

The sociometric status of students with disabilities in elementary level integration classes in Turkey**

İlköğretim Düzeyindeki Kaynaştırma Sınıflarında Eğitim Alan Özel Gereksinimli Öğrencilerin Sosyometrik Konumları

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ABSTRACT By using peer nomination technique, this study examined sociometric status of integrated students, nominated students for integration and students without disabilities in classrooms where integration was being applied. Ninety-nine students from 14 elementary schools, where integration was being applied participated in the study. Thirty-nine of these students were integrated students, 27 were nominated for integration and 933 were students without disabilities. Results showed that more than half of the students in both the integrated group and nominated for integration group were rejected by classmates and had significantly lower social preference scores.

Key Words: Sociometric status, students with disabilities, integration/inclusion

ÖZ Bu çalışmada, kaynaştırma uygulaması yürütülen sınıflarda eğitim alan kaynaştırma öğrencileri ve kaynaştırmaya aday gösterilen ve yetersizlik göstermeyen öğrencilerin sosyal konumları akran tercihi tekniği kullanılarak incelenmiştir. Çalışmaya, kaynaştırma uygulaması yürütülen 14 ilköğretim okulundan toplam 999 öğrenci katılmıştır. Bu öğrencilerin 39'unu kaynaştırma öğrencileri, 27'sini kaynaştırmaya aday gösterilenler, 933'ünü yetersizlik göstermeyen öğrenciler oluşturmuştur. Sonuçlar hem kaynaştırma öğrencilerinin hem de kaynaştırmaya aday öğrencilerin yarısından daha fazlasının akranları tarafından reddedildiğini ve anlamlı şekilde düşük sosyal tercih puanlarına sahip olduklarını göstermektedir.

Anahtar Sözcükler: Sosyometrik konum, özel gereksinimli öğrenci, kaynaştırma

INTRODUCTION

When the literature for the last thirty years was reviewed, it may be noticed that there are many studies in which advantages of the integration of the children with and without disabilities or the segregation of these students have been discussed (Alter & Gottlieb 1987; Ballard, Corman, Gottlieb & Kaufman, 1977; Cole & Meyer 1991; Gottlieb & Budoff 1973; Jenkins, Odom & Speltz, 1989; Lewis & Doorlag, 1987; Madge, Affleck & Lowenbraun, 1990; Pavri & Luftig, 2000; Salend 1999).

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Findings of the research have shown a trend that education of individuals with disabilities in general education environments contributes to their academic and social developments. In the period of 30 years of education of students with disabilities in general education environments has shown a developmental trend from mainstreaming to full inclusion. There has been an increase in interest in the social development of students with disabilities in integrated environments (Cole & Meyer, 1991, Kemp & Carter 2002; Waughn, Elbaum & Schumm 1996). One of the important outcomes of successful integration is the development of appropriate social skills by the integrated students (Kemp & Carter, 2002). When students display appropriate social skills, acceptance of the students revealing appropriate social skills by their peers and teachers increases.

The literature focusing on the assessment of social interaction and determination of social status of the children with or without disabilities provides significant implications for improving social acceptance as well as organizing and managing behavior in the classroom (Franz & Gross, 2001; Lewis & Doorlag 1987). Zirpoli and Melloy (1997) emphasize that sociometric techniques, rating by others, behavioral interviews, self-reporting measures and natural observations are among the methods used to evaluate social competence. Sociometric techniques such as peer nominations, peer ratings and peer evaluations have provided evidence that supports the need for social skills training for students who lack social skills. The results of the studies have been demonstrated strongly that sociometric techniques have very high levels of reliability and validity and that they may be powerful predictors of future social outcomes (Chan & Mpofu, 2001, Frederickson & Furnham 1998, Greener, 2000; Merrell 2001, Odom, McConnell & Chandler, 1994; Schloss & Smith 1994). Sociometric techniques have three fundamental restrictions in evaluating social skills: (1) although there is a clear relation between social skills and peer acceptance, sociometric techniques measure peer acceptance instead of social skills of the students, (2) sociometric techniques are applied for groups instead of individuals (eg. classrooms), (3) because sociometric evaluation requires permission of parents of the students included in the study and administration of the school in question, it is quite difficult to apply them in the schools. Since sociometric techniques determine social status of a group, they may cause inconvenience in explaining the results such as being rejected or being in lower social status to the students and their families (Chan & Mpofu 2001; Merrell, 2001). Despite these restrictions, sociometric measurements are the most frequently used method in collecting data about rejection or acceptance of the children with disabilities (Lewis & Doorlag, 1987).

Peer nomination and peer rating are widely used sociometric techniques to evaluate social acceptance among the peers, social status and social competence of the child (Akçamete & Ceber 1999, Merrell, 2001, Sugai & Lewis 1996; Zirpoli & Melloy, 1997). By using peer nomination technique, it is possible to find out the peers that the child likes or dislikes to be with (in working with, in playing with, etc.), it can be determined whether the students are popular, rejected, neglected by their peers in the classroom (Zirpoli & Melloy, 1997).

