esteem. Self-esteem which can be explained that an individual's satisfaction from himself has a basis component like body image. Negation in body image causes a decrease in self-esteem. While positive body perception is related to high self-esteem, negative body perception is related to low self-esteem (Karadağ et al., 2005).

In Diagnostic And Statistical Manual of Mental Disorders (The Diagnostic and Statistical Manual, fifth edition, DSM V) people who have body perception

disorder are defined as being busy with one or more deficiency or disorder in their appearance. They worry about their disorder which nobody can see or mind them. They do repeater actions because of the anxiety about their appearance.

1.5.5. Psychopathology and BBS

Psychopathology is a study of mental disorder, and, abnormal/discordant behavior. It is known that physical activities have impact on mental health, decrease on depression and anxiety, adapting the sleep, relief, increase on self-confidence and so on. After all, being too much eager to spend most of time doing physical exercises, doing too many exercises in spite of some obstacles are named as addiction of exercise. Addiction of exercise is repeating a behavior in a compulsive way. Doing exercise may have some purposes like losing weight or protecting weight besides doing too many exercises. From this point, it possible to see eating disorders especially like anorexia and bulimia nervosa (Vardar, 2012, p.52).

DSM V (The Diagnostic and Statistical Manual, fifth edition, DSM-V), muscle perception disorder is described as individual's dissatisfaction about his own body structure. Body perception disorder is a situation that affects body builders and is identified as desire to get more well-built body. Although those people have enough muscle, they have a pathologic belief that they don't have enough well-built body. They do too much sport, spend hours in sport center and practice absurd nutrition programme (Mosley, 2008).

Muscle impairment disorder was first used in 1997. There are two thoughts about the causes, though not always known. This problem is first thought to be a kind of obsessive-compulsive disorder (Murray et al., 2010). It is also considered another reason why the media is pressuring people to have the ideal body to be popular. Male individuals think that being successful, attractive, and strong is due to having a certain appearance and when this idea is increasingly conditioned, a distorted body

sensation of up to obsession can occur (Pickett et al., 2005). Muscle perception disorder was recently described by psychiatrists as the opposite of anorexia. Muscle development is so prevalent in some people's minds that they do not care about many important events; they continue to work despite their pain or broken bones and may even lose their jobs in order to fit their physical development programs. The most basic feature of muscle-perception disturbance is that they think that they do not have enough muscle however they try to get more and more muscle (Chung, 2001). Although getting into action and start an exercise program is perfect in terms of health and aesthetic benefits, there is a fine line between being insistent and being addicted to training (Vardar et al., 2012). Compulsive engagement in physical exercise many result with exercise addiction

The use of anabolic steroids and dietary supplementation is very common in patients with impaired muscle perception. While healthy body builders spend about 40 minutes caring their physical development, patients with muscle perception disorder spend 5 hours or more thinking that their bodies are not enough built. The individuals with muscle perception disorder do not participate situations such as social life and work life, birthdays, friends' meetings not to miss their training programs. Although men with muscle perception disorder experience side effects such as increased aggression, acne, breast enlargement, baldness, impotence and shrinking testicles, they can continue using anabolic steroid. Some individuals even inject syntol, a greasy solution into their body, for the sake of appearing more muscular. This oily solution is injected between the skin and muscle and they continue to use it, although it makes it difficult for individuals to maintain their daily life (Olivardia et al., 2000).

CHAPTER II

LITERATURE REVIEW

Researches show that there is a positive relationship between body image and sportive activities and this relationship provides people feeling better themselves and protecting their self-esteem. Today sport is believed to be a significant part of high quality of life. Especially, Bodybuilding sports and muscle strengthening exercises have begun to become more prevalent. Sport is also important for social life besides physical development. In the field of sport, self-esteem has a critical role. It is suggested that sport's contribution on positive self-development and that self-esteem is so high that it can make people successful (Erşan et al., 2009).

According to researches, exercise addiction is identified as doing exercise everyday, being reluctant to have a rest, doing exercise while being sick or injured and keeping exercising in spite of doctor's warnings. Individuals with sufficient body image from the physical side are expected to have a high level of positive self-concept (Erşan et al., 2009). Exercise programs lead to a significant increase in self-esteem level. It is suggested that exercise may have an indirect relationship between self-esteem and body image. People try many ways in order to get fit and look muscular and more elegant. It is seen that sportive activities have a positive impact on body perception (Thompson et al., 1997).

In a study, muscle dysmorphic disorder and negative body perception were examined, and it was determined that negative sensory body perception was present in individuals with muscle dysmorphic disorder again, in the same study, it was investigated whether there was a relationship between muscle sensory disturbance and narcissism,

and there was no relationship between narcissism and muscle sensory disturbance (Colis et al., 2016 p.213).

In a study by John and colleagues, they examined the prevalence of impairment of body image and muscle sensation. They found that 13% of male participants and 27.7% of female participants had a sense of physical impairment as a result of the survey study. The prevalence of muscle dysmorphia was found to be 12.7% for males and 4.2% for females. It has also been determined that individuals with impaired muscle sensation use more reinforcement products (John et al., 2016).

In a study, nutritional status between regular BBS and those with muscle sensory disturbance were analyzed. 141 participants aged 18-45 participated in the study. As a result of the study, it was observed that both groups consumed carbohydrate and fat. When protein consumption was examined, it was determined that individuals who did BBS consumed 1.5 grams of protein per kilogram and individuals with muscle sensory disturbances consumed more than 2.0 grams of protein per kilogram (Segura et al., 2015 p.324).

In one study, it was observed that six weeks of exercise improved children's self-esteem and continuity of self-concepts (İçten et al., 2006).

Recent researches show that the individual who are use drugs to maximize performance are young male population and supplements are used much more by patients with muscle dysmorphia (Lynch et al., 2003).

In a study conducted on two groups in which the effect of the sport on self-perception was examined, a certain training program was applied to the participants in the first group for six months once a week. The second group did not have such an activity. At the beginin of the study, general self-perceptions were measured in both groups. Begining there was no difference. Six months later, when tests are repeated,

significant increase in perceptions of people following a regular sport program for six months, especially for their bodies was found relative to others. However, BBS can have a negative effect on self-esteem and body image (İkizler, 2000 p.20).

The body image is a way of describing what an individual is. In many societies, characteristics such as youth and beauty can be regarded as the most important individual characteristics (Nazik et al., 2014).

According to Brown and Mann (1991), individuals with high self-esteem are seen as more creative, successful and healthy, self-confident.

In a study, in order to identify the relationship between food consumption and body perception of people who have done body building exercise which is effective for appearance, 30 male volunteers who do sport regularly and 30 male volunteers having the same social-cultural background and don't do sport regularly have been examined. It is found that physical exercises has a positive impact on body perception; of people who are from study group meanwhile, it is common that being busy with BBS has an important role in terms of muscle satisfaction and appearance as well (Coşkun 2011, p.16).

In a survey, a body dissatisfaction scale was used to determine whether women who did or did not sport were pleased with their body and it is determined that women who aren't athletes were more dissatisfied than their athletes (Ergün et al., 2015).

CHAPTER III

METHOD

3.1. Study Model

Current study is a cross sectional, quantitative model.

3.2. Universe and Sampling

The universe of the sample is formed from adult males attending at least for 1 year to private sport centers for BBS in TRNC. The sample was retrieved from 10 different private sports centers in Lefkoşa and Girne. Non probability purposive sampling was used. The sample of study was formed total of 80 males: 49 of them are doing standard body building exercises, and 31 are doing intense body building exercises.

3.3. Survey Form

Study data was collected with a survey form which consists of a socio-demographical section, Rosenberg Self Esteem Scale (RSES), Body image scale (BIC) and symptom check list (SCL-90-R) Scale form.

3.3.1. Socio-Demographical Information Form

First section of the survey consists of the questions regarding the socio-demographical characteristics of the participants. This section was developed by the researcher and it aims to gather information such as age, height, weight, education level, marital status, presence of physical or psychiatric diseases, use of medications, use of supplements and use of steroids.

3.3.2. RSES

A 10-item scale that measures global self-esteem by measuring both positive and negative feelings about the self. The scale is believed to be uni-dimensional. Morris Rosenberg in 1963 originally scored the measure as a 7-point Guttman scale, then all items are answered using a 4-point Likert scale format ranging from strongly agree to strongly disagree.

The scale was translated to in Turkish by Çuhadaroglu (1986) and its Cronbach alpha value was reported as 0,75.

In this current study, only the first part of the total scale was used which focuses on self-esteem. It contains 10 questions (out of 63 total) and it has a score range between 0 to 6. High scores show low self-esteem. Cronbach alpha of the current study population was calculated to be 0,78.

