# The Relationship between Emotional Intelligence, Social Physique Anxiety and Life Satisfaction in Physical Education and Sports Students

Gamze Üngür Dokuz Eylül University School of Sport Sciences and Technology 35340, İnciraltı, İzmir, Turkey

Cengiz Karagözoğlu Marmara University School of Physical Education and Sports 34800, Anadoluhisarı Campus, Beykoz, İstanbul, Turkey

# Abstract

This study aims to retrieve the relationship between emotional intelligence, social physique anxiety and life satisfaction among physical education students whom engaged to all kinds of sport activities and a physically active population. 141 students, 89 male (%63.1) and 52 female (%36.9), average age=21.6 participated to the study and completed Schutte Emotional Intelligence Scale, Social Physique Anxiety Scale (SPAS) and The Satisfaction With Life Scale. Students with high appraisal of emotions score have lower life satisfaction. Students with high social physique anxiety (SPA) have high positive emotional intelligence (EI) total score and appraisal of emotions score but negative correlation found with life satisfaction score and SPA. Results show that gender doesn't have a direct effect on SPA, a Univariate ANOVA conducted to reveal the difference between gender group, EI group and SPA. According to results, gender & EI has an important effect on SPA. Female students with high EI level have a higher SPA than lower EI group of both males and females.

Key words: Emotional intelligence, social physique anxiety, life satisfaction, physical education student

# 1. Introduction

Emotions are one of the most argued psychological and complex phenomena. James-Lange theory is one of the early descriptions which explain the model. "The bodily changes follow directly the perception of the existing fact, and that one's feeling of the same changes as their occuring is the emotion". According to this explanation; (1) people mentally perceive something; (2) this creates a mental affect (the emotion); and (3) this generates some physical expression. (Strongman, 2003, p.14). This early stage theory shows that there is a link between emotion and body responses. Emotional Intelligence (EI) concept, which involves abilities related emotions, has a broad interest in the scientific fields. According to Saibani, Sabtu, Muhamad, Wahab, Sahari and Deros (2012), EI focuses not only on emotions but also on the effect of the use of emotions and EI becomes an interesting element associated with the academic performance of students in tertiary education. Peter Salovey and John Mayer, who originally used the term "emotional intelligence" in published writing, defined emotional intelligence as:

(...)Emotional intelligence involves the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth (Mayer and Salovey, 1997).

Physical self-concept represents a person's global view of one's physical self (Hagger, Hein and Chatzisarantis, 2011). Social Physique Anxiety (SPA) is one of the self-perception related concept. SPA is the anxiety which occurs as "a result of the prospect or presence of interpersonal evaluation involving one's physique" (Hart, Leary and Rejeski, 1989). The main concept of SPA is that people who may perceive that a situation can probably provoke others to evaluate their body in a non-positive way and SPA is associated with some other negative behaviors like disordered eating (Fitzsimmons-Craft, Harney, Brownstone, Higgins, Bardone-Cone, 2012), also unfavorable eating attitudes (Aşçı, Tüzün and Koca, 2006).

However, people with a higher SPA levels are tend to participate more to physical exercise programs (Crawford and Eklund, 1994). Similarly, being physically slim was associated with less physique anxiety (Petrie, Diehl, Rogers and Johnson, 1996). And female university students are showing higher SPA than male (Koparan, Şahin and Kuter, 2010). In fact, it is thought that SPA is directly connected to emotions with various perceptions. Because of this, SPA might be associated with EI; SPA level may be affected by EI level. SPA is also found to be highly related to body image dissatisfaction (Atalay and Gençöz, 2008); participants who were dissatisfied with their body image experienced higher SPA. This association makes us think that there might be relation between SPA and life satisfaction. In this study, main aim was to obtain the relationship between social physique anxiety, emotional intelligence and life satisfaction on highly physically active students. Actually, it is wondered whether there are differences among these variables among students being physically active.

