The examination of sport's effects over high school students' resiliency levels

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The aim of this study was to examine the resiliency of high school education students and to compare it by athletic or non-athletic factors. A sample of 728 (284 girls, 444 boys) high school students who were chosen randomly among pupils studying in Gaziantep provided responses. High School Version of California Resiliency Rating Scale which was developed in 1999 by WestEd and Duerr Evaluation Resources, and adopted by Özcan (2005) into Turkish was used as data collection tool. In dependent samples t-test was used to test the statistical differences in mean scores by using SPSS 16.0 program. Analysis indicated that resiliency levels of all students involved in our studies are above average; and when it is evaluated from the point of doing sports, in male high school students it is showed that being athletic have positive affects over the increase of resiliency level; on the other hand, considering female students, it was determined that sport causes more increase in factors described as external resiliency traits of sport; however, it is stated that sport has no affect on internal resiliency traits. As a conclusion, gender variance does not have any influence over resiliency levels of high school sportsman pupils.

Key words: Sport, resiliency, high school education.

INTRODUCTION

Humans who are social being by nature; born, live and die in the web of relations. As human relations are effected by traits and interactions of individuals, also are influenced by social and physical environment in which he lives (Hortaçsu, 2003). To be able to struggle against life difficulties which humans face, a well psychological organism is required.

Resiliency-our study’s main concept-has been described by many researchers in diverse ways. Joseph (1994) described this concept as pulling himself together during a bad or hard situation, being able to change and ability to overcome hardships. In another definition, resiliency is described as ‘a successful orientation period's result, process and capacity despite an environment which includes threats and challenges. Generally, it is expressed that resiliency is a human-specific concept. Resiliency trait is evaluated in different ways and is seen as an individual trait, process or a result (Glantz and Sloboda, 1999).

Literature about resiliency showed that, it is the power to overcome difficulties, deficiencies and stress (Begun, 1993) or striving in this period together with the ability to be able to be normalized successfully despite harsh living conditions and achieving eventually (Masten, 2001). According to Newman (2005), it is the ability to be able to orient when encountered with a disaster, trauma, hardships, difficulties and ongoing specific life stress.

Toprak (2009) describes resilient individual from the point of clinical psychological way; he emphasizes that he has to have several traits such as improving social friendship, having effective communication skills, being able to use a language well, assertiveness, planning the events and controlling them; additionally it defines as having several traits as happiness, optimism, the power to check oneself and being aware of one's feelings, strong self-confidence in terms of emotional ways (Kınımoglu et al., 2012). In addition, Fletcher and Sarkar
(2012), mentions that psychological resilient improves individual's effective communication skill and Reivich and Seligman (2011) mentions that psychological resilient improves individual's social friendship.

Even if the researchers propound that these individuals have genetic tendencies like social tendencies, which contribute to their resiliency or physical attractiveness, Ogulmus (2001) indicates that rather than a series of innate personal traits, it is a process which is obtained by learning and many traits of resilient individuals can be gained by ordinary individuals, too. In accordance, Leipold and Greve (2009) discuss that resiliency is a kind of bridge between development and coping.

The link between resiliency and development has always affected each other and it reflects the continuous truth that has to be lived (Ahern et al., 2008). It is stated that resilient children and adolescents are more hopeful than the others in terms of the ability for producing good results and they are mediocre happy individuals (Kumpfer, 1999). On the other hand, Nezhad and Besharat (2010) mentioned that, “Resilience and hardness positively affect sport achievement and psychological well-being”.

Considering the aforementioned definitions, it can be stated that psychological solidity cannot be explained only with a point of view. However, all of the definitions have certain things in common. These common points include several facts such as psychological solidity fact's being a dynamic process, including developable features—coping with trauma and harsh living conditions effectively—healthy orientation or the process of being able to develop proficiency; individual’s being exposed to risk or hardship so that psychological solidity can develop; gaining success in different aspects of life by orienting with the situation. When these are taken into account, it can be stated that resiliency level is made clear by harsh living conditions and that some elements like education, friends support and sport have positive affects as supportive factors (Oz and Yilmaz, 2009).

Resiliency level, which includes individual traits such as making the resistance of an individual increase and for strengthening to be able to cope with poor conditions of environment, is a new topic being researched in Turkey and there are a few available researches about its relation with sport. Sport is a broad concept which involves some terms as rivalry, interaction, motivation, stress, being stuck in a difficult situation, empathy etc. and when their physical-mental-spiritual roles over an individual was taken into consideration, investigation of the relation between doing sports and resiliency levels is crucial; because individuals who have traits of a resilient person, are expected to have high-self esteem, to solve problems, to show empathy, to cope with stress, to use effective interaction abilities and motivation on the high levels. It is stated that resiliency concept makes contribution to the development of the individuals more in sub-socioeconomic levels in which there are more negative environmental conditions (Joseph, 1994; Henderson and Milstein, 1996; Masten and Powell, 2003). From this point of view, the purpose of this study was to examine high school education students’ resiliency and to compare it with regards to athletic or non-athletic factors.