3.3.3. BIS

BIS was developed by Secord and Jourand in 1953 and its Turkish translation and validation was performed by Hovardaoğlu in 1989. Hovardaoğlu examined the scale's validity and reliability and reported a Cronbach alpha value of 0,91.

The scale consists of 40 items and each of these items are related with a specific part of the body (such as arms, legs, face etc.) or body functions (such as sexual activity level).

Each item is scored as 5-point Likert scale. These scores range from 1 to 5: 1 ("I do not like at all"), 2 ("I do not like"), 3 ("I am undecided/unsure"), 4 ("I like"), or 5 ("I like a lot"). Total scores can range from 40 to 200 on the scale, with higher total scores representing more positive evaluations of one's body.

Current study BIS has a Cronbach alpha of 0,825.

3.3.4. Symptom Check List (SCL-90-R)

SCL-90-R is a 90-item self-report symptom inventory developed by Leonard R. Derogatis from the Hopkins Symptom Checklist (HSCL) in mid-1970s to measure psychological symptoms and psychological distress.

It is designed to be appropriate for use with individuals from the community who are 13 years and older with a sixth-grade reading level, as well as individuals with either medical or psychiatric conditions.

The SCL-90-R assesses psychological distress in 10 subscales those are labeled as: Somatization, Obsessive-Compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, Psychoticism and Additional Items subscales. Total scale score is the sum of all 10 subscale scores.

Each of the 90 items has five following response categories: 0 = Not at all, 1 = little, 2 = some, 3 = very, 4 = severe. Albeit this instrument has been developed in 1970's, it is still useful to understand psychiatric disorder as classified in DSM-IV

In the current study, SCL-90-R scale has a Cronbach alpha score of 0,786.

3.4. Statistical Analysis

All statistical calculations and analysis were performed with Statistical Package for Social Sciences (SPSS) 21.0 software.

Frequency analysis was carried out to investigate the descriptive characteristics of study sample.

For the continuous data such as RSES, BIS and SCL-90-R scale and subscale scores, descriptive statistics such as arithmetic mean, standard deviation, median, minimum and maximum values were calculated.

To determine the statistical hypothesis testing methods, the distribution characteristics of the scale scores were investigated in terms of normality. For this purpose, Kolmogorov-Smirnov test of normality, Shapiro-Wilk test of normality, Q-Q plots, skewness and kurtosis values were all analyzed in each body building group. Additionally, Levene's test of homogeneity of variances were applied where required. Using all gathered information, non-parametric hypothesis tests were performed throughout the whole data analysis phase.

To understand the possible associations between age and BMI with scale scores, Pearson correlation test was used.

Mann Whitney U test was applied for the comparison of all scale and subscale scores between two body building groups. In addition, within each body building group, scale scores were compared with respect to two age groups with Mann Whitney U test.

Two separate linear regression analysis were applied, each for understanding BIC and Rosenberg Self Esteem scale (dependent variables) with respect to independent variables: age, body building group and all 10 of the SCL-90-R subscales.

Related analysis result of each statistical method is shown in their corresponding tables throughout the text. Level of significance was accepted to be 0.05 for the whole study.

CHAPTER IV

RESULTS

Table 1. Descriptive statistics of two groups with respect to age, education and marital status categories

	Body Building		Intense Body Building		Total		X ²	p
	n	%	n	%	n	%		
Age Groups								
24 and Younger	23	46.9	13	41.9	36	45.0	0,192	0,66
25 and Older	26	53.1	18	58.1	44	55.0		
Education								
High School or Lower Degree	7	14.3	3	9.7	10	12.5		0,733*
University or Higher Degree	42	85.7	28	90.3	70	87.5		
Marital Status								
Single	33	67.3	20	64.5	53	66.3	0,068	0,794
Not Single	16	32.7	11	35.5	27	33.7		

**Fisher Exact test has been used.*

Table 1 displays the frequency analysis outcomes for age groups, education level and marital status of the participants in both study groups.

Accordingly, in body building group, 23 of the participants (%46.9) were 24 years old or younger while 26 of them (%53.1) were 25 years old or older. In the intense body building group, 13 of the participants (%41.9) were 24 years old or younger and 18 of them (%58.1) were 25 years old or older.

For education level, 7 participants in body building group (%14.4) were having high school or lower degree and 42 of them (%85.7) were having university

or higher degree. On the other hand, in the intense body building group, 3 participants (%9.7) were having high school or lower degree and 28 of them (%90.3) were having university or higher degree.

Frequency analysis for the marital status in body building group showed that 33 individuals (%67.3) were single and 16 of them (%32.7) were not. In the intense body building group, 20 individuals (%64.5) were single and 11 of them (%35.5) were not.

Table 2. Descriptive statistics of two groups with respect to height, weight and BMI distributions

	Body Building					Intense Body Building				
	\bar{x}	s	Median	Min	Max	\bar{x}	s	Median	Min	Max
Height	178,33	5,57	179,00	166,00	192,00	178,65	5,79	179,00	164,00	191,00
Weight	78,33	7,76	78,00	58,00	95,00	81,10	6,35	81,00	70,00	97,00
BMI	24,67	2,61	24,62	18,31	30,37	25,45	2,20	25,18	21,85	31,60

Table 2 shows the descriptive statistics of height, weight and BMI in both study groups.

As seen in the table, body building group had a median level of height of 179,00 (166,00-192,00) cm while in intense body building group median height was 179,00 (164,00-191,00) cm.

For the weight, body building group had a median level of weight of 78,00 (58,00-95,00) kg while in intense body building group median weight was 81,00 (70,00-97,00) kg.

BMI median level in body building group was 24.62 (18.31-30.37) and it was 25.18 (21.85-31,60) in the intense body building group.

Table 3. Descriptive statistics of two groups with respect to physical diseases, psychiatric diseases and medication use categories

	Body Building		Intense Body Building		Total		X ²	p
	n	%	n	%	n			
Physical Diseases								
No	47	95.9	29	93.5	76	95.0		0,639*
Yes	2	4.1	2	6.5	4	5.0		
Psychiatric Diseases								
No	48	98.0	30	96.8	78	97.5		0,628*
Yes	1	2.0	1	3.2	2	2.5		
Medication Use								
No	47	95.9	30	96.8	77	96.3		0,668*
Yes	2	4.1	1	3.2	3	3.7		

**Fisher Exact test has been used.*

Table 3 displays the frequency analysis outcomes for occurrence of physical and psychiatric diseases as well as the medication use of the participants in both study groups.

Accordingly, in body building group, 47 of the participants (%95.9) did not have any physical health problem while 2 of them (%4.1) had. In the intense body building group, 29 of the participants (%93.5) did not have any physical health problem and 2 of them (%6.5) had.

For psychiatric diseases, 48 participants in body building group (%98.0) were not experiencing such problems and 1 of them (%2.0) reported psychiatric disease.

On the other hand, in the intense body building group, 30 participants (%96.8) were not experiencing psychiatric problems and 1 person (%3.2) reported such problems.

Frequency analysis for the medication use in body building group showed that 47 individuals (%95.9) were not using any medication and 2 of them (%4.1) were using. In the intense body building group, 30 individuals (%96.8) were not using medications and 1 of them (%3.2) was using.

Table 4. Descriptive statistics of two groups with respect to supplement use and steroid use categories

	Body Building		Intense Body Building		Total		X ²	p
	n	%	n	%	n	%		
Supplement Use								
No	31	63.3	6	19.4	37	46.3	14,727	0,000*
Yes	18	36.7	25	80.6	43	53.7		
Steroid Use								
No	48	98.0	16	51.6	64	80.0	25,499	0,000*
Yes	1	2.0	15	48.4	16	20.0		

* $p < 0,05$

Table 4 displays the frequency analysis for supplement and steroid use in both study groups.

In the body building group, 31 participants (%63,3) did not report supplement use while 18 of them (%36.7) reported that they are using supplements. In the intense body building group, 6 participants (%19.4) did not report supplement use while 25 of them (%80.6) reported that they are using supplements.

For the steroid use, only 1 participant (%2.0) reported the use in body building group. However, 15 individuals (%48.4) in the intense body building group admitted that they use steroids.

