

Social physique anxiety levels of Turkish combat sports (martial arts) athletes and sedentary individuals

Authors' Contribution:

- A** Study Design
B Data Collection
C Statistical Analysis
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Abstract

Background and Study Aim:

Anxiety is one's threat perception and fear of an outer situation-specific event generally accompanied by an expectation of future threat. It is defined as mental and somatic indications of one's perception of emotional and physical situations by psychologists. This paper aim is social physique anxiety levels of combat sports and martial arts athletes in comparing sedentary individuals in similar age.

Material and Methods:

Research group of this study was 147 individuals (81 male and 66 female between 16-24 years old), 24 of which are sedentary and 123 are combat sports and martial arts athletes in Turkey: 70 taekwondo; 30 judo; 23 kung fu. The research data was obtained by the questionnaire administered by the researcher to the sample group in various competitions in 2014. Social Physique Anxiety Inventory was used as a data collection tool in the research SPSS 17.0 software package was used to analyse the obtained data using descriptive statistics and Kruskal Wallis H test methods.

Results:

Significant difference was determined between the group of combat sports (martial arts) and the sedentary group in the physical appearance easement and total scores between in the negative evaluation expectancy scores at 0.01 level. The combat sports and martial arts athletes had a lower level of social physique anxiety compared to the sedentary individuals of same age group.

Conclusions:

That self-esteem and self-confidence gained by athletes through struggling with others in training and competitions have a deterministic effect on the results concerning physical appearance easement, negative evaluation expectancy, and social physique anxiety scores is an important outcome. This is an important proof that martial arts and combat sports training has a positive effect on personality.

Keywords:

judo • kung fu • Social Physique Anxiety Inventory • taekwondo

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Anxiety – *noun* the state of being very worried and afraid [30].

Combat sport – *noun* a sport in which one person fights another, e.g. wrestling, boxing and the martial arts [30].

Martial arts – *plural noun* any of various systems of combat and self-defence, e.g. judo or karate, developed especially in Japan and Korea and now usually practised as a sport [30].

Combat sport & martial art – relation according to the theory of combat sport: “every combat sport is martial arts but not vice versa” [31, p. 18]

Physical activity – *noun* exercise and general movement that a person carries out as part of their day [30].

INTRODUCTION

Anxiety is one's threat perception and fear of an outer situation-specific event generally accompanied by an expectation of future threat. It is defined as mental and somatic indications of one's perception of emotional and physical situations by psychologists.

Physique and physical appearance are ever important in how people are viewed in their social environment. With good physique and physical appearance come the spoils: social acceptance, admiration, and opportunity [1]. To a certain extent, an attractive physique is related to enhanced self-esteem and perceived social competence. Theron et al. [2] found that the “more positive the scores on body-image, the lower the scores on self-consciousness and the more socially competent the individual. In recent years, psychological features concerning the physique such as one's satisfaction with his body, and his concerns about his physical appearance as well as the relationship between such psychological features and participation to physical activities have been commonly examined by researchers [3-5]. Social physique anxiety (SPA), a term concerning anxiety associated with one's physique, is defined as the anxiety and/or stress one feels about his physique being evaluated by others [5]. Body perception has significant functions about one's feelings, thoughts and behaviours as well as with his/her interaction with the environment. In this context, negative imaginations imposed by a person to his/her body either in cognitive or sensual terms also influence his/her interaction both with himself/herself and the environment [5].

The anxiety associated with one's physique affects his participation and preferences of physical activity. Individuals with a high level of social physique anxiety generally prefer to do sports in isolated environments where they are less likely to be evaluated with their physical appearance by others [6]. Anxiety is sometimes accompanied by specific physical symptoms such as muscle tension in the neck and shoulders, hematuria, sleeping disorders, sweating, cold sweaty palms, high blood pressure and pulse without an apparent reason, and heart throbbing. Those who with social anxiety are generally shy, asocial, quiet and introverted persons are avoiding eye contact. They generally do not talk unless someone asks them anything, and they do not like to attract attention. They rarely talk in groups and slur over compliments quietly. Fear or avoidance-related behaviours have an important place in their life [7].

An inescapable component of most face-to-face social interactions, physical appearance is a prominent domain of self-presentation. In particular, each (real or imagined) in-person social encounter carries with it the prospect of mutual evaluation of the shape and composition of the participants' bodies. Distress experienced in this sort of situation has been labelled “social physique anxiety” (SPA) [5], which tends to be higher among women than among men [5] and to decrease with age [8]. SPA is correlated with aspects of self- and body- evaluation [5, 9] and disordered eating attitudes/behaviours [10]. Associations have also been documented between SPA and anthropometric factors such as body mass index (BMI), height, weight and percent body fat [5]. Much of the research on SPA has been conducted in the context of exercise and sport, where body evaluation is commonplace and, in some cases, an integral part of the activity. People with high SPA tend to exercise less than those with low SPA [11]. Among exercisers, high SPA is associated with endorsement of self-presentational and other extrinsic motives for engaging in physical activity [9]. Involvement in a regimen of regular exercise can reduce SPA [8]. Thus, it appears that, although the public nature of some forms of exercise may deter participation in physical activity for people high in SPA, regular exercise may have a salubrious effect on SPA.

