Effect of the Tolerance Tendency Enhancement Program to 5th Grade Students Tolerance and Bullying Level *

Mehmet Boyacı 1, Oya Gülendam Ersever 2

Abstract

The aim of this study is to evaluate the effectiveness of the Tolerance Tendency Enhancement Program (TTEP) which was prepared to enhance tolerance tendency and reduce bullying level of the fifth grade students. Pretest, posttest, follow up test, control and placebo group experimental design has been used in this research. This study was carried out with a sample of 42 fifth grade students (14 for experimental group, 14 for placebo group, and 14 for control group). The data used in this study was obtained through the Tolerance Tendency Scale (TTS) and Peer Bullying Scale (PBS). Wilcoxon Signed Ranks, Kruskal-Wallis H Tests were used to analyze the data. The results of the study showed that there was a significant change between post-tests of the placebo, control and experimental groups in favor of the experimental group. It can be said that the TTEP enhance tolerance tendency and reduce bullying level of the experimental group. Besides, the TTEP applied on the experimental group was understood to have permanent effects on tolerance tendency. Conclusion part of the study, some suggestions and recommendations were provided for the counseling practices and researchers in the light of findings.

Keywords

Tolerance Tendency Enhancement Program
Tolerance
Bullying
Psychoeducational program
Value education

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Introduction

People living in society and sharing a joint environment cannot have same feelings and opinions due to the differences among them. For this reason, the coexistence of differences is underlined in the framework of the definition of society (Hunt & Colander, 2013). A welcoming approach to the individual differences in society can prevent these differences not to become conflicts and provide social consensus. (Miglietta, Gattino, & Esses, 2014). Otherwise, there would be neither the happiness of individuals nor social peace in society (Beelmann & Heinemann, 2014; Türe, 2014). So, developing tolerance which is a universal value would be beneficial to Fewer conflicts in interpersonal relationships and provide social peace.

1 This study was produced from dissertation titled “The effectiveness of a tolerance tendency enhancement program: Promoting tolerance tendency and preventing bullying”.

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‘Tolerance’ can be defined as a functional communication process based on mutual respect and understanding (Reardon, 2000). Besides many various definitions of tolerance, the common point of these definitions is respecting the individual differences and solving the conflicts in a constructive way (Almond, 2010; Avery, Sullivan, & Wood, 1997; Cetron, 2011; Darr-Elston, 2014; Hansen, 2011; Rapp & Freitag, 2015). The problems which people face in social life are generally based on communication conflicts (Hunt & Colander, 2013). Accordingly, adopting tolerance as a value in interpersonal communication provides mutual respect and prevents the emergence of problems beforehand. In this sense, tolerance is accepted as a preventive factor by researchers in recent years (Campbell, 2011; Cetron, 2011; Chongruksa, Prinyapol, Wadeng, & Padungpong, 2010; Erdem-Zengin, 2014; Killen, Rutland, & Ruck, 2011; Vietze & Hildebrandt, 2009). Instead of crisis-based studies, developmental and preventive studies are preferred in modern psychology and training activities (Korkut-Owen, 2015; Nazlı, 2014). The Services of Psychological Counseling and Guidance in schools are one of developmental and preventive services. In this sense, developmental and preventive studies guided by the psychological counselors in schools might be beneficial for children’s personal, social and academic development (Conyne, 2013; Korkut-Owen, 2015). From this point of view, studies towards developing tolerance in schools can also be evaluated within preventive counseling services.

Children having different characteristics become acquainted with the institutions such as kindergarten or pre-school at an early age and they spend most of their time at these places (Nazlı, 2014). So education institutions play an important role for the development of a person. Some problems such as bullying, violence, aggression and exclusion in school environment may cause some psychological problems and even dropping out (Austin & Sciarra, 2013; Merrill & Hanson, 2016; Nickerson, Aloe, Livingston, & Feeley, 2014). Bullying, one of the prominent reasons leading students to be alienated from the school, is mostly studied by researchers (Hymel & Swearer, 2015; Juvonen & Graham, 2014; Miyazaki et al., 2016; Sánchez et al., 2016). The studies focused on this issue reveal that there is a high incidence of bullying at schools at every level (Bradshaw, Waasdorp, & Johnson, 2014; Juvonen & Graham, 2014; Kutlu, 2005; Levine & Tamburrino, 2014; Olweus, 2013).