Table 5. Descriptive statistics and statistical comparison of two groups with respect to their scale scores

	Body Building					Intense Body Building					Z	p
	x	S	Median	Min	Max	X	s	Median	Min	Max		
RSES	0,91	0,56	0,75	0,25	2,83	0,95	0,69	0,83	0,25	2,59	-0,08	0,940
BIS	164,16	16,63	162,00	99,00	200,00	140,90	17,99	138,00	107,00	192,00	-5,31	0,001*
SLCL 90-R												
Somatization	9,67	5,74	9,00	0,00	22,00	13,26	6,70	13,00	3,00	29,00	-2,31	0,021*
Obsessive	5,88	4,39	5,00	0,00	17,00	8,65	6,05	7,00	0,00	27,00	-2,18	0,029*
Compulsive	7,59	5,50	6,00	0,00	23,00	9,68	6,48	11,00	0,00	21,00	-1,47	0,143
Interpersonal Sensitivity	8,92	5,47	9,00	0,00	21,00	13,74	7,52	14,00	2,00	31,00	-2,76	0,006*
Depression	6,63	6,17	5,00	0,00	21,00	8,55	4,56	8,00	0,00	21,00	-2,12	0,034*
Anxiety	4,84	3,84	4,00	0,00	15,00	6,32	4,81	5,00	0,00	18,00	-1,24	0,213
Hostility	5,88	4,56	5,00	0,00	18,00	8,45	4,72	8,00	0,00	17,00	-2,44	0,015*
Phobic Anxiety	3,18	4,22	2,00	0,00	17,00	2,84	3,34	2,00	0,00	14,00	-0,35	0,724
Paranoid Ideation	6,24	5,65	5,00	0,00	21,00	9,84	7,53	8,00	0,00	28,00	-2,16	0,031*
Psychoticism	3,18	4,54	2,00	0,00	21,00	4,03	4,07	3,00	0,00	17,00	-1,57	0,117
Additional Items	62,02	41,43	50,00	10,00	163,00	85,35	44,01	72,00	20,00	170,00	-2,53	0,011*
SCL-90-R Scale												

* $p < 0,05$

Table 5 shows all scale score descriptive statistics in both groups as well as the statistical comparison between the two.

As seen in the table, RSES score did not show any statistically significant differences between body building (0,75 (0,25-2,83)) and intense body building (0,83 (0,25-2,59)) groups ($p > 0,05$).

Conversely, the BIS score in body building group (162,00 (99,00-200,00)) was significantly higher than the level in intense body building group (138,00 (107,00-192,00)) ($p < 0,05$).

SCL-90-R scale contained 10 subscales. Among these 10 subscales, 6 of them showed statistically significant differences between body building and intense body building groups ($p < 0,05$). For all these 6 sub scales, intense body building group levels were significantly higher than the body building group. These subscales were; somatization, obsessive compulsive, depression, anxiety, phobic anxiety and psychoticism subscales.

Not only these 6 subscales of SCL-90-R, but also the total scale score was significantly different between two study groups. Total SCL-90-R score in body building group was 50,00 (10,00-163,00) while it was 72,00 (20,00-170,00) in intense body building group, and this difference was significant ($p < 0,05$).

Table 6. Descriptive statistics and statistical comparison of age categories within Body Building group with respect to their scale scores (n=49)

		Body Building						
	Age	X	s	Median	Min	Max	Z	P
RSES	24 and Younger	1,07	0,70	0,99	0,25	2,83	-1,40	0,162
	25 and Older	0,77	0,37	0,71	0,25	1,50		
BIS Score	24 and Younger	164,43	18,84	165,00	99,00	197,00	-0,89	0,372
	25 and Older	163,92	14,79	160,50	140,00	200,00		
Somatization	24 and Younger	11,09	6,37	10,00	0,00	22,00	-1,55	0,122
	25 and Older	8,42	4,92	7,50	2,00	19,00		
Obsessive Compulsive	24 and Younger	6,74	4,84	5,00	1,00	17,00	-0,97	0,334
	25 and Older	5,12	3,88	5,00	0,00	16,00		
Interpersonal Sensitivity	24 and Younger	8,78	6,33	9,00	0,00	23,00	-1,24	0,215
	25 and Older	6,54	4,50	6,00	0,00	18,00		
Depression	24 and Younger	9,96	5,62	12,00	0,00	19,00	-1,33	0,185
	25 and Older	8,00	5,28	7,00	1,00	21,00		
Anxiety	24 and Younger	8,39	7,15	7,00	0,00	21,00	-1,51	0,131
	25 and Older	5,08	4,78	4,50	0,00	16,00		
Hostility	24 and Younger	5,70	4,13	5,00	0,00	15,00	-1,37	0,171
	25 and Older	4,08	3,46	3,50	0,00	12,00		
Phobic Anxiety	24 and Younger	7,04	5,25	6,00	0,00	18,00	-1,36	0,174
	25 and Older	4,85	3,65	5,00	0,00	15,00		
Paranoid Ideation	24 and Younger	5,35	5,16	3,00	0,00	17,00	-3,10	0,002*
	25 and Older	1,27	1,64	1,00	0,00	6,00		
Psychoticism	24 and Younger	8,09	6,24	8,00	0,00	21,00	-2,05	0,040*
	25 and Older	4,62	4,61	3,50	0,00	18,00		
Additional Items	24 and Younger	4,13	5,07	3,00	0,00	21,00	-1,60	0,109
	25 and Older	2,35	3,93	0,50	0,00	16,00		
SCL-90-R Scale	24 and Younger	75,26	46,72	64,00	18,00	163,00	-1,84	0,067
	25 and Older	50,31	32,72	46,50	10,00	147,00		

* $p < 0,05$

Table 6 summarizes the age-based differences for all scale and subscale scores within the body building group.

Accordingly, none of the three scales showed statistically significant differences between age levels of body building group participants.

However, amongst the 10 subscales of SLR-90-R scale, two of them had significant differences. Paranoid Ideation subscale score in 24 years old and younger body builders was 3,00 (0,00-17,00) and it was 1,00 (0,00-6,00) in 25 years old and older body builders. This difference was statistically significant ($p < 0,05$).

Moreover, Psychoticism subscale score also showed a similar difference. In 24 years old and younger group of body builders, it was 8,00 (0,00-21,00) while it was 3,50 (0,00-18,00) in 25 years and older body builders. The difference showed statistical significance.

Table 7. Descriptive statistics and statistical comparison of age categories within Intense Body Building group with respect to their scale scores (n=31)

Intense Body Building								
	Age	\bar{x}	s	Median	Min	Max	Z	p
RSES	24 and Younger	1,06	0,57	1,00	0,25	2,59	-1,38	0,168
	25 and Older	0,86	0,76	0,50	0,25	2,25		
BIS	24 and Younger	140,08	19,03	133,00	107,00	167,00	-0,10	0,920
	25 and Older	141,50	17,73	140,00	112,00	192,00		
Somatization	24 and Younger	13,38	6,40	16,00	3,00	25,00	-0,20	0,841
	25 and Older	13,17	7,10	11,00	3,00	29,00		
Obsessive Compulsive	24 and Younger	10,54	7,42	11,00	0,00	27,00	-1,17	0,244
	25 and Older	7,28	4,57	7,00	0,00	18,00		
Interpersonal Sensitivity	24 and Younger	10,46	6,51	11,00	0,00	21,00	-0,46	0,644
	25 and Older	9,11	6,58	10,00	0,00	20,00		
Depression	24 and Younger	15,62	8,73	17,00	2,00	31,00	-1,02	0,307
	25 and Older	12,39	6,43	10,50	3,00	25,00		
Anxiety	24 and Younger	9,23	5,07	9,00	3,00	21,00	-0,42	0,673
	25 and Older	8,06	4,24	8,00	0,00	16,00		
Hostility	24 and Younger	7,38	5,25	6,00	0,00	18,00	-1,01	0,315
	25 and Older	5,56	4,45	4,00	0,00	14,00		
Phobic Anxiety	24 and Younger	10,00	4,64	9,00	3,00	17,00	-1,49	0,137
	25 and Older	7,33	4,58	7,00	0,00	14,00		
Paranoid Ideation	24 and Younger	4,00	4,56	3,00	0,00	14,00	-0,92	0,357
	25 and Older	2,00	1,78	2,00	0,00	6,00		
Psychoticism	24 and Younger	11,00	8,39	10,00	0,00	28,00	-0,70	0,482
	25 and Older	9,00	6,98	7,00	0,00	21,00		
Additional Items	24 and Younger	5,54	4,84	4,00	0,00	17,00	-1,74	0,082
	25 and Older	2,94	3,11	2,50	0,00	11,00		
SCL-90-R Scale	24 and Younger	97,15	47,44	103,00	20,00	170,00	-1,14	0,254
	25 and Older	76,83	40,56	69,50	21,00	150,00		

Table 7 displays the age-based differences for all scale and subscale scores within the intense body building group.

Like the body building study group, none of the three scales showed statistically significant differences between age levels of intense body building group participants.