Social physique anxiety that argues people always have a natural motivation of establishing a positive impression in the eyes of others and has theoretical foundations based on self-presentation and impact management, is argued to emerge in situations when individuals think that they are inadequate to establish the image that they want to be in the eyes of the others regarding their body images [12]. Social anxiety is distinguished from other types of anxiety by the existence or probability of existence of interpersonal evaluation in imaginary or real environments. Thus, social anxiety may be called as “anxiety of being evaluated.” Social anxiety appears associated not only with how an individual is perceived and evaluated by others but also with the existence of probability of being evaluated [13].

For the self-presentation approach developed by Schlenker and Leary [14] for explaining social anxiety, individuals are motivated to create positive impressions on others; they have social relationships with whom. However, they are not sure whether the aimed impressions will be created.

Moreover, individuals experience a high level of social anxiety in such circumstances. Considering approaches to social physique anxiety, cognitive behavioural method stands out. Social physique anxiety occurs based on one's anticipation that he/she and other individuals consider his/her body image in a negative way.

Moreover, individuals tend to consider their own body more negatively with the effect of anxiety [15]. By causing social avoidance behaviour, it is seen in men and women at an equal rate unlike other phobias and generally associated with low self-esteem and the fear of criticism /rejection. Avoidance is very apparent in most cases, and it may cause full social withdrawal in severe cases [16]. The common fears of individuals with a social anxiety disorder are talking and eating in front of others, attending interviews and meetings. These individuals are also afraid that others may understand their anxiety and laugh at them. They are also very sensitive to negative evaluation and rejection [17].

Another factor causing anxiety to become permanent in individuals is the difficulties one face with during the first socialization attempts in childhood. The children should also develop some methods to cope with their peers. Insulting and repellent behaviours a child faces in the relations with his friends may play an important role in stiffening the

negative feelings. Many recommendations point to the positive impact of permanent combat sports and martial arts training from the earliest years of life on shaping the human personality [18-23].

This paper aim is social physique anxiety levels of combat sports and martial arts athletes in comparing sedentary individuals in similar age.

MATERIAL AND METHODS

Studied total 147 individuals (81 male and 66 female between 16-24 years old), 24 of which are sedentary and 123 are combat sports and martial arts athletes in Turkey: 70 taekwondo; 30 judo; 23 kung fu (more details in Table 1). The research data was obtained by the questionnaire administered by the researcher to the sample group in various competitions in 2014 and a group of 1st and 2nd class and similar age group 24 university students.

The "Social Physique Anxiety Scale" developed by Hart et al. [5] and adapted to Turkish by Mulazimoglu-Balli et al. [7] was used as a data collection tool. The scale includes 12 items and two sub-scales. In the Turkish version of the scale, the test-retest correlation coefficient was found 0.88 for females and 0.81 for males; while internal consistency coefficient was found 0.81 for females and 0.77 for males.

Table 1. Descriptive statistics on the demographic characteristics of research groups.

Variable	Group	N	Mean, SD	Min	Max
Age (years)	judo	30	19.33 ±1.93	16.00	24.00
	taekwondo	70	19.85 ±2.22	16.00	24.00
	kung fu	23	19.13 ±1.68	17.00	23.00
	sedentary	24	19.66 ±1.37	17.00	22.00
Training experience (years)	judo	30	3.53 ±1.97	1.00	6.00
	taekwondo	70	2.98 ±1.67	1.00	6.00
	kung fu	23	4.00 ±1.56	1.00	6.00
	sedentary	24	do not have a regular sport habit		
Training time (hours per week)	judo	30	3.40 ±1.52	1.00	6.00
	taekwondo	70	2.68 ±1.55	1.00	6.00
	kung fu	23	4.39 ±1.58	1.00	6.00
	sedentary	24	do not have a regular sport habit		
Income level (conventional units)	judo	30	3.50 ±1.07	1.00	5.00
	taekwondo	70	2.55 ±1.12	1.00	5.00
	kung fu	23	3.39 ±0.83	2.00	5.00
	sedentary	24	3.00 ±1.02	1.00	5.00

The test is composed of scores of two sub-scales “Physical Appearance Easement” and “Negative Evaluation Expectancy” and the total scores of the two sub-scales constitute the score of “Social Physique Anxiety.” The high test scores mean the anxiety level is high, while the low scores mean the anxiety level is low both in sub-scale and total scores.

Income level was calculated (alternatively) by TL (Turkish lira), USD, EUR, and expressed in conventional units (from 1 to 5). For example, level 3: between 1500 and 2199 TL; approximately between 500-700 USD; between 450-650 EUR.

The obtained data was analysed in SPSS 17.0 software package using descriptive statistics and Kruskal Wallis H analysis methods.

