

# Designing of Educational Games based on the Concept of Respect and the Investigation of its Effectiveness on the Decrease of Physical Bullying of the Primary-School Students with Special Needs

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**Abstract:** Bullying is one of the common problems at schools and in recent years it is taken into consideration by different researchers and scientists because of its different mental, social, academic and even physical consequences. The aim of the present research is to design educational games based on the concept of respect and investigate its effectiveness on the decrease of physical bullying of the primary-school students with special needs. This research is done with quasi-experimental method and by using pre-test and post-test design with control group. The statistical society of this research is all the primary-school girl students with special needs in Yazd and 20 students were selected (10 in experimental group and 10 in control group) by an available sampling method; these students get higher score of physical bullying according to criterion score and they were randomly divided into groups. In this research, as an independent variable, the educational games based on the concept of respect have been used for eight educational sessions that were one hour and a half and also Olweus bullying questionnaire (1993) has been used in order to evaluate the physical bullying level of the students. In order to analyze the data, covariance analysis is used. The findings showed that the games based on respect have significant influence on the decrease of physical bullying of the students with special needs ( $F_{(1,16)}=9/16$ ,  $P=0/008$ ,  $\omega^2=0/36$ ). According to the results of this research, the games based on respect can be used as an effective strategy for the prevention of physical bullying. More research topics have been recommended in this field.

**Key Words:** bullying, respect, moral intelligence, students with special needs.

## **Introduction:**

Bullying is an aggressive behavior that is usually repeated continuously. Bullying can damage a lot of students including the victim, the witnesses of bullying and the bully person. The aggressor usually tries to force other people to do his/her own desired behaviors by using his/her physical and mental power. The aggressor's effort to achieve his/her personal goals regardless of other people's rights will result in facing with problem in relationship with other students. The bully person will try to force other people to do his/her own desired behavior. This effort includes mental and physical pressure and threat and when these tools are inefficient for achieving the goal, the bully person will use bullying and violence.

The undesirable and destructive influence of bullying is completely evident on the victim and it is proved in different researches. Mental instability and the pressure of bullying behavior result in serious problems and can damage the educational and social functions of the students. In Seals' opinion (2003), an excessive fear and anxiety can be an inseparable part of the victim's life and will result in avoidance of approaching the bully person and the places in which the victim is bullied and he/she avoids approaching these places. It is clear that if these places are schools, bullying can decrease the educational motivations of the victim students.

Due to the undesirable influences of bullying at schools, during the last decades bullying has been mentioned as a serious issue. Bullying will negatively influence on different social and educational aspects of students. The researchers showed that due to the concern of school authorities and general planners of education and training system, it has been tried in many countries to decrease the intensity of bullying with preventive and intervention plans.

Perhaps, one of the most dangerous and damaging phenomena at schools is bullying of some students toward other students. Olweus (1993) considered bullying as placing other people in individual and group negative proceedings repeatedly during the time and he believed that bullying can include a range of physical and verbal aggressive proceedings that can be direct (kicking, threat and extortion) and indirect (spreading rumors, social exclusion and exclusion from the group).

It seemed that although bullying has been taken into consideration during these years, this topic cannot get enough attention regarding its importance. In our country Iran, this topic has been rarely taken into consideration and most of the people in this field have self-imposed negligence. The evidences showed that other countries have rarely taken this topic into consideration and some of the researchers believed that bullying is recognized as a common topic but forgotten one all over the world (Swearer et al, 2011).

The researchers showed that bullying can result in many psychological, emotional and behavioral problems (Cook et al, 2010). Bullying can make the bully child feel unsecured and uncomfortable due to rejection by other children and feeling lonely. According to these findings, sometimes the bully person understands this problem and he/she tries to join other children but due to lack of communicative skills, he/she does not know how to communicate with peers and after the failure in communicating with peers, the bully person forms a poor self-concept and low self-esteem and feels weak and worthless.

