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Skills for Growing on school climate, students’
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The effectiveness of the Lions Quest Program: Skills for Growing on school climate, students’ behaviors, perceptions of school, and conflict resolution skills

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ABSTRACT
This study examines the effectiveness of the Lions Quest Program: Skills for Growing by employing a quasi-experimental design with a control group. The experimental and control group each comprises two primary schools – one public, one private. One classroom at each grade level, 1 through 4, in each school was selected by random sampling for a total of 16 classrooms in the study. Pre-test data were collected in September 2013 and post-test data in May 2014, after the schools in the experimental group had implemented the program for eight months. Observations, interviews, and questionnaires were used for data collection. To examine the effects of the program on school climate, students’ behaviors, students’ perceptions of school, and students’ conflict resolution skills, data were collected from both students and teachers. The findings show that the Lions Quest Program had a positive effect on school climate, students’ behaviors, and conflict resolution skills, but did not have any significant effect on students’ perceptions of school.

KEYWORDS
Lions Quest Program: Skills for Growing; social emotional learning (SEL); school climate; student behavior; student perception; conflict resolution skills

Introduction
Traditionally, education has been seen as the acquisition of academic knowledge and skills, reading, writing, arithmetic, science, history, and so on. However, changing societal, family, and individual needs are pushing schools to undertake more (Cohen 2006; Walker 2004). Schools nowadays are expected to contribute to the development of children’s social and emotional skills (Denham et al. 2006; Gresham 2004). There are two reasons for this trend. One reason is widespread concern about aggression and violence, bullying, and dropping out (Bulut 2008; Gittins 2006; Kapci 2004; Moore, Jones, and Broadbent 2008; Ohsako 1999; Smith 2004). One cause for hope is that studies examining the effects of anger management programs show that judicious intervention can result in reduced externalization (e.g., deviant, disruptive, off-task, and aggressive behaviors) and internalization (e.g., depression, shyness, anxiety), improved social skills (e.g., peer relations, self-control, assertiveness, problem solving, management skills), and positive beliefs and attitudes (e.g., self-efficacy, self-esteem, locus of control) (Gansle 2005).

The second reason for the trend is that the teaching of social and emotional skills in schools seems to produce higher academic achievement (Zins et al. 2007), a conclusion
supported by a wealth of recent research (Durlak et al. 2011; Elias and Moceri 2012; Payton et al. 2008). Durlak et al. (2011) found that students gained eleven percentile points in academic achievement as a result of social and emotional learning (SEL) programs. Payton et al. (2008), in a meta-analysis of over 700 SEL programs, found that gains of 11 to 17 percentile points could be attributed to SEL programs. Such research has prompted Denham and Brown (2010) to propose a model showing that SEL skills of self-awareness, self-management, social awareness, decision-making, and relationships are linked to academic achievement.

The relationship between school climate and student behavior is well established (Jennings and Greenberg 2009; Jones 2004). Creating a nurturing school climate has been shown to improve children’s problem solving, conflict resolution, and prosocial behaviors such as building friendships and respecting others (Thapa et al. 2013). Improvement of SEL skills results in less aggression and more negotiation in conflict situations (Clayton, Ballif-Spanvill, and Hunsaker 2001; Jones 2004). Moreover, as they develop SEL skills, students are less likely to suffer from mental health problems or to engage in aggressive behavior (Walker 2004; Zins and Elias 2007). This study examines the effectiveness of the Lions Quest Program in elementary schools in Turkey by looking at school climate and at students’ behavior, perceptions, and conflict resolution skills after implementation.

The need of SEL programs in Turkish schools

Incidents of school violence in Turkey have increased to such a level that politicians, media, and the general public cannot ignore the issue (Bulut 2008; Education Reform Initiative 2007). In response to increasing concerns, the Ministry of National Education (MoNE) published two reports, the first of which (2007) stated that 34% of the incidents of aggressive and violent behavior in schools consisted of physical violence and 24% consisted of bullying. In the second report (2008), 27% of the elementary and secondary school students, approximately one student out of every four, stated that they were victims of aggression. Eighteen percent reported that they were exposed to violence at school, compared to 9% who reported that they were victimized at home. Seventy-six percent of the students reported that they were victims of verbal/emotional violence, whereas 22% declared they were physically abused. Twenty-nine percent reported that they were the victims of violence imposed on them by peers; 15% that they were victimized by teachers and principals, and 16% that they were victimized by their parents.

Bulut (2008) examined the websites posted on the Internet by television channels and national newspapers between 2001 and 2006 and found 302 incidents of violence, 74% of which occurred in schools. Ozgur, Yorukoglu, and Baysan Arabaci (2011) studied high school students’ experiences of violence and found that 10.3% reported being a victim of violence; 51.4% of these victims reported that they were subjected to abuse in school and 21.6% that they were victims of family violence. Kapci (2004) studied bullying in schools and found that 40% of the 4th and 5th graders surveyed reported that they were victims of bullying. In yet another study, Ozcebe, Cetik, and Uner (2006) found that of all the students who claimed to have been victims of violence, 42% said that the abuse had occurred at school. On the other side to the coin, 65.6% of the students surveyed reported that they had acted violently at school. It is evident from these figures that the
magnitude of violence in Turkish schools is such that social and emotional skill development has become a necessity.

