The Impact of Conflict Resolution Training on Elementary School Children

Asude Bilgin

ABSTRACT. The purpose of this study was to measure the impact of conflict resolution training on elementary school children. It was hypothesized that a conflict resolution program would increase the use of constructive conflict resolution strategies of students. 217 4th grade students were taken randomly and asked the most common conflicts they had experienced. The most frequent responses were written as two scenarios. These were given as a pre-test to the students and asked to resolve these conflicts. The responses were rated by three psychologists in terms of conflict strategies theory and their reliability was tested by Kendall’s Coefficient of concordance. The students who have the lowest scores were chosen as the subjects. Experimental group (7 girls, 7 boys) received 10 hours of training during a 30-minute period twice a week. Control group (7 girls, 7 boys) received no training. Training was realized as an unstructured, non-linear group study. Then the same scenarios were given as a post-test. The correlation between pre and post-tests were tested by Wilcoxon matched pair test and no significant differences were found. The results were interpreted by the technique and duration of the application. More concentrated and longer training periods was suggested for future research. It is very important to teach the students to cope with conflicts with constructive strategies, because low academic achievement, low self-esteem, stress and the worst, violence are the results of destructive conflict resolution.

Key words: Conflict, conflict resolution strategies, elementary school

INTRODUCTION

The word of conflict is associated with the disharmony between/among people. It affects the lives of either individuals or societies. Conflict is almost impossible to be avoided because it is a natural part of life. Koch and Miller (1987) pay attention to the fact that contradictions and conflicts are the natural part of children’s socialization and maturation by saying “The life is conflict and we can be alive only in conflicts.” It can be concluded that the issue is not the conflict. In other words the conflict is not positive or negative by itself; it is the way of managing conflicts that make it either constructive or destructive. The problem occurs when we use destructive ways to solve conflicts and these ways then cause to stress, anxiety, loneliness, resentment, suppressed anger, fatigue, illness etc. (Cornelius & Faire, 1993).

The reasons of conflict can be clustered in three main groups (Johnson and Johnson, 1995):

1) Unsatisfied psychological needs: The main cause of conflict is thought to be other people, but it is rather the psychological needs of the individuals. According to Glasser (1998) there are four primary needs: Relatedness, belongings, freedom and fun. People are motivated by different needs and these can lead to the conflicts when they contradict each other. In other situation a person who tries to satisfy his/her need cannot find time and energy to satisfy the other. Everyone has a different image of the need satisfaction object and this can also lead to conflicts.

2) Limited sources: This is the reason for most of the conflicts. It causes to the competition between conflicting parties. The limited sources of time, money, and properties force people concentrate on only their needs.

3) Different values: people naturally have different values of what is beautiful and hideous; right and wrong; good and bad. These differences also cause to the conflicts between individuals. People become defensive about their values and hardly accept the other’s values.

The theories of psychology refer directly or indirectly to the conflict as part of the human development. For example, psychoanalytic theory approaches conflicts as a result of psychological
separation from parents. According to this theory interpersonal conflicts encourages individualization, and decreases anxiety. The child begins life with his/her parents, but as he/she develops the frequency of conflicts increases and the child starts to search for new relations (Johnson & Johnson, 1996).

In Piaget's view (1950), cognitive development progresses through different stages and substages. In this approach, conflicts are essential, since they are seen as a drive for developmental change. They represent contradictions between different actions of the child or between what the child anticipates from action and the observed results. These contradictions lead children to move from their initial views toward a higher level of development (Piaget, 1926, 1932 cited in Busch et al., 2004).

Developmental social psychologists have stressed the social nature of conflicts. They proposed that relational conflicts are essential to the stimulation of cognitive development. They emphasize that conflicts occur in all social relations and the management of conflicts depended on the nature of these relations. These conflicts of communication have proved to be beneficial for learning in different contexts (Doise, Mugny, & Perez, 1998; Levine, Resnick, & Higgins, 1993 cited in Busch et al., 2004). Dual concern theory is another social psychological theory as developed by Blake and Mouton (1964; cited in Johnson & Johnson, 1997). It says that there are two main concerns in conflict resolution process:

1° Concern about reaching his/her own goal
2° Concern about the relationship with the others.

Goals and relations can be categorized from the most important to the least ones. The individual may use one of five modes of conflict handling strategies according to the importance of goal and relationship. These are (Blake and Mouton, 1964; cited in Johnson & Johnson, 1997):

1) Integrative negotiation: If the goal and the relation are very important to the parties they try to agree on exact satisfaction of their needs. This needs taking the perspective of the other.
2) Compromising: If the goal and the relation have moderate importance, parties give up some of their goals of relations and compromise on an agreement that both of them win.
3) Smoothing: If the relationship is very important, but the goal has not of importance, the individual try to keep the quality of relation by dropping some of his/her goal.
4) Withdrawal: If the goal is not worth to struggle for or it is very hard to handle for both sides and relationship is not of importance they attempt to get rid of conflict by denying it exists. So they decide to avoid and withdraw from the conflict situation, leaving it to chance.
5) Forcing: If the goal is very important and the relation is not, one of the parties forces the other and tries to reach his/her goal. One of them wins and the other loses. When it occurs at international level it may become war.