However, unlike the body building group, none of the subscales of SLR-90-R scale showed statistically significant difference between age groups of intense body builders ($p>0,05$).

Table 8. Correlation between age and scale scores in two groups

		Age	
		Body Building	Intense Body Building
RSES	r	-0,137	-0,113
	p	0,347	0,543
BIS Score	r	-0,061	0,040
	p	0,678	0,832
Somatization Score	r	-0,173	0,063
	p	0,234	0,736
Obsessive Compulsive Score	r	-0,213	-0,191
	p	0,142	0,304
Interpersonal Sensitivity Score	r	-0,090	-0,004
	p	0,539	0,984
Depression Score	r	-0,106	-0,086
	p	0,470	0,644
Anxiety Score	r	-0,160	-0,109
	p	0,274	0,560
Hostility Score	r	-0,105	-0,151
	p	0,475	0,418
Phobic Anxiety Score	r	-0,205	-0,239
	p	0,157	0,195
Paranoid Ideation Score	r	-0,328	-0,397
	p	0,021*	0,027*
Psychoticism Score	r	-0,192	-0,099
	p	0,187	0,596
Additional Items Score	r	-0,190	-0,371
	p	0,191	0,040*
SCL-90-R Scale Score	r	-0,209	-0,167
	p	0,150	0,370

* $p<0,05$

In Table 8, correlation analysis results between age and all scale scores in two study groups were displayed.

Results show that age is negatively correlated with Paranoid Ideation scale score in body building group ($r = -0,328$; $p < 0,05$).

Also in the intense body building group, age is negatively correlated with Paranoid Ideation scale score ($r = -0,397$; $p < 0,05$). The other subscale score which is significantly correlated with age in intense body building group is Additional Items score.

It has a moderate level of negative correlation with age ($r = -0,371$; $p < 0,05$) and as age of the intense body builders increases, their Additional Items score tends to decrease significantly.

Table 9. Correlation between body mass index and scale scores in two groups

		BMI	
		Body Building	Intense Body Building
RSES	r	-0,143	0,311
	p	0,326	0,089
BIS Score	r	-0,260	-0,303
	p	0,071	0,097
Somatization Score	r	-0,107	0,189
	p	0,462	0,308
Obsessive Compulsive Score	r	-0,129	0,323
	p	0,378	0,076
Interpersonal Sensitivity Score	r	-0,072	0,428
	p	0,621	0,016*
Depression Score	r	-0,020	0,195
	p	0,892	0,292
Anxiety Score	r	-0,017	0,530
	p	0,905	0,002*
Hostility Score	r	-0,059	0,437
	p	0,689	0,014*
Phobic Anxiety Score	r	-0,018	0,427
	p	0,901	0,017*
Paranoid Ideation Score	r	-0,219	0,202
	p	0,131	0,276
Psychoticism Score	r	-0,108	0,524
	p	0,462	0,002*
Additional Items Score	r	-0,102	0,173
	p	0,484	0,352
SCL-90-R Scale Score	r	-0,099	0,439
	p	0,499	0,013*

* $p < 0,05$

In Table 9, correlation analysis results between BMI and all scale scores in two study groups were displayed.

Unlike the age, BMI has no statistically significant correlations with any scale scores in body building group.

However, four subscales of SLR-90-R were significantly correlated with BMI in intense body building group.

Interpersonal Sensitivity subscale score was positively correlated with BMI in intense body building group ($r = 0,428$; $p < 0,05$). This moderate level correlation indicates that as BMI increases, Interpersonal Sensitivity subscale score also tends to increase in intense body builders.

Anxiety Subscale score also followed a similar association with BMI in intense body builders group. Moderate level positive and significant correlation indicates that as the BMI increases, Anxiety Subscale score tends to increase, as well ($r = 0,530$; $p < 0,05$).

Third subscale score which is positively correlated with BMI in intense body building group is Phobic Anxiety Subscale score ($r = 0,427$; $p < 0,05$). This is a moderate level significant correlation and it indicates that the intense body builder who has higher BMI will have higher Phobic Anxiety Subscale score.

Last SCL-90-R subscale which is significantly correlated with BMI in intense body building group is Psychoticism Subscale ($r = 0,524$; $p < 0,05$). This shows that BMI increases is accompanied by Psychoticism Subscale score increases in intense body builders.

As a result, total SCL-90-R scale score was also positively correlated with BMI of intense body builders ($r = 0,439$; $p < 0,05$). This is a moderate level of association and shows that increased BMI is an indicator of increased SCL-90-R score in the people who do intense body building.

Table 10. Correlation between scale scores in body building group (n=49)

		RSES	BIS	Somatization	Obsessive Compulsive	Interpersonal Sensitivity	Depression	Anxiety	Hostility	Phobic Anxiety	Paranoid Ideation	Psychoticism	Additional Items	SCL-90-R Scale
RSES	r	1,000	-0,117	0,209	0,271	0,253	0,276	0,372	0,442	0,311	0,353	0,366	0,425	0,391
	p		0,422	0,149	0,059	0,080	0,055	0,009*	0,001*	0,030*	0,013*	0,010*	0,002*	0,005*
BIS	r	-0,117	1,000	-0,102	-0,187	-0,271	-0,188	-0,130	-0,173	-0,362	-0,021	-0,242	-0,176	-0,224
	p	0,422		0,485	0,197	0,060	0,197	0,372	0,236	0,011*	0,885	0,093	0,228	0,121
Somatization	r	0,209	-0,102	1,000	0,763	0,734	0,583	0,457	0,559	0,475	0,621	0,639	0,604	0,783
	p	0,149	0,485		0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*
Obsessive Compulsive	r	0,271	-0,187	0,763	1,000	0,723	0,739	0,628	0,640	0,638	0,662	0,802	0,725	0,885
	p	0,059	0,197	0,001*		0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*
Interpersonal Sensitivity	r	0,253	-0,271	0,734	0,723	1,000	0,644	0,768	0,774	0,550	0,660	0,744	0,729	0,891
	p	0,080	0,060	0,001*	0,001*		0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*
Depression	r	0,276	-0,188	0,583	0,739	0,644	1,000	0,638	0,673	0,554	0,541	0,715	0,557	0,809
	p	0,055	0,197	0,001*	0,001*	0,001*		0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*
Anxiety	r	0,372	-0,130	0,457	0,628	0,768	0,638	1,000	0,763	0,626	0,628	0,713	0,671	0,839
	p	0,009*	0,372	0,001*	0,001*	0,001*	0,001*		0,001*	0,001*	0,001*	0,001*	0,001*	0,001*
Hostility	r	0,442	-0,173	0,559	0,640	0,774	0,673	0,763	1,000	0,490	0,576	0,685	0,675	0,823
	p	0,001*	0,236	0,001*	0,001*	0,001*	0,001*	0,001*		0,001*	0,001*	0,001*	0,001*	0,001*
Phobic Anxiety	r	0,311	-0,362	0,475	0,638	0,550	0,554	0,626	0,490	1,000	0,423	0,684	0,524	0,722
	p	0,030*	0,011*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*		0,002*	0,001*	0,001*	0,001*
Paranoid Ideation	r	0,353	-0,021	0,621	0,662	0,660	0,541	0,628	0,576	0,423	1,000	0,671	0,690	0,778
	p	0,013*	0,885	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,002*		0,001*	0,001*	0,001*
Psychoticism	r	0,366	-0,242	0,639	0,802	0,744	0,715	0,713	0,685	0,684	0,671	1,000	0,713	0,894
	p	0,010*	0,093	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*		0,001*	0,001*
Additional Items	r	0,425	-0,176	0,604	0,725	0,729	0,557	0,671	0,675	0,524	0,690	0,713	1,000	0,828
	p	0,002*	0,228	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*		0,001*
SCL-90-R Scale	r	0,391	-0,224	0,783	0,885	0,891	0,809	0,839	0,823	0,722	0,778	0,894	0,828	1,000
	p	0,005*	0,121	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	

* $p < 0,05$

Table 10 shows that associations between all scale and subscale scores in body building group.

As shown in the table, RSES score is positively correlated with 6 of the 10 subscales of SCL-90-R, as well as the total SCL-90-R score. These subscales are Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, Psychoticism and Additional Items subscales ($p < 0,05$).

BIS is, however, only correlated with one subscale of SCL-90-R scale: Phobic Anxiety Subscale score ($r = -0,362$; $p < 0,05$). This moderate level negative correlation indicates that as the BIS increases, Phobic Anxiety Subscale score tends to decrease in body builders.

SCL-90-R total scale score does not show any statistically significant correlation with other two scales. As expected, it is positively and significantly correlated with all of its own components (subscales).