Olweus (2013), who is a well-known researcher in international area with his comprehensive studies on bullying, defines bullying as ‘Being subjected to negative (undesirable) attitudes by other people deliberately or permanently’. There are also other definitions and kinds of bullying which is a problem all over the world and tried to be prevented (Hase, Goldberg, Smith, & Campaign, 2015; Merrill & Hanson, 2016; Miyazaki et al., 2016; Sánchez et al., 2016). There are some conditions for an attitude to be accepted as bullying; the attitude should be done deliberately to damage someone; it should be permanent; there should be a power inequality between the persons (Hymel & Swearer, 2015; Olweus, 2013). Reardon (2000) defines bullying as a kind of intolerance. Bullying is based on intolerance for differences (Coloroso, 2011). So some undesired facts like bullying or violence may occur in the environment in which people having different characteristics come together (Olweus, 2013; Sánchez et al., 2016). The importance of taking precaution beforehand for some undesired facts like bullying is underlined in the literature (Austin & Sciarra, 2013; Gökler, 2009; Stefanakou, Tsiantis, & Tsiantis, 2014). The preventive studies and creating a good atmosphere in schools may be effective to decrease this kind of undesired facts (Çalık, Özbay, Özler, Kurt, & Kandemir, 2009; Şahin & Akbaa, 2011; Türkatan, 2013; Ugürol, 2010). As a result bullying is based on intolerance toward the ones less powerful, so developing tolerance might be helpful to decrease bullying.
In this research aiming to develop tolerance tendency as part of preventive studies, 5th grade students form the target group. Secondary school years are a period in which individuals experience a deep social, physical and mental development. In this period, person experiences puberty and individual differences becomes more visible (Gander & Gardiner, 2010). So these differences should be taken into consideration and training environments in which individual differences are respected, should be provided (Darr-Elston, 2014). Some training on social peace, interpersonal relations, tolerance and values might be helpful to students in this period (Campbell, 2011; Lister, 2013; Moss, 2013; Pascale, 2011; Tatar, 2009). In the framework of this research, the Tolerance Tendency Enhancement Program (TTEP) aiming to develop tolerance tendency has been planned for the 5th grade students. Similarly, Tatar (2009) working with pre-school children and Erdem-Zengin (2014) working with elementary school fourth-year students in experimental studies in Turkey reached the conclusion that tolerance can be enhanced with practices.

The studies on tolerance are based on respecting differences and living together by accepting them. When the researches in Turkey are scanned, there are researches that emphasize tolerance as an important value and to develop tolerance in the society (Çalışkan & Sağlam, 2012; Erdem-Zengin, 2014; Kalın, 2013; Kolaç, 2010; Türe, 2014). Although in these researches, the importance of tolerance is emphasized but there was no empirical study by Tatar (2009) to try to develop tolerance by making preschool program attachments and to increase tolerance tendency and by Erdem-Zengin (2014) trying to develop tolerance with creative drama. On the other hand there are a lot international researches on developing tolerance (Campbell, 2011; Cetron, 2011; Darr-Elston, 2014; Lintner, 2005; Lister, 2013; Pascale, 2011; Usui, 2008; Zakin, 2012). Many fields such as literature (Chongraksi et al., 2010; Lister, 2013), art (Campbell, 2011), theatre (Cetron, 2011), painting (Lintner, 2005) and music (Pascale, 2011) have been benefited within these studies for developing tolerance. For this reason, it is considered that the findings of the research will be beneficial in the name of the closure of the application for the area in Turkey.

As an indication of importance of tolerance, the UN celebrates 16 November as ‘International Day for Tolerance’ (UN, 2016). The aim of this research is developing tolerance and decreasing bullying for the students attended to the research. The research findings will also be supporting for the lack of applied research within the field. Accordingly, an answer has been sought for the question of “Does the Tolerance Tendency Enhancement Program have significant effect on the levels of tolerance tendency and bullying among the 5th grade students?” Some hypotheses have been also formed in the direction of this question.

**Hypothesis 1:** Experimental group Tolerance Tendency Scale posttest scores are significantly higher than the pretest scores.

**Hypothesis 2:** Tolerance Tendency Scale posttest scores of the experimental, placebo and control group significantly differentiate in favor of experimental group.

**Hypothesis 3:** There is no significant difference between experimental group Tolerance Tendency Scale posttest and follow up tests scores.

**Hypothesis 4:** Experimental group Peer Bullying Scale posttest scores are significantly lower than the pretest scores.

**Hypothesis 5:** Peer Bullying Scale posttest scores of the experimental, placebo and control group significantly differentiate in favor of experimental group.

**Hypothesis 6:** There is no significant difference between experimental group Peer Bullying Scale posttest and follow up tests scores.
Method

This empirical research has been formed to determine the effect of tolerance tendency and bullying under the Tolerance Tendency Enhancement Program developed for the 5th grade students. The Tolerance Tendency Enhancement Program is the independent variable of the research whereas the levels of ‘tolerance’ and ‘bullying’ are dependent variables. In this section, the plan of the research, participants, data collection tools, operation method and explanations regarding to the analysis of the findings have been presented in order.

Research Design

In this research, pretest-posttest-follow-up test with control and placebo group experimental design was used. In true experimental design, subjects are randomly assigned into the groups (Büyüköztürk, Kılıç-Çakmak, Akgün Karadeniz, & Demirel, 2014; Karasar, 2014; Tabachnick & Fidell, 2013). The aim of the pretest-posttest control group design is to test the impact of the independent variables on the dependent variables (Heppner, Wampold, & Kivlighan, 2008). The 3x3 split-plot design was used in this study. In this design the first factor shows the independent treatment groups (experiment, control and placebo), and the second factor shows the repeated-measures related with the dependent variables (pretest-posttest-follow-up test). The design of the study was represented in Table 1.