Within 3421 years of recorded history only 268 years without war has existed. After the destruction of 1st and 2nd World War the nations started to manage their conflicts by negotiation and cooperation. During this process formal mediators were in charge (Sweeney & Carruthers, 1996).

At the beginning of 1970’s school principals, counselors and teachers become interested in conflict resolution. They seem understood the importance of internal locus of control rather than external locus of control (Travers, 1980).

In spite of increasing studies on this field the number of violence incidences in schools is also increasing. Physical and verbal violence, incivility, drug abuse, robbery, assault and even murder in the society and in the schools are familiar news of the media almost every day and everywhere in the world. Since students don’t know the ways of managing conflict constructively and they often seek assistance from their teachers. Many teachers spend a great amount of time and energy managing classroom conflicts (Amsler and Sadella 1987). When students poorly manage their conflicts with each other and with school stuff it leads to aggression (McCormick 1988, Kreidler 1984). Such behavior is usually punished with shouting, expulsions or even spanking by teachers (Ray, Kestner, and Freedman, 1985).

Although conflicts are part of school life it may certain that a democratic, humanistic and peaceful school environment is needed for the quality of education. As violence increases, pressure for
safe and orderly schools increases. A peaceful classroom has five characteristics (Kreidler, 1984). These are cooperation, communication, tolerance, positive emotional expression and conflict resolution. All of these components are interrelated and only considering all these components we can reduce conflicts in the classroom. The quality of education will get higher only by this way, because psychological health of students, their self-esteem and academic achievement highly depend upon these variables.

Examining violence in schools and society and the influences of it helps us understand that the necessary thing is to teach students to resolve their conflicts by using constructive ways (Johnson & Johnson, 1997). That is why; conflict resolution training programs are designed for students at schools (Johnson & Johnson, 1995). In a broad sense conflict resolution is the process of attempting to resolve a conflict. The purpose of a conflict resolution program is to help students develop their ability to manage conflicts in classroom situations. There are important reasons for schools to improve conflict resolution programs (Crawford & Bodine, 1996):

- As a result of a conflict resolution training students are expected to use integrative negotiation strategies instead of forcing or withdrawal.
- Such a program can develop a positive school climate. Deutch (1992) explained that conflict resolution and cooperative learning creates a good school climate in which all students feel comfortable, wanted, valued, accepted, and secure. School climate influence learning, teaching environments, academic success, and school attendance
  - It can reduce violence and vandalism in the school and probably in the society.
  - It can develop the students’ emphatic power and social skills.
  - It can develop citizenship level of the students as teaching the negotiation, mediation and the importance of consensus.
- It can improve listening, critical thinking and problem solving skills of the students that are basic to all learning.

Opotow (1991) reported that forcing and withdrawal are the most common strategies for students (95 % withdrawal, 5 % forcing). Johnson et al., (1994) found that 97 % of students used forcing strategies such as physical or verbal aggression. Similarly, Johnson, Johnson, Dudley and Magnuson (1995) indicated that students between 6th and 9th grades used forcing, withdrawal and smoothing as main conflict resolution strategies. There are many examples of studies showing the effectiveness of conflict resolution programs on students using the constructive conflict resolution strategies (Argyris, 1994; Mitchell, Lupton-Smith at all., 1996). It has to be noted that in spite of its importance these programs are very difficult to apply in schools, because they need too much money, time, energy and a change in the attitude toward conflicts.

The effect of teaching the constructive conflict resolution strategies on the students being trained was the problem of the study. The purpose of this study was to examine the impact of conflict resolution training as conducted by a small group study on elementary school children. Around this general purpose three hypotheses were tested:

1) The post-test scores of experimental group would be significantly higher than their pre-test scores and the post-test scores of experimental group would be higher than those of control group.
2) There would be significant differences between the follow up measure and pre-test scores of experimental group.
3) The post-test of the girls in the experimental group would be significantly higher than the boys.

**METHOD**

**Subjects**

The study was conducted during the 2000-01 academic year. Participants were 28 students - 14 boys and 14 girls - from an elementary school at Bursa, in Turkey. They were selected by the results of pre-test and assigned randomly to the experimental and control groups by 7 boys and 7 girls.
each. All students in the experimental group received a conflict resolution training while control group received no training. The students were heterogeneous in academic achievement. The school was in a district where middle class families live.

Dependent Variable

217 students from an elementary school were asked the question and wanted to write the most typical conflicts of their daily lives. The conflicts which were most frequently reported by the students were written as two scenarios:

Scenario 1: “While you were watching your favorite cartoon on TV your sister or brother has come and wanted to turn on the channel for his/her favorite program. You didn’t want to do but he/she was insisting. What would you do?”

Scenario 2: “You divided into two groups and started to play football. Towards the end of the game the other group was losing and they started to swear you. What would you do?”