Research in the area of SEL has been gaining momentum since the early 2000s due to national recognition of the issue of violence in schools in Turkey. Diken et al. (2011) studied the First Step to Success Program’s effectiveness in terms of reducing antisocial behavior in K-2 classrooms. Their findings show that the program was effective in reducing problem behaviors while increasing prosocial behaviors and academic competence. Donat Bacioglu (2014) conducted a meta-analysis of prevention and intervention programs aimed at reducing violence and aggression in schools. In 22 studies of Turkish samples between 2002 and 2012, she found an effect size of 1.169 addressing the need for SEL programs in Turkey.

**Lions Quest Program: Skills for Growing**

The Lions Quest Program was started in 1975 in the USA and first funded by Lions Clubs International in 1984. The program has been implemented in 85 countries, employing 31 languages in the process. It is composed of three sub-programs targeting different grade levels from kindergarten through high school: Skills for Growing, grades K-5; Skills for Adolescence, grades 6–8; and Skills for Action, grades 9–12.

By developing a good school climate, the program encourages students to develop social and emotional skills, volunteer in community improvements, protect themselves and others from violence, and avoid drug and alcohol use. The most important characteristic of the Lions Quest Program is teacher training aimed at providing a positive environment in which children are helped to face the problems that life will throw at them. The program is based on values of taking responsibility, living healthfully, making positive decisions, volunteering, and feeling grounded in family, school, and community (Pinar and Gol-Guven 2010). The expected skills included in the program are: (1) to contribute to a good school climate; (2) to develop learning environments that are respectful, collaborative, open to cooperation; (3) to know one’s personal characteristics and strengths, be self-expressive, and make good decisions for health and general well-being; (4) to take responsibility for self and others and respect self and others; (5) to be a good team member and have the initiative to take group leadership; (6) to use conflict resolution strategies, show resiliency to peer pressure, and respect differences; (7) to volunteer for community improvement projects; (8) to recognize different feelings in oneself and in others; (9) to feel connected to family, school, friends, community, culture, and society; (10) to value academic success and make an effort to achieve academic success (Lions Clubs International 2013a, 2013b).

The Lions Quest Program has been implemented in Turkish schools from kindergarten to 12th grade since 2008. By July 2012, 310 schools were participating and more than 1700 teachers had attended training seminars, which occupied one whole day for kindergarten teachers and two days for primary and secondary teachers. The training materials and seminars have been continuously revised and redeveloped based on first-hand experience.

Research evaluating the effectiveness of the Lions Quest Program has documented its positive outcomes. Berkowitz and Bier (2005) conducted a research review of 69 studies that evaluated 33-character education programs. They found the Lions Quest Program to be effective in reducing the number of risky behaviors and boosting the number of
prosocial behaviors. In the document of Collaborative for Academic, Social, and Emotional Learning (2003), the Lions Quest Program was reported ‘strong’ in developing four SEL areas, self-awareness, self-management, relationship skills, and responsible decision-making, and ‘promising’ in social awareness. One outcome of developing these skills has been the reduction of the use of drugs, alcohol, and cigarettes by empowering adolescents to resist social influences (Eisen et al. 2003; Eisen, Zellman, and Murray 2002; Foxcroft and Tsertsvadze 2012). Laird and Black (1999) found that Lions Quest: Skills for Action, which focuses on service learning, has a positive effect on adolescents who have difficulty developing relationships. They also found improvements in students’ grades, increased motivation, and attitudes toward learning, along with reduced risk of dropping out (Laird and Black 1999). In another study Laird, Bradley, and Black (1998) found that at-risk high school students were less likely to drop out and had more positive interpersonal attitudes (e.g., participating in diverse groups, helping others, taking social action, and intending to volunteer in the community) (as cited in Laird and Black 1999; US Department of Education 2006). Other studies concluded that the program resulted in significant positive outcomes associated with a strong connection to school and family (Quest International 1995).

Nevertheless, further investigation is needed. Three criticisms of previous research have been noted (Hallfors, Sussman, and Sporer 2001). One is that the three Lions Quest programs have not been subjected to the same level of attention. Lions Quest Skills for Action has been studied more thoroughly than Skills for Adolescence, and only one study has examined the effectiveness of Skills for Growing. The second criticism is that previous studies published as reports have not appeared in peer-reviewed journals, a failing that raises some doubts about their rigor. The third criticism is that much of the earlier research was conducted in 1990s and is now outdated, although two studies have been more recent (Eisen et al. 2003; Eisen et al. 2002). The current study is responsive to the criticism.