Table 1. Research Design

<table>
<thead>
<tr>
<th>Groups</th>
<th>Assignment</th>
<th>Pretest Procedure</th>
<th>Posttest</th>
<th>Follow-Up Test (Ten Weeks Later)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiment</td>
<td>Random</td>
<td>TTS* Tolerance Tendency Enhancement Program (10 Sessions)</td>
<td>TTS*</td>
<td>TTS*</td>
</tr>
<tr>
<td>Control</td>
<td>Random</td>
<td>TTS* Tolerance Tendency Enhancement Program (10 Sessions)</td>
<td>TTS*</td>
<td>TTS*</td>
</tr>
<tr>
<td>Placebo</td>
<td>Random</td>
<td>TTS* Placebo Activities (10 Sessions)</td>
<td>TTS*</td>
<td>TTS*</td>
</tr>
</tbody>
</table>

* TTS: Tolerance Tendency Scale  
** PBS: Peer Bullying Scale

Study Group

The participants of the research are the 5th grade students at a secondary school which has been selected upon the permission of the Provincial Directorate of Ankara for National Education. Information has been given to the school principals, school counselors and teachers at the beginning of the research. Necessary ethical permissions have been also taken from the Committee of Ethics of Hacettepe University Senate.

Characteristics of the Participants and Formation of the Groups

In the framework of the research, the Peer Bullying Scale, Tolerance Tendency Scale and Personal Information Form have been practiced in one session on the 5th grade students of a secondary school located in Etimesgut, Ankara to determine the experimental, control and placebo groups. In total 243 students consisting of 126 female, 117 male from 8 classes participated to the research. Volunteer students have been divided into three different groups by lot (it was drawn separately for girls and boys). These three groups have been named in the same way as experimental (N=14), placebo (N=14) and control group (N=14). The demographic information regarding to the students within these three groups has been collected with the Personal Information Form (PIF) developed by the researcher. The demographic information regarding to the participants has been indicated in the Table 2 below.

Table 2. Distribution of Participants by Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Experimental Group</th>
<th>Control Group</th>
<th>Placebo Group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Female</td>
<td>7</td>
<td>50</td>
<td>6</td>
<td>42.8</td>
</tr>
<tr>
<td>Male</td>
<td>7</td>
<td>50</td>
<td>8</td>
<td>57.2</td>
</tr>
</tbody>
</table>
Participans of the research are the 5th grade students of a secondary school located in Etimesgut, Ankara. They come from the middle socio-economic class. In total, 48% female, 52% male students participated to the research and their ages were between 10-11 (X = 10.30, ss=.23). It should be determined whether there is a considerable difference between two genders in terms of the variables or not, to test the efficiency of the program used in empirical studies (Heppner et al., 2008). So the pre-test points of the students in empirical, control and placebo groups have been analyzed with the Kruskal-Wallis H test. The results of the analysis have been indicated in the Table-3.

Table 3. Experiment, Control and Placebo Group Kruskal Wallis H-Test Results related to TTS and PBS Pretest Scores

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Group</th>
<th>n</th>
<th>Mean Rank</th>
<th>X²</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>TTS</td>
<td>Experiment</td>
<td>14</td>
<td>20.29</td>
<td>1.018</td>
<td>2</td>
<td>.601*</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>14</td>
<td>20.04</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Placebo</td>
<td>14</td>
<td>24.18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PBS</td>
<td>Experiment</td>
<td>14</td>
<td>24.89</td>
<td>1.758</td>
<td>2</td>
<td>.415*</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>14</td>
<td>18.96</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Placebo</td>
<td>14</td>
<td>20.64</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p>.05

According to the results of the Kruskal-Wallis H test indicated in the Table 3, there is no a significant difference between the groups in terms of the TTS pre-test points (X²= 1.018, p>.05). It is also same for the PBS pre-test points (X²= 1.758, p>.05). As a result, it can be said that the levels of tolerance tendency and bullying of the participants in the empirical, control and placebo groups have been nearly same before the test.

Measurement Instruments

The Peer Bullying Scale (PBS) developed by Pişkin and Ayas (2007), the Tolerance Tendency Scale (TTS) developed by Çalışkan and Sağlam (2012) and the Personal Information Form (PIF) developed by the researchers have been used to assess the results of the research. In this section, information regarding to the PBS, TTS and PIF has been presented.