Responses were classified according to the categories that put forward by dual concern model (Blake & Moutan, 1964 cited in Johnson & Johnson, 1997). This model reports five probable strategies used for handling conflicts and their scoring systems:

1) Forcing: 1 point
2) Withdrawal: 2 points
3) Smoothing: 3 points
4) Compromising: 4 points
5) Integrative negotiation: 5 points

Three people who have PhD. in psychology including researcher rated students’ responses for pre and post-tests. Inter-rater reliabilities were tested by Kendall’s Coefficient of Concordance: \( W \) and they were acceptable values for all test of experimental and control groups. This means that the concordance among three raters was significantly high for several measures. These values were shown in the Table 1 as follows:

Table-1 Kendall’s Coefficient of Concordance: \( W \), analysis of three judges’ ratings of experimental and control groups for first and second scenario scores

<table>
<thead>
<tr>
<th></th>
<th>FIRST SCENARIO</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EXPERIMENTAL GROUP</td>
<td>CONTROL GROUP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pre-test</td>
<td>Post-test</td>
<td>Post-test</td>
<td>Pre-test</td>
<td>Post-test</td>
</tr>
<tr>
<td>( \chi^2 )</td>
<td>28.08</td>
<td>37.44</td>
<td>33.02</td>
<td>26.05</td>
<td>23.41</td>
</tr>
<tr>
<td>( p )</td>
<td>( p &lt; .01 )</td>
<td>( p &lt; .001 )</td>
<td>( p &lt; .01 )</td>
<td>( p &lt; .02 )</td>
<td>( p &lt; .05 )</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>SECOND SCENARIO</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EXPERIMENTAL GROUP</td>
<td>CONTROL GROUP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pre-test</td>
<td>Post-test</td>
<td>Post-test</td>
<td>Pre-test</td>
<td>Post-test</td>
</tr>
<tr>
<td>( \chi^2 )</td>
<td>40.01</td>
<td>26.31</td>
<td>38.42</td>
<td>27.45</td>
<td>25.87</td>
</tr>
<tr>
<td>( p )</td>
<td>( p &lt; .001 )</td>
<td>( p &lt; .02 )</td>
<td>( p &lt; .001 )</td>
<td>( p &lt; .02 )</td>
<td>( p &lt; .02 )</td>
</tr>
</tbody>
</table>

\( N>7 \)

Then the students put in order by means of their scores. Students who have the lowest scores (using more destructive strategies) were chosen randomly as 14 girls and 14 boys from 4th. grades. These scores were used as pre-test scores. The same scenarios for experimental and control group were used as post-test after the treatment. After two weeks the same scenarios were given for a follow up.
Independent variable

In this study a pre-test – post-test, experimental design with control group was used. The independent variable was the conflict resolution training for the experimental group. On this procedure the experimental group received a 30 minutes training twice a week about 10 weeks, totally 10 hours. At first group members were talked about the meaning of conflict and constructive ways of conflict resolution. Then they were asked to bring their own conflicts suggest some constructive solutions, discuss and choose the best outcome among these. Towards the end of the session, the information was given again about the steps of integrative negotiation. During the training role-playing, small group discussions, brainstorming and reviewing exercises were used. The training was conducted by the researcher for all sessions.

Training Procedure

The conflict resolution training was summarized as follows:

First session:
It was realized at an Elementary School in Bursa with the participation of seven girls and seven boys as experimental group. They were very eager and interested to be in this group. Some of them were classmates some not, but they all were recognizing each other. Even some fought with each other once and they immediately talked about this. After the introducing of the group members the group rules were discussed, voted and accepted. These were about the attendance of the meetings, listen the other when he/she is talking, to respect each other and the secrecy.

Second session:
In this session in the following day the concept of conflict was explained and then the students were asked to tell instances about their daily conflicts. The importance of communication was mentioned. This message was given: If there is a conflict between or among people they have to talk and explain their needs. Then the students let to explain their thoughts, but their resolution strategies were emphasized on quarrel or fight.

Third session:
In the second week the participants again asked to talk about important conflicts which they lived in the past or still living. These were generally about name calling, taking the canteen turn and swearing. A conflict incidence in a student’s words: “While we were playing football in the street, the ball crashed the window glass of a neighbor, then the neighbor man get angry and refused to give back the ball.” was brought to life by role playing. After the playing role exchange performed and the needs of the parties were discussed.

Fourth session:
In this session the students were very active. They were climbing to the chairs, playing jokes and talking. Two girls talked about their conflict. One of them taunted other’s clothes and the other girl drew down her skirt. They voluntarily role played their conflict but they tended to fight again. During this application some examples for “I messages” instead of “you messages” were given.

Fifth session:
Girls reported a conflict situation between two of them related to gossiping that was resulted in withdrawal of the parties. This conflict was role played by other students and role reversal was done. They were really fighting and spanking each other. The reasons of the conflict and the needs of the parties were discussed. The information were given about constructive resolution strategies of conflicts.

Sixth session:
The group members were very joyful and dynamic. Two boys reported a conflict between two boys in their class. While they are waiting in the canteen turn to buy a bagel one swore to another and then they fought. They role played this conflict. During the playing they were almost really fighting. It was tried to find alternative positive resolution techniques by brainstorming. Negotiation steps were explained. These steps were: describing what you want, explaining what you feel, understanding what lies behind the wishes and emotions, taking the points of view of the other and proposing at least three constructive solutions.
Seventh session:
A boy was offered to be his girl friend to a group member. This conflict was resulted with fight already. In fact this offer was made for the purpose of irritating the girl. The possible constructive resolution strategies for this conflict were discussed and written to the board.