**Study aims**

The aim of this study is to evaluate the effectiveness of the Lions Quest Program in Turkey by examining the effect on school climate and students’ behavior, including their perceptions of school and their conflict resolution skills. Specifically, the study will investigate: (1) the effect of the Lions Quest Program on school climate; (2) the differences in student behaviors before and after implementation; (3) students’ perceptions of school, teachers, and peer relationships before and after implementation; (4) the students’ conflict management skills before and after implementation.

**Method**

Using experimental design to evaluate the effectiveness of intervention programs seems to be a widely preferred approach (Mayoral-Rodríguez et al. 2015; Rosenthal and Gatt 2010; Ştefan and Miclea 2014). Thus, the research employs a quasi-experimental design with a control group. Data were collected in two public schools and two private schools which indicated an interest to the research call. One public school and one private school formed the experimental group and the other two schools formed the control group.
The schools carried typical characteristics of city schools in Istanbul serving middle class parents and their children. Teachers in the experimental schools implemented the program for eight months. Pre-implementation data were collected in September 2013, and post-implementation data were collected in May 2014 after a month that the program implementation had been completed.

**Participants**

The principals of the two implementing schools were informed about the aims of the study and the responsibilities of teachers. They helped to produce a schedule for teacher training sessions and data collection. Once the experimental group was formed, one public and one private school located in the same district of the intervention group were chosen to be the control group because of their similarities to the experimental schools (e.g., managerial set-up, number of students, resources). All four schools displayed a willingness to participate.

One classroom in grades one through four in all four schools was selected randomly for data collection. These 16 classrooms encompassed 16 teachers and 417 students. Eighty of the students were selected randomly for observations and one-on-one times to ask for their opinions about school, teachers, friends, and interactions.

Collectively, the 16 teachers had an average of 19.26 years of teaching experience (minimum two, maximum 41). Fifty-three percent had been in their current positions for at least five years. When asked ‘How many professional seminars have you attended this academic year?’ 20% stated that they did not attend professional seminars, 38% that they had attended one or two seminars, and 37% that they had attended more than three seminars. Statistically teachers in the experimental and control groups were no different in terms of their years of experience, longevity in their current positions, and attendance at seminars.

The number of students in classrooms ranged from 14 to 40 with an average of 26. The final number of participating students was 397, of whom 193 were girls and 204 were boys (i.e., 20 students had infrequent attendance). At the beginning of the 2013–14 school year, the age of the 80 students randomly selected for study, 40 girls and 40 boys, ranged from 5 years 6 months to 9 years 7 months with an average of 7 years 7 months. Statistically, students in the experimental and control groups were no different in terms of age, number in a classroom, and ratio of girls to boys.

**Data collection and measurements**

The data were collected by two researchers doing their graduate studies in elementary education. The duration of data collection in each school varied from five to seven days. The researchers had been trained in the use of the instruments by the main investigator of the study. The training sessions took place at four grade levels in other schools holding similar characteristics of the schools in the study. After the visits, the raters compared and discussed their notes and the points they assigned to items in the checklist, and reached agreement under the supervision of the main investigator. Examples and hypothetical cases for every item in the scales were discussed so that the data-gathering instruments
would be used correctly and accurately. The interrater reliability ranged from .72 to .91 for the study’s measurement tools.

A protocol for data collection was followed in each visit. First the 16 randomly selected classrooms were observed for an assessment of school climate. After the completion of classroom observations, a representative group of students was selected for an assessment of students’ behaviors. A total of 48 observations of students’ behaviors (i.e., classrooms groups were observed three times for 10 minutes) were used as pre- and post-tests respectively, 24 observations in experimental group classrooms and 24 in control group classrooms. After these observations, the students whose behaviors had been observed were invited to answer some questions about school and friends. Written consent was collected from the parents. Oral consent was taken from the children, and the children who expressed unwillingness to participate or who seemed hesitant were excused. These one-on-one times began with asking students’ opinions about their school, teachers, relationship with peers, and general atmosphere of the school and classroom. Then vignettes consisting of conflicts were provided to students and their solutions for each were asked. All the measurements were translated and back translated and face validity was ensured by asking two experts with relevant expertise. After discussing minor revisions (e.g., cultural meaningfulness of wording) suggested by the experts, final forms of the instruments were given.

Two focus groups with the teachers were conducted by a program expert in January 2014. The teachers shared their practices and asked questions about the program to the expert. This also allowed to detect any fidelity issues in the process of program implementation.

