

*Full Length Research Paper*

# A comparison of levels of quality of life, depression and loneliness among athletes with different levels of training

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The purpose of this study is to compare the levels of life quality, depression and loneliness among the students of the Faculty of Sports Sciences (FSS), national wrestlers and non national wrestlers in terms of some demographic variables. The participants of the study included 37 students from the Faculty of Sports Sciences of Ondokuz Mayıs University, 40 wrestlers in national team and 36 wrestlers who are not in the national team. The data was collected through a "Demographic Information Form" developed by the researchers and "Whoqol Bref Quality of Life Scale" (KF 36) to determine the quality of life, "Beck Depression Scale" to determine the levels of depression and "UCLA Loneliness Scale" to determine the levels of loneliness. Quality of life, loneliness and depression levels were examined between different level subjects, between gender and between under and upper 20 years subjects. Kruskal Wallis and Mann Whitney-U test were used for the statistical analysis of the data. It was found that the wrestlers who were not national athletes had higher loneliness and depression levels and lower social domain scores than those of the national wrestlers and students of the Faculty of Sport Sciences ( $p < 0.0167$ ). Female participants were found to have higher loneliness levels and lower social domain scores than male participants. All the participants under 20 were found to have lower social domain scores and higher loneliness levels than the participants over 20 ( $p < 0.05$ ). The wrestlers in the national team experienced less loneliness than the wrestlers who were not in the national team. This result indicates the significance of having a successful sportive identity in terms of loneliness. Within this context, it will be of use for trainers to give importance to activities and trainings that will contribute to a successful identity formation.

**Key - words:** Depression, loneliness, quality of life, wrestler.

## INTRODUCTION

Sedentary life style, which is currently very common, is an important public health problem due to its negative effects (ACSM, 2009). Thus, regular exercise is an

important factor in making the body physically fit (Guyton and Hall, 2007). Considering the benefits of physical exercise, individuals should be encouraged to do the

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most suitable level of physical activity for healthier individuals and healthier societies (Yuksel, 2011). In addition, physical activity and sport affect the central nervous system and increase brain monoamines related to moods such as dopamine, noradrenaline and serotonin (Isik et al., 2013).

World Health Organization defines quality of life as "individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns". In other words, quality of life is defined as an individual's subjective perception of his/her health within the socio-cultural environment he/she lives in (Zorba, 2008). Mostly personal and changeable, quality of life is an individual's perception of his/her state in life in terms of his/her own aims, expectations, standards and anxieties relevant to the cultural structure and values system that he/she lives in (WHOQOL, 1993).

Depression is a normal reaction for a great number of situations that cause stress brought by life (Atkinson, 1990). Cam et al. (2004) define depression as a syndrome that includes symptoms such as thinking and talking in a sad mood, having slower moves and serenity, feeling invaluable, small and pessimistic and having slower physiological functions. A great many symptoms that affect all of the psychological and physical functions of a person are within the study area of depression. Some of the situations that can be interpreted as depression are failure at school or at work, losing someone beloved and understanding that disease or old age is consuming a person's resources (Atkinson, 1990).

The feeling of loneliness is a feeling that can be seen in almost every period of a person's life. People feel lonely when they do not have anyone that can respond to their need of the support of a social group in which they can feel sincere, frank and safe or when they cannot do this since they do not have enough maturity to have proper social relations with others (Santrock, 1999). According to Asher et al. (1998), loneliness is a situation that can cause feelings of disapproval and not being liked by the people around; feeling alienated for what is happening around, absence of commitment figures that existed in the past and absence of someone that can share personal interests and experiences or becoming lonely and not having the chance to make another choice. Studies have found that physical activity and sport do not have positive effects only on quality of life (Bize et al., 2007; Motl and McAuley, 2010), but they also have positive effects on depression and loneliness (Strohle, 2009; Strong et al., 2005).

Within the light of this information, it is important to determine the factors that affect loneliness and depression by taking into consideration the role of moods such as quality of life, depression and loneliness on the motivation and sportive success of the national wrestlers and wrestlers who are not in the national team. The purpose of this study is to compare the quality of life, depression and loneliness levels of athletes with

different levels of training and to contribute to literature.