Eighth session:
The group leader brought an example for a conflict. This was about two brothers or sisters who want the same toy and their mother’s effort to solve this conflict. Following brainstorming alternative suggestions were written on the board. Time was up, that is why these were recorded on a piece of sheet.

Ninth session:
The recorded resolution proposals were written on the board again and continued to the brainstorming about constructive or destructive conflict resolutions. Constructive and destructive suggestions were written apart. Students were making this diversion easily. At the end of the session it was decided for the mother to give the toy to their children in order.

Tenth session:
Before the session the school principal told that a new coming student was beaten by a gang whose three members were in this group. This incident was discussed in the group. The students were not giving satisfactory excuses for their behavior, but they were not sorry about their behaviors. They were laughing and they were saying that every new coming was exposed to these kinds of behaviors. The importance of a peaceful school environment was discussed again.

Eleventh session:
The discussion of the previous session was gone on. The emotions (like fear, anxiety or safety) behind this behavior was tried to explore. Lacks of confidence, fear of rejection, fear of losing control were written after this analysis, but still they did not seem agreed with the group leader that using physical force on a school mate is unacceptable.

Twelfth session:
Aggressive behaviors of the students were going on. While coming inside the meeting room they were fighting with each other. When they were settled they role played the conflict situation they lived with deputy principal last week. By role reversal the importance of emphatic understanding was emphasized. They seemed to understand the point of view of the deputy principal.

Thirtieth session:
A brainstorming was performed to handle constructive resolutions for the conflict situation they lived with recently coming classmates. The importance of negotiation, the worthiness of different values and point of views was underlined.

Fourteenth session:
A conflict scenario was brought by the group leader. A child was asking permission to his/her mother to play outside in a snowy day, but his/her mother was not let his/her. This situation was role played and roles were reversed. There was not enough time to analysis, but they did not seemed to empathize with their mothers.

Fifteenth session:
The conflict situation of the previous session was recalled and it is talked to create a map of this conflict. At first the parties of the conflict were written on the board, at the second step the problem was clarified and written again. The demands and the feelings of the parties also noted. The worry of the mother underlined. Then the resolution alternatives suggested by the students. The most appropriate three of them were selected by the group. The most popular alternatives were escaping from the house, claiming the mother to father. It was asked to the students to offer resolutions in which both parties get benefit.

Sixteenth session:
A new conflict scenario was brought to the session by the students. This was a very typical sample. A student lost his/her pencil and then he/she finds it in the box of another classmate. This conflict was analyzed. At first the parties were introduced and then the problem was explained. The
needs of the parties were investigated, resolution alternatives were written. Then they were eliminated to three options and the best one was agreed upon. They were still proposing aggressive ways.

**Seventeenth session:**
The students brought a sample conflict case about a girl who was teased because of her thin body. This conflict was role played, roles were reversed and the situation was analyzed. The group members seemed to learn the steps and importance of negotiation but their behaviors with each other were not so much different in reference to the beginning of sessions.

**Eighteenth session:**
The students talked a real life conflict they observed. A boy newly emigrated from Bulgaria was teased by class mates because of his imperfect Turkish. This incidence was discussed. The steps of negotiation adapted to this case. Alternative tactics were submitted and one of them was accepted. This was the suggestion for other classmate to help this student.

**Nineteenth session:**
The main issue was about what they learned from these training. It was discussed if they use these tactics of integrative negotiation in the future. It was underlined that “even someone attacks you there are some alternative ways to counter attack”. The importance of win-win solutions stressed. The students were very happy in the group. Both they and their teachers frequently reflected this. So they requested not to end the sessions.

**Twentieth session:**
Students were asked to paint an image about their relations in family or school. A girl drew herself with her sister while holding up an axe. A boy painted himself while drawing a sword to his friend. Another boy drew six boys standing hand in hand in front of the canteen waiting for him to beat A girl painted herself with a man. She wrote “principal” on him and beside the painting she wrote “fight” with bigger letters.

**Twenty-first session:**
Two scenarios which was given as pre-test to 28 students in the experimental and control groups were applied as post –test to the groups. After two weeks the same procedure was replicated for a follow up.

**Analysis**
The conflict resolution strategies were elicited from students’ responses to the scenarios were rated according to conflict strategies theory by three different raters. Inter-rater reliability was tested by Kendall’s Coefficient of Concordance: W. and it was found meaningful. These scores were used as a pre-test to assign the students to the experimental and control groups. After the treatment the same scenarios were used as post-test and after 2 weeks as second post-test. The differences between the pre and post-test scores were tested by Wilcoxon Matched-Pairs Signed –Ranks Test. It is a non-parametric alternative of t test. The difference between the post-test scores of experimental and control groups, and the pre and post-test scores of boys and girls, were analyzed by Mann-Whitney U test.