METHODS

This study was intended to determine the relation among secondary school students’ resiliency levels and to compare it with respect to athletic or non-athletic factors and it depends on descriptive survey model. The participants were divided into two categories with respect to having a sport certification or not. The research sample was applied in 2010 to 2011 educational year and it consists of 284 girls and 444 boys, chosen randomly, who have been studying in high school institutions which are located in towns grown especially by migration and are known as low level in terms of socio-economic in Gaziantep. The average age of girls who were included in the research was 16.56 and the average age of boys was 16.73.

High School Version of California Resiliency Rating Scale, which was developed by WestEd and Duer Evaluation Resources in 1999, also adopted into Turkish by Özcın, has been used to gain research data. CRRS consists of eight sub-factors. The first factor is titled as protective relations and high expectations; the second factor is titled as protective relations in the family, high expectations and opportunities for significant participation; the third factor is titled as protective relations at school and high expectations; the fourth factor is titled as protective relations in friend groups; the fifth factor is titled as self-efficacy and self-awareness; the sixth factor is titled as empathy; seventh factor is titled as goals and longing; and the eighth one is titled as solving problem. Alpha levels for the reliability of CRRS are .85 for factor 1, .81 for factor 2, .77 for factor 3, .89 for factor 4, .66 for factor 5, .71 for factor 6, .61 for factor 7, .61 for factor 8, and .89 for total (Özcın, 2005). Onat (2010), in CRRS used in his study, total correlations of Cronbach's alpha is (0.93). For sub-dimensions, .82 for factor 1, .84 for factor 2, .77 for factor 3, .88 for factor 4, .78 for factor 5, .73 for factor 6, .66 for factor 7, .68 for factor 8, have been determined (Onat, 2010). These results indicate a high level of reliability of the scale. If it is 0.60 ≤ α < 0.80, the scale is pretty reliable and has been evaluated as acceptable (Arslan and Şahbaz, 2012; Black and Porter, 1996; Tekez, 2004; Tuckman, 1999).

With the permission of Headships, scale was carried out after the goal and importance of working in class environment had been told. It was seen that scale was filled by students approximately in 30 min. Independent samples t-test were used to test the statistical mean differences by using SPPS 16.0 program.

FINDINGS

In Table 1, there is a matching of points taken by CRRS sub-factors in terms of male students’ athletic and non-athletic factors. According to Table 1, there were statistically mean differences in support of athletic male students considering all of the sub-factors of the scale.

In Table 2, there is a matching of points taken by CRRS sub-factors in terms of female students’ athletic and non-athletic factors. According to Table 2, in the sub-factors including high expectations and protective relations both at school and in society, also in sub-factors including protective relations in family and meaningful participation it has been encountered with meaningful difference in support of female students.

However, the analysis indicated that there were not any
Table 1. The comparisons of male high school students’ resiliency levels by athletic and non-athletic factors.

<table>
<thead>
<tr>
<th>Sub-factors</th>
<th>Variance</th>
<th>N</th>
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Table 2. The comparisons of female high school students’ resiliency levels athletic and non-athletic factors.

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statistical differences in self-efficacy, self-awareness, empathy, goals-missing and solving problem subfactors with regard to being a sports women or non-sports women.

In Table 3, there is a matching of points taken by CRRS sub-factors in terms of gender variance of high school students doing sports. The results of analysis revealed no significant differences in high school athlete students' mean scores with regard to gender.

**DISCUSSION AND CONCLUSION**

In this research which was carried out for determining resiliency levels of students who study in high school education institutions in terms of athletic and non athletic factors, 284 girls and 444 boys who study in Gaziantep's secondary schools were included. The average age of girls is 16.56 and the average age of boys is 16.73.

At the conclusion of the research, male and female students’ resiliency levels and their doing sports have been investigated separately; also, resiliency levels of sports men have been matched in terms of gender variance, too.

When we examined resiliency levels of male high school students in terms of athletic and non-athletic factors, in support of athletes, meaningful differences have been detected. The points male students who do sports attained from resiliency scale’s sub-factors are increasing in a meaningful way when compared with the non-athletes. Accordingly, it was determined that the resiliency levels of athlete male students were higher than the non-athletes.