# 2. Method

### 2.1. Participants

A random sample of 141 physical education and sports students, 89 male (63.1%) and 52 female (36.9%), age range between 18-32 (average=21.6), participated to the study. 52 of the students were freshmen (39.7%), 23 were sophomore (16.3%), 41 were junior (29.1%) and 21 of the students were senior (14.9%).

### 2.2. Measures

### 2.2.1. Schutte Emotional Intelligence Scale

The Schutte Emotional Intelligence Scale, developed by Schutte, Malouff, Hall, Haggerty, Cooper, Golden and Dornheim (1998), revised by Austin, Saklofske, Huang and McKenney (2004) and adapted for the Turkish population by Tatar, Tok and Saltukoğlu (2011), was used to measure emotional intelligence. The scale contains 41 items with a 5 points Likert-type scale; it gives an overall EI score as well as scores for three subscales: optimism/mood regulation, utilizations of emotions and appraisal of emotions. The Cronbach-Alfa internal consistency coefficient for the entire scale was 0.82.

### 2.2.2. Social Physique Anxiety Scale (SPAS)

The SPAS (Hart et al., 1989) comprises 12 items with a 5 points Likert-type scale. The labels were not at all (1), slightly (2), moderately (3), very (4), and extremely (5) (Hagger, Aşçı, Lindwall, Hein, Mülazımoğlu-Ballı, Tarrant, Pastor Ruiz and Sell, 2007). SPAS has two subscales which are "feeling of discomfort about the presentation of one's physique" and "expectations of negative evaluation of physique by others" (Koca and Aşçi, 2006). In this study, feeling of discomfort about the presentation of one's physique of discomfort about the presentation of one's physique subscale is used for measure SPA scores. In general, SPAS can be useful for examining the effects of physique-related self-presentation concerns in exercise settings (Crawford and Eklund, 1994).

### 2.2.3. The Satisfaction with Life Scale

Diener, Emmons, Larsen and Griffin (1985) developed the scale, Yetim (1993) adopted into Turkish population and found the internal consistency as .86 and reported high construct validity. The scale contains 5 items with a 7 points Likert-type scale.

### 3. Results

Table 1. Means and Standard	<b>Deviations for EI. SPA</b>	and Life Satisfaction Scales
	20110112101121,0111	

Gender	Optimism/	Utilizations of	Appraisal of	EI Total	Social Physique	Life
	Mood Regulation	Emotions	Emotions		Anxiety	Satisfaction
Female	47,27(2.7)	15,38 (2.9)	23,48(4.7)	86,13(5.9)	15,13(6.3)	26,84(4.7)
Male	45,76(4.8)	16,78(3.1)	24,4(5.4)	86,95(7.9)	14,72(5.8)	24,34(6.1)
Total	46,31(4.2)	16,27(3.1)	24,07(5.2)	86,65(7.2)	14,87(5.9)	25,26(5.7)
t	2.4	-2.6	1.0	65	.40	2.55
P<	.05	.01	N.S.	N.S.	N.S.	.01

Optimism/mood regulation, utilizations of emotions and life satisfaction scores show significant differences between genders. Female students have higher scores of life satisfaction and optimism/mood regulation, but their utilizations of emotions scores are lower than male students (Table 1).

	Age	Optimism/Mood Regulation	Utilizations of Emotions	Appraisal of Emotions	EI Total	SPA
Age	-	C				
Optimism/Mood Regulation	-,147	-				
Utilizations of Emotions	-,215*	-,073	-			
Appraisal of Emotions	-,090	-,177*	,238**	-		
EI Total	-,243**	,425**	,560**	,714 <sup>**</sup>	-	
SPA	-,167*	-,095	,128	,553**	,395**	-
Life Satisfaction	,132	,255**	-,059	-,331**	-,114	-,307**

Table 2. Pearson Moment	<b>Correlation analyses fo</b>	for EI, SPA and Life Satisfaction Scales

\* Correlation is significant at the 0.05 level.