The majority of the studies that have examined social status and social acceptance of the students with disabilities in integration classrooms have been conducted with students with learning difficulties and intellectual disabilities (Ballard, Corman, Gottlieb & Kaufman, 1977; Cole & Meyer, 1991; Hall, 1994; Kemp & Carter, 2002; Lee, Yoo & Bak 2003; Madge, Affleck & Lowenbraun, 1990; Pavri & Luftig, 2000; Rutherford, Mathur & Quinn 1998; Sale & Carey, 1995; Stone & La Greca, 1990; Taylor, Asher & Williams, 1987).

Ballard, Corman, Gottlieb, and Kaufman (1977) conducted a study with 37 integrated students with mild intellectual disabilities from grades 3, 4 and 5 randomly assigned to an experimental treatment for the purpose of improving their social status. Their ages were between 8-11 years. Sociometric tests were distributed to the students before and after treatment. Two to four weeks after the treatment, it was noted that social acceptance of the students had improved; however no decrease was observed in social rejection.

In the research conducted by Taylor, Asher and Williams (1987), social status of total 845 students, 34 of whom were with mild intellectual disabilities and 811 of whom were without disabilities in the grades of three and six of nine public schools were studied. Data were collected by a play rating-scale measure and positive nomination measure. As a result, it was noted that the students with mild intellectual disabilities had not been accepted by their peers. Additionally, it was also noted that their teachers described the students with intellectual disabilities as more shy and avoidant, as less cooperative and as less likely to exhibit leadership skills. On the other hand, it was also noted from the expression of the teachers and peers, that they were not more aggressive than peers without disabilities.

Stone and La Greca (1990) used play rating-scale and peer nomination technique in their study. They conducted their study to compare social status of total 547 students, of whom 57 were students with intellectual disabilities and 490 of whom were students without disabilities, in four public schools where integration was applied. The study revealed that the students with learning difficulties obtained fewer scores and nominated less positively than peers without disabilities. However, it was noted that more than 75 % of the students with learning difficulties were in the categories of rejected or neglected.

Cole and Meyer (1991) conducted a longitudinal study which lasted longer than two years reviewing impacts of integrated or segregated environments on development of social skills. They observed total 91 students with severe disabilities. Fifty-five of these students were in segregated environments while the other 36 students were in integrated environments. To collect data, social competence was assessed and student-environment interactions were observed in the study. At the end of the study, no difference was found between the developmental skills of integrated and segregated students when a traditional measurement was applied. However, it was also noted that social competence of integrated students indicated progress while segregated students indicated retrogression in their social competence. The researchers pointed out that integrated environments are more useful to develop social competence.

In the study carried out by Hall (1994), social relations of four young children with intellectual disabilities who attended integrated classes were evaluated. The data were collected through the observations of free play activities, peer nominations, and interviews with teachers and parents. The study revealed that each of four students had at least one mutual friendship relation and one student was positively nominated by seven of the peers. None of the students were found to be nominated as the most negative one by the peers. In another study conducted by Hall and Mac Gregor (2000) in which three of the students involved in Hall's (1994) study were examined. In this study, it was noted that social status of the two students had been decreased while the third student's social status improved on upper grades. Additionally, a few negative peer nominations were also recorded.

Sale and Carey (1995) examined the sociometric status of 592 students attending to an integrated (full inclusion) school that did not use eligibility labels for special education services. In order to collect data, peer nomination techniques including positive and negative questions were used. In this study, the majority of subject population included students with learning disabilities. Also 524 students were interviewed. Statistical analyses were used to categorize the data. When data collected from students in the eligible and the likely eligible groups were combined. The students in the combined group were obtained significantly lower social preference scores and higher social impact scores than their peers without disabilities in the control group. When eligible students, likely eligible students and students without disabilities attending general education classrooms were compared mutually, likely eligible students obtained significantly lower social preference scores in comparison to the students in eligible and control groups. The authors emphasized that full inclusion strategies did not eliminate negative social perceptions of students with disabilities.

Pavri and Luftig (2000) examined students with learning disabilities and their peers without disabilities to reveal social face of inclusive education. They used "Modified Children's Loneliness Scale and Peer Nomination Inventory" in the study. As a result of their study, they expressed that loneliness of the students with learning disabilities were related to their decreasing social status, that these children were probably less popular compared to their peers who had no disability and that they were rarely nominated by their peers for social activities. Nevertheless, they also pointed out that the students with learning disabilities were not labeled as socially insufficient by their peers.

Social skills and social status of 22 students with moderate intellectual disabilities attending integrated classes in preschool were examined in a study conducted by Kemp and Carter (2002). The measures included direct evaluation of social interaction in playground and the determination of social status. Interviews with classmates and rating of the class teachers, parents, and school principals were used in determining social status. Consequently, a significant difference was not found between the social status of students with and without disabilities. The study revealed that social statuses of the children with disabilities were evaluated as better by their parents in contrary to their teachers and principals.