This situation may result from biological, social and psychological effects of sport. For instance, according to Abakay (2010), sport not only increases an individual’s self-confidence but also helps the individual get rid of stress resulting from social oppression, and helps control oneself, overcome the difficulties life presents him. Also, it is a vital for the governments to invest in sport in order to raise both physically and spiritually young people. In Sahin’s (2011) qualitative data of the study which is about the interaction between sport and politics, in response to the question that which kind of functions the governments have to perform primarily; participants from diverse ministries had a detection: “governments should support human resources” and sport setup investments in a planned way the reason for this idea was that: Someone who has got sport education and culture not only makes himself noticeable in other branches but also he becomes braver and enterprising; his self-confidence is higher and he is more effective in two-way communications. The results of this study support our study’s findings.

Considering female students doing sports, when their
resiliency levels are viewed, in three sub-factors (pro-
tective relations at school and high expectations, pro-
tective relations in family and meaningful participation, pro-
tective relations in friend groups) meaningful dif-
fferences have been encountered in support of female 
athletes. Female athlete students' points which were got 
by resiliency sub-factors such as protective relations at 
school-in society, high expectations, protective relations 
in family and meaningful participations and protective 
relations in friend groups are increasing meaningfully in 
proportion to ones not doing sports.

In resiliency concept, external features are in the type 
of developmental supports, opportunities and protective 
factors; as to internal features are indicated as self-
efficacy, self awareness, empathy, goals-missing, and 
solving problem factors (Constantine et al., 1999; 
Constantine and Benard, 2001). Based on this 
description, in the factors which include external features, 
it can be said that: Females doing sports get higher 
points than non-sports women and that sub-factors 
including internal features do not show differences in 
terms of female athlete students.

In terms of gender variance, the resiliency levels of 
high school students' sub-factors, any differences have 
not been able to be detected. It can be stated that both 
males and female students involved in this study, are in 
the same level and have resiliency levels over the 
average.

Özcan, in his study over high school students in 2005, 
detected a meaningful difference in support of female 
students only in empathy sub-dimension on the level of 
p=.05. However, there were no significant differences in 
other sub-factors as regarding to gender.

In a study-about coaches-carried out by Kırımoğlu et al. 
(2012), in terms of gender variance, a meaningful dif-
ference were not found in resiliency levels. In another study 
of Kırımoğlu et al. (2010) over physical education 
teachers, any differences were not encountered in terms 
of gender variance. Both working groups used in related 
studies and the group included in our study, are closely 
related to sport, because there were no difference in 
terms of gender variance in these three groups. It can be 
said that sport has an affect over both men and women's 
resiliencies equally.

In the studies, which are in literature and have been 
carried out over individuals who have diverse socio-
economic profiles, it is emphasized that gender variance 
has no affect over resiliency level (Eitzen and Pratt, 1989; 
Özcan, 2005; Gürgan, 2006; Gökden, 2007; Dayioglu, 
2008; Terzi, 2008; Karaimak, 2009; Choowattanapakorn 
et al., 2010).

As a result, the resiliency levels of all students who 
have taken part in our study, are over the average level 
and when it is evaluated by athletic and non-athletic 
factors, it has been determined that, sports have positive 
effects over resiliency levels in male high school 
students. In addition, it is clear that in female students, 
in the factors described as external resiliency traits, sport 
results in more increase, as to in internal resiliency traits 
it has been stated that sport has no affect on these traits. 
Also, it was concluded that gender variance has no affect 
on high school athlete students' resiliency levels.

Resiliency concept can be described as a kind of risk 
and difficulty an individual experiences. Resiliency level is 
not a character feature which protects the individual from 
negative effects of environment (Gizir, 2007). Re-
liencies are protective factors in psycho-social references 
and they have attitudes and abilities which enable 
environmental risk factors to decrease their effects. 
Protective factors describe the situations which develop 
individuals' abilities and healthy harmony; also they ease 
the effect of difficulty or risk – reduce or remove them-
(Masten, 1994; Caffo and Belaise, 2003). In this study 
which is about the young in towns formed due to 
migration, it has been determined that sport activities that 
have protective factor feature are a determinant over the 
formation of resiliency level. The contribution of sport to 
resiliency level is stated in the related literature. Besides 
individual and parental protective factors, the diversity 
and multitude of resources presented by environment 
such as sport, culture, art and recreation activities make 
contribution to increase the psychological stability of the 
young who are at diverse risk (Wang et al., 1994; 
Mandleco and Perry, 2000).

The following suggestions have been developed 
considering the findings obtained from the research.

For future researches, individuals with diverse features— 
such as the ones who are in orphanages, experienced 
earthquake, live separately from parents or lost relatives— 
can be compared with each other. More comprehensive 
results can be reached by repeating similar studies in 
different cities which have dense migration population. 
More participation to sports activities should be supported 
so that resiliency feature of the disadvantaged young 
people can be constituted and developed. Sport facilities 
from which young children can benefit should be con-
stituted especially in districts which emerged by migra-
tion. In addition, qualitative studies can be conducted for 
broader analysis.

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