\*\* Correlation is significant at the 0.01 level.

Age of the student has significant negative relation with utilizations of emotions (p<.05), EI Total (p<.01) and SPA (p<.05). Two sub scales (optimism/mood regulation and appraisal of emotions) of EI scale have negative correlation (p<.05). Students with high appraisal of emotions score, have lower life satisfaction. Students with high social physique anxiety show high positive EI Total and appraisal of emotions score (p<.01), but there is negative correlation between SPA and life satisfaction score (p<.01) (Table 2).

A Univariate ANOVA was conducted to analyze the interaction between SPA and EI,Gender and age group. There were no difference between female & male students for SPA, but EI level shows significantly difference on SPA. Also Gender&EI has an interaction between SPA score (Table 3).

Source	Type III Sum of	df	Mean Square	F	Sig.	
	Squares					
Corrected Model	687.57 <sup>a</sup>	3	229.19	7.29	.000	
Intercept	29227.61	1	29227.61	929.88	.000	
Ei_group	641.24	1	641.24	20.40	.000	
Gender	6.01	1	6.01	.19	.663	
Ei_group * Gender	163.76	1	163.76	5.21	.024	
Error	4306.13	137	31.43			
Total	36181.00	141				
Corrected Total	4993.70	140				

Table 3. Univariate ANOVA Statistics between EI and Gender for SPA

a. R Squared = .138 (Adjusted R Squared = ,119)

The students with low EI score have average 12.94 (4.7) SPA and students with high EI score have average 16.77 (6.4) SPA. Also gender&EI has an effect on SPA. Female students with a low EI have average 11.8 (3.9) SPA, male students with low EI have average 13.6 (5.1) SPA, but female students with high EI scores have a relatively high average 18.5 (6.5) SPA score than male students 15.8 (6.2) (Table 3). These results show that gender does not have a direct effect on SPA, while gender&EI has an important effect on SPA. Female students with high EI scores have a relatively have a direct effect on SPA, while gender&EI has an important effect on SPA. Female students with high EI have a higher SPA level than lower EI group of male&female.

### 4. Discussion

The present study examined the relationship between emotional intelligence, social physique anxiety and life satisfaction in a sample of physical education and sports students. The findings of the gender differences show that female students have higher scores of life satisfaction and optimism/mood regulation, while utilizations of emotions subscale scores are lower than male students. Bar-On's study (1997) reveals that females are more aware of emotions, can establish better interpersonal relationships and socially more responsible than men. This finding shows similar results with our study about the score of females on optimism/mood regulation subscale. Generally, literature indicates that there is a strong relationship between optimism and life satisfaction (Bailey, Eng, Frisch and Snyder, 2007). In the current study, life satisfaction scores of females might be higher than male students because of their high optimism scores.

According to Brackett, Mayer and Warner (2004) and Mayer, Caruso and Salovey (1999), females EI scores typically higher than males, this result overlaps with our finding about optimism/mood regulation dimension, but utilizations of emotions scores are paradoxically different.

Pearson correlation analyses show that age of the students has significant negative relationship with social physique anxiety. Paradoxically, Tompson and Chad (2002) founded age was significantly positively correlated to the social physique anxiety. In addition, a negative body image is associated with higher social physique anxiety in adult females (Hart et al., 1989). These findings are not supported by results of current study and this difference might be because of population. This study was carried out with a sample of university students, and young students may be more interested in their physique, so it may increase their social physique anxiety level.

Age shows negative correlations between utilizations of emotions, and emotional intelligence total score. Literature and "common sense" consider that older people are more aware, wise, and restrained (Fariselli, Ghini and Freeman, 2008). It is expected that life experience contributes to the improvement of EI level. In study of Fariselli et al (2008), emotional intelligence increases slightly but significantly with age, even the relationship between EI and age, there are many young people with high EI and many older people with lower EI. Some factors such as different demographic categories, academic level may affect EI level; therefore, younger people would have high EI level.