Developments in integration philosophy and applications of integration in developing countries have also affected developments in education of the students with disabilities in Turkey. Although the students with mild disabilities have been placed in integrated environments for the last ten years, Government Decision about Special Education (Nr: 573) was accepted by the government in 1997. This decision demands that the students with disabilities be educated together with their peers preparing individualized education programs. Presently, integration of least restrictive environments occurs in the schools closest to the homes of students with disabilities. However, difficulties arise in providing required supportive services. Applications of integration are yet confined to students with mild and moderate disabilities. There is only one study with regard to evaluation of sociometric status of the students with disabilities in an integration environment. In the study conducted by Akçamete and Ceber (1999) sociometric statuses of the students with/without hearing impairments in integrated classrooms were compared. In total, 54 students attending to two vocational high schools participated in the study. Thirty of these students were hearing, while the remaining 24 had hearing disabilities. In order to data collect, peer rating and peer nomination techniques were used. The results of this study did not reveal a significant difference between the sociometric status scores obtained from the students with and without hearing impairments in integrated classrooms.

The present study aims to determine the social status of students with mild intellectual disabilities or/and learning difficulties who were officially diagnosed as integrated students and the students who were nominated for integration by their teachers due to their insufficiencies and who were accepted to be monitored in integrated classrooms although they were not officially diagnosed. For this purpose, the following questions are asked.

- 1) What is the distribution of the all subjects' social preferences and social impact scores?
- 2) Is there a significant difference between the ratings (liked most, liked least, liked most first, liked least first, social preferences and social impact) between the combined group including the students integrated and nominated for integration and the control group including the students without disabilities when peer nomination technique was used?
- 3) Is there a significant difference between the combined group and the control group in terms of categories of social preferences and social impact?
- 4) Is there a significant difference between the scores of three separate groups that consist of integrated students and students nominated for integration and control group students without disabilities?

METHOD

Settings and Participants

In Turkey, in a province centre, integration is applied in 79 elementary schools. These are public schools applying dual education programs; one from 07:30 a.m. to 12:30 a.m. and the other from 13:00 p.m. to 17:30 p.m.. The integrated students are receiving education in general classrooms with full time program. Fourteen of these schools volunteered to take part in the study. In 39 classrooms of the schools participating in the study, integrated students and students nominated for integration were present. Teachers of 34 classrooms and all parents of the students accepted to take part in the study. Population of the classrooms ranged between 16 and 42. Ninety-nine students in the selected classrooms took part in the study. In the study, the subjects were divided into three sub groups.

Integrated group. The students in this group were the ones diagnosed as the students with mild intellectual disabilities or learning difficulties and they were sent to integration classes with the orientation report by the Special Education and Study Unit of Guidance and Research Center (official institute performing identification evaluation and placements of the students indicating inadequacy). Thirty-nine students were involved in this group. In this group, only one student did not know basic reading and writing.

Nominated group for integration. The students in this group were nominated by the class teachers for integration. However, these are the students who are not officially reported by the experts in Special Education and Study Unit of Guidance and Research Center, but recommended to be observed and monitored in general education classrooms. These students had no formal orientation reports. In this group, there were 27 students and all of them had basic reading and writing skills.

Control group. From 34 integration classes 933 students without disabilities participated. Sixty-six of the students were randomly selected from the classrooms. The students participating in the study were listed regarding to their classrooms in order to form the control group. Students were assigned taking the gender into consideration; for example, if one girl and two boys were placed in a class for integrated group and/or nominated for integration group, one girl and two boys from the same classroom were randomly assigned to the control group. All the students in this group had reading and writing skills. Demographical characteristics of the groups were presented in Table 1.

Table 1. Demographical characteristic of the groups

| Characteristics | Total n=999 | Integrated group n=39 | Nominated group n=27 | Control group n=66 |
|-------------------------|----------------|--------------------------|-------------------------|-----------------------|
| Gender | | | | |
| Girl | 485 | 11 | 11 | 22 |
| Boy | 514 | 28 | 16 | 44 |
| Grades | | | | |
| 1 | 50 | 3 | 1 | 4 |
| 2 | 128 | 4 | 4 | 8 |
| 3 | 115 | 4 | 5 | 9 |
| 4 | 225 | 6 | 11 | 17 |
| 5 | 169 | 7 | 5 | 12 |
| 6 | 67 | 3 | - | 3 |
| 7 | 120 | 6 | 1 | 7 |
| 8 | 125 | 6 | - | 6 |
| Age | | | | |
| Arithmetical average | | 11,43 | 9,74 | 10,61 |
| SD | | 2,45 | 1,34 | 2,04 |

Procedures

In the present study, peer nomination technique was used to determine social status of the students with and without disabilities in integration classrooms. A form that includes questions of two positive and one negative nominations intended to detect positive and negative nominates of the students involved in the study was prepared. Below each question, an empty space in which the subject students could fill the names of the friends in the order of preference was provided. The students were asked to rank their nominates starting from the most liked down to least liked for the 1st and 2nd questions, while the order was reverse in the 3rd question (that is from the least liked down to the most liked). The instructions were as follows;

- 1) Write the names and surnames of three of your friends that you liked to sit with in the classroom.
- 2) Write the names and surnames of three of your classmates that you liked to play with in the breaks.
- 3) Write the names and surnames of three of your classmates that you don't like to sit or play together with.

