



## Evaluation of dissociative life of male athletes in some disability sportive branches<sup>1</sup>

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### Abstract

This research focused on evaluation of dissociative lives of male disabled athletes who played in teams of amputee football league and regional wheelchair basketball league. In this research; general survey method, one of the descriptive research methods, was used. As data collection tools; “Personal Information Form”, “Household Income Form” and “The Dissociation Scale Questioner” were used. A total of 92 male disabled participants (55 amputee football players and 37 wheelchair basketball players) were included in the study.

There were no significant statistical differences between participants’ dissociation levels and age, educational status, marital status, whether or not being a national player and employment status. However; there was statistically significant difference in terms of use of prostheses-use, sportive branch, household income and time of disability.

It may be argued that acquired traumatic events that occur after birth have stronger traumatic life levels/effects compared to congenital traumatic events that occur before or during birth

**Keywords:** Dissociative Life; Amputee Football; Wheelchair Basketball.

### 1. Introduction

Psychological traumas caused by the destructive traumatic events that people experience in their lives have recently been drawing the attention of the psychology science. As for sports psychology, there is a similar tendency, too.

Especially; as a natural result of the increasing number of the sportive branches and sportive federations established for the disabled people in our country, the number of the disabled people who play sports has increased and thus it may be said that the need to conduct scientific studies to investigate this sportive group has been inevitable. Therefore; subjective evaluation and the need to

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create awareness about negative effects of a physiological and psychological pathology of the disabled athletes have recently been more and more important (Beşiroğlu et al., 2007).

Particularly, after the traumatic events that cause people to lose their one or more than one extremities and make them veterans due to various causes (struggle against terrorism, conflicts, mines, explosions) while they are doing military service in our country or as a result of any traumatic events (like traffic accidents, natural disasters, sexual abuses); the psychological traumas that these people experience when they resume their normal lives in familial and social environments are remarkable.

It is evident that these people physically and psychologically lead a normal life as normal members of the society until they face traumatic events but after these traumatic events, loss of extremities causes them to undergo psychological traumas and becomes an important factor for them to have negative life experiences; which is explained in literature as dissociation.

In the general sense, dissociation is a deterioration in the perception of the one's conscious, memory, identity and environment integrity (APA, 1994) and is explained by the emphasis made on the changed mental process caused mainly by the psychological traumas (Boysan, Besiroglu, Kalafat, Kagan, & Ates, 2010).

Dissociation is a defense reaction formed against traumatic and destructive life events and therefore, -unlike disorders for which genetic factors are apparent such as schizophrenia and bipolar disorders- people who undergo external and destructive live events response these events using dissociation. There is a negative correlation between recovery and dissociation symptoms after one has experienced a traumatic event. Restoration of sense and confidence having been lost after the traumatic experience reduces prevalence of dissociative symptoms.

Psychological traumas are associated with painful, sudden and unexpected events which occur in extraordinary situations, are emotionally not coped with and are not controlled (Classen, Koopman, & Spiegel, 1993; Sayıl, 1992) and it is reported that psychological traumas occur when the stress that are created by these events exceeds one's resilience (Classen et al., 1993).

It is clear that a stressful event is not equally felt by everybody; which is explained in literature as resilience. Those who get positive and unexpected success under difficult conditions and have the ability to adapt to extraordinary conditions and situations are called as "resilient" (one who is marked by the ability to recover readily) and the term "resilience" (the ability to recover quickly) is used as a personality trait (Noguera, 1995; Terzi, 2008)

The relevant literature supports the fact that activities of physical education and sports make positive contributions to psychological, physical, mental and social development of people with normal development and life conditions and also are an effective and desirable tool for those who have special needs (Baron & Faubert, 2005; Canan & Ataoglu, 2010; İlhan, 2007; Layton, 1988; Winnick, 2010)

Therefore; this research focused on evaluation of dissociative life of athletes who played in teams of amputee football league and regional wheelchair basketball league.

## 2. Methods

In this research; general survey method, one of the descriptive research methods, was used. Survey method is a research model used on the purpose of representing existing condition (Karasar, 2005).

The study was composed of a total of 92 disabled individuals (55 male participants from amputee football league and 37 male participants from wheelchair basketball league).

As data collection tools; "Personal Information Form" designed by the researchers, "Household Income Form" and "The Dissociation Scale Questionnaire (DIS-Q)" designed by J Vanderlinden et al. and adapted for Turkish by Şar (1995) were used (Vanderlinden, Van Dyck, Vandereycken, Vertommen, & Jan Verkes, 1993).