**RESULTS**
The main purpose of this study was to investigate the impact of the conflict resolution training on elementary school students. The first hypothesis was expressed as “the post-test scores of experimental group would be significantly higher than their pre-test scores and the post-test scores of experimental group would be higher than those of control group”.

Before the training the students in the experimental and control groups were likely to use forcing or withdrawing responses to the conflict scenarios. After the training the experimental group has changed to some extent in the positive direction as it can be seen in table 2 and 3. There were nobody using smoothing and compromising before the treatment, but after the training one student was found to use smoothing and two of them compromising for both of he scenarios.
Table 2. The numerical and percentage distribution of the responses of experimental and control groups for first scenario

<table>
<thead>
<tr>
<th>Conflict resolution strategies</th>
<th>Experimental Group Pre-test</th>
<th>Post-test¹</th>
<th>Post-test²</th>
<th>Control Group Pre-test</th>
<th>Post-test¹</th>
<th>Post-test²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forcing</td>
<td>n 12</td>
<td>% 86</td>
<td>n 8</td>
<td>% 57</td>
<td>N 10</td>
<td>% 72</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>n 2</td>
<td>% 14</td>
<td>n 3</td>
<td>% 22</td>
<td>N 2</td>
<td>% 14</td>
</tr>
<tr>
<td>Smoothing</td>
<td>- -</td>
<td>-</td>
<td>1</td>
<td>% 7</td>
<td>7</td>
<td>% 14</td>
</tr>
<tr>
<td>Compromise</td>
<td>- -</td>
<td>-</td>
<td>2</td>
<td>% 14</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Negotiation</td>
<td>- -</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>% 100</td>
<td>14</td>
<td>% 100</td>
<td>14</td>
<td>% 100</td>
</tr>
</tbody>
</table>

Table 3. The numerical and percentage distribution of the responses of experimental and control groups for second scenario

<table>
<thead>
<tr>
<th>Conflict resolution strategies</th>
<th>Experimental Group Pre-test</th>
<th>Post-test¹</th>
<th>Post-test²</th>
<th>Control Group Pre-test</th>
<th>Post-test¹</th>
<th>Post-test²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forcing</td>
<td>n 12</td>
<td>% 86</td>
<td>n 8</td>
<td>% 57</td>
<td>N 10</td>
<td>% 72</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>n 2</td>
<td>% 14</td>
<td>n 3</td>
<td>% 22</td>
<td>N 2</td>
<td>% 14</td>
</tr>
<tr>
<td>Smoothing</td>
<td>- -</td>
<td>-</td>
<td>1</td>
<td>% 7</td>
<td>7</td>
<td>% 14</td>
</tr>
<tr>
<td>Compromise</td>
<td>- -</td>
<td>-</td>
<td>2</td>
<td>% 14</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Negotiation</td>
<td>- -</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>% 100</td>
<td>14</td>
<td>% 100</td>
<td>14</td>
<td>% 100</td>
</tr>
</tbody>
</table>

The pre and post-test scores of experimental group were analyzed by using the Wilcoxon Matched-Pairs Signed-Rank Test as seen in Table 4 and 5 for two scenarios.

Table 4. The difference between pre and post-test scores of experimental group as analyzed by Wilcoxon Matched-Pairs Signed-Rank Test for first scenario

<table>
<thead>
<tr>
<th>First Scenario</th>
<th>Students</th>
<th>Post-test¹</th>
<th>Pre-test</th>
<th>d</th>
<th>Rank of d</th>
<th>Rank with less frequent sign</th>
<th>T+</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5 6 7 8 9 10 11 12 13 14</td>
<td>1 4 1 3 2 2 2 1 1 1 1 1 4 1</td>
<td>1 1 1 1 1 1 1 1 1 1 2 1 1 1</td>
<td>0 3 0 2 1 1 0 0 0 0 -1 0 3 0</td>
<td>5.5 4 2 2</td>
<td>-2</td>
<td>5.5 T+ = 19</td>
</tr>
</tbody>
</table>

For n = 6, at the level of $\alpha = 0.025$ for a one tailed test $T > T$ table we can not reject Ho.

Table 5. The difference between pre and post-test scores of experimental group as analyzed by Wilcoxon Matched-Pairs Signed-Rank Test for second scenario

<table>
<thead>
<tr>
<th>Second Scenario</th>
<th>Students</th>
<th>Post-test¹</th>
<th>Pre-test</th>
<th>d</th>
<th>Rank of d</th>
<th>Rank with less frequent sign</th>
<th>T+</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5 6 7 8 9 10 11 12 13 14</td>
<td>1 4 2 1 2 2 1 1 2 4 1 1 1 1</td>
<td>1 2 1 3 1 1 1 1 1 1 1 1 1 1</td>
<td>0 2 1 -2 1 1 0 0 1 3 0 0 0 0</td>
<td>5.5 2.5 -5.5 2.5 2.5 2.5 7</td>
<td>-5.5</td>
<td>T+ = 22.5</td>
</tr>
</tbody>
</table>

For n = 7, at the level of $\alpha = 0.025$ at single tailed test $T > T$ table we can not reject Ho. There was not significant difference between pre and post-test scores of experimental group for both of the scenarios.
Table 6 and 7 declares the differences between pre and post-test scores of control group for first and second scenarios.