Peer Bullying Scale (PBS)-Child Form: PBS has been used with permission of the researchers who have worked on this issue, to determine the students’ level of bullying. The PBS is a five point likert scale consisting of 37 subject and 5 factors in total. The students have been demanded to mark frequency of attitudes stated in the options within the PBS-Child Form. The highest point is 185 and the lowest point is 37 within the scale. The higher point gets the student, the higher risk of bullying is possible then. In the development process of the PBS, a database regarding to bullying as parallel with the literature has been formed. Experts’ opinions from the field of Psychological Counseling and Guidance have been taken for the database. A confirmatory factor analysis has been made for the scale of bullying after taking the experts’ opinions. According to the analyses, it has been detected that the scale of bullying is on allowable level as in fit index of the confirmatory factor analysis made to analyze the validity of the PBS [χ²= 1471.43, χ²/sd= 2.36, RMSEA=.05, GFI=.84, AGFI=.82, CFI=.96, NNFI=.91]. The reliability of the PBS has been tested with the Cronbach internal consistency method. The alpha value of the scale is 87 (Pişkin & Ayas, 2007). In this research, the data collected from the pre-test implemented to the group (N=243) before the PBS has been analyzed again and the internal consistency index has become 84.
**Tolerance Tendency Scale (TTS):** The Tolerance Tendency Scale (TTS) has been developed by Çalışkan and Sağlam (2012) to determine tolerance tendency of 5th, 6th, 7th and 8th grade students. In the development process of the TTS, 899 students from five different primary schools have been included into the research. A 18-subject assessment instrument explaining 48% of the variance has been developed after the analyses. The TTS is a five point likert type assessment instrument. The highest point is 90 and the lowest point is 18 within the TTS (Çalışkan and Sağlam, 2012). A high point from the TTS means a high level of tolerance tendency. Expert opinions from six different academicians working in the fields of assessment-evaluation, Psychological Counseling and psychology have been taken for available questions to support validity of the TTS. It has been confirmed that the model indexes obtained from the Confirmatory Factor Analysis (CFA) made for construct validity of the scale is acceptable \[\chi^2= 549.39, sd=128, RMSEA= .061, GFI=.94, AGFI=.91, CFI=.98, NFI=.98\]. The test-retest and Cronbach alfa internal index has been analyzed to check reliability of the scale. The scale has been implemented to 61 students every other month to check the test-retest reliability of the TTS. The correlation index between two measurements has been detected as .89 (Çalışkan & Sağlam, 2012). In this research, the scale reliability has been rechecked with the Cronbach alpha method according to the results obtained from the group (N=243), on which a pre-test has been done before the TTS practice, and internal consistency index has been determined as .79.

**Personal Information Form (PIF):** PIF form has been prepared to collect detailed information about the participants. The various socio-demographic information such as gender, school, grade, age, number of sibling and education level of parents has been asked in these forms.

**Procedures**

All implementations for empirical, control and placebo groups have been realized at a secondary school in Etimesgut, Ankara under the guidance of the researchers. After completion of the preparation phrase of the TTEP, it has been implemented for the students within the experimental group in the spring of 2014-2015. Two weeks before the sessions, the PBS and TTS pre-tests have been implemented for the students within the experimental, control and placebo groups by the first researcher. Two weeks after the pre-tests, the TTEP developed by the researcher has been practiced as a 60 minute-weekly session on the students in the experimental group for 10 weeks. In this process, educational and professional counseling (not related with tolerance) consisting of 10 weekly sessions has been realized with the students in the placebo group. In this phrase, any training has not been practiced for the control group.

At the beginning of the trainings for the experimental and control group, the theater hall of the school has been used as it has a stage. However, another class has been preferred as of the second session due to the echo within the hall. Projection, computer and sound systems have been used in the implementations. Two students in the empirical group have not attended to the sessions as they were ill in the beginning. However, they have attended to the next sessions. There has not been discontinuity in the placebo group. Consequently, the sessions for the experimental, control and placebo groups have been completed with 14 students as in the beginning.

After the sessions for the empirical and placebo groups had been completed, the scales have been practiced as posttest to the students in placebo and control groups. Two and half months after the post tests to check the effect of the TTEP on tolerance tendency and bullying, same scales have been practiced as follow up test for all students. After completion of the practices, in the fall of 2015-2016, the TTEP has been implemented to the students in the placebo and control groups to decrease the level of bullying.

In experimental studies, the accuracy of the effect of the application is dependent on internal and external validity (Karasar, 2014). Measures were also taken in this research to ensure internal and external validity. Non-random assignment to groups affects the internal validity of experimental research (Karasar, 2014). In this study, subjects were randomly assigned to the experimental, control, and placebo groups. The collection of data and the implementation of data collection tools also affect
internal validity (Büyüköztürk et al., 2014). Within the scope of the study, all participants were PBS, TTS and PIF; the same guidelines were applied by a single investigator in similar settings. When participating researchers are aware that they are selected for the experiment, they assume that the researcher expects a positive change in behavior from them and they act accordingly. This trend is defined as the Hawthorne Affect (Karasar, 2014). In this study, a placebo group was established as a second control group to control the Hawthorne effect. In addition, follow-up measurements were performed two and a half months after the experimental procedure to try to determine the effect of changes in time-treatment interaction on the validity of the study. Performing the monitoring test only once and studying with a limited sample group can be seen as the weaknesses of the study. However, the use of experimental design in this study, and the creation of a placebo group as a second control group, rather than a single control group, is an example of the strength of the study.

The Tolerance Tendency Enhancement Program (TTEP): The program prepared within the research aims to develop the value of tolerance which eases a person to adapt to environment and accepts personal differences as cultural richness rather than problem. In the literature, it is underlined that negative attitudes such as bullying, aggression and violence are based on intolerance (Cetron, 2011). So developing tolerance tendency may contribute to prevent these negative attitudes. The TTEP is a psycho educational program consisting of 10 sessions. The psycho educational groups are preferred especially in preventive studies as they are based on trainings and aim to develop skills (Korkut-Owen, 2015). These psycho educational programs within the TTEP include both emotional sharing and informing. In the preparation process, theoretical and philosophic basics have been defined at first. This program has grounded on humanist philosophic approach and positive psychology.