## METHOD

The study included 37 students studying at Ondokuz Mayıs University, 40 national team wrestlers and 39 wrestlers who were not in the national team. The data was collected through "Demographic Information Form" prepared by the researchers, "Whoqol Bref Quality of Life Scale" (KF 36) to assess quality of life, "Beck Depression Scale" to assess levels of depression and "Ucla Loneliness Scale" to find out levels of loneliness. Whoqol Bref Quality of Life Scale was developed by Rand Corporation in 1992 and its Turkish validity and reliability studies were made by Kocyigit et al. (1999). The depression scale (Beck Depression Scale), which was developed by Beck et al. (1961) and which was translated into Turkish and tested for validity and reliability by Hisli (1989), was used. Ucla Loneliness Scale was developed by Russel et al. (1980) and adapted to Turkish by Demir (1989). "High scores" are "good" for Quality of Life Scale, "bad" for Loneliness Scale and "bad" for Depression Scale. Quality of life, loneliness and depression levels were examined between different level subjects, between gender and between under and upper 20 years subjects.

The SPSS 19 package software was used in the statistical analyses of our study's data. The continuous variables did not exhibit a normal distribution, as tested by the Kolmogorov Smirnov test. So the values among three groups were compared by Kruskal Wallis Test. For the pairwise comparison Mann Whitney-U test was used. Because the comparison number was three, in each Bonferroni corrected Mann Whitney U tests, the level of significance taken into account was  $0.05/3=0.0167$ . The values among two groups were compared by Mann Whitney-U test and the level of significance taken into account was 0.05 and 0.01.

## FINDINGS

The Quality Life, Loneliness and Depression scores were compared between three different level training groups, between gender and between age (under and upper 20 years). Table 1 presents the comparison of scores from scales in terms of groups. No significant difference was found between groups in terms of psychological domain scores, while a significant difference was found in terms of social domain scores. A significant difference was also found between the scores of loneliness and depression in another comparison between groups ( $p<0,0167$ ).

In the comparison of scale scores in terms of the gender of athletes, social domain scores, which is the sub-factor of quality of life, were found to be lower in women ( $p<0.05$ ). A significant difference was found in loneliness scores in favor of men ( $p<0.01$ ). That is, loneliness levels of female athletes were found to be higher than those of male athletes (Table 2).

As can be seen from Table 3, a significant difference was found between the social domain scores and loneliness scores of the participants in terms of age ( $p<0.05$ ). The participants under 20 were found to have lower social domain scores while they had higher loneliness scores. No significant difference was found between the participants' depression and psychological domain scores in terms of age ( $p>0.05$ ).

**Table 1.** Comparison of scale scores in terms of groups.

Scales	Groups	N	Median	Min	Max	p
Psychological domain score	Non-national wrestlers (1)	36	13	7	15	-
	FSS Students (2)	37	13	8	17	
	National wrestlers (3)	40	13	9	17	
<b>Quality life</b>						
Social domain score	Non-national wrestlers (1)	36	13	9	20	1<2,3*
	FSS Students (2)	37	15	9	20	
	National wrestlers (3)	40	15.5	9	20	
<b>Loneliness score</b>						
Loneliness score	Non-national wrestlers (1)	36	46	31	56	1>2,3*
	FSS Students (2)	37	38	28	56	
	National wrestlers (3)	40	38	27	54	
<b>Depression score</b>						
Depression score	Non-national wrestlers (1)	36	7	0	15	1>2,3*
	FSS Students (2)	37	3	1	12	
	National wrestlers (3)	40	4	1	12	

\*p&lt;0.0167.

**Table 2.** Comparison of scale scores in terms of gender.

Scales	Gender	n	Median	Min	Max	p
Psychological domain score	Female	34	13	7	17	0.433
	Male	79	13	9	17	
<b>Quality life</b>						
Social domain score	Female	34	13	9	19	0.029*
	Male	79	15	9	20	
<b>Loneliness score</b>						
Loneliness score	Female	34	45	32	56	0.005**
	Male	79	39	27	56	
<b>Depression score</b>						
Depression score	Female	34	5.5	1	15	0.177
	Male	79	4	0	13	

\*\*p&lt;0.01 \*p&lt;0.05.

**Table 3.** Comparison of scale scores in terms of age.

Scales	Age	N	Median	Min	Max	p
Psychological domain score	<20 Age	49	13	7	17	0.810
	>20 Age	64	13	8	17	
<b>Quality life</b>						
Social domain score	<20 Age	49	13	9	20	0.045*
	>20 Age	64	15	9	20	
<b>Loneliness score</b>						
Loneliness score	<20 Age	49	44	28	56	0.044*
	>20 Age	64	38	27	56	
<b>Depression score</b>						
Depression score	<20 Age	49	4	1	15	0.424
	>20 Age	64	4	0	13	

\*p&lt;0.05.