A negative correlation found between optimism/mood regulation and appraisal of emotions subscale scores. This result might be negative because of different functions of these two sub scales. In this study, students with high appraisal of emotions score, have lower life satisfaction than others. Ability of evaluation emotions may cause deep understanding feelings, even bad ones, and people with this ability may express their emotions better than others. In addition, students with high social physique anxiety show also high positive EI total and appraisal of emotions score. Emotional intelligence processes initially starts with perceptual system, and EI allows for the accurate appraisal and expression of feelings (Salovey and Mayer, 1990). Accordingly, students with high EI might realize their SPA level and express it better. There is also negative correlation between SPA and life satisfaction score in this study. It might indicate that people with high SPA have low life satisfaction.

Results also revealed that EI level has a significant effect on SPA while there were no difference between female and male students for SPA. Average SPA score is higher among students with higher EI group than students with low EI group. These results indicate that people who have high EI level might have high SPA. We could not find any research examining the relationship EI and SPA in literature but EI was negatively related to levels of depression and anxiety (Extremera and Pizarro, 2006). Result about EI and SPA does not support to this research's findings. Generally, EI refers to the ability to recognize and regulate emotions in ourselves and others (Goleman, 2001). According to this definition, it is clear that emotions should be realized initially. So, the result of this study about EI and SPA may indicate that people who have high EI level are more aware of their feeling, their SPA.

Analyzing the interaction variables also shows that gender and EI has an important effect on SPA. The average SPA score of female students with a low EI lower than the average SPA score of male students with low EI, but female students with high EI have relatively higher average SPA score than male students. Mass media and other cultural influences designate some standards of beauty and especially women tend to evaluate their appearance with reference to these difficult standards (Brownell, 1991). For this reason, females may have higher SPA than males, but the significative factor in this study is EI level. As mentioned above, high EI level is related to realize feelings, therefore, females with high EI might be aware of their SPA and this may explain the difference between female and male students with high EI. These results show gender doesn't have a direct effect on SPA, but gender and EI has an important effect on SPA. Female students with high EI have higher SPA levels than lower EI group of female and male.

The present study reveals several significant differences between variables. As there are few related studies in literature, it is suggested to researchers to continue examining relationship between emotional intelligence and social physique anxiety to have clear explanation about subjects.