Due to the importance of this topic, in many countries, the intervention plans are designed for the prevention of these behaviors at schools; many of the plans are implemented at schools and their effectiveness is also confirmed. Olweus et al, 1999 investigates the effectiveness of the plan at different American schools by designing a school-based and comprehensive plan named Olweus preventive plan of bullying. The results of the research showed that school-based preventive plan of bullying can significantly decrease bullying at schools.

The bully student is a person who feels uncomfortable and unsecured and other youths avoid him/her. Sometimes, he/she understands this problem but does not know how to communicate with peers. When he/she sees the signs of vulnerability in other student, he/she remembers him/herself and attacks the other students due to anger of this humiliation feeling or frightens the other students in order to take care of him/herself against the threats (Brazelton, 2010).

It seems that this feeling of weakness and humiliation is transferred from family to person. Since family is the most important and effective center of child training and the parents' behaviors are considered as the most important component of child training, the fact is that the children are strongly influenced by their family's behavior, beliefs and thoughts. The influence of family on child's behavior, thought and personality is proved by researchers. Many of the theorists such as Erikson (1950) investigate the influence of family on the formation of fundamental feelings and the consequences of the individual's behaviors in psycho-social theory. According to this issue, it is so important that the role of family in the formation of bullying behavior of the children will be investigated. The family background of the bully person is very important and notable. The researchers showed that although the family background of the bully people is different and various, the common aspect of them is the presence of the problem in relationship between parents and children. Smith et al (2002) found that the childhood harassments are related to maladaptive and anti-social behaviors and incompatibility with peers in adulthood. It is clear that childhood harassments can result in low self-esteem and decrease the self-confidence in children (Margolin, 2000). Sometimes the child blames him/herself due to low self-esteem and feels guilty due to

the problem that results in his/her punishment. Contrary to general belief, it does not seem that the bully students have little stress and high self-confidence. Little evidence showed that they are victims of others and due to this fact they have bad feelings toward themselves (Saeedi, 2010).

Other researchers believed that the effective factors in bullying have more extensive range such as culture and its effects, neighborhood and social environment of the people. According to this viewpoint, paying attention to effective factors in person's performance as an integrated system and systematic interventions for decreasing bullying is very important and paying attention to person's environmental system and its effects is a priority (Sung Hong, 2012). According to this approach, in order to have systematic approach toward phenomena such as bullying for implementing the preventive strategies and improving bullying, all the effective fields must be taken into consideration.

The family experiences and social environment cause many of the bully children to be attracted in anti-social groups and their incompatible and inappropriate behaviors will be continued in more extensive levels (Espelage & Holt, 2013). Being attracted in anti-social groups and dangerous behaviors result in the decrease and weakness of the person's educational performance. The bully people and victims show high levels of internalized behaviors (isolation, physical complaints, anxiety and depression), externalized behaviors (aggression and crime), unhappiness at school, educational problems, and lower community-friendly behaviors. And also it is clear that the victims and bully people have significant difference with other students in various fields such as low emotional consistency, weaker relationships with their classmates and psychosomatic problems (Gini & Pazzoli, 2009).

Pepler et al 2008 mentioned that bully children are often harassed by their parents and the children often show bullying as a learned behavior. The results of this research showed that the bully children seldom experience the relationships with support in the relationship with their parents and their relationships include much conflict and very low level of self-confidence and the parental supervision on child's behaviors and activities are very low and limited. In teenage period, these children show more conflict with their peers and put more pressure on their peers.

These behaviors and also the fact that these children are morally left and don't have the required sympathy and compassion in order to see the negative results of their behaviors on others (Pepler et al, 2008), the violent behavior of these children with their peers cause that other children approach them with very low interest and their relationships with bully children is very superficial and they experience less friendship with intimacy. Therefore, it is necessary that children achieve the required skills in order to communicate desirably with peers. One of the strategies of increasing these competencies in children is to train and reinforce respect in them. According to this issue, it has been attempted in this research to design the suitable games according to moral intelligence theory in the field of respecting the children in order to present necessary training for respecting other people's rights. In Borba's moral intelligence theory, the concept of respect is described as follow: attention and respect is to valorize other people with polite and thoughtful behavior (Borba, 2005).