Peer nomination technique was carried out by 34 undergraduate students from Special Education Department in the specified integration classrooms. An undergraduate student and the class teacher read the instructions to the student who had no reading-writing skills and they wrote the replies given by the student. The

undergraduate students made observations for 12 weeks in the integration classrooms where the technique was applied in accordance with the course of preparation of integration programs. The peer nomination technique was applied by the undergraduate students during the second week of the observation period.

Response stability was determined by randomly selected three students (one student from each of all subgroups) randomly selected eighteen classes. The peer nomination technique was carried out these classes two weeks after initial survey by the undergraduate students.

Training of appliers. A meeting was held by the researcher regarding the application of peer nomination technique. The aim of the study was explained to these undergraduate students during this meeting, and sociometric techniques were described. Also steps and the rules of peer nomination technique were explained. These were presented briefly in Table 2. Peer nomination forms used to collect data were photocopied according to the number of subjects taking part in the study and distributed to undergraduate students. They were requested to apply the technique and hand in the forms to the researcher in the same week

Table 2. Steps and rules to be followed in application of peer nomination technique

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- Apply it to all students in the classroom.
 - Provide a silent environment in the classroom before starting.
 - Explain the application procedure to the students in a language they are able to understand.
 - Tell the students to reply the questions thinking thoroughly.
 - Remind the students that the classmates they wanted to write must be from their own classroom and they can write the names of their classmates even if they are not present in that day.
 - Take due care for intimacy and privacy during the research.
 - Pay attention that the students fill in the forms without looking at the answers of others or conferring with each other during the application.
 - Ensure that write their identities completely.
 - Do not interfere with the responses of the students.
 - If an instruction is not well understood by the students, make the necessary explanation to them again.
 - Collect the forms after making sure that all the students have filled in their forms.
-

Preparation of sociograms. In order to be able to evaluate the data and provide feedback to the teachers, sociometric matrix and sociograms were formed for each classroom. These activities were carried out by the undergraduate students who

carried out the survey under guidance of the researcher. For this purpose, the researcher and these students held a second meeting. Prior to this meeting, all phases to be pursued were determined step by step by the researcher and noted down. The written materials were projected by a head projector in order to provide guidance to undergraduate students about the steps to be followed during the investigation. There were totally eight steps in two stages. These were:

Preparation of matrix of sociometric

- 1) A matrix was formed creating a student list of each classroom from down to up (selectors) and left to right (selected). These matrices had been previously prepared by the researcher.
- 2) For each question to be used separately three matrices for all classrooms total 102 matrices were prepared.
- 3) In each matrix the scores of the subjects obtained from the 1st, 2nd, and 3rd question were written in front of the name of the subject. For example, if the subject is nominated in the first range by one of his/her classmates three points, if the nomination is in the second range 2 points and 1 point for the preference in the 3rd range was assigned.

Preparation of sociograms

- 1) A table comprising eight columns was prepared for each classroom. In the first four columns of this table, subject lists and total points obtained by the subject for first, second and third question were written in respective order.
- 2) In the fifth column, the score given to the subjects for the 1st and 2nd question were added together and the score for 3rd question was subtracted. Thus social preference score of the subject was found.
- 3) In the sixth column, social impact score was calculated adding the points given for the 1st, 2nd and 3rd question.
- 4) In the seventh column, the names of the subjects were listed in an order starting from the highest score down to the lowest according to the social preference scores obtained.
- 5) In the eighth column, the names of the students were listed beginning with the highest score down to the lowest score based on social impact scores obtained.

Determination of categories of social preference and social impact. The matrices obtained were reviewed one by one by the researcher and mistakes were corrected. Averages and absolute deviation values of social preference and social impact scores obtained were calculated independently for each classroom in order to determine social preference and social impact categories. (Absolute deviation is used instead of standard deviation due to negative values). Using ± 1 absolute deviation accuracy

high and low limits were found. The subjects with scores under the lowest limit were named as rejected, the ones with a score within the limits as average and the subjects who obtained scores above the highest limit as popular ones. Similarly, the subjects with social impact scores under the lowest limit were described as low, the ones with a score within the limits as moderate and the subjects with scores above the highest limit as high. Six social status indexes were formed based on the data obtained using peer nomination technique. Social status index is presented in Table 3.