#### References

- Aşçı, F. H., Tüzün, M., & Koca, C. (2006). An examination of eating attitudes and physical activity levels of Turkish University students with regard to self-presentational concern. Eating Behaviors, 7, 362–367.
- Atalay, A. A., &Gençöz, T. (2008). Critical factors of social physique anxiety: exercising and body image satisfaction. Behaviour Change, 25, 178-188.
- Austin, E. J., Saklofske, D. H., Huang, S. H. S., & McKenney, D. (2004). Measurement of trait emotional intelligence: testing and cross-validating a modified version of Schutte et al.'s (1998) measure. Personality and Individual Differences, 36, 555-562.
- Bailey, T. C., Eng, W., Frisch, M. B., & Snyder, C. R. (2007). Hope and optimism as related to life satisfaction. The Journal of Positive Psychology, 2(3), 168-175.
- Bar-On, R. (1997). The emotional quotient inventory (EQ-i): technical manual. Toronto, Canada: Multi-Health Systems, Inc.
- Brackett, M. A., Mayer, J. D., & Warner, R. M. (2004). Emotional intelligence and its relation in everyday behavior. Personality and Individual Differences, 36, 1387-1402.
- Brownell, K. D. (1991). Dieting and the search for the perfect body: Where physiology and culture collide. Behavior Therapy, 22, 1–12.
- Crawford, S., & Eklund, R. C. (1994). Social physique anxiety, reasons for exercise, and attitudes toward exercise settings. Journal of Sport and Exercise Psychology, 16, 70-82.
- Diener, E., Emmons, R. A., Larsen, R.J., & Griffin, S. (1985). The satisfaction with life scale. Journal of Personality Assessment, 49, 71-75.
- Extremera, N., Pizarro, D. (2006). The role of emotional intelligence in anxiety and depression among adolescents. Individual Differences Research, 4(1), 16-27.
- Fariselli, L., Ghini, M., & Freeman, J. (2008). Age and emotional intelligence: white paper. [Online] Available: http://www.6seconds.org/sei/media/WP\_EQ\_and\_Age.pdf (January 8, 2008), 1-10.
- Fitzsimmons-Craft, E. E., Harney, M. B., Brownstone, L. M., Higgins, M. K., & Bardone-Cone, A. M. (2012). Examining social physique anxiety and disordered eating in college women. The roles of social comparison and body surveillance. Appetite, 59, 796-805.
- Goleman, D. (2001). Emotional intelligence: Issues in paradigm building. In C. Cherniss and D. Goleman (Ed's.), The emotionally intelligence workplace (pp. 13-26). San Francisco: Jossey-Bass.
- Hagger, M. S., Aşçı, F.H., Lindwall, M., Hein, V., Mülazımoğlu-Ballı, Ö., Tarrant, M., Pastor Ruiz, Y., & Sell, V. (2007). Cross-cultural validity and measurement invariance of the social physique anxiety scale in five European nations. Scand J Med Sci Sports, 17, 703-719.
- Hagger, M. S., Hein, V., & Chatzisarantis, N. L. D. (2011). Achievement goals, physical self-concept, and social physique anxiety in a physical activity context. Journal of Applied Social Psychology, 41(6), 1299-1339.
- Hart, E. A., Leary, M. R., & Rejeski, W.J. (1989). The measurement of social physique anxiety. Journal of Sport and Exercise Psychology, 11, 94-104.
- Koca, C., & Aşçı, F. H. (2006). An examination of self-presentational concern of Turkish adolescents: an example of physical education setting. Adolescence, 41(161), 185-197.
- Koparan, Ş., Şahin, E., & Kuter, F. (2010). A comparison on of self-efficacy perception and social physical anxiety levels of teacher candidates at Physical Education Department. Proceedia Social and Behavioral Sciences, 2, 3932–3937.
- Mayer, J. D., Caruso, D., & Salovey, P. (1999). Emotional intelligence meets traditional standards for an intelligence. Intelligence, 27, 267-298.
- Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey and DJ. Sluyter (Eds), Emotional development and emotional intelligence: Implications for educators (pp. 3-31). New York: Basic Books.
- Petrie, T. A., Diehl, N., Rogers, R. L., & Johnson, C. L. (1996). The social physique anxiety scale: reliability and construct validity. Journal of Sport and Exercise Psychology, 18, 420-425.
- Saibani, N., Sabtu, M. I., Muhamad, N., Wahab, D. A., Sahari, J., & Deros, B. M. (2012). Comparison of emotional intelligence scores among engineering students at different stages of an academic program. Asian Social Science, 8(16), 88 95.
- Salovey, P., & Mayer, J. (1990). Emotional intelligence. Imagination, Cognition and Personality, 9(3), 185-211.
- Schutte, N.S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J.T., Golden, C.J., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. Personality and Individual Differences, 25, 167-177.

Strongman, K.T. (2003). The Psychology of Emotion (5th ed.). John Wiley and Sons, England.

- Tatar, T., Tok, S., & Saltukoğlu, G. (2011). Adaptation of the revised Schutte emotional intelligence scale into Turkish and examination of its psychometric properties, Bulletin of Clinical Psychopharmacology, 21(4), 325-338.
- Thompson, A. M., & Chad, K. E. (2002). The relationship of social physique anxiety to risk for developing an eating disorder in young females. Journal of Adolescent Health, 31, 183-189.
- Yetim, Ü. (1993). Life satisfaction: a study based on the organization of personal projects. Social Indicators Research, 29, 277-289.