Table 11. Correlation between scale scores in intense body building group (n=31)

		RSES	BIS Score	Somatization	Obsessive Compulsive	Interpersona l Sensitivity	Depression	Anxiety	Hostility	Phobic Anxiety	Paranoi d Ideatio n	Psychoticis m	Addition al Items	SCL- 90-R Scale
RSES	r	1,000	-0,077	0,282	0,174	0,418	0,403	0,341	0,301	0,563	0,443	0,404	0,504	0,475
	p		0,681	0,125	0,350	0,019*	0,025*	0,060	0,100	0,001*	0,012*	0,024*	0,004*	0,007*
BIS	r	-0,077	1,000	-0,480	-0,562	-0,682	-0,382	-0,625	-0,481	-0,353	-0,032	-0,400	-0,231	-0,563
	p	0,681		0,006*	0,001*	0,001*	0,034*	0,001*	0,006*	0,051	0,862	0,026*	0,212	0,001*
Somatization	r	0,282	-0,480	1,000	0,673	0,694	0,695	0,667	0,613	0,663	0,257	0,524	0,321	0,812
	p	0,125	0,006*		0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,163	0,002*	0,078	0,001*
Obsessive Compulsive	r	0,174	-0,562	0,673	1,000	0,702	0,612	0,758	0,734	0,549	0,446	0,501	0,205	0,804
	p	0,350	0,001*	0,001*		0,001*	0,001*	0,001*	0,001*	0,001*	0,012*	0,004*	0,269	0,001*
Interpersonal Sensitivity	r	0,418	-0,682	0,694	0,702	1,000	0,711	0,741	0,738	0,652	0,260	0,685	0,510	0,882
	p	0,019*	0,001*	0,001*	0,001*		0,001*	0,001*	0,001*	0,001*	0,158	0,001*	0,003*	0,001*
Depression	r	0,403	-0,382	0,695	0,612	0,711	1,000	0,636	0,653	0,641	0,277	0,511	0,525	0,828
	p	0,025*	0,034*	0,001*	0,001*	0,001*		0,001*	0,001*	0,001*	0,131	0,003*	0,002*	0,001*
Anxiety	r	0,341	-0,625	0,667	0,758	0,741	0,636	1,000	0,838	0,751	0,304	0,669	0,466	0,880
	p	0,060	0,001*	0,001*	0,001*	0,001*	0,001*		0,001*	0,001*	0,096	0,001*	0,008*	0,001*
Hostility	r	0,301	-0,481	0,613	0,734	0,738	0,653	0,838	1,000	0,604	0,219	0,800	0,572	0,881
	p	0,100	0,006*	0,001*	0,001*	0,001*	0,001*	0,001*		0,001*	0,235	0,001*	0,001*	0,001*
Phobic Anxiety	r	0,563	-0,353	0,663	0,549	0,652	0,641	0,751	0,604	1,000	0,555	0,477	0,515	0,804
	p	0,001*	0,051	0,001*	0,001	0,001*	0,001*	0,001*	0,001*		0,001*	0,007*	0,003*	0,001*
Paranoid Ideation	r	0,443	-0,032	0,257	0,446	0,260	0,277	0,304	0,219	0,555	1,000	0,078	0,243	0,413
	p	0,012*	0,862	0,163	0,012	0,158	0,131	0,096	0,235	0,001*		0,675	0,187	0,021*
Psychoticism	r	0,404	-0,400	0,524	0,501	0,685	0,511	0,669	0,800	0,477	0,078	1,000	0,573	0,775
	p	0,024*	0,026*	0,002	0,004	0,001*	0,003	0,001*	0,001*	0,007	0,675		0,001*	0,001*
Additional Items	r	0,504	-0,231	0,321	0,205	0,510	0,525	0,466	0,572	0,515	0,243	0,573	1,000	0,617
	p	0,004*	0,212	0,078	0,269	0,003	0,002	0,008	0,001	0,003	0,187	0,001		0,001*
SCL-90-R Scale	r	0,475	-0,563	0,812	0,804	0,882	0,828	0,880	0,881	0,804	0,413	0,775	0,617	1,000
	p	0,007*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,021	0,001*	0,001*	

* $p < 0,05$

Table 11 shows that associations between all scale and subscale scores in intense body building group.

As shown in the table, RSES score is positively correlated with 6 of the 10 subscales of SCL-90-R, as well as the total SCL-90-R score. These subscales are Interpersonal Sensitivity, Depression, Phobic Anxiety, Paranoid Ideation, Psychoticism and Additional Items subscales ($p < 0,05$). It is also positively correlated with total SCL-90-R scale score ($r = 0,475$; $p < 0,05$).

BIS is negatively correlated with seven subscales of SCL-90-R scale: Somatization, Obsessive Compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility and Psychoticism. These correlations are all negative and significant, which means an increase in BIS score leads to decreases in these subscale scores. This is also true with total SCL-90-R score ($r = -0,563$; $p < 0,05$).

SCL-90-R total scale score shows statistically significant correlations with other two scales. It is positively correlated with Rosenberg Self Esteem Scale score ($r = 0,475$; $p < 0,05$) and negatively correlated with BIC Score ($r = -0,563$; $p < 0,05$). In addition, it is positively and significantly correlated with all its own components (subscales), as expected.

Table 12. Correlation between scale scores in all participants (n=80)

		Rosenberg Self Esteem Scale Score	BIC Score	Somatization Score	Obsessive Compulsive Score	Interpersonal Sensitivity Score	Depression Score	Anxiety Score	Hostility Score	Phobic Anxiety Score	Paranoid Ideation Score	Psychoticism Score	Additional Items Score	SCL- 90-R Scale Score
RSES	r	1,000	-0,099	0,242	0,221	0,331	0,329	0,351	0,373	0,413	0,377	0,379	0,453	0,420
	p		0,380	0,031*	0,049*	0,003*	0,003*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*
BIS Score	r	-0,099	1,000	-0,369	-0,437	-0,466	-0,413	-0,330	-0,351	-0,435	0,004	-0,400	-0,215	-0,439
	p	0,380		0,001*	0,001*	0,001*	0,001*	0,003*	0,001*	0,001*	0,975	0,001*	0,056	0,001*
Somatization Score	r	0,242	-0,369	1,000	0,735	0,725	0,670	0,537	0,601	0,588	0,448	0,612	0,493	0,809
	p	0,031*	0,001*		0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*
Obsessive Compulsive Score	r	0,221	-0,437	0,735	1,000	0,720	0,697	0,661	0,699	0,618	0,523	0,666	0,493	0,850
	p	0,049*	0,001*	0,001*		0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*
Interpersonal Sensitivity Score	r	0,331	-0,466	0,725	0,720	1,000	0,683	0,747	0,764	0,608	0,488	0,723	0,640	0,887
	p	0,003*	0,001*	0,001*	0,001*		0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*
Depression Score	r	0,329	-0,413	0,670	0,697	0,683	1,000	0,621	0,670	0,625	0,376	0,640	0,529	0,825
	p	0,003	0,001*	0,001*	0,001*	0,001*		0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*
Anxiety Score	r	0,351	-0,330	0,537	0,661	0,747	0,621	1,000	0,772	0,670	0,526	0,680	0,613	0,843
	p	0,001*	0,003*	0,001*	0,001*	0,001*	0,001*		0,001*	0,001*	0,001*	0,001*	0,001*	0,001*
Hostility Score	r	0,373	-0,351	0,601	0,699	0,764	0,670	0,772	1,000	0,557	0,415	0,751	0,628	0,850
	p	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*		0,001*	0,001*	0,001*	0,001*	0,001*
Phobic Anxiety Score	r	0,413	-0,435	0,588	0,618	0,608	0,625	0,670	0,557	1,000	0,435	0,613	0,524	0,772
	p	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*		0,001*	0,001*	0,001*	0,001*
Paranoid Ideation Score	r	0,377	0,004	0,448	0,523	0,488	0,376	0,526	0,415	0,435	1,000	0,395	0,544	0,611
	p	0,001*	0,975	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*		0,001*	0,001*	0,001*
Psychoticism Score	r	0,379	-0,400	0,612	0,666	0,723	0,640	0,680	0,751	0,613	0,395	1,000	0,640	0,845
	p	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*		0,001*	0,001*
Additional Items Score	r	0,453	-0,215	0,493	0,493	0,640	0,529	0,613	0,628	0,524	0,544	0,640	1,000	0,742
	p	0,001*	0,056	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*		0,001*
SCL-90-R Scale Score	r	0,420	-0,439	0,809	0,850	0,887	0,825	0,843	0,850	0,772	0,611	0,845	0,742	1,000
	p	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	0,001*	

* $p < 0,05$

Table 12 displays all the correlation combinations between scale and subscale scores in total number of participants.