Table 3. Social status index

| Index |
|--|
| <i>Liked-Most Score:</i> The sum of the scores obtained by the subjects preferred by his/her classmates in the first, second and third row for the question requiring positive preferences. |
| <i>Liked-Least Score:</i> The sum of the scores obtained by the subjects preferred by his/her classmates in the first, second and third range for the question requiring negative preference. |
| <i>Liked-Most First Score:</i> The sum of the scores obtained by a subject preferred in the first range by his/her classmates for the positive questions. |
| <i>Liked-Least First Score:</i> The sum of the scores obtained by a subject preferred in the first range by his/her classmates for the question requiring negative preference. |
| <i>Social Preference Score:</i> The score obtained after subtracting the total score for the negative preference question from total score for the positive preference questions. Social preference scores may be either positive or negative numbers. |
| <i>Social Impact Score:</i> The score obtained by adding all of the scores given for the questions requiring both positive and negative preferences. |

Finally, sociograms including social preference scores, social impact scores, social status (popular, average, and rejected) and social impact (high, moderate, low) levels of the students were prepared. These sociograms were delivered to the class teachers by undergraduate students.

A two way analysis of variance (ANOVA) was used in order to determine if there is a difference among groups in terms of liked most, liked least, liked most first, liked least first, social preference scores and social impact scores. First, both groups, group with the integrated students and the students nominated for integration were combined to be able to compare the scores between the combined group and the control group. Chi-square analysis was used to determine whether there is a difference between the combined group and the control group in terms of social preference and social impact categories. Secondly, ANOVA was used again separating the groups. For the determination which groups had differences, post-hoc Scheffe test was conducted.

RESULTS

Response stability

Response stability coefficients were calculated by gathering correct name matches on liked-most and liked-least nominations (in any order) and by dividing the number of matches by the total number of nominations. The average response stability coefficient across classes was 0.58 (range 0.32 to 0.89). Although doesn't look very high, this coefficient is very similar to what Sale and Carey (1995) found. Average response stability coefficient was found to be 0.59 (range 0.33 to 0.75) in study.

Distribution of social preference scores and social impact scores from all subjects

In Figure 1, the social preference scores of the students who are educated in integration classes, nominated for integration and without disabilities obtained through peer nomination technique, indicated a normal distribution. In Figure 2, a curve that is close to normal distribution, but shifting a little to the left, is obtained. Left shifting of this curve may be explained as an indication of high social impact of both positive and negative scores.

Figure 1 Distribution of social preference score for all subjects

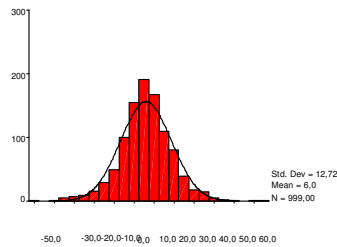
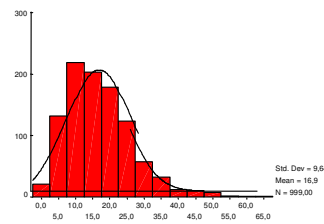


Figure 2 Distribution of social impact score for all subjects



Comparisons for the combined group and the control group

Table 4. ANOVA with combined group

| Index | GROUPS | | | | F | p |
|-------------------|----------------|--------|---------------|--------|--------|------|
| | Combined Group | | Control Group | | | |
| | Mean | SD | Mean | SD | | |
| Most Liked | 2.575 | 3.342 | 10.984 | 9.712 | 44.240 | .000 |
| Least Liked | 12.666 | 11.062 | 4.318 | 5.364 | 30.433 | .000 |
| Most Liked First | 1.454 | 2.425 | 5.636 | 6.562 | 23.580 | .000 |
| Least Liked First | 7.227 | 8.386 | 2.227 | 3.423 | 20.110 | .000 |
| Social Preference | -7.984 | 12.791 | 9.909 | 13.846 | 59.474 | .000 |
| Social Impact | 17.348 | 11.632 | 18.545 | 10.208 | .395 | .531 |

n=66 combined group, n=66 control group p<.01

In Table 4, the results of analysis of variance between the combined group and the control group were summarized. When the groups consisting of integrated students and those who are nominated for integration were combined, they obtained a significantly lower social preference scores. When the combined group was compared to the control group, the difference between social preference scores was significant $F(1,130)=59.474$, $p<.01$. When liked most scores were compared between the combined and the control group, the combined group had lower scores than the control group, and the difference between the social preference scores was significant $F(1,130)=44.240$, $p<.01$. When liked least scores were reviewed, the combined group had significantly higher scores than the control group $F(1,130)=30.433$, $p<.01$. When liked least scores were examined, the students in the combined group had significantly higher scores $F(1,130)=20.110$, $p<.01$. When the liked most scores are reviewed, it is clear that the students in the combined group had significantly lower scores $F(1,130)=23.580$, $p<.01$. There is not a significant difference between the social impact scores of both groups $F(1,130)=0.395$, $p=.531$.