After a comprehensive research of the literature, a context in line with the requirements has been tried to form by considering development features of the 5th grade students. Sessions have been prepared within the TTEP for students to identify personal differences, respect them and develop interpersonal communication. After making a research on similar studies, acquisitions have been defined by specifying the general purpose of the program. While the acquisitions of counseling programs have been written, taxonomy developed by Wellman and Moore in 1988-68 has been used rather than Bloom’s taxonomy. The taxonomy developed by Wellman and Moore consists of three levels which are ‘perception’, ‘comprehension’ and ‘generalization’ (Nazlı, 2014). The acquisitions of the TTEP have been prepared in accordance with the taxonomy of Wellman and Moore.

After the acquisitions were made, the application of TTEP was started. In this section briefly described that what had been done in ten sessions of TTEP. Detailed information about the implementation of TTEP is included in the doctoral dissertation that this article has been improved. In the first sessions, with the help of musical balloons, group members were introduced to each other and TTEP was introduced to group members. The second session was worked about what tolerant and intolerant behaviors are. It was also talked about how individual differences enrich the world. At the third session, the members were asked to write the characteristics of their own in order to recognize the individual differences. After that members of similar and different characteristics are separated into different corners and members in each group are provided to talk with each other. It was emphasized that differences do not prevent to live together in the same world. In order to better understand the effects of exclusion due to differences, this session was screened with short film members in the form of animations of the story "The Ugly Ducklings" from Andersen’s tale. At the fourth session, the necessary materials were distributed to each group member and they were asked to draw something beautiful for themselves. After that the members said that each one draws different pictures, but that they are all good things for themselves. In addition, Mevlana’s story titled “Bilgin with Kayakçı”, in which the story of two different people is told, was read in this session and the importance of respecting the differences was emphasized. The fifth session emphasized the importance of respecting individual and cultural differences. Creative drama techniques had been utilized in TTEP in order to ensure that the members of the group have a pleasant time and learning. The “Deserted Island” game is animated. In this practice, two different groups were formed, who fell into the deserted island and were exposed to tolerant and
intolerant behavior by the indigenous people living in the island. After the animation, they were asked
to share what they felt when they greeted the members with tolerance and when they welcomed it
intolerantly.

At the sixth session, the pictures from different cultures were affixed around the world picture,
and members were asked about what they learned about different cultures. In the same session, the
members of the group worked on what they could do if they were exposed to intolerance because of
their different characteristics. Group members were asked to talk about how often they used positive
coping, aggressive coping, and avoiding coping when they faced to intolerant behaviors. In the seventh
session, the prejudices which caused intolerance were studied. Photographs of different individuals and
cultures by the group leader were shown to the group members and asked them “which is the richest?
Which is the most loving? Which one is the hardest working? to try to make group members be aware
of their prejudices regarding the individuals. At the eighth session, it was attempted to recognize the
labeling and the consequences of these libeling’s. In the ninth session, the members divided into three
groups. The first group was asked about what could be done to improve the tolerance in the school, the
second group in the society and the third group in the world. In the last session, all sessions were
summarized by the group leader. Then the group members evaluated the all sessions and expressed
their feelings. Members generally expressed that they are sad because the sessions are over and will
miss the group. In order to leave the members from the group with positive feelings, the activity named
“postman” was applied. In this activity, the group members wrote positive thoughts about their friends
and they were distributed to members in the form of letters by the group leader.

**Processing for the Placebo Group:** A placebo group as the second control group has been
formed to research the efficiency of empirical processing within the research. The aim of formation of
the placebo group is helping to differentiate the effects of the empirical processing and the possible
effects (Hawthorne) on the subjects (Heppner et al., 2008; Karasar, 2014). In this research, 60 minute-
sessions have been realized with the placebo group whereas in total 10 sessions practiced per week have
been implemented for the empirical group. Practices including vocational guidance, educational
guidance and leisure have been realized per week for the placebo group.

**Data Analysis**

Before making data analysis, the points of the students in the empirical, control and placebo
groups regarding to the TTS and PBS pre-tests have been checked by the parametric tests and the results
have been compared with the assumptions to be able decide which tests to be implemented. Sample
extent plays an important role for the analysis to be implemented, because test efficiency also decreases
as the number of subject decreases. If the number of subject is 20 or less, the efficiency of parametric test
may not be reliable (Stevens, 2009).

In this research, all groups which are empirical, control and placebo consist of 14 students. As
the number of participants in the empirical, control and placebo groups is few, non-parametric statistic
techniques have been benefited according to the expert opinions. In this research, difference between
scales has been tested by the Wilcoxon Rank-Order Test, whereas the difference between the groups has
been tested by the Kruskal-Wallis H test to check the efficiency of the TTEP (Büyüköztürk, 2016). In
addition, the difference between the groups was examined by Mann Whitney U test. The SPSS 15.00
program has been used to analyze the date within the research.
Results

In this section, the findings as a result of the analysis and their assessment have been presented after the students in the empirical, control and placebo groups got their points from the scales. The findings have been presented in an order under the two heads as ‘Tolerance Tendency’ and ‘Bullying’ as in the hypotheses.