**School climate**

In order to assess the school climate Indicators of Orderly Classroom, developed by Golly and Snead (2004), was used. The tool was also used in other studies conducted in Turkish context (Gol-Guven 2013, 2014). It provides a means to measure important components of classroom climate and interactions, such as order in routines, positive behaviors and interactions, and student participation in decision making. Its four sub-scales were: (1) physical arrangement of the classroom, 13 items covering such topics as cleanliness and layout of the furniture, appropriateness of the furniture for a specific age group, durability of the materials, adequate number of amenities, traffic flow, and use of open space; (2) classroom organization, seven items covering such topics as an orderly daily schedule, visibility and use of the schedule by students and teachers, age appropriateness of the activities, rules reflecting positive expectations, rules made by students and teacher together, rules addressing different needs, a responsibility chart available for use by students, and an attendance record accessible to students; (3) classroom management, 31 items addressing interaction and communication among teachers and students; use of reinforcement, praise, and feedback; problem solving strategies of teachers and students; sharing strategies of rules and expectations; transition activities in lessons and between lessons; monitoring and guiding strategies used by teachers; (4) classroom atmosphere, 26 items addressing such topics as communication/relationship among teachers, teachers’ communication with students, students’ communication with students, teachers’ behavioral strategies. Each item is scored by using a three-part scale: Strong = 3 points, Medium = 2 points and Weak = 1 point.
**Student behavior**

Observational Checklists for Prosocial Behaviors of Elementary School Children was used to assess student behavior ('Observational Checklists' n. d.). The scale was used in the evaluation studies of Lions Quest programs (Lions Quest Evaluation Reports 2012). The scale obtained good reliability scores and reported Cronbach’s alphas ranging from .78 to .90 (Kim and Laird 1995). This instrument examines 10 positive and 10 negative behaviors. Some of the positive behaviors are helpfulness, cooperation, leadership, problem solving, and decision-making. Some of the negative students’ behaviors are: selfishness, unresponsiveness, bossiness, rudeness, belittling, and avoidance of work. Occurrences of these behaviors were counted and narrative notes were taken during the observations. Routinely, the observer made 10-minute observations and took notes for five minutes. One classroom hour allowed for three such observation intervals. Groups of children to be observed were selected at random.

**Students’ perception of school**

To measure students’ perceptions of school, an instrument developed for the Child Development Project by the Developmental Studies Center was used (‘Child Development Project’ 1988–2005). The measurement tool has been used in the project resulting in good reliability and validity features (Battistich, Schaps, and Wilson 2003; Schaps, Battistich, and Solomon 2004). Cronbach’s alphas reported for the subscales were ranged from .63 to .87 (Battistich et al. 2000, 2003). The subscales are ‘Liking School,’ ‘Classroom Supportiveness’ ‘Trusting the Teacher,’ ‘Student Autonomy and the Power of Affecting the Classroom Procedures,’ ‘Self-esteem,’ and ‘Academic Self-Esteem’. It consists of 25 items, 10 of which are expressed negatively. The ‘Liking School’ subscale has four items (e.g., ‘Do you like your school?’); ‘Classroom Supportiveness’ has four items (e.g., ‘Do you help one another during the tasks and assignments?’); ‘Trusting the Teacher’ has six items (e.g., ‘Does your teacher keep her/his promises?’); ‘Autonomy and the Power of Affecting the Classroom Procedures’ has five items (e.g., ‘Does your teacher ask for your opinion when he/she makes decisions?’); ‘Self-esteem’ has two items (e.g., ‘Do you like yourself as you are?’); and ‘Academic Self-Esteem’ has four items (e.g., ‘Are you a successful student?’). The response sheet shows three faces: a happy face for ‘Agree,’ a sad face for ‘Disagree,’ and a neutral face for ‘Sometimes agree.’ Rather than using the faces answer sheet, some children preferred to respond orally by saying ‘Yes,’ ‘No,’ or ‘Sometimes.’

**Students’ conflict resolution skills**

The assessment instrument, which was developed for the Child Development Project by the Developmental Studies Center, presents a student with situations requiring conflict resolution and the student is expected to provide a solution for each situation by selecting one of the options provided (‘Child Development Project’ 1988–2005). The instrument provided Cronbach’s alpha of .85 as reported in Battistich et al. (1995). There are six such situations, two of which were added expressly for the Turkish context. An example is as follows: Imagine that someone comes and takes your pencil when you leave it on your desk for a minute. You ask him/her to give it back to you. He/she says “No.” What would you do? For this situation the options are ‘A. I take the pencil from him/her;’ ‘B. I say “I really need the pencil to finish my work” ’; ‘C. I ask my teacher to take the pencil from him/her;’ ‘D. I help him/her find another pencil or I say, “You can use the pencil after you finish
your work.” E. ‘I threaten to beat him/her up or take something that belongs to him/her.’ All the choices address different types of conflict resolution strategies: Negotiation, Aggression (physical or emotional), Adult-dependent, and Withdrawal.

**Data analysis**

The students’ gender and ages were obtained from the school administrators and/or the teachers. All the data were entered into SPSS®. Scales were developed by calculating means and standard deviations. Percentages were calculated for Conflict Resolution Skills. To evaluate if any group differences were present before implementation, paired t tests were calculated. To allow comparisons between groups after implementation, ANOVA was run. Effect sizes (i.e., partial eta squares and Cohen’s d) were also calculated. Calculating effect sizes in addition to p values recommended for quantitative studies since magnitude of change is considered important (Cohen 1988).