Household Income Form is used to measure of the combined incomes of participant and all other people sharing a particular household. Participant household income is made up of his income plus that of the people (parents, spouse, siblings and others) who live with him. House income includes every form of income such as salaries and wages. According to The Turkish Statistical Institute data, the subjects were classified in the above average and below average income levels. 41 subjects were classified as below average income levels and 51 subjects were classified as above average income levels.

The Dissociation Scale (DIS-Q) is used to screen dissociative experiences and disorders and to measure the severity of these experiences and disorders. It is a self-administered scale and may be used for psychiatric patients, people with traumatic experiences as well as for out-clinic populations. The scale has a total of 63 questions and the subject marks each of these questions. The scoring of the scale is between 1 point and 5 points for each question. Mean score is obtained by dividing these points into 63. The studies conducted in Turkey indicate that those whose mean total score is  $2.5 \geq$  have a higher chance of dissociative disorder.

## 2.1. Statistical analysis

SPSS 16.0 statistical software was used to calculate and to analyze the data obtained. Normality tests of the data were performed with One-Sample Kolmogorov-Smirnov Test and it was seen that the data did not follow a normal distribution. Therefore; of nonparametric tests; Mann Whitney U Test (for the comparison of two groups) and Kruskal Wallis Test (for the comparison of three and more groups) were used for the data analysis. Error threshold was accepted as 0.01 and 0.05 in this study. These techniques used for the data analyses are descriptive statistics (Nie, Bent, & Hull, 1975).

## 3. Results

Table 1.  
Participants' dissociation levels according to different status

		N	Dissociation Levels ( $\bar{X} \pm SD$ )	P
Prostheses Use	Yes	63	1.71 $\pm$ 0.79	<b>.014</b>
	No	29	2.18 $\pm$ 0.82	
Sports Branch	Amputee Football	55	2.04 $\pm$ 0.85	<b>.010</b>
	Wheelchair basketball	37	1.60 $\pm$ 0.72	
Household Income	Below Average	41	2.18 $\pm$ 0.91	<b>.001</b>
	Above Average	51	1.61 $\pm$ 0.66	
Time of the disability	Congenital disability	26	1.52 $\pm$ 0.82	<b>.013</b>
	Acquired disability	66	2.05 $\pm$ 0.82	
Marital status	Yes	52	1.87 $\pm$ 0.79	NS
	No	40	1.85 $\pm$ 0.82	
National player status	Yes	21	2.07 $\pm$ 1.01	NS
	No	71	1.80 $\pm$ 0.76	
Employment status	Yes	52	1.72 $\pm$ 0.71	NS
	No	40	2.05 $\pm$ 0.93	

NS: *non-significant*

As a result of the statistical analyses performed to explore participants' dissociation levels related to their disability in terms of prostheses-use; it was found out that dissociation levels of those who did not use prostheses were significantly higher than those who used prostheses

( $P > 0.05$ ). In terms of sportive branch variable of the participants, those who played in amputee football league had higher levels of dissociation as compared with those who played in regional wheelchair basketball league ( $P > 0.05$ ). There were significant statistical differences between participants' economic status and dissociation levels. As the result of the analysis, the participants who told to have poor economic status (household income) had higher dissociation levels as compared with those who told to have moderate economic status (household income) ( $P > 0.01$ ). It was observed that dissociation levels of those who became disabled due to an after-birth cause (accidents, conflicts, diseases) were significantly higher than those who were congenitally disabled ( $P > 0.01$ ). There is no significant differences ( $p > 0.05$ ) between dissociation levels and Marital, Employment and National player status.