### **Research Methodology**

This research is quasi-experimental and two experimental and control groups are used with pre-test and post-test. Also the aim of this research is practical. The variables of the research include an independent variable (games based on the concept of respect) and a dependent variable (physical bullying).

In this research, the statistical society includes all primary-school girl students with special needs in Yazd in 2015-2016. From different groups of students with special needs, the available society of blind and half-blind students was selected. All the blind and half-blind girl students of Rasoolian blind school were 53 and 20 students were selected according to their physical bullying score and they were divided into two experimental and control groups (10 in experimental group and 10 in control one).

In this research, the tool for collecting data is Olweus bullying questionnaire. This test is a self-report questionnaire designed by Olweus (1996) in order to evaluate the students' viewpoint about bullying and victim in ages from 11 to 17. It has 19 items; the first 10 items are for evaluating the victim and the next 9 items are for evaluating bullying. A person getting higher score in one of these sub-scales shows his/her relationship with bullying. Although the researches showed that a few people experience bullying and being a victim simultaneously, these people will repeat this behavior toward their subalterns after being a victim.

Grading this questionnaire is done according to Likert 5-grade scale; this questionnaire asks people to determine their answers of each question according to the last few months of their life by assigning 1 to "never happened" and assigning 5 to "happened several times in a week". Cronbach's alpha coefficient in Olweus research (1997) is reported 0/87 for the sub-scale of bullying and 0/86 for the sub-scale of being a victim; this shows a good internal consistency of the test. In Soori et al (1992), the reliability of the test is calculated for sub-scales and their factors by Cronbach's alpha and internal consistency and it is reported 0/84 for sub-scale of being a victim of social bullying and 0/78 for sub-scale of being a victim of verbal bullying.

**Findings**

In this part, at first the descriptive findings are reported.

**Table 1: The mean and standard deviation of bully group physical bullying**

	<b>Pre-test</b>		<b>Post-Test</b>	
	<b>Mean</b>	<b>Standard Deviation</b>	<b>Mean</b>	<b>Standard Deviation</b>
<b>Experimental group</b>	5/30	2/40	3/50	1/27
<b>Control group</b>	4/80	1/39	5/30	2/40

In table 1, the mean and standard deviation of the scale of physical bullying is shown. According to the data of table 1, the mean and standard deviation of experimental and control group do not have much difference. But the mean of control group is more than experimental one in post-test.

Now, we investigate the inferential findings. In order to apply covariance test, at first it is necessary to investigate the assumptions of this test in order to use it in case of its fulfillment.

**The Investigation of Normality of Data**

**Table (1): Kolmogorov-Smirnov Test for variables of physical bullying**

<b>Group</b>		<b>Pre-test</b>	<b>ost-test</b>
<b>Experimental</b>	<b>Statistics</b>	0/48	0/66
	<b>Significance level</b>	0/69	0/51
<b>Control</b>	<b>Statistics</b>	0/69	0/55
	<b>Significance level</b>	0/91	0/68

According to the the amounts of that are higher error in the

above table and significance level than the assumed research (0/05)

both in experimental and control groups in pre-test of implementing the intervention (the games based on respect) and post-test, the normality of data is confirmed.

After investigating the normality of data distribution, the homogeneity of variances is investigated.

**Table (2): The investigation of homogeneity of variances (physical bullying)**

Diffraction Source	Sum of Squares	Degree of Freedom	Mean of Squares	F-Statistics	Significance Level
Pre-test group*	2/75	2	1/37	0/96	0/46
Error	22/72	16	1/42		
Total	354/00	20			

Table 4-17 shows that the difference of variances is not significant and the homogeneity of variances is confirmed. Therefore, we can use test of covariance analysis.