## DISCUSSION AND CONCLUSION

The presence of an association between quality of life and physical activity has recently become an interesting subject in scientific community. However, the degree of the association between quality of life and physical activity is not known well in terms of some variables and thus studies are conducted on this area (Acree et al., 2006; Shibata et al., 2007). Quality of life, loneliness and depression levels were examined between different training level subjects. No significant difference was found between groups in psychological domain scores, which is a sub-factor of quality of life. However, a significant difference was found in social domain scores, which is another sub-factor. The higher social domain scores was seen in national wrestlers. This difference can be explained by the facts that national wrestlers are in touch with the athletes of different countries through national and international competitions, they meet new cultures and thus they are active in social domains. In addition, a significant difference was found between the loneliness and depression scores of groups. The wrestlers who were not in the national team were found to have higher loneliness scores than national wrestlers and the students of Faculty of Sport Sciences. This result can be explained with the fact that these athletes perform in a sport club and at the same time they get away from social circles due to their busy training schedules to get a place in the national team. High depression scores of these wrestlers can be resulting from the facts that they have an understanding focused on success and they consider that becoming a national athlete is the saturation point in their lives.

Quality of life, loneliness and depression levels were examined between gender. No significant difference was found in terms of psychological domain and depression scores while a significant difference was found in social domain and loneliness scores in favor of male athletes. In other words, female athletes were found to have higher levels of loneliness. Female athletes' high levels of loneliness were thought to be associated with their low social domain scores. Various studies on loneliness which used various variables have found loneliness levels of women to be higher than those of men (Kim, 2001; Rokach, 2000). It can be said that men can express their feelings more comfortably, they form relationships with people more easily and thus they do not live alone while women are not as comfortable as men in expressing their feelings and thoughts and as a result of this, they are more lonely. However, there are also studies which have stated that men are lonelier than women (Le Roux and Connors, 2001; Dereli et al., 2010; Yuksel et al., 2013). The fact that the group in this study consists of high level athletes can be a factor in having results different from other studies.

Scores of depression were not found to differ significantly in terms of gender. However, average scores

of women were found to be higher than those of men. Studies on depression have generally found the frequency and prevalence of depression to be higher in women than in men (Adewuya et al., 2006; Ackard et al., 2006; Ertem and Yazıcı, 2004; Oner et al., 2004; Turkles et al., 2008). Hormonal differences, societal values and being faced with different stressors increase the possibility of depression in women (Dogan, 2000). However, there are also studies in literature which state that men have higher levels of depression (Ceylan and Sahin, 2008; Sahin, 2009).

In our study, quality of life, loneliness and depression levels were examined between subjects age under and upper 20 years. Social domain and loneliness scores differed significantly in terms of age. The participants under 20 were found to have low socializing levels and high loneliness levels. According to Kontos and Wilcox (1997), all students are accustomed to living alone since all individuals are alone and they tend to experience the feeling of loneliness under different circumstances. In addition, teenagers and young adults have been reported to experience loneliness more frequently (Jones and Carver, 1991). Studies show that loneliness is associated with some psychological problems such as incompetency in social skills (DiTommaso and Spinner, 1997) and depression (Anderson and Harvey, 1998). In parallel with our study, there are studies reporting that the level of loneliness decreases as a person's age increases (Kozakli, 2006; Yilmaz et al., 2008). No significant difference was found in the participants' depression and psychological domain levels in terms of age.

As a conclusion, it can be seen that national wrestlers experience the feeling of loneliness less when compared with wrestlers who are not in the national team. This result presents the importance of having a sportive identity in terms of loneliness. Within this context, it will be of use for trainers to include more activities and works that will contribute to forming a successful identity.

With survey studies that will be conducted on athletes, groups that have high loneliness and depression levels and risk groups with low quality of life can be determined. Starting from this point of view, as a result of the findings of the study, it can be suggested that in order to find out and minimize the problems that athletes can encounter and to prevent them from experiencing estrangement, effective guiding systems can be formed in schools and camps and guiding approaches that they can take psychological support from when necessary can be included. During the training programs for the people in these groups, the differences caused by variables such as branch, training level, gender and such can be considered.

This study, the purpose of which was to compare the quality of life, depression and loneliness levels of athletes having different training levels, can contribute to limited literature and form a scientific base to future studies with similar subjects.

## Conflict of Interests

The authors have not declared any conflict of interests.

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