Accordingly, the correlation between RSES score and BIS score is not statistically significant ($r = -0,099$; $p < 0,05$). However, RSES score is significantly correlated with each of the 10 subscales of SCL-90-R scale ($p < 0,05$). These correlations are all positive and indicate that as RSES score increases, all subscale scores of SCL-90-R also tends to increase. Therefore, RSES score is also positively correlated with total SCL-90-R scale score ($p < 0,05$).

In a similar way, BIS score is also correlated with most of the subscale scores of SCL-90-R. It is negatively correlated with 8 out of 10 subscales of SCL-90-R ($p < 0,05$), while the only subscale which do not show significant correlation are Paranoid Ideation subscale and Additional Items subscale ($p > 0,05$). The correlation between BIS and SCL-90-R total score is also negative and significant ($r = -0,439$; $p < 0,05$). This shows that in all participated individuals, as BIS score increases, SCL-90-R score tends to decrease, and vice versa.

As expected, SCL-90-R subscale scores are significantly correlated with each other, as well as the total scale score ($p < 0,05$).

Table 13. Linear Regression analysis results with BIS being dependent variable

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	p
Model Constant	174,08	9,36		18,60	0,001*
Group	-18,22	3,93	-0,44	-4,64	0,001*
Age	-0,04	0,32	-0,01	-0,11	0,914
Somatization	0,56	0,46	0,17	1,21	0,232
Obsessive Compulsive	-1,02	0,61	-0,26	-1,67	0,100
Interpersonal Sensitivity	-1,80	0,59	-0,52	-3,07	0,003*
Depression	0,25	0,42	0,08	0,60	0,550
Anxiety	0,41	0,58	0,11	0,70	0,486
Hostility	0,24	0,80	0,05	0,30	0,765
Phobic Anxiety	-1,03	0,55	-0,24	-1,88	0,065
Paranoid Ideation	1,41	0,62	0,27	2,28	0,026*
Psychoticism	0,04	0,45	0,01	0,10	0,922
Additional Items	0,13	0,60	0,03	0,22	0,824

$R^2 = 0,539$

* $p < 0,05$

Table 13 displays the linear regression analysis results where the model is constructed with BIS score as dependent variable and the variables shown in the table as dependent variables.

The coefficient of determination of the model was 0,539 and model was significant ($p < 0,05$). Amongst all independent variables, body building group, Interpersonal Sensitivity Subscale and Paranoid Ideation Subscale were significantly contributing to the model that aims to explain the BIC score.

Accordingly, being an intense body builder would decrease the BIS score at an estimated rate of 18,22 units, compared to the standard body builders ($p < 0,05$).

A 1 unit increase in Interpersonal Sensitivity Subscale score would lead to 1,80 units decrease in BIS score ($p < 0,05$).

Moreover, the model predicts that a 1 unit increase in Paranoid Ideation Subscale score would be accompanied by 1,41 units of increase in BIS score ($p < 0,05$).

Table 14. Linear Regression analysis results with RSES being dependent variable

	Unstandardized Coefficients		Standardized Coefficients		p
	B	Std. Error	Beta	t	
Model Constant	0,48	0,34		1,43	0,156
Group	-0,04	0,14	-0,03	-0,26	0,792
Age	0,00	0,01	0,03	0,29	0,772
Somatization	-0,01	0,02	-0,09	-0,50	0,616
Obsessive Compulsive	-0,04	0,02	-0,33	-1,73	0,088
Interpersonal Sensitivity	0,00	0,02	-0,04	-0,20	0,843
Depression	0,01	0,02	0,12	0,71	0,480
Anxiety	-0,02	0,02	-0,15	-0,76	0,453
Hostility	0,03	0,03	0,23	1,15	0,254
Phobic Anxiety	0,04	0,02	0,31	2,00	0,049*
Paranoid Ideation	0,04	0,02	0,27	1,88	0,064
Psychoticism	0,01	0,02	0,13	0,72	0,472
Additional Items	0,03	0,02	0,19	1,20	0,234

$R^2 = 0,323$

* $p < 0,05$

Table 14 shows the linear regression analysis results where the model is constructed with RSES score as dependent variable and the variables shown in the table as independent variables.

The coefficient of determination of the model was 0,323 and model was significant ($p < 0,05$).

Amongst all independent variables, only Phobic Anxiety Subscale score was significantly contributing to the model that aims to explain the Rosenberg Self Esteem Scale score.

A 1 unit increase in Phobic Anxiety Subscale score would lead to 0,04 units increase in Rosenberg Self Esteem Scale score ($p < 0,05$).

Other variables that were entered to the model did not have any statistically significant contribution to predict RSES score ($p > 0,05$).

CHAPTER V

DISCUSSION

The participant who make normal and intense BBS are compared according to age, education, marital status, presence of physical or psychiatric disorder or use of medication no significant difference is found. The difference found between these two groups about other variables can be accepted as a result of different exercise attitudes in BBS. In this research, body-building group and intense body-building group have been examined according to RSES scale and there is not any meaningful difference.

Yegül found no statistically significant difference in the relationship between self-esteem and self-perception scores among high school male athletes and non-athletes in terms of the self-esteem subscale score of the RSES in the research study. (Yegül, 1999). Tiryaki and Morali(1992) compared self-esteem and socio-demographic characteristics of using lysine or not athletes in a study they conducted. There was no statistically significant difference between self-esteem scores of those who were athletes and those who were not athletes (Tiryaki ve Morali, 1992).

As it seems, some of the research briefly outlined above indicate that there is no significant difference between self-esteem level of the sportsmen and the non-sportsmen by supporting the result of the current study.

The participants who make intense body building current study are found to use significantly more supplement and steroid than body building group. When the other researches is studied, similar results are found. Individuals who go to gym regularly, taking supplements and have muscle dysmorphic disorder have been examined by Segura and his friends. Individuals who have muscle dysmorphic disorder take supplements much more than the others (Segura, et al.2015). In other research, muscle dysmorphic disorder for male weightlifters has been examined and at the end of the research it can be seen; muscle

dysmorphic disorder increases participant have anabolic steroid use (Olivardia, et al., 2000). Another research has been done about effects of the using steroid and taking alcohol on mature athlete and it has been seen doing exercise decrease the alcohol addiction and taking the steroids (Kulig et al., 2003). In another study, abuse of anabolic steroids have been examined and it has been determined; marathon runners, wrestlers and horse bikes use steroid for keeping low calorie (Baron et al., 2005). In this study body building group have significantly higher scores of BIS. Than intense body building group indicating that they have a better perception of their body than the intense body building group. When the studies in the literature are examined, there are studies with similar results. Individuals who have body dysmorphic disorder have low satisfaction about their body and they keep feeling fat about themselves and always try to lose weight (Aslan, 2004). In a study investigating body dysmorphic disorder in patients who applied for cosmetic treatment, it was determined that patients want plastic surgery because of their taints and the most of them have low body satisfaction after the surgery (Altıntaş, 2015). Research has been done about the body satisfaction on the olympic athletes. Individuals who do individual sports have body satisfaction much more than individuals who do team sports. In a study on international athletes, factors such as trust, determination and success have had an impact on sport performance (Morgan,1980).

In the current study, when psychological symptoms of Body building group and intense body building group are compored, I.B.B group was found to have significantly higher scores form scl 90 subscales indicating more psychopathology.

When studies in the literature are examined, there are many studies supporting the relation between muscle dysmorphic disorder and psychopathology. In a study by Olivardi et al. (2000) patients who have muscle dysmorphic disorder had anxiety and mood disorder in their past. In a study of body dysmorphic disorder in remotely psychiatric patients, it can

be seen the most common psychopathologies are obsessive-compulsive disorder, major depression and social phobia. It has been determined, some patients have sensitivity considerations and imperfect body perception. And some of the patients have suicidal tendency (Aşkın, 2002). The relationship between the anxiety, obsessive-compulsive disorder and muscle dysmorphia have been examined. It was found that; individuals' who have muscle dysmorphia have anxiety and obsessive - compulsive symptoms are seen much more than the other (Christopher. 2009). A research has been done to professional athletes and it has been determined; professional athletes have depressive symptoms, anxiety and chronic fatigue much more than the non-professional athletes (Raglin et al., 1991)

Tezcan et al (1996) made a research about the relationship between the obsessive-compulsive disorders and dysmorphic disorder. It has been determined; most of the patients who have obsessive-compulsive disorders have dysmorphic disorders.

Altamura et al (2001) made a research and patients who applied to plastic surgery has been examined with some scales. At the end of the research, that patients have body dysmorphic disorder, obsessive-compulsive disorder and suicide thoughts.