Four sub-scales of Indicators of Orderly Classroom were developed and means and standard deviations calculated for each. Additionally, the means and standard deviations of the items of the measurement were calculated to obtain the total scores. A paired t-test compared within-group mean differences in pre- and post-tests. ANOVA compared the between-group means for post-tests. Effect sizes were computed. Two scales were developed to measure students’ positive and negative behaviors. Means, standard deviations, and frequencies of observed behaviors were calculated for both. Independent t-tests were run to compare the pre-test mean differences between the two groups. ANOVA was run to compare the group differences after implementation. After doing reversed coding for negative statements, the Students’ Perceptions of School assessment was developed for the purpose of recording the students’ perceptions. Six scales were developed and an independent t-test was run to examine the statistically significant group differences in pre-test data. The test the significant group differences, ANOVA was used. Lastly, data derived from the Conflict Resolution Skills instrument were analyzed by calculating the percentage of responses that take the form of each of the four types of resolution – negotiation, aggression, adult-dependent, and withdrawal – then comparing the pre- and post-test percentages for each situation.

**Results**

**School climate**

When the experimental group and control group were compared at the outset of the study, t-tests revealed that the pre-test means of the sub-scales of school climate did not show any statistically significant differences: Physical Arrangement \[ t(14) = .508, p = .62 \]; Organization \[ t(14) = .070, p = .94 \]; Classroom Management \[ t(14) = -.018, p = .98 \]; Classroom Atmosphere \[ t(14) = .044, p = .96 \]; and Total \[ t(14) = 1.178, p = .86 \].

It is also valuable to look at within-group differences between the pre- and post-test means of the two groups. The experimental group’s post-test means were higher than their pre-test means. The control group’s post-test means, on the other hand, dropped lower in every sub-scale. Schools implementing the Lions Quest Program had better school climate after implementation, whereas school climate in control group schools,
according to our measures, got worse. Paired t-test analysis showed that the experimental group had statistically significant increases in Atmosphere \[ t(7) = 3.743, p = .007 \] and Total \[ t(7) = 3.228, p = .01 \], while the control group had statistically significant decreases in Physical Arrangement \[ t(7) = -2.400, p = .04 \] and Management \[ t(7) = -4.043, p = .005 \].

ANOVA did not yield any statistically significant difference between the post-test means of the two groups. However, effect sizes showed moderate to high partial eta squared values: Physical Arrangement \[ F(1, 14) = 2.819, p = .115; \eta^2_p = .168, \text{Cohen’s } d = .83 \]; Organization \[ F(1, 14) = 3.227, p = .094; \eta^2_p = .187, \text{Cohen’s } d = .91 \]; Management \[ F(1, 14) = 4.001, p = .065; \eta^2_p = .222, \text{Cohen’s } d = .97 \]; Atmosphere \[ F(1, 14) = 3.251, p = .093; \eta^2_p = .188, \text{Cohen’s } d = .90 \]; and Total \[ F(1, 14) = 3.797, p = .072; \eta^2_p = .213, \text{Cohen’s } d = .97 \] (see Table 1). Although, these results do not show a statistically significant difference between the pre- and post-tests of the two groups, the findings are noteworthy when effect sizes were taken into account.

Both between- and within-group pre- and post-test scores can be observed in Figure 1. In light of these findings, it can be claimed that the schools implementing the Lions Quest Program created a more positive school climate than the schools that did not implement the program.

**Student behaviors**

First, a t-test was used to compare the results of a pre-test of students’ behaviors. The experimental group’s mean for positive behaviors was \( M = 11, SD = 7.50 \); the control group’s was \( M = 8.62, SD = 5.88 \). The experimental group’s mean for negative behaviors was \( M = 7.75, SD = 7.57 \); the control group’s was \( M = 9.70, SD = 10.14 \). The experimental group’s mean for positive behaviors was higher than the control group and the control group’s mean for negative behaviors was higher than the experimental group. However, these differences were not found to be statistically significant (positive behaviors \[ t(46) = -1.221, p = .22 \], negative behaviors \[ t(14) = -7.58, p = .45 \]). Thus the two groups can be considered equal prior to implementation of the program.