#### 4. Discussion

In light of the study findings, it was explored as the result of the analysis conducted to understand whether there was a statistically significant correlation between dissociation levels and prostheses-use that dissociation levels of those who did not use prostheses because of the disability were significantly higher than those who used prostheses ( $P > 0.05$ ). This result may be due to the perception that athletes who use prostheses regain their body-integrity thanks to the prostheses. Hence, according to the literature information, it is reported that it takes one year for a permanent level of adaptation and functionality of the amputation (Oğul & Erden, 2005). According to the literature and the studies of the literature; sports and physical activities help people to explore different identities and roles in order to increase their participation in social life and therefore offer an opportunity to change self-perceptions, stimulate group-feeling and decrease awareness of the disability (Groff, Lundberg, & Zabriskie, 2009). Different sports and recreational activities minimize the problems of the physically disabled people and play an important role in improving self-image, coping with stress and increasing quality of life (Altun, Bayramlar, Kayıhan, & Ergun, 2011). That information in the literature concurred with our study. Actually, when considering the duration of license of the participants of the amputee football team who used prostheses in the daily life, it was found out that mean sports-participation time was  $4.07 + 2.53$  years. In light of this information, it was possible to suggest that athletes who used prostheses completed amputation adaptation period, they made functionality of the amputation permanent and therefore their dissociation levels turned out to be lower. Besides, when the dissociation levels of the athletes in the sample group were assessed in terms of whether or not they used prostheses, it was seen that those athletes with prostheses led their daily life independently using assisting tools like prostheses while those who did not use prostheses were generally dependent due to the dependency on wheelchair and were incompetent in –especially- social areas and their self-sufficiency levels were lower compared to those who used prostheses; which may have been the reason why those who did not use prostheses had higher dissociation levels.

According to the statistical analysis conducted in terms of sportive branch variable of the participants, those who played in amputee football league had significantly higher levels of dissociation as compared with those who played in regional wheelchair basketball league. Also; thanks to the statistical analysis made in relation with the time of disability we found out that dissociation levels of those who were congenitally disabled were significantly lower than those who became disabled due to an after-birth cause (accidents, conflicts, diseases). These two findings were thought to be interrelated because when profiles of the athletes in amputee football teams were examined, it was seen that most of them (74%) got disabled due to an after-birth cause (accidents, conflicts, diseases) and their amputation reason was generally due to traumas (Özünlü, Aytar, Irmak, & Ergun, 2010). It is known that wheelchair basketball players -unlike amputee football players- became generally disabled not because of traumas but because of congenital defects. Being disabled creates negative effects not only upon adaption to social life but also upon one's psychology. Therefore, it is known that there is a difference between “congenital disability” and

“acquired disability” in terms of adaptation to social life and accepting the case. If one is born as a congenitally disabled person it is easier for him/her to accept his/her case whereas acceptance of acquired disability (amputation, etc.) is a harder and more traumatic case (Akçamete, 1992; Uğuz, Toros, İnanç, & Çolakkadıođlu, 2004). These statements explain the reason of the above-mentioned statistical differences.

According to this comparison conducted in terms of sportive branch variable of the participants, the positive result on behalf of the wheelchair basketball players may be associated with the disability level of the athletes who played wheelchair basketball. The literature defines amputation as the removal of a body extremity or a part of that extremity which loses its functions and the presence of which threatens existence of the individual due to various diseases or injuries which are impossible to cure (Fındık, 1999). Amputee football is played by those who have lost one leg with forearm crutches ((Yazıcıođlu, Taskaynatan, Guzelkucuk, & Tugcu, 2007; Yazıcıođlu K., 2007). Although some of those disabled who play in wheelchair basketball teams are dependend upon wheelchair, those who cannot normally be regarded as disabled in daily life but who have had meniscus operation or had problems with cruciate ligaments can play wheelchair basketball according to the rules and criteria of being a wheelchair basketball player; which –we thought- may have resulted in the lower level of dissociative life than amputee football players.

There were significant statistical differences between participants’ economic status and dissociation levels. As the result of the analysis, the participants who told to have poor economic status (household income) had significantly higher dissociation levels as compared with those who told to have moderate economic status (household income) ( $P>0.01$ ).

Particularly, environmental stressful factors play a crucial and big role in the emergence of dissociation (Şar, 2009). Dissociation is a psychological defense reaction in which external experiences and stress are important. Economical status can be considered as an external but positive and therapeutic factor among these athletes. Recovery process of those with traumatic experiences should be dealt with bio-psycho-social integrity and all of the therapeutic external factors should be included in recovery process.

This study indicated the necessity to conduct new studies on psychological health of the amputee football players.

## 5. Limitations And Restrictions Of The Study

This study was conducted with a limited number of participants; which therefore makes generalization of the study results difficult. It was impossible to compare with a control group because rate of the dissociative experiences of healthy athletes was unknown. The fact that the participants were only male athletes makes it impossible to comment on the generalization of the data about female athletes and about gender differences.

Dissociative experiences are in direct proportion to the dimension of the trauma and the damage to the physical integrity of the individual but this study was able to present heterogeneous results because it was conducted with individuals with different traumatic experiences.

One of the most determinant factors for dissociative experiences to occur is the level of psychological health before the trauma. Since there was no information relating the level of psychological health of our participants, factors that predicted dissociation development were not discussed.

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