Table 6. Difference between pre and post-test scores of control group for first scenario

<table>
<thead>
<tr>
<th>Students</th>
<th>1 2 3 4 5 6 7 8 9 10 11 12 13 14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-test</td>
<td>2 2 1 1 1 1 1 1 1 1 1 1 1 1 2</td>
</tr>
<tr>
<td>Pre-test</td>
<td>1 1 1 1 1 1 1 2 1 1 1 1 1 1 1</td>
</tr>
<tr>
<td>D</td>
<td>1 1 0 0 0 -1 -1 0 0 0 0 0 0 0 1</td>
</tr>
<tr>
<td>Rank of d</td>
<td>3 3 -3 -3 3 T = 9</td>
</tr>
<tr>
<td>Rank with less frequent sign</td>
<td>-3 -3 T = 6</td>
</tr>
</tbody>
</table>

For \( n = 4 \), at the level of \( \alpha = 0.025 \) at single tailed test \( T > T \) table we can not reject Ho.

Table 7. Difference between pre and post-test scores of control group for second scenario

<table>
<thead>
<tr>
<th>Students</th>
<th>1 2 3 4 5 6 7 8 9 10 11 12 13 14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-test</td>
<td>2 2 1 1 1 1 1 2 1 1 1 1 1 1 1</td>
</tr>
<tr>
<td>Pre-test</td>
<td>2 1 1 1 1 1 2 1 2 1 1 1 1 1 1</td>
</tr>
<tr>
<td>D</td>
<td>0 1 0 0 0 -1 0 -1 -1 1 0 0 0 0</td>
</tr>
<tr>
<td>Rank of d</td>
<td>3 -3 -3 -3 3 T = 9</td>
</tr>
<tr>
<td>Rank with less frequent sign</td>
<td>3 T = 6</td>
</tr>
</tbody>
</table>

For \( n = 5 \), at the level of \( \alpha = 0.025 \) at single tailed test \( T > T \) table we can not reject Ho.

As Table 6 and 7 shows the results of Wilcoxon Matched-Pairs Signed-Rank Test there was no significant difference between pre and post-test scores of control group for two scenarios.

In Table 8 and 9 the difference between the post-test scores of experimental and control groups for both of the scenarios was analyzed by Mann-Whitney U.

Table 8. The difference between the post-test scores of experimental and control groups for first scenario

<table>
<thead>
<tr>
<th>Experimental group</th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw data</td>
<td>1 4 1 3 2 2 1 1 1 1 1 4 1</td>
</tr>
<tr>
<td>Ranks ( \Sigma R1 = 228,5 )</td>
<td>( \Sigma R2 = 177,5 )</td>
</tr>
</tbody>
</table>

For \( n = 14 \) at significance level of \( \alpha = 0, 05 \) we cannot reject Ho. At significance level of \( \alpha = 0, 10 \) we can reject Ho.

Table 9. The difference between the post-test scores of experimental and control groups for second scenario

<table>
<thead>
<tr>
<th>Experimental group</th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw data</td>
<td>1 4 2 1 2 2 1 1 2 2 4 1 1 1 1</td>
</tr>
<tr>
<td>Ranks ( \Sigma R1 = 227 )</td>
<td>( \Sigma R2 = 179 )</td>
</tr>
</tbody>
</table>

For \( n = 14 \) at significance level of \( \alpha = 0, 05 \) we cannot reject Ho.

According to Table 8 and 9 there was no significant difference between post-test scores of experimental and control group for two scenarios.

As the second hypothesis it was proposed that after two weeks the impact of the training would be still going on. Since there was not any significant difference between the pre and post-test scores of the students it was not expected to find any difference between the pre-test and second post-test scores. Tables 10 and 11 it can be followed the results of the analysis realized by Wilcoxon Matched –Pairs Signed- Rank test related to this hypothesis.
Table 10. The difference between 2nd post-test and pre-test scores of experimental group as analyzed by Wilcoxon Matched-Pairs Signed-Rank Test for first scenario

<table>
<thead>
<tr>
<th>Students</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-test ¹</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Pre-test</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>d</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>-1</td>
<td>0</td>
<td>2</td>
<td>-1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rank of d</td>
<td>2.5</td>
<td>5.5</td>
<td>-2.5</td>
<td>5.5</td>
<td>-2.5</td>
<td>2.5</td>
<td>5.5</td>
<td>-2.5</td>
<td>2.5</td>
<td>T+ = 16</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rank with less frequent sign</td>
<td>-2.5</td>
<td>-2.5</td>
<td>T</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For n = 6, at the level of α = 0.025 at single tailed test T > T table we can not reject Ho.

Table 11. The difference between 2nd post-test and pre-test scores of experimental group as analyzed by Wilcoxon Matched-Pairs Signed-Rank Test for 2nd scenario

<table>
<thead>
<tr>
<th>Students</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-test ¹</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Pre-test</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>d</td>
<td>0</td>
<td>-1</td>
<td>2</td>
<td>-2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Rank of d</td>
<td>-2</td>
<td>5</td>
<td>-5</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td>T+ = 9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rank with less frequent sign</td>
<td>-2</td>
<td>-5</td>
<td>T</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For n = 6, at the level of α = 0.025 at single tailed test T > T table we can not reject Ho.