**Table 1.** School climate: pre- and post-test means, standard deviations, results of ANOVA, and effect sizes.

<table>
<thead>
<tr>
<th>Sub-scales</th>
<th>Experiment</th>
<th>Control</th>
<th>Group X Time Interaction</th>
<th>Experiment</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>F</td>
</tr>
<tr>
<td>Physical</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td>7.66</td>
<td>3.08</td>
<td>7.00</td>
<td>2.06</td>
<td>2.819</td>
</tr>
<tr>
<td>Post-test</td>
<td>8.20</td>
<td>3.37</td>
<td>6.08</td>
<td>1.19</td>
<td></td>
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<tr>
<td>Organization</td>
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<td>1.06</td>
<td>3.50</td>
<td>1.30</td>
<td>3.227</td>
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<tr>
<td>Pre-test</td>
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<td>1.00</td>
<td>3.20</td>
<td>.733</td>
<td></td>
</tr>
<tr>
<td>Post-test</td>
<td>10.1</td>
<td>2.73</td>
<td>7.93</td>
<td>1.56</td>
<td>4.001</td>
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<td>Management</td>
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<td>2.60</td>
<td>9.81</td>
<td>2.04</td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-test</td>
<td>13.52</td>
<td>3.60</td>
<td>11.10</td>
<td>2.61</td>
<td>3.251</td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
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<td>1.85</td>
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<td>2.56</td>
<td>7.08</td>
<td>.97</td>
<td></td>
</tr>
</tbody>
</table>

Cohen (1977): Cohen’s d: .2 = small, .5 = moderate, .8 = large
Cohen (1988): partial eta squared \( \eta^2_p \): .02 = small, .13 = medium, .26 = large
After analysis of pre-test scores, the next step was to compare the two groups to see if there was any significant change in the students’ behaviors. It is valuable to start by noting the differences between counted frequencies for positive and negative behaviors. The frequency for observed positive behaviors in the experimental group’s pre-test was 207, and the number increased to 338 in post-test. The frequency for observed negative behaviors in the experimental group’s pre-test was 233, and the number decreased to 176 in post-test. There was no increase in the control group’s frequencies for positive behaviors (pre-test 264, post-test 255); however, there was an increase in the frequencies for negative behaviors (pre-test 186, post-test 279).

When post-tests of the two groups were compared by using ANOVA (Table 2), the experimental group’s total mean score for positive behaviors was found to be higher than the control group’s (Control $M = 10.63$, SD = 6.64; Experimental $M = 14.08$, SD = 5.77), and the experimental group’s total mean score for negative behaviors was lower (Control $M = 11.63$, SD = 10.27; Experimental $M = 7.33$, SD = 6.11). The differences in the total means for positive behaviors [$F(1,46) = 3.706$, $p = .06$] and the differences in the total means for negative behaviors [$F(1,46) = 3.093$, $p = .08$] came closer to statistical significance. In addition to the difference between total means, two differences between the scores for positive behaviors and two differences between the scores for negative behaviors were considered to be worth examining further. ANOVA yielded a statistically significant result in Cooperation behavior [$F(1,46) = 8.050$, $p = .007$] and in Belittling behavior [$F(1,46) = 4.404$, $p = .04$]. Leadership behavior and Fighting/Arguing behavior approached to the level of significance [$F(1,46) = 3.314$, $p = .07$; $F(1,46) = 3.372$, $p = .07$ correspondingly]. Calculation of Cohen’s d for effect sizes showed that the increase in positive behaviors was moderate to large, while the decrease in negative behaviors was small.

Figure 1. School climate: experimental and control group pre- and post-test means.
To sum up, when the students’ behavior scores of the two groups are compared, the outcome definitely favors the experimental group. The positive behavior of students in the experimental group was better than the behavior of students in the control group, and their negative behavior was not as bad as the behavior of students in the control group. (See Figures 2 and 3). This finding is important because it leads to the conclusion that the Lions Quest Program has a positive effect on student behavior. Equally important is the apparent increase of negative behavior found in the control group’s pre- and post-test scores. It is important to mention that the same tendency showed up when classrooms were evaluated. There also the control group had lower post-test scores, highlighting the need for implementation of the Lions Quest Program.

<table>
<thead>
<tr>
<th>Table 2. Students’ behaviors: experimental and control group post-test means, standard deviations, ANOVA, P-values, and effect sizes.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Means</strong></td>
</tr>
<tr>
<td>Cooperation</td>
</tr>
<tr>
<td>Control</td>
</tr>
<tr>
<td>Leadership</td>
</tr>
<tr>
<td>Control</td>
</tr>
<tr>
<td>Positive Behaviors</td>
</tr>
<tr>
<td>Control</td>
</tr>
<tr>
<td>Belittling</td>
</tr>
<tr>
<td>Control</td>
</tr>
<tr>
<td>Fighting/arguing</td>
</tr>
<tr>
<td>Control</td>
</tr>
<tr>
<td>Negative Behaviors</td>
</tr>
<tr>
<td>Control</td>
</tr>
</tbody>
</table>

Cohen (1977): Cohen’s d: .2 = small, .5 = moderate, .8 = large

Figure 2. Positive students’ behaviors: experimental and control group post-test means.
Students’ perceptions of school

The students’ perceptions of self, schools, classrooms, and teachers in both the experimental group and the control group are very positive, as indicated by values close to three in the pre- and post-test data. Table 3 shows the analysis of the post-test data. It will be seen that the students in the control group responded to the items more positively, which resulted in slightly higher means. This was also true for pre-test means. However, except Trusting the teacher \( t(78) = 2.828, p = .006 \), none of the sub scale means yielded in statistically significant results.