Test of the Hypotheses for Tolerance Tendency

The 1st, 2nd and 3rd hypotheses formed within the research are regarding to the tolerance variable of the research. The pre-test and post test scores of the students within the empirical group have been tested with the Wilcoxon Rank-Order Test to control the Hypothesis-1 and the results have been indicated in the Table 4.

Table 4. Experimental Group Wilcoxon Signed Rank Test Results related to TTS

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Posttest-Pretest</th>
<th>n</th>
<th>Mean Rank</th>
<th>Sum of Rank</th>
<th>Z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>TTS</td>
<td>Negative Rank</td>
<td>0</td>
<td>.00</td>
<td>.00</td>
<td>-3.07</td>
<td>.00*</td>
</tr>
<tr>
<td></td>
<td>Positive Rank</td>
<td>12</td>
<td>6.50</td>
<td>78.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Equivalent</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.05

According to the results of analysis indicated in the Table 4, there is a remarkable difference between the TTS pre-test and post test scores of the students in the empirical group (z=-3.07, p<.05). When the difference in the rank sum has been analyzed, it can be seen that this difference is in favor of positive ranks, in other words the posttest points. Accordingly, the hypothesis which is ‘the TTS posttest point average is notably higher than the pre-test point average for the students in the empirical group within the Tolerance Tendency Enhancement Program’ has been proved. So it can be said that the Tolerance Tendency Enhancement Program is effective to develop students’ tolerance tendency. The Kruskal-Wallis H Test has been implemented on the TTS posttest points of the students in the empirical, control and placebo groups to check the Hypothesis 2. The results of the analysis are indicated in the Table 5.

Table 5. Experiment, Control and Placebo Group Kruskal Wallis H-Test Results related to TTS and PBS Posttest Scores

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Mean Rank</th>
<th>Df.</th>
<th>( \chi^2 )</th>
<th>p</th>
<th>Significant Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiment</td>
<td>14</td>
<td>34.14</td>
<td>2</td>
<td>24.404.00</td>
<td>.00*</td>
<td>Experiment-Control,</td>
</tr>
<tr>
<td>Control</td>
<td>14</td>
<td>12.04</td>
<td>2</td>
<td></td>
<td></td>
<td>Experiment-Placebo</td>
</tr>
<tr>
<td>Placebo</td>
<td>14</td>
<td>18.32</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.05

A significant difference between the posttest points of the students in the empirical, control and placebo groups regarding to the Tolerance Tendency Scale has been detected as indicated in the Table 5 (\( \chi^2 = 24.404, p<.05 \)). The paired comparisons have been realized with the Mann Whitney U test to determine which groups have difference and a remarkable difference in favor of the empirical group has been determined between the empirical-control and empirical-placebo groups.

When the mean rank is considered, it has been detected that the tolerance tendency level of the students in the empirical group within the TTEP is higher than the ones who have not attended to the program. So the hypothesis which is “The posttest points of the students in the empirical group for the Tolerance Tendency Scale are considerably higher than the posttest points of the students in the control and placebo groups within the TTEP” has been supported. The Tolerance Tendency Scale posttest and follow up test points of the students in the empirical group have been controlled with the Wilcoxon Signed Rank Test and the results of analysis have been indicated in the Table 6.
According to the results of analysis indicated in Table-6, there is no a remarkable difference between the posttest and follow up test points obtained from the Tolerance Tendency Scale practiced for the students in the empirical group (Z=-.480, p>.05). So the hypothesis which is ‘there is no a remarkable difference between the posttest and follow up test points of the students in the empirical group for the Tolerance Tendency Scale within the Tolerance Tendency Development Program’ has been supported. In other words, the efficiency of the Tolerance Tendency Development Program in increasing tolerance tendency has been maintained in follow up after two and half months. In addition, regarding to the Tolerance Tendency Scale, the pre-test, post and follow up test points of students in the empirical, control and placebo groups have been indicated in the Figure 1 to give more detailed information about the research.

**Table 6.** Experimental Group Wilcoxon Signed Rank Test Results related to TTS

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Follow Up Test-Posttest</th>
<th>n</th>
<th>Mean Rank</th>
<th>Sum of Rank</th>
<th>Z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>TTS</td>
<td>Negative Rank</td>
<td>5</td>
<td>5.30</td>
<td>26.50</td>
<td>-.480</td>
<td>.631*</td>
</tr>
<tr>
<td></td>
<td>Positive Rank</td>
<td>4</td>
<td>4.63</td>
<td>18.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Equivalent</td>
<td>5</td>
<td></td>
<td></td>
<td>(.00)</td>
<td>(.00)</td>
</tr>
</tbody>
</table>

*p<.05

**Test of the Hypothesis for Bullying**

The 4th, 5th and 6th hypotheses within the research have been prepared for bullying. The Wilcoxon Signed Rank Test has been implemented for the pre-test and posttest points obtained from the Peer Bullying Scale tested on the students in the empirical group to check the 4th hypothesis.