Table 5. Chi-square analysis of combined groups

| | <u>Combined Group</u> | <u>Control Group</u> | χ^2 | p |
|-----------------------------------|-----------------------|----------------------|----------|----------|
| Social preference category | | | | |
| Rejected | 39 | 6 | 44.758 | .000 |
| Average | 26 | 41 | | |
| Popular | 1 | 19 | | |
| Social impact level | | | | |
| Low | 11 | 3 | | |
| Moderate | 38 | 51 | 7.332 | .026 |
| High | 17 | 12 | | |

$p<.01$

Previously, social preference categories reflecting popular, average and rejected students in each classroom were formed. Three levels which reflected the social impact, as low, moderate and high, were formed. Results of chi-square analysis, that compared social preference categories and social impact levels of the students in the combined group and the control group, are presented in Table 5. When the groups combining integrated students and those who are nominated for integration are compared to the control group in terms of social preference, it can be seen that 39 students from the combined group were in the rejected category. On the other hand, only six students from the control group were in the rejected category. There is a significant difference between groups in terms of social preference categories $\chi^2=43.758$, $p<.01$. When the combined group and the control group were compared, in terms of social impact levels no significant difference was found between the groups $\chi^2=7.338$, $p=.026$.

Comparisons of groups of integrated and nominated for integration and control

Table 6. Results of ANOVA for groups of integrated and nominated for integration and control

| Index | <u>Integrated-Nominated</u> | | <u>Integrated-Control</u> | | <u>Nominated-Control</u> | |
|-------------------|-----------------------------|------|---------------------------|------|--------------------------|------|
| | Mean Difference | P | Mean Difference | P | Mean Difference | P |
| Liked Most | -9.116E-02 | .999 | -8.446* | .000 | -8.355** | .000 |
| Liked Least | -3.823 | .212 | 6.784*** | .001 | 10.607* | .000 |
| Liked Most First | .2051 | .986 | -4.097** | .000 | -4.303**** | .001 |
| Liked Least First | -2.623 | .261 | 3.926 | .011 | 6.550** | .000 |
| Social Preference | 3.096 | .651 | -16.627* | .000 | -19.723* | .000 |
| Social Impact | -4.549 | .251 | -3.058 | .382 | 1.491 | .835 |

n=39 Integrated group, n=27 Nominated for integration group, n=66 Control group, p<.01

Table 7. Comparisons among groups by Scheffe analyze

| Index | <u>Integrated Group</u> | | <u>Nominated for Integration Group</u> | | <u>Control Group</u> | | F | p |
|-------------------|-------------------------|--------|--|--------|----------------------|--------|--------|------|
| | Mean | SD | Mean | SD | Mean | SD | | |
| Liked Most | 2.538 | 3.485 | 2.629 | 3.188 | 10.984 | 9.712 | 21.951 | .000 |
| Liked Least | 11.102 | 9.640 | 14.925 | 12.694 | 4.318 | 5.364 | 17.035 | .000 |
| Liked Most First | 1.538 | 2.371 | 1.333 | 2.542 | 5.636 | 6.562 | 11.715 | .000 |
| Liked Least First | 6.153 | 6.846 | 8.777 | 10.153 | 2.227 | 3.423 | 11.544 | .000 |
| Social Preference | -6.717 | 11.693 | -9.814 | 14.258 | 9.909 | 13.846 | 30.135 | .000 |
| Social Impact | 15.487 | 10.480 | 20.037 | 12.846 | 17.947 | 10.918 | 1.598 | .206 |

n=39 Integrated Group; Nominated Group n= 27; Control group n=66

*p<.00001; **p<.0001; ***p<.001; ****p<.01

Results of ANOVA for the groups comprising integrated group, nominated for integration group, and the control group were summarized in Table 6. The results of Scheffe test, showing the groups in which there are differences, were presented in Table 7. These tables (Table 6 and Table 7) will be described together. When integrated group, group of nominated for integration and control group were compared one by one, significant difference was found in social preference scores $F(2,129)=30.135$, $p<.01$. When integrated group ($p<.00001$) and group of nominated for integration ($p<.0001$) were compared to the control group, they obtained significantly lower social preference scores.

When the liked most scores were reviewed, significant difference was found between the groups $F(2,129)=21.951$, $p<.01$. When integrated group ($p<.001$) and group of nominated for integration ($p<.00001$) were compared individually to control group, they obtained significantly lower liked most scores. When the liked most scores are reviewed, the control group took the first, group of nominated for integration the second and the integrated group the third rank. When the liked least scores were reviewed, a statistically significant difference was found among the groups $F(2,129)=17.035$, $p<.01$. Nominated for integration group took the most liked-least scores. The integrated group and control group followed them in due order. As to the liked least scores, there is a significant difference between the integrated group and the control group ($p<.0001$), and between the nominated for integration group and the control group as well ($p<.00001$). When liked least first scores were reviewed, a significant difference was found among the groups $F(2,129)=11.544$, $p<.01$. There is a significant difference between nominated for integration group and the control group ($p<.00001$). There is no significant difference between the integrated group and the control group regarding the liked least first scores ($p=.01$).

As the liked most first scores were examined, a significant difference was found among the groups $F(2,129)=11.715$, $p<.01$. As to the liked most first scores, there is a significant difference between the integrated group and the control group ($p<.01$) and the nominated for integration group and the control group as well ($p<.01$). When the nominated for integration group liked most first scores were reviewed, the control group took the first, the integrated group the second and the group of nominated for integration the third rank. A significant difference is not detected when social impact scores were reviewed.