There was not any significant difference between 2nd post-test and pre-test scores of experimental group for first and second scenarios.

The 3rd hypothesis was about the gender differences. The training was expected to show positive effects on girls more than boys.

Table 12. The difference between the post-test scores of boys and girls in the experimental group for two scenarios

<table>
<thead>
<tr>
<th></th>
<th>First Scenario</th>
<th>Second Scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Girls</td>
<td>Boys</td>
</tr>
<tr>
<td>Raw data</td>
<td>1 4 1 3 2 2 1</td>
<td>1 1 1 3 1 4 1</td>
</tr>
<tr>
<td>Sum of ranks</td>
<td>Σ R1 = 76, 5</td>
<td>Σ R2 = 66,5</td>
</tr>
</tbody>
</table>

For n= 7  n = 7 at significance level of α = 0, 05 we cannot reject Ho (U >U table).

The results did not support the hypothesis. There were no significant differences between post-test scores of boys and girls in the experimental group as analyzed by Mann-Whitney U.

**DISCUSSION AND CONCLUSION**

In this study the impact of a conflict resolution training program was tested by the comparison of pre and post-test scores of elementary school students. The results are discussed with regard to research hypotheses.

1) It was hypothesized that there would be a significant difference between post and pre-test scores of experimental group but there wouldn’t be such a difference at the scores of control group. The result did not support this hypothesis. It couldn’t found a significant difference between the pre and post-test scores of experimental group (p > 0.025). There wasn’t a significant difference also between the post-test scores at experimental and control groups (p >0, 05). In discussion of these results we have to look at the characteristics of children’s groups. Although there are individual differences in the expression of emotions among children, generally they get angry when they are frustrated. They express their anger different from adults. They often fight, because they don’t have the ability to express themselves verbally and they were not equipped with social abilities to resolve the conflicts destructively. When they get angry they fight, run away, make noise, move their seats, grapple, and
claim to the teacher and talk to each other. Besides these withdrawals, rationalization, suppression, substitution, displacement and denial are the common defense mechanisms used frequently in children groups (Boulter et al., 1995).

Several techniques have been developed for use with children in resolving conflict (Arrington, 1987; Edleson, 1981; McClure, Miller, & Russo, 1992). “The majority of techniques are based on the observation that children do not have the verbal communication skills necessary to verbally express their conflicting feelings and thoughts; they are physical, and express themselves in physical ways” (Arrington, 1987). It is helpful if they are given a physical outlet to express emotions; role playing has been found to be helpful. Writing has also been shown to help in the expression of conflict (Edleson, 1981). In addition they need a good model in which they can develop new skills and compare existing skills. Further, it is necessary to give clear feedback to the student. It is very hard to wait an important behavioral change as a result of the training unless there is emphasis on skills Teaching the knowledge is not enough; repeated practice using the skills in several situations is needed. During these practices students have to be observed and corrected by a qualified person for successful use of the skills. In addition to the practice knowledge of the principles are needed to generalize to everyday situations (Deutsch, 1994). The establishment of a strong relationship between the group leader and the students also will be helpful (Lyon, 1991).

An important technique proposed by Edleson (1981) is "Readiness Activities." This includes role playing and allowing the children to act out how they feel within a group setting. The children write about their problems and reactions to the problems. Then the student present the problem to the group to brainstorm to discuss the possible solutions. Role playing let them to think about a given situation. McClure et al, (1992) also emphasized the need to allow children physical movement. In addition, Edleson (1981) suggested giving some homework between sessions can be effective for skill training (Edleson, 1981).

As children get familiar with the concept of constructive conflict resolution they are allowed to lead the group. Allowing the children to lead the group helps the children to generalize the problem-solving and conflict resolution process to the "real" world (McClure et al., 1992). Conflict resolution skills have been gained successfully in a group environment, because it allows students to interact with their peers. Edleson (1981) reported that groups present situations more similar to the real world. In dealing with children in a group setting conflict is inevitable and it is important to control the conflict and provide learning. In addition, follow-up studies will increase the probability of extensive generalization (Lyon, 1991). It must be added that the social and cognitive skills are very different to observe from physical skills. If one student writes an incorrect word the teacher immediately sees the fault and gives feedback, but in conflict situation, the feedback is not immediate (Deutsch, 1994).