**Table 7.** Experimental Group Wilcoxon Signed Rank Test Results related to PBS

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Posttest-Pretest</th>
<th>n</th>
<th>Mean Rank</th>
<th>Sum of Rank</th>
<th>Z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBS</td>
<td>Negative Order</td>
<td>12</td>
<td>6.50</td>
<td>78.00</td>
<td>-3.70</td>
<td>.00*</td>
</tr>
<tr>
<td></td>
<td>Positive Order</td>
<td>0</td>
<td>.00</td>
<td>.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Equivalent</td>
<td>2</td>
<td></td>
<td></td>
<td>(.00)</td>
<td>(.00)</td>
</tr>
</tbody>
</table>

*p<.05
According to the results of analysis indicated in the Table-7, there is a significant difference between the students’ pre-test and posttest points for the Peer Bullying Scale in the empirical group (Z=-3.70, p<.05). When the rank sum of the difference is calculated, it can be seen that this difference is in favor of negative ranks or pre-test points in other words. So the hypothesis which is “the posttest points of the students in the empirical group are considerably lower than the pre-test points for the Peer Bullying Scale within the TTEP” has been supported. In other words, it can be said that the TTEP is effective to decrease the bullying points of the students. The Kruskal-Wallis H test has been implemented for the Peer Bullying Scale posttest points of the students in the empirical, control and placebo groups to check the hypothesis 5 and the results have been indicated in the Table 8.

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Mean Rank</th>
<th>df</th>
<th>X^2</th>
<th>p</th>
<th>Significant Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiment</td>
<td>14</td>
<td>13.18</td>
<td>2</td>
<td>9.948</td>
<td>.007*</td>
<td>Experiment-Control, Experiment-Placebo</td>
</tr>
<tr>
<td>Control</td>
<td>14</td>
<td>26.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Placebo</td>
<td>14</td>
<td>25.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.05

A significant difference has been detected between the posttests points of the empirical, placebo and control groups for the Peer Bullying Scale as indicated in the Table-8 (X^2=9.948, p<.05). The paired comparisons have been implemented by using the Mann Whitney U test to determine which groups have the difference. A significant difference in favor of control and placebo groups has been observed between the empirical-control and empirical-placebo groups. When the rank sums are analyzed, it can be observed that the students attended to the TTEP have lower level of bullying than the ones who have not attended. So the hypothesis which is ‘the students of the empirical group attended to the TTEP have lower level for the posttest points than the students in the control and placebo according to the Peer Bullying Scale’ has been supported. The Peer Bullying Scale posttest and follow up test points of the students in the empirical group have been analyzed with the Wilcoxon Signed Rank Test to check the hypothesis 6 and the results have been indicated in the Table-9.

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Follow Up Test-Posttest</th>
<th>n</th>
<th>Mean Rank</th>
<th>Sum of Rank</th>
<th>Z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBS</td>
<td>Negative Rank</td>
<td>5</td>
<td>5.30</td>
<td>26.50</td>
<td>-.480</td>
<td>.631*</td>
</tr>
<tr>
<td></td>
<td>Positive Rank</td>
<td>4</td>
<td>4.63</td>
<td>18.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Equivalent</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p>.05

The results of analysis indicated in the Table-9 shows that there is a significant difference between the posttest and follow up test points of the students in the empirical group according to the Peer Bullying Scale (z=-2.619, p<.05). When the rank sums are analyzed, it can be seen that the difference is in favor of the positive ranks or follow up test points in other words. So the hypothesis which is ‘There is no significant difference between the Peer Bullying Scale posttest and follow up test points of the students in the empirical group within the Tolerance Tendency Development Program’ has not been supported. In other words, the efficiency related to bullying points could not be maintained according to the follow up tests two and half months after the TTEP. The Peer Bullying Scale pre-test, posttest and follow up test points of the students in the empirical, control and placebo groups have been indicated in the Figure-2 to give detailed information about the research.
Figure 2. The Change in the Peer Bullying Scale Pretest, Posttest, and Follow-Up Test Mean Scores of the Experiment, Control, and Placebo Groups

Discussion, Conclusion and Suggestions

In this research, the effect of the TTEP on the levels of tolerance tendency and bullying of the 5th grade students has been analyzed. As a result of this research, it has been detected that there is an increase in the level of tolerance tendency of the students in the empirical group under the TTEP and this rate has not changed in follow up tests after two and half months. In addition, the TTS post and follow up test points of the students in the empirical, control and placebo groups have been compared and a significant difference in favor of the empirical group has been observed in both measurements. These results support the hypotheses of the research regarding to tolerance. So the TTEP can be accepted as an effective program to enhance tolerance tendency. These results regarding to tolerance tendency are compatible with the results of the other studies in the literature (Campbell, 2011; Cetron, 2011; Chongruksa et al., 2010; Lister, 2013; Pascale, 2011; Usui, 2008; Zakin, 2012).

Erdem-Zengin (2014) stated that activities based on creative drama are effective to increase students’ tolerance tendency. Accordingly, the results showing a significant increase for tolerance tendency of the students in the empirical group within the TTEP, is compatible with the results of the study of Erdem-Zengin (2014). These drama techniques have been benefited during the sessions within the TTEP as in the study of Erdem-Zengin (2014). Tatar (2009), another researcher studied on this field, determined that students made progress in terms of tolerance and asserting their rights after the training of tolerance, in his/her empirical study for the preschool students. However, this new training of tolerance developed within the research, did not reveal more efficient results from the current training of tolerance in the schedule. The researcher attributed this situation to efficiency of the current implementations for tolerance within the preschool schedule (Tatar, 2009). So the results of the TTEP and Tatar’s research are not compatible with each other. Accordingly, good planning and sufficient qualified implementations within the TTEP may affect the results of the research positively.