Figure 3. Negative students’ behaviors: experimental and control group post-test means.

### Table 3. Students’ perceptions of school: experimental and control group post-test means, standard deviations, ANOVA and P-values.

<table>
<thead>
<tr>
<th>Sub-Scales</th>
<th>Means</th>
<th>SD</th>
<th>F test df = 78</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liking School</td>
<td>Experiment</td>
<td>2.75</td>
<td>.35</td>
<td>1.123</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>2.83</td>
<td>.32</td>
<td></td>
</tr>
<tr>
<td>Classroom Supportiveness</td>
<td>Experiment</td>
<td>2.68</td>
<td>.33</td>
<td>.418</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>2.73</td>
<td>.35</td>
<td></td>
</tr>
<tr>
<td>Trusting the Teacher</td>
<td>Experiment</td>
<td>2.60</td>
<td>.32</td>
<td>1.113</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>2.67</td>
<td>.32</td>
<td></td>
</tr>
<tr>
<td>Student Autonomy</td>
<td>Experiment</td>
<td>2.27</td>
<td>.29</td>
<td>2.674</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>2.38</td>
<td>.26</td>
<td></td>
</tr>
<tr>
<td>Self-esteem</td>
<td>Experiment</td>
<td>2.82</td>
<td>.38</td>
<td>1.825</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>2.92</td>
<td>.39</td>
<td></td>
</tr>
<tr>
<td>Academic Self-esteem</td>
<td>Experiment</td>
<td>2.31</td>
<td>.41</td>
<td>.019</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>2.33</td>
<td>.39</td>
<td></td>
</tr>
</tbody>
</table>
Differences between group scores for perceptions of school were evaluated by means of an ANOVA test. No significant differences were found, either between the post-test scores (Table 3). This finding suggests that the Lions Quest Program did not have any significant effect on students’ perceptions of the learning environment.

**Students’ conflict resolution skills**

Six vignettes requiring conflict resolution were described for each child, who, for each situation, had to choose one of the solutions provided. All six vignettes first and second choices of four response types (i.e., negotiation, aggression, adult dependency, and withdrawal) were calculated. Among the experimental group’s responses to the six situations one would expect to see an increase in favor of negotiation skills and a decrease in aggression and withdrawal. Asking for an adults’ help in situations that contain conflict might be more preferable than showing aggression to peers. Figure 4 shows the percentages of differences between pre- and post-test data for both groups. In the beginning of the school year, at least 50% of all responses favored negotiation in the pre- and the post-test. Negotiation among the control group responses increased by 2.71%, and among the experimental group’s responses by 9.59%. The control group’s percentage difference between pre- and post-test decreased by 1.67% for aggression, while the experiment group’s difference decreased by 4.4%. The control group’s percentage difference for adult dependency increased by 3.5% and the experimental group’s increased by 2.31%. The control group’s percentage decrease for withdrawal was only 1.1%, whereas the experimental group’s percentage decrease was 8.8%. In the light of these findings, it can be claimed that students in the experimental group chose negotiation more often than students in the control group, and they chose aggression and withdrawal less often.

![Figure 4. Conflict resolution skills: percentages of four skills between experimental and control group pre- and post-tests.](image-url)
Discussion

Within-group analysis of the sub-scales of the Indicators of Orderly Classroom showed that the experimental group’s post-test means were higher than its pre-test means. The control group’s post-test means, on the other hand, were lower than its pre-test means in all sub-scales. This finding shows that while school climate in the experimental schools was getting better, school climate in the control group’s schools was getting worse. Between-group analysis shows that the means of the experimental group were higher than the control group’s means in every sub-scale. Differences between the two sets of scores, with the single exception of physical arrangement, were close to statistical significance, with large effect sizes. Similar improvement in school climate caused by intervention programs is well documented in the literature (Jennings and Greenberg 2009; Thapa et al. 2013).

It is important to connect the finding related to improvement in school climate with the findings related to students’ behaviors. It is obvious from post-test data that student behavior in the experimental group was better than student behavior in the control group. The positive behaviors of the experimental group’s students increased in frequency during implementation, while their negative behaviors decreased. Clearly, the Lions Quest Program, as intended, had a beneficial impact on student behavior. It is equally important to note that the negative results found in the control group data for school climate and student behavior, in the absence of the program, illustrates the need for its implementation.

Other studies examining intervention programs’ effects on different aspects of school climate and students’ behaviors found positive outcomes. For instance, Metzler et al. (2001) found that the Effective Behavior Support program for middle school students resulted in decreased aggressive behaviors, discipline referrals, and harassment among male students. The students in that experimental group reported that they felt safe in the school, a good indicator of positive school climate. Pears et al. (2014) studied the Kids in Transition to School Program, which helps children develop school readiness skills. They found by the end of the implementation that the participating children improved their self-regulation skills (i.e., their control of emotions and behaviors based on interpersonal and contextual input). Concomitantly, there was a decrease in aggressive responses to peer provocation.