Table 8. Distribution based on social preference and social impact categories

| Social preference category | <u>Integrated Group</u> | <u>Nominated for Integration Group</u> | <u>Control Group</u> |
|-----------------------------------|-------------------------|--|----------------------|
| Rejected | 23 | 16 | 6 |
| Average | 15 | 11 | 41 |
| Popular | 1 | - | 19 |
| <u>Social Impact Level</u> | | | |
| Low | 8 | 3 | 3 |
| Moderate | 22 | 16 | 51 |
| High | 9 | 8 | 12 |

In Table 8, the integrated and the nominated for integration groups indicate a disproportional distribution in social preference categories. While one student from the integrated group is in popular category, no student is popular in the nominated group in contrast to the expectations.

DISCUSSION

The aim of this study was to determine social status of the students who were integrated (officially diagnosed with intellectual or learning disabilities) or nominated for integration by their classroom teachers. For this purpose, positive and negative peer nominations of the students, who were integrated, nominated for integration and students without disabilities were surveyed through a peer nomination technique. The students were asked to write the names of their friends they liked and disliked to sit or play with. The data were analyzed through appropriate statistical methods. The integrated and nominated for integration groups were combined and this combined group was compared to control group. It was found that liked most scores of the students in the combined group were significantly lower, while liked least scores of the same group were significantly high. In parallel with this study results, the combined group, consisting of students who were integrated or nominated for integration students, had lower social preference scores in comparison to the control group which contained students without disabilities.

Mutual comparisons of integrated group and nominated for integration group and control group revealed that nominated for integration group had lower social preference scores than the other two groups. When the liked most scores were reviewed, integration group had obtained significantly lower scores than the control group. As the social impact scores were examined, it was seen that nominated for integration group had the highest social impact score, although there was no significant difference among the groups. The students in integration group and nominated for integration group obtained more negative social impact scores.

These data are consistent with the data of the research conducted by Sale and Carey (1995) that examined sociometric status of the students with disabilities in full inclusion schools. Based on these results, it may be claimed that the students with disabilities have not been accepted at a socially sufficient level by their peers in integration. It must be discussed how and to in what extent the integration environment can be useful for these not sufficiently accepted students. It is evident that similar findings have been obtained from other studies reviewed in the present paper (Hall, 1994; Pavri & Luftig, 2000; Stone & La Greca, 1990; Taylor, Asher & Williams, 1987).

Lower social preference scores of the group of nominated for integration in comparison to the integrated group, in other words, more negative scores of these students, led to consideration that social status of these students, because of not being officially diagnosed, was not impacted positively. These results can point out, that mostly emotional and behavioral problems of the students nominated for integration might have been taken as the criteria. Special education arrangements are not yet presented in Turkey for the students with emotional and behavioral disabilities. Moreover, in Turkey, integration is quite new and neither classroom teachers nor students with disabilities can be offered supportive services. Although mandated by the law, the teachers are usually unable to prepare and implement IEP, due to lack of knowledge, time, motivation, etc. (Varlier & Vuran, 2004).

Informal interviews were conducted with the undergraduate students who were present as observers in the classrooms where the investigation was conducted. Undergraduate students emphasized that integrated students and nominated students for integration sat alone in the classrooms, did not go out to the play ground during breaks, or played alone, and their positive behaviors were not generally supported and reinforced by their teachers and classmates. They mentioned that teachers had lack of information and experiences with students with disabilities. Moreover, they said that teachers have efforts to educate students with disabilities in their classrooms. However teachers are not sufficient in teaching academic and social skills to students with disabilities, and developing social acceptance by their classmates.

To generalize research results, this study needs to be repeated in other provinces and other schools where integration of students with disabilities is applied. In future studies, other groups with different disabilities may be examined. In this study, social status of the students was determined using only peer nomination technique. The future studies may be diversified employing other techniques such as peer evaluation, natural observation and etc. used in measuring social status and social acceptance.

In this study, social status of the students in the integration classrooms was determined through peer nomination technique with a view to support the findings obtained, focus group interviews were made separately with classroom teachers and undergraduate student. These students applied peer nomination technique for this study in the integration classrooms. The aims of these interviews were to reveal whether parallelism existed between social status of the students with disabilities and their social behaviors in their classrooms; whether the integration classrooms

contributed to social development of these students; what problems are encountered in acquisition social behaviors or skills in integration environments and what suggestions might be made for solutions of these problems. Inductive analyses of these interviews are continuing.