The activities developed for the TTEP in the framework of the research have been all-purpose to increase tolerance tendency of the participants in the empirical group. Some similar results to the previous studies in the literature have been obtained in the end. So this research has underlined the importance of developmental and preventive studies under the guidance of schools once again. So PCG services and their studies play an important role to support student’s improvement to be happy and enjoying the life. Moreover, some studies on tolerance and peace which contribute to the development of a person, may be developed and practiced by the Psychological Counseling and Guidance services in schools. In this way, student’s psycho-social needs can be met.
According to the findings regarding to bullying which form the second group hypotheses of the research, a significant decrease on the bullying points of students in the empirical group within the TTEP has been observed, but this has not been maintained in the follow up tests after two and half months. In addition, when the post tests and follow up tests for bullying of the students in the empirical, control and placebo groups have been analyzed, a meaningful difference in favor of the empirical group has been observed for the post tests. This means that there has been a decrease for the bullying points of the empirical group. It is also emphasized that bullying can be prevented by applying effective programs and creating a positive school environment (Austin & Sciarra, 2013; Çalık et al., 2009; Gökler, 2009; Stefanakou et al., 2014; Şahin & Akbaba, 2011; Türktan, 2013; Ugürol, 2010). The main aim was to develop tolerance and decrease bullying by implementing the TTEP for the empirical group in the framework of the research. According to the findings of the research, the posttest points regarding to bullying of the students in the empirical, control and placebo groups have been analyzed, a meaningful difference in favor of the empirical group has been observed for the post tests. This means that there has been a decrease for the bullying points of the empirical group. It is also emphasized that bullying can be prevented by applying effective programs and creating a positive school environment (Austin & Sciarra, 2013; Çalık et al., 2009; Gökler, 2009; Stefanakou et al., 2014; Şahin & Akbaba, 2011; Türktan, 2013; Ugürol, 2010). The main aim was to develop tolerance and decrease bullying by implementing the TTEP for the empirical group in the framework of the research. According to the findings of the research, the posttest points regarding to bullying of the students in the empirical group have notably decreased compared to the pre-test points. Accordingly, strengthening the positive characteristic of a person may contribute to prevent undesired facts like bullying as stated in the literature.

Two and half months after the posttests which have been implemented to research the lasting effect of the TTEP on decreasing bullying, the decrease on the level of bullying could not be maintained in the follow up tests. The content of the implementations within the TTEP has not been directly prepared for bullying. Some implementations have been prepared to develop tolerance tendency within the TTEP and the impact of these implementations on bullying has been researched. The programs for preventing bullying in the literature are directly for bullying (Karataş, 2011; Kutlu, 2005; Türktan, 2013). In addition, the necessity of cooperation of the school, family, parents and students; maintenance of preventive studies and adopting preventive studies as institutional culture are underlined by the researchers to provide permanent preventive studies for bullying (Austin & Sciarra, 2013; Bradshaw et al., 2014; Gökler, 2009; Hymel & Swearer, 2015). This research has been practiced as 10 sessions for the students in the empirical group and any preventive study has not been implemented after the empirical practice. For this reason, it has been assumed that this effect as a result of the TTEP could not be maintained due to the lack of support of the school and family which have an important role in development of the child. Accordingly, the findings of the research are consistent with the literature. Consequently, bullying is a common undesired fact in schools. Some systematic methods may prevent bullying but maintenance of these studies, the school-family cooperation, institutional culture and education policies play an important role to maintain this impact (Hymel & Swearer, 2015; Gökler, 2009; Olweus, 2013; Türktan, 2013).

This research has some limitations like other researches. Findings of students participating in the survey are limited to qualities measured by the measuring instruments used. The results of this experimental study can only be generalized to fifth grade students with similar characteristics. In addition, a follow-up test was conducted once to test the permanence of the study. Along with their limitations, the TTEP has been planned to be implemented easily by the employees. In case of its implementation in other empirical studies, it may contribute to validity of the results of this research. Like the other studies results (Campbell, 2011; Cetron, 2011; Lister, 2013) in this study indicated that the tolerance tendency may be improved. So some development programs for Tolerance Tendency for teachers and school principals, who play an important role in creating an environment of tolerance, may be developed and their efficiency may be researched. The students participated to the research stated that they had been exposed to intolerant attitudes. So an environment of training to support the culture of tolerance should be considered while planning educational policies. Besides, similar programs encouraging positive attitudes of persons might be developed and implemented in schools. Finally, it is suggested that researchers who will work on tolerance should know the developmental characteristics of the age group they will work with and use activities appropriate to these characteristics.
References


Merrill, R. M., & Hanson, C. L. (2016). Risk and protective factors associated with being bullied on school property compared with cyberbullied. BMC Public Health, 16(1), 1.