Drolet et al. (2013) interviewed 12- to 14-year-old children about the Lions Quest Program. The children expressed feelings of belonging and positive relationships with friends and adults in the school as a result of the program. Karasimopoulou, Derri, and Zervoudaki (2012), in a quasi-experimental study of a health education-social skills program, found that the ratings of children in both the control group and the experimental group were high along various dimensions at the beginning of the program. However, children in the experimental group rated the school environment and social relationships with peers significantly higher than children in the control group in the end. In the present study, however, there appeared to be no significant effect of the program on the students’ perceptions of school; students in both the control group and the experimental group responded positively to questions about the learning environment. Another study (Gol-Guven 2014) also showed that students had favorable things to say about their schools, teachers, and friends. However, in dramatic contrast, classroom observations revealed
students fighting with one another, teachers criticizing students, teachers doing all the decision-making, and a general lack of positive reinforcement. An explanation could be found within the cultural framework. Although it changes by the effects of modernity on children and young adults, it is still highly discouraged to criticize adults in traditional cultures (Kagitcibasi 1996; Kagitcibasi and Sunar 1992). Thus, the students in the study would have been hesitant to answer the questions about their school and teacher negatively.

On the other hand, the program does seem to have had an effect on the students’ conflict resolution skills. When post-test results of the experimental and control groups were compared, it was evident that more students in the experimental group favored negotiation for conflict resolution. The analysis based on observations of student behavior also confirm the positive change in conflict resolution skills of students. The increase of Cooperation (e.g., getting along with others, listening and working with groups) and Leadership (e.g., asking the group to plan the solution to problems) and the decrease in Belittling and Fighting/Arguing (i.e., verbal and physical aggression) provide evidence in support of the findings of students’ conflict resolution skills.

Other intervention studies also have promising outcomes of students’ using more peaceful techniques in conflict situations. Kim and Laird (1995) found positive improvement in 4th–5th graders’ conflict resolution skills after the implementation of the Lions Quest Program. The quasi-experimental study of the effectiveness of Lions Quest Conflict Management programs (i.e., Working It Out and Promoting Peace and Preventing Violence for Teens and Young Adults) (Laird and Syropoulos 1996) also showed that students learned how to handle anger and resolve conflict. Prosocial interactions among students in the experimental group were five times greater than those among students in the control group. Teachers reported a 68% decrease in violence-related referrals after two years of implementation.

**Conclusion**

The overall conclusion of this evaluation study is that the Lions Quest Program has a positive effect on school climate, students’ behaviors and a moderate effect on students’ conflict resolution strategies. However, no statistically significant results were found on students’ perceptions of school.

In this article, it has been argued that schools need intervention programs to improve school climate, support students to show positive behaviors, help students gain positive view about their school, and develop conflict resolutions skills. Positive outcomes of this evaluation study for the intervention group is promising. Yet, it was drastic to find out that school climate and student behaviors in the control group have got worsen in the absence of such programs. This particular result seems to be a convincing indicator for education community studying early years to push policymakers to take actions improving school climate and developing SEL skills in children. The results could be considered as a call for both national and international early childhood policymakers, practitioners, and advocates.

Despite all the drawbacks and struggles, schools and teachers started recognizing provisions of SEL programs as a part of their work. Their endeavors are supported by many programs available for teachers to improve general school climate and develop social and
emotional skills in children. However, there is a need for research that answers what works and how it works to help teachers and schools make a decision. The research that shows positive effects will convince teachers, practitioners, and policymakers to contribute to dissemination of evidence-based practices at schools.

Limitations and future directions

Factors such as treatment integrity and fidelity, dissemination, and social validity seem to affect the outcomes of intervention programs (Gresham 2009). A growing body of literature points out that those factors are just as important as school and teacher characteristics (Han and Weiss 2005). Although the focus groups with the teachers did not show the exact percentages of teachers' implementation of the program, they provided positive feedback that the program is owned and used by them. It is suggested that researchers should take those factors into account in future research.

In this study, the Lions Quest Program was evaluated over the course of one school year. Longitudinal studies are also necessary, since many factors such as changing personnel and lengthening experience with an innovation can affect the success of a program over time. Student grades, drop-out rates, discipline records, and attendance should also be considered to see the possible effects of an intervention program on students' achievement.

A sample size of four schools limits the generalizations that can be made from this study. While a quasi-experimental design was useful and desirable in this case, a design with randomized experimental and control groups would produce more robust results. Finally, it must be recognized that this study was conducted in Istanbul. The Lions Quest Program has also been implemented in other parts of Turkey where social and cultural influences might be entirely different. Thus, to evaluate the program in general, as opposed to a single implementation, large-scale studies in various contexts would be needed.

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