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ÖZET

Son otuz yılda literatür incelendiğinde, özel gereksinimli çocukların normal gelişim gösteren çocuklardan ayrı mı yoksa onlarla birlikte mi eğitilmelerinin yararlarının tartışıldığı pek çok araştırma bulunmaktadır (Alter & Gottlieb, 1987; Ballard, Corman, Gottlieb & Kaufman, 1977; Cole & Meyer, 1991; Gottlieb & Budoff, 1973; Jenkins, Odom & Speltz, 1989; Lewis & Doorlag, 1987; Madge, Affleck & Lowenbraun, 1990; Pavri & Luftig, 2000; Salend, 1999). Araştırma bulguları, özel gereksinimli bireylerin genel eğitim ortamlarında eğitilmelerinin akademik ve sosyal gelişmelerine katkıda bulunduğu yönündedir. Otuz yıllık süreç içerisinde özel gereksinimli öğrencilerin genel eğitim ortamlarında eğitilmeleri kaynaştırmadan tam

kaynaştırmaya doğru bir gelişme göstermiştir. Birlikte eğitim ortamlarında özel gereksinimli öğrencilerin sosyal gelişiminde dikkat çekici bir artış olduğu vurgulanmaktadır. Kaynaştırmanın başarısı ise kaynaştırılmış öğrencinin uygun sosyal beceriler göstermesine bağlıdır. Uygun sosyal beceriler gösteren öğrencilerin akranları ve öğretmenleri tarafından sosyal kabulleri kuşkusuz artacaktır.

Akran tercihi ölçeği, akran dereceleme ölçekleri, akran sıralama ve akran değerlendirme gibi sosyometrik teknikler çocuk gelişimine ilişkin alanyazında oldukça uzun ve zengin bir tarihçeye sahiptir. Araştırma sonuçları, sosyometrik tekniklerin gelecekteki sosyal sonuçları kestirmek için güçlü ve bir o kadar da geçerlik-güvenirliliklerinin yüksek olduğunu göstermektedir. Sosyometrik ölçeklerin grup içindeki sosyal konumu belirlemesi nedeniyle, reddedilme ve düşük sosyal konumda olma gibi sonuçların, öğrenciler ve ailelerine açıklanması güçlük yaratabilir (Chan & Mpofu, 2001; Merrell, 2001). Bu sınırlılığa rağmen yetersizliği olan çocukların reddedilmeleri ya da kabul edilmeleri konusunda, veri toplamada en fazla kullanılan yöntem sosyometrik ölçümlerdir.

Kaynaştırma ortamlarında özel gereksinimli öğrencilerin sosyal konumlarıyla ilişkili Türkiye’de yalnızca bir araştırma bulgusuna rastlanmıştır. Sözü edilen araştırma ise kaynaştırma uygulamasına katılan işitme engelli öğrencilerle ilgilidir. Türkiye’de kaynaştırma ortamlarında zihin özürlü veya öğrenme güçlüğü tanısı almış öğrencilerin sosyometrik konumlarına ilişkin veri bulunmamaktadır. Bu çalışmadan elde edilecek verilerin, etkili kaynaştırma programlarının hazırlanabilmesi, özel gereksinimli öğrencilerin sosyal becerilerinin geliştirilebilmesi ve dolayısıyla sosyal kabullerinin artırılması için yapılacak çalışmalara ışık tutması beklenmektedir.

Araştırma, İç anadolu bölgesinde bir il merkezinde ilköğretim okullarındaki kaynaştırmaya yerleştirilen öğrenciler (zihin özürlü veya zihinsel öğrenme yetersizliği olarak resmi tanı almış), öğretmenleri tarafından kaynaştırmaya aday gösterilen öğrenciler ve normal gelişim gösteren öğrencilerin sosyal konumlarının belirlenmesi ve karşılaştırılması amaçlanmıştır. Araştırmaya, kaynaştırma uygulaması yürütülen 14 ilköğretim okulunda eğitime devam eden toplam 999 öğrenci katılmıştır. Bu öğrencilerden 39’u kaynaştırma öğrencisi, 27’si kaynaştırmaya aday öğrenci ve 933’ü ise normal gelişim gösteren öğrencilerdir. Verilerin toplanmasında “Akran Tercihi Ölçeği” kullanılmıştır. Veri toplama sürecini, Anadolu Üniversitesi Özel Eğitim Bölümü Zihin Engellilerin Öğretmenliği Programı üçüncü sınıf lisans öğrencilerinden 34 kişi gerçekleştirmiştir. Araştırmacılar tarafından lisans öğrencilerine, “Akran Tercihi Ölçeği”nin tanıtımı ve nasıl uygulanmasına ilişkin bir saat süren toplantı düzenlenmiştir. Elde edilen verilerin çözümlemelerinde “SPSS 10.0 FOR Windows” programı kullanılmıştır. Araştırma sonucunda, özel gereksinimli öğrencilerin yaklaşık yarısının “reddedilen” sosyal tercih kategorisinde; “orta” sosyal etki düzeyinde yer aldıkları belirlenmiştir. Ayrıca en çok birinci tercih edilen adaylara bakıldığında, kontrol grubu ilk sırada, kaynaştırma grubu ikinci sırada, kaynaştırmaya aday grup ise son sıradadır. Bu sonuçlara dayanarak kaynaştırma öğrencilerinin sınıflarında

yeterince kabul görmedikleri, kaynaştırmaya aday öğrencilerin ise sınıflarında daha da az kabul edildikleri söylenebilir.

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