In a study conducted, it was found that the comorbidity of personality disorder and body dysmorphic disorder is very high (Semiz 2005).

On the other hand, the group who have exercise addiction and control group have been compared and also exercise addiction and Psychopathological features have been evaluated. According to psychopathological features, there is not any meaningful difference of the groups (Vardar, 2012).

As BMI of the participants engaged in I.B.B increase, the mean scores of subscales of SCL-90 also increases. High BMI does not only indicate that the individual is overweight but in I.B.B group as muscle size increase, the weight of the person also

increases, resulting with increased BMI. In other words increased BMI is related with increased muscle size indicating intense B.B.G. The compulsive engagement in BBS is related with increased symptom of inter personal sensitivity, hostility, phobia, anxiety, psychoticism.

In a study conducted, nutrition has been analyzed between the individuals who do body-building and individuals who have muscle dysmorphic disorders. At the end of the research, it has been seen, these two groups take fat and carbohydrate similar way but taking protein level of the individuals who have muscle dysmorphic disorder order much more than the other individuals who do body-buildings (Segure, et al. 2015 p.324-329).

5.1. Conclusion and Recommendations

As a conclusion, when the research is examined, it can be seen; heavy body-building athletes use steroid and supplement much more than the others. When the research is examined again, body-builder athletes have body satisfaction but heavy body-builder athletes have low body satisfaction and the cause may be muscle dysmorphia. When the SCL subscales are examined, heavy body-builders have pathological manifestations much more. And also it can be seen, when the body mass index increases, pathological manifestations increase, this cause may be muscle sense disorder. The inclusion of more participants within the scope of the research may make further work more meaningful. Unlike the variables used in our research, the use and investigation of other variables can lead to different perspectives. Different results can be obtained by comparing different groups. Comparisons of body image, self-esteem, and psychopathology symptoms of individuals who do not perform any sports and do intense BBS in future studies may lead to a different perspective. Different results can be achieved by including female participants in future study. 5.1.1. Recommendations for participants Bodybuilders should be primarily concerned about their health, and it would be more beneficial for them to be healthier than

the image of the individuals who are doing sports. Work on the subject must be communicated to the trainers and the BBS sportsmen through the press, the publication.

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APPENDIXES

APPENDIX A- BİLGİLENDİRME FORMU

Vücut geliştirme sporu yapan ve ağır vücut geliştirme sporu yapan bireylerin benlik saygısı, beden algısı ve psikopatlojik belirtilerinin karşılaştırılması

Bu çalışmanın amacı, ağır düzeyde vücut geliştiren bireyler ve normal düzeyde vücut geliştiren bireylerin beden algısı, benlik saygısı ve psikopatoloji belirtilerinin karşılaştırılmasıdır.

Bu çalışmada size bir demografik bilgi formu ve bir dizi ölçek sunduk. Demografik bilgi formu sizin yaş cinsiyet gibi demografik özellikleriniz hakkındaki soruları içermektedir. Ölçekler ise, beden algısı, benlik saygısı ve psikopatolojiyi ölçmektedir.

Daha önce de belirtildiği gibi, ölçeklerde ve görüşmelerde verdiğiniz cevaplar kesinlikle gizli kalacaktır. Eğer çalışmayla ilgili herhangi bir şikayet, görüş veya sorunuz varsa bu çalışmanın araştırmacılarından biri olan Psk. Emin Buğra Yoldaş ile iletişime geçmekten lütfen çekinmeyiniz (eminbugrayoldas@gmail.com).

Eğer araştırmanın sonuçlarıyla ilgileniyorsanız, 01.07.2017 tarihinden itibaren araştırmacıyla iletişime geçebilirsiniz.

Katıldığınız için tekrar teşekkür ederim.

Psk. Emin Buğra Yoldaş

Psikoloji Bölümü,

Yakın Doğu Üniversitesi,

Lefkoşa.

APPENDIX B- AYDINLATILMIŞ ONAM

Bu çalışma, Yakın Doğu Üniversitesi Fen Edebiyat Fakültesi Psikoloji Bölümü tarafından gerçekleştirilen bir çalışmadır.

Bu çalışmanın amacı. Vücut geliştirme sporu yapan ve ağır vücut geliştirme sporu yapan bireylerin benlik saygısı, beden algısı ve psikopatlojik belirtilerinin karşılaştırılmasıdır. Anket tamamen bilimsel amaçlarla düzenlenmiştir. Anket formunda kimlik bilgileriniz yer almayacaktır. Size ait bilgiler kesinlikle gizli tutulacaktır. Çalışmadan elde edilen veriler yalnızca istatistik veri olarak kullanılacaktır. Yanıtlarınızı içten ve doğru olarak vermeniz bu anket sonuçlarının toplum için yararlı bir bilgi olarak kullanılmasını sağlayacaktır.

Telefon numaranız anketörün denetlemesi ve anketin uygulandığının belirlenmesi amacıyla istenmektedir.

Yardıminız için çok teşekkür ederim.

Psk. Emin Buğra Yoldaş

Yukardaki bilgileri ayrıntılı biçimde tümünü okudum ve anketin uygulanmasını onayladım.

İsim:

İmza:

Telefon:

APPENDIX C- SOSYO-DEMOGRAFİK BİLGİ FORMU

Demografik Bilgiler:

1-Kaç yaşındasınız, belirtiniz

2.Boyunuz kaç santimdir, belirtiniz.....

3.Kilonuzu belirtiniz.....

4.Eğitim Durumunuz nedir?

a-ilk okul

b-orta okul

c- lise

d-üniversite ve üstü

5.Medeni Durumunuz nedir?

a-Evli

b-Bekar

c-Dul

d-Nişanlı

e-ilişkisi var

6.Fiziksel bir hastalığınız var mı? a-yok b.var belirtiniz.....

7.Ruhsal bir hastalığınız var mı? a-yok b-var belirtiniz.....

8.Düzenli olarak kullandığınız bir ilaç var mı? Varsa belirtiniz.....

9.Düzenli spor yapıyor musunuz?

a. Evet

b. Hayır

Evet ise Spor yapmak haftada ortalama kaç saat ayırdığınızı belirtiniz.....

10.Düzenli vücut geliştirme sporu yapıyorsanız, günde ortalama kaç saat spor için vakit ayırıyorsunuz? Belirtiniz..... Saat günde

11. Düzenli vücut geliştirme sporu yapıyorsanız, günde ortalama kaç saat spor dışında vücut gelişiminiz için zaman ayırıyorsunuz? (Beslenme, özel yiyeceklerin hazırlanması, masaj, vücut geliştirme ile ilgili araştırma yapmak okumak vd).

12.Herhangi bir destek ürün (vitamin – mineral-suplement vb) kullanıyor musunuz?

a-Hayır

b-Evet, Belirtiniz.....

13.Hayatınızın herhangi bir döneminde, doktor reçetesi dışında, vücut geliştirmek, dayanıklılığı artırmak veya performansı geliştirmek için hormon(streoid) kullandınız mı?

a.Hayır

b. Evet, Belirtiniz.....

APPENDIX D- Rosenberg Benlik Saygısı Ölçeği

Madde 1

1. Kendimi en az diğer insanlar kadar değerli buluyorum.

a. çok doğru b. doğru c. yanlış d. çok yanlış

2. Bazı olumlu özelliklerim olduğunu düşünüyorum.

a. çok doğru b. doğru c. yanlış d. çok yanlış

3. Genelde kendimi başarısız bir kişi olarak görme eğilimindeyim.

a. çok doğru b. doğru c. yanlış d. çok yanlış

Madde 2

4. Ben de diğer insanların birçoğunun yapabildiği kadar birşeyler yapabilirim.

a. çok doğru b. doğru c. yanlış d. çok yanlış

5. Kendimde gurur duyacak fazla birşey bulamıyorum.

a. çok doğru b. doğru c. yanlış d. çok yanlış

Madde 3

6. Kendime karşı olumlu bir tutum içindeyim.

a. çok doğru b. doğru c. yanlış d. çok yanlış

Madde 4

7. Genel olarak kendimden memnunum.

a. çok doğru b. doğru c. yanlış d. çok yanlış

Madde 5

8. Kendime karşı daha fazla saygı duyabilmeyi isterdim.

a. çok doğru b. doğru c. yanlış d. çok yanlış

Madde 6

9. Bazen kesinlikle kendimin bir işe yaramadığımı düşünüyorum.

a. çok doğru b. doğru c. yanlış d. çok yanlış

10. Bazen kendimin hiç de yeterli bir insan olmadığımı düşünüyorum.

a. çok doğru b. doğru c. yanlış d. çok yanlış

APPENDIX E- BEDEN ALGISI ÖLÇEĞİ

BEDEN ALGISI ÖLÇEĞİ

Aşağıda çeşitli vücut özellikleri ve beğenip beğenmemeye ifadeleri bulunmaktadır. Yapmanız gereken, bir vücut özelliğiniz hakkındaki duygularınızı bu ifadelere göre değerlendirmektir. Örneğin bir vücut özelliğinizi çok beğeniyorsanız, bu özellik için "çok beğeniyorum" ifadesinin bulunduğu kutuya "X" işareti koyunuz. Herhangi bir vücut özelliğinizi genel olarak beğenip beğenmediğinize göre duygularınızı değerlendiriniz.