RESULTS

The average age of the research and the sedentary group was found 19.60 ± 1.97 years, the training experience was found 3.40 ± 1.77 years,

the training time was found 3.23 ± 1.69 hours per week, and the income level was found 2.95 ± 1.12 conventional units. Considering the indicators analysed based on these findings, demographic features of the research and the sedentary groups were considered homogenous (Table 1).

Considering descriptive statistics, the high mean scores of the sedentary group in all main indicators are indicative of a high level of anxiety (Table 2). A significant difference was found at the 0.01 level in the examined indicators of the research group (Table 3).

DISCUSSION

Social anxiety disorder (social phobia) is the fear of feeling humiliated and ashamed before others or exhibiting disgraceful behaviours. People with a social anxiety disorder are afraid of and avoid, as far as possible, circumstances requiring them to communicate with others or performing an activity before others. For example, they have

Table 2. Descriptive statistics concerning social physique anxiety scores of research groups.

Variable	Group	N	Mean, SD	Min	Max
Physical appearance easement	judo	30	16.53 ±3.50	9.00	22.00
	taekwondo	70	17.51 ±3.52	9.00	25.00
	kung fu	23	17.21 ±3.41	9.00	24.00
	sedentary	24	19.66 ±2.11	16.00	25.00
Negative evaluation expectancy	judo	30	18.20 ±5.09	7.00	32.00
	taekwondo	70	19,27 ±5.45	7.00	32.00
	kung fu	23	18.39 ±4.85	9.00	26.00
	sedentary	24	23.25 ±2.78	18.00	27.00
Social-physical anxiety score	judo	30	34.73 ±4.87	22.00	49.00
	taekwondo	70	36.78 ±6.75	16.00	56.00
	kung fu	23	35.60 ±5.15	27.00	47.00
	sedentary	24	42.91 ±3.48	37.00	51.00

Table 3. Results of Kruskal Wallis analysis of variance concerning social physique anxiety scores of research groups (athletes vs sedentary individuals).

Variable	SD	Variance	Significance level
Physical appearance easement		0.004	0.01*
Negative evaluation expectancy	3	0.0001	0.01*
Social-physical anxiety score		0.0001	0.01*

*p<0.01

a feeling of shame, humiliation and fear when eating and talking on a cell phone in places open to the general public, using public toilets, writing their names of signing before others [24].

As many people agree, one's impression on others is very important. People try to think of ways to make a good impression in specific environments. Thus, they regard what others may think about them. Individuals with a social anxiety disorder are strictly interested in receiving social approval of others [25]. In this point of view, it can be deduced that individuals involved in different combat sports and martial arts do not have any difficulty in accepting their physical appearance as is and in communicating with others in social environments.

The fear of negative evaluation is not only the fundamental reason for social anxiety but also a problem of shy persons. Particular importance attached by parents to physical appearance and attitudes of others may cause children to have a feeling of being observed and evaluated continuously. Overprotective parenting style is stated to result from the lack of self-esteem of parents [26].

Social anxiety and self-esteem are inversely related. The fundamental reason for having a low level of self-esteem is to have an excessively accepting or rejecting family or friends. Parents who are accepting and affectionate are likely to raise children with a higher level of self-esteem; while parents who are excessively authoritarian, non-permissive and intolerant are likely to raise children with a lower level of self-esteem [25]. Social physique anxiety levels of university students participated in the research are below the mean score. No significant difference was found between the departments, and it was determined that students are pleased with their body image, and thus, their social physique anxiety levels are as expected [27].

Young individuals regarding their body image and the fact that they give excessive importance to their body images [28]. A combative participant who lives up to a certain level of ego ideal may

develop emotions about the course's potential outcomes for these individuals it may be shameful to engage in physical hand-to-hand confrontation and lose [29].

It is known as a general approach that five basic traits as "I exist, I am natural, I am precious, I deserve to love and to be loved, and I am reliable" are important for personal development. These traits are begun to be learned and developed in childhood period. Both family and social, environmental conditions in childhood period have an important role in the development of these traits. Active participation in life and awareness of one's skills and values are supported by the positive development of such personal traits. Restrictive and overprotective parenting style limits the independence and skills of a child and causes parental dependency. Unconcerned and rejecting attitudes of parents may cause the child to be in dire need of approval and acceptance and may cause the development of the fear of negative evaluation. These children are likely to become individuals with social anxiety disorder [26].

Individual experiences and self-acceptance during active participation in life lead the development of self-esteem. In this regard, it is likely to conclude that elite groups involved in different combat sports and martial arts feel more comfortable in terms of physical appearance, have less negative feelings concerning negative evaluation expectancy, and have a lower level of social physique anxiety compared to sedentary individuals.

CONCLUSIONS

That self-esteem and self-confidence gained by athletes through struggling with others in training and competitions have a deterministic effect on the results concerning physical appearance easement, negative evaluation expectancy, and social physique anxiety scores is an important outcome. This is an important proof that combat sports and martial arts training has a positive effect on personality.

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