**The Investigation of Linear Relationship between Dependent and Independent Variable**

In this part, we investigate the linear relationship between diffraction and dependent variables and the equality of regressions slope of experimental and control groups. Now, we investigate the linear relationship between pre-test and post-test in the variable of physical bullying.

**Diagram (1): Transmittal of pre-test and post0test scores of verbal bullying**

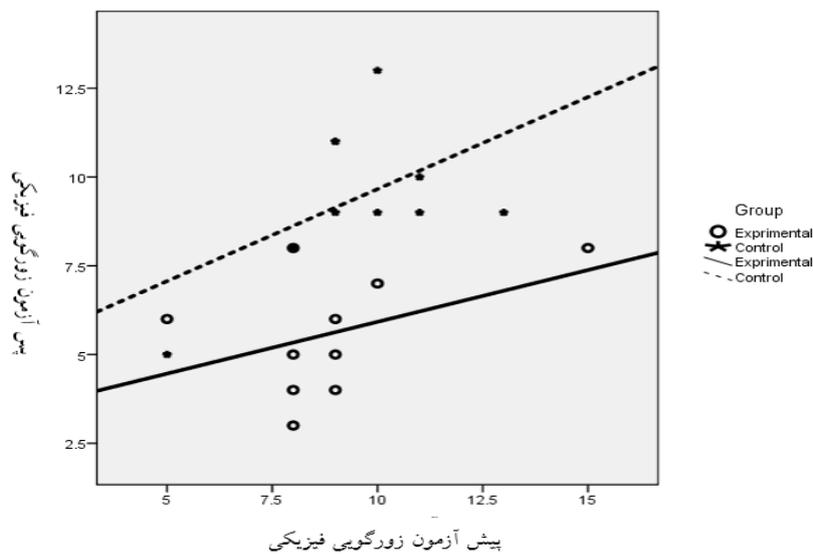


Diagram (1) shows that there is a linear relationship between pre-test and post-test scores. Also according to the drawn regression line, the slopes of 2 regression lines related to experimental and control groups are approximately equal and this issue fulfills the test of covariance analysis.

Therefore, according to the available evidences, the test of covariance analysis is a useful method for evaluating the mean of experimental group in comparison with the control group. We will investigate it in the following section.

**Table 3: Covariance analysis for investigating the games based on respect in order to decrease the physical bullying of the students with special needs**

<b>Diffraction Source</b>	<b>Sum of Squares</b>	<b>Degree of Freedom</b>	<b>Mean of Squares</b>	<b>F-Statistics</b>	<b>Significance Effect Level</b>	
<b>Diffraction</b>	27/66	1	27/66	16/61	0/001	0/50
<b>Group</b>	14/38	1	14/38	14/38	0/01	0/35
<b>Error</b>	26/64	16	1/66			
<b>Total</b>	354/00	20				

According to data of table 3, there is a significant difference between experimental and control groups after adjusting the influence of diffraction variable (pre-test) in post-test of physical bullying ( $F_{(1,16)}=9/16$ ,  $P=0/008$ ,  $\omega^2=0/36$ ). The scores of the adjusted mean of physical bullying showed that the group under the intervention of games based on respect (experimental group) has significant and different scores in comparison with the group that has not received intervention (control group). The size of effect is 0/35 and it shows that the change of scores is due to the intervention program. According to data, the second hypothesis is confirmed and it can be concluded that the games based on respect decrease the physical bullying of the students with special needs.

### Discussion and Conclusion

The increase of scores between two experimental and control groups is significantly different. The findings of this research are compatible with the results of Brown et al (2011).

According the available principle in the concept of respect, when a person develops this feature in him/her, not only he/she avoids the verbal and social bullying but also avoids physical bullying. A person, who has this feature, rarely performs physical bullying.

It seems that physical bullying is sometimes due to a person's disability in expressing his/her desire with an appropriate and logical language or due to the hopelessness of a person in achieving the goal with an appropriate and logical method. Respecting and paying attention to other people's needs help these feature to be formed in them and they will apply less violent methods such as physical bullying for expressing their needs and achieving them.

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