According to Tuckman and Jensen (1977) all groups go through a series of stages of development before performing in a fully mature and effective manner. They identified five stages of development: 1° Formation, 2° Storming, 3° Development of norms, 4° Performance, 5° Ending of the session. The most important stage is the second one. In this stage the expression and resolution of conflict help to the formation of norms related to conflict resolution. This stage forms a bridge between the super facial conservations of first stage and direct expression of feelings in the other stages. Then gradually the responsibility passes the members from the leader (McClure, 1990). The energy cumulated during the storming have to be discharged by physical movement. Then role-playing, creative drama is easily accepted by the children in this stage. This chaotic stage is the start of self-exploration

In this study the first two stages were followed. The children expressed their conflicts and they were very eager to talk about their conflicts and to role play these conflicts. At the beginning of the study (before training) the most typical conflict resolution strategy used by students was forcing (86%). The treatment was expected to lead a behavior modification from forcing to negotiation, but it did not. In other words the group did not advance more than storming stage. There might be several reasons for explaining these results. At first there was a control problem in the group. In of children groups the leader is perceived as an authority figure and they reflect the expectations about how a leader must act. This can lead to problems between the leader and the group (Arrington, 1987). This
group is formed by the students who have the least scores on conflict strategies, (because the destructive strategies were scored lesser with points: Forcing: 1 point; withdrawal: 2 points; smoothing: 3 points; compromising: 4 points; integrative negotiation: 5 points) and they were called by their teachers as “the most troublesome students of the school”. For this reason the children can be reactive to the researcher. In addition according to Lyon (1991) conflict resolution programs may not be influential on the aggressive “difficult cases”. In fact research has shown that aggressive people are more likely to elicit aggressive responses from others and to perceive others as aggressive (Wright, Zakriski, & Drinkwater, 1999; Dodge & Somberg, 1987 cited in Colsman and Wulfert, 2002). Then it is needed more intensive programs to change their behaviors towards handling constructive conflict resolution strategies In the present study probably for this reason sessions were not enough for expected behavior modification. Training held as 30 minutes period twice a week for 10 weeks, because it was tried not taking the time of class hours. It seemed that 30 minutes periods might not enough. Probably an application extended two terms of the instructional year at least one class hour a week could be more efficient.

In fact if the percentages of results taken into consideration it can be said that there was a change at the post-test scores of experimental group on positive direction. Thus, 86 % of students preferred forcing for first scenario. After the training this was around 57 %. 14 % of withdrawal increased to 22 %. smoothing and compromising that didn’t use before training were used as 7 % and- 14 % for two scenarios. Whereas Johnson, Johnson Dudley, Mitchell and Frederickson (1997) found that, the 63 % of forcing was regressed to 30 % after the training. Negotiation was progressed to the ratios of 48 % (during pre-test the percentage was 4 %). Johnson, Johnson, Dudley, Mitchell & Frederickson (1997) conducted a study with elementary school students by totally 14 hours, with 25 minutes periods, and significant differences were reported between the experimental and control group in the knowledge of the negotiation procedure and ability to apply it to actual conflicts.

The approach of Turkish culture to conflict resolution is another important discussion point. Avruch (1998) pointed out that culture is a key factor in the evolution and resolution of conflicts. Culture is very dynamic part of individual experience and it is very relevant to the conflict resolution approaches of individuals in a given society. So that it is not easy to expect a great behaviour modification by means of a ten hours training program. Avruch emphasizes the need not only to develop “a clear understanding of what culture is, but also to take that understanding and incorporate it into more effective conflict resolution processes”. In a similar manner Deutsch (1994) declared that “The constructive use of conflict resolution skills is more likely if the social context is favorable to their use”.

There are some findings that cadre training programs have a stronger impact in terms of students’ conflict attitudes and behaviors and whole school programs have a stronger impact in terms of school climate. Based on this evidence, it can be said that at first step a cadre program has to be implemented (Jones, Bodtler & Knmita, 2000).

Another point to be discussed was the difference between the structured and unstructured programs. In this study a structured program did not be followed; rather it was realized as a non-linear, unstructured training process. Probably it would be better to follow a structured program to be effective for the behavior change, because it would helpful for children to focus on the negotiation procedure.

2) The second hypothesis about the follow up the study was not supported also. It was related to the first hypothesis

3) It was hypothesized that the girls would be affected by the training much more than the boys. Although the gender differences were not reported in the literature especially in Turkey girls are raised to be more conforming, emotional, and sensitive. Social values are very important for them, and they are assumed to be more cooperative and emphatic than boys. They attach importance to long-term relationships. So it was expected that girls would be effected more then boys by the treatment. The results did not support the hypothesis. This result was consistent with Johnson, Johnson, Dudley, Mitchell and Frederickson’s (1997) study results. They studied with 198 students they didn’t prove
significant difference between the post-test scores of boys and girls. This was may be due to the changing role of women in society. They were resisting to social pressure as boys.

As a result researchers, school counselors and teachers must be very careful with children groups; it is not too easy to have successful results by short-term treatments. No doubt schools have to be the places where peace, democracy, cooperation, tolerance, communication, expression and conflict resolution skills are charged. The children who learned constructive conflict resolution strategies will create the society of the future without violence. For this global purpose all the school principals, teachers, counselors and parents must come together to start these kinds of programs in all schools.

REFERENCES


Çatışma Çözme Eğitiminin İlköğretim Çocukları Üzerindeki Etkisi


Anahtar Kelimeler: Çatışma, çatışma çözüm taktikleri, ilköğretim okulu

**Tartışma:** Bulguların tartışılması için önce çocukların özelliklerinden söz etmek gerekir. Çocuklar duygularını ifade ederken sık sık sinirlenir, bağırsız ve kavgalar ederler. Bunun nedeni kendilerini sözel olarak ifade etmede güçlük çekmeleridir.