	Çok beğeniyorum	Orduku beğeniyorum	Kararsızım	Pek beğenmiyorum	Hiç beğenmiyorum
1. Saçlarım					
2. Yüzümün rengi					
3. İhtahım					
4. Ellerim					
5. Vücudumdaki kil dağılımı					
6. Burnum					
7. Fiziksel gücüm					
8. İdrar – dışkı düzenim					
9. Kas kuvvetim					
10. Belim					
11. Enerji düzeyim					
12. Sırtım					
13. Kulaklarım					
14. Yapım					
15. Çenem					
16. Vücut yapım					
17. Profilim					
18. Boyum					

APPENDIX F- SCL-90-R (PSİKOLOJİK BELİRTİ TARAMA LİSTESİ)

SCL-90-R (psikolojik belirti tarama listesi)

ADI, SOYADI:..... YAŞ: CİNSİYETİ(E/K): MESLEĞİ:

AÇIKLAMA: Aşağıda zaman zaman herkeste olabilecek yakınmaların ve sorunların bir listesi vardır. Lütfen her birini dikkatle okuyunuz. Sonra bu durumun bu gün de dahil olmak üzere son üç ay içerisinde sizi ne ölçüde huzursuz ve tedirgin ettiğini gösterilen şekilde numaralandırarak işaretleyiniz.

Hiç : 0 Örnek: 1. (2) Baş ağrısı
Çok az : 1
Orta derecede : 2
Oldukça fazla : 3
İleri derecede : 4

1. () Baş ağrısı
2. () Sinirlilik ya da içinin titremesi
3. () Zihinden atamadığınız tekrarlayan, hoşla gitmeyen düşünceler
4. () Baygınlık ya da baş dönmesi
5. () Cinsel arzu ve ilginin kaybı
6. () Başkaları tarafından eleştirilme duygusu
7. () Herhangi bir kimsenin düşüncelerinizi kontrol edebileceği fikri
8. () Sorunlarınızdan pek çoğu için başkalarının suçlanması gerektiği duygusu
9. () Olayları anımsamada güçlük
10. () Dikkatsizlik ya da sakarlıkla ilgili düşünceler
11. () Kolayca gücenme, rahatsız olma hissi
12. () Göğüs ya da kalp bölgesinde ağrılar
13. () Caddelerde veya açık alanlarda korku hissi
14. () Enerjinizde azalma veya yavaşlama hali
15. () Yaşamınızın sonlanması düşünceleri
16. () Başka kişilerin duymadıkları sesleri duyma
17. () Titreme
18. () Çoğu kişiye güvenilmemesi gerektiği hissi
19. () İştah azalması
20. () Kolayca ağlama
21. () Karşı cinsten kişilerle utangaçlık ve rahatsızlık hissi
22. () Tuzağa düşürülmüş veya yakalanmış olma hissi
23. () Bir neden olmaksızın aniden korkuya kapılma
24. () Kontrol edilemeyen öfke patlamaları
25. () Evden dışarı yalnız çıkma korkusu
26. () Olanlar için kendisini suçlama
27. () Belin alt kısmında ağrılar
28. () İşlerin yapılmasında erteleme duygusu
29. () Yalnızlık hissi
30. () Karamsarlık hissi
31. () Her şey için çok fazla endişe duyma
32. () Her şeye karşı ilgisizlik hali
33. () Korku hissi
34. () Duygularınızın kolayca incitilebilmesi hali
35. () Diğer insanların sizin özel düşüncelerinizi bilmesi
36. () Başkalarının sizi anlamadığı veya hissedemeyeceği duygusu
37. () Başkalarının sizi sevmediği ya da dostça olmayan davranışlar gösterdiği hissi
38. () İşlerin doğru yapıldığından emin olmak için çok yavaş yapmak

39. () Kalbin çok hızlı çarpması
40. () Bulantı ve midede rahatsızlık hissi
41. () Kendini başkalarından aşağı görme
42. () Adale (kas) ağrıları
43. () Başkalarının sizi gözlediği veya hakkınızda konuştuğu hissi
44. () Uykuya dalmada güçlük
45. () Yaptığınız işleri bir ya da birkaç kez kontrol etme
46. () Karar vermede güçlük
47. () Otobüs, tren, metro gibi araçlarla yolculuk etme korkusu
48. () Nefes almada güçlük
49. () Soğuk veya sıcak basması
50. () Sizi korkutan belirli uğraş, yer veya nesnelerden kaçınma durumu
51. () Hiç bir şey düşünmeme hali
52. () Bedeninizin bazı kısımlarında uyuşma, karıncalanma olması
53. () Boğazınıza bir yumru takınmış hissi
54. () Gelecek konusunda ümitsizlik
55. () Düşüncelerinizi bir konuya yoğunlaştırmada güçlük
56. () Bedeninizin çeşitli kısımlarında zayıflık hissi
57. () Gerginlik veya coşku hissi
58. () Kol ve bacaklarda ağırlık hissi
59. () Ölüm ya da ölme düşünceleri
60. () Aşırı yemek yeme
61. () İnsanlar size baktığı veya hakkınızda konuştuğu zaman rahatsızlık duyma
62. () Size ait olmayan düşüncelere sahip olma
63. () Bir başkasına vurmak, zarar vermek, yaralamak dürtülerinin olması
64. () Sabahın erken saatlerinde uyanma
65. () Yılanma, sayma, dokunma, gibi bazı hareketleri yineleme hali
66. () Uykuda huzursuzluk, rahat uyuyamama
67. () Bazı şeyleri kırıp dökme hissi
68. () Başkalarının paylaşıp kabul etmediği inanç ve düşüncelerin olması
69. () Başkalarının yanında kendini çok sıkılgan hissetme
70. () Çarşı, sinema gibi kalabalık yerlerde rahatsızlık hissi
71. () Her şeyin bir yük gibi görünmesi
72. () Dehşet ve panik nöbetleri
73. () Toplum içinde yer, içerken huzursuzluk hissi
74. () Sık sık tartışmaya girme
75. () Yalnız bırakıldığınızda sinirlilik hali
76. () Başkalarının sizi başarılarınız için yeterince takdir etmediği duygusu
77. () Başkalarıyla birlikte olunan durumlarda bile yalnızlık hissetme
78. () Yerinizde duramayacak ölçüde rahatsızlık hissetme
79. () Değersizlik duygusu
80. () Size kötü bir şey olacağını hissi
81. () Bağırma ya da eşyaları fırlatma
82. () Topluluk içinde bayılacağınız korkusu
83. () Eğer izin vererseniz insanların sizi sömüreceği duygusu
84. () Cinsiyet konusunda sizi çok rahatsız eden düşüncelerin olması
85. () Günahlarınızdan dolayı cezalandırılmanız gerektiği düşüncesi
86. () Korkutucu türden düşünce ve hayaller
87. () Bedeninizde ciddi bir rahatsızlık olduğu düşüncesi
88. () Başka bir kişiye karşı asla yakınlık duymama
89. () Suçluluk duygusu
90. () Aklınızda bir bozukluğun olduğu düşüncesi

APPENDIX G – CURRICULUM VITAE

He was born in Muş in 1991. He graduated from psychology undergraduate programme from Cyprus International University between 2010-2015 years. Then he graduated from Clinical psychology master programme from Near East University between 2015-2017 years.

Master's Thesis:

Yoldaş E. (2017). Vücut geliştirme sporu yapan ve ağır vücut geliştirme sporu yapan bireylerin benlik saygısı, beden algısı ve psikopatolojik belirtilerinin karşılaştırılması Yüksek Lisans Tezi. Yakın Doğu Üniversitesi. Sosyal Bilimler Enstitüsü Lefkoşa, Kıbrıs.

APPENDIX H- ORIGINALITY REPORT

tez

ORIGINALITY REPORT

% 7	% 5	% 5	%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	www.prohealth.com Internet Source	% 1
2	library.neu.edu.tr Internet Source	% 1
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