Comparative Investigation about Impaired Hearing Students in Integrate and Atypical Schools; Behavioral Characteristics, Feeling Loneliness and Rejection

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Abstract: The aim of this study is a comparative investigation upon hearing impairment among students, behavioral characteristics, feeling loneliness and rejection. The study is a science- comparative one. The sample was composed of hearing impaired high school students in integrated and atypical students of Shiraz. One hundred students were chosen as sample. Means of data collection were Ratter behavioral questionnaire (teacher form), children loneliness index and peers rejection questionnaire. Data were analyzed by SPSS software and t-test. According to teachers, results showed no significant differences between hearing impaired students in integrative and atypical schools in terms of behavioral characteristics and abnormalities. Also students in integrative schools feel more loneliness and rejection feeling than students in atypical schools.

Key words: Hearing impaired • Behavioral characteristics • Feeling loneliness • Rejection

INTRODUCTION

Based on international statistics; 10 to 15 percent of children in each society have noticeable personal differences with other children, so they will need special education. This group of children has been considered as "children with special needs" by education and upbringing authorities in all countries and so far, many special plans have been developed for their education [1].

By reviewing the history of training for children with special needs, we meet two basic viewpoints in this regard: in the first viewpoint, individuals who have disability are considered separate from those with no disability. The second viewpoint shows differences between people with and without disability in quantitative manner and considers it on a continuum and raises comprehensive approach of training. In this approach, students regardless of their differences and capability levels are trained equally, means their trainings are performed the same regardless of their physical, mental, emotional, verbal condition and other characteristics. Such training necessarily includes children whether children with or without disability; sharp-witted children; street children; children in remote areas; verbal, cultural, ethnic minorities and children with other deprivations [2].

Halahan and Kaufman [3] advised that students should not be referred to special education, unless broad and unsuccessful efforts have conducted in usual classes to adapt and respond with their needs. Considering above mentioned, it looks one of the major topics in education and rehabilitation of students with special needs in recent years is integrating these students in usual schools and following the normalization rule. Normalization rule implies that, people with special needs should benefit the same preference, rights and chances that normal people enjoy. Conducting integration plans and comprehensive education and starting off atypical schools are considered as applications of normalization rule in education and training domain.

According to experts in this field, the presence of children with special needs in usual schools is addressed in four levels: physical presence of this students,
acceptance by peers, students' participation in class activities and finally students' progress with special needs [4].

In the first level, only the physical presence of student is relevant; in the second level, student's presence has emotional and social aspect and his/her peers' social acceptance is; in the third level, physical presence and social acceptance of student with special needs motivate participation of these students in class activities and finally, the forth level, includes students' progress. Studies showed that, five groups of factors influence success integration scheme of these students.

- Factors related to child like, compromised behavior, cognitive abilities, educational skills and child's skill level;
- Factors related to peers and their attitude toward acceptance of group with special needs;
- Factors related to education and teacher;
- Factors related to management and execution, like provisions to support teachers;
- Parents and society's viewpoints concern to integrated education [5, 6].

Deaf people, as one of these groups are subject to these plans. Integrated education for students with hearing impairment appears to be more complicated than what is usual. An integrated education plan, prepares hearing impaired and deaf students for living among hearing people. Integration is a way to prepare deaf and hearing impaired students for entrance among normal people. This preparation is obtained via learning the skills which cannot be achieved by environmental experiences of deaf [7]. According to Brown and Bergen [8], deaf and hearing impaired children can indeed experience social skills based on observational learning principle and through observing their peers 'activities and behaviors and interaction with them.

Many different and conflicting debates about the subject of integrating students with special needs in usual schools based on normalization rule, has been considered and yet, specialists haven't get any common point of view in this field and disagreement is obvious here. A group emphasizes that integrating students with special needs in usual schools is useful and they agree with normalization rule, whereas another group are opposed with this idea and believe that integration scheme of this group in usual schools, rather than positive results, will have more negative consequences, so they emphasize on using atypical schools. We cannot definitely judge by reviewing literature about giving priority to integrated or atypical education for students with special needs especially deaf students. Many studies were emphasized on usefulness of the results of integrated project on different aspects of the life of this group of people [9-15]. many studies revealed more negative effects of this educational method that pointed in their results [16, 17, 4].

In recent years, some studies have compared some psychological variables about students with hearing pathology who have integrated and atypical education. Burk and Karen [4] in a research about behavioral problem in hearing impaired students who were integrated in usual schools, stated that these students act weekly in independent performance and in the other hand, experience much of stress and use less concentration techniques to solve problem. Farrugia and Austin [17] stated in a report that adaptability of hearing impaired students who were integrated in usual schools is less than those students in atypical schools. In RafieiIrani's research [14] about parents' viewpoints of hearing impaired students to integrated education, statistical universe consists of parents whose children were studying in integrated education elementary schools. According to their opinions (parents) most of their children's educational needs are satisfied in this system, also they believe that integration is an important factor for increasing confidence and emotional development in their children. Also, researches demonstrated that race, high family revenue; less hearing dropout is educational embedment anticipant (assigning position) for hearing impaired students [11].

The most relevant research that has been conducted in this field in Iran is Farajollahi, et al. [15] research that compares educational and behavioral performance of two mentioned groups. This research is going to compare students in integrated and atypical education system in terms of three elements: behavioral statues, felling loneliness and peer's rejection.

**MATERIALS AND METHODS**

This investigation is a casual-comparative study. The sample in this study are 100 hearing impaired high school students in Shiraz whom are studying in integrated schools (50 students) and atypical schools (50 students) and are chosen via available sampling. To conduct the study, deaf students' teachers in usual and atypical schools were asked to fill out the Ratter questionnaire carefully enough. Due to the low number of teachers than students, each teacher was asked to fill out 5
questionnaire related to students whom are completely known by their teacher. 20 teachers filled out the questionnaire. These teachers are fully aware of students' conditions and before completion, have been explained about how to fill out scale by researcher. Two other questionnaires that fill out via self-report method were given to selected students in sample group and filled out by them.

Measures:

Rutter Behavioral Inventory (form B): This form was provided and analyzed by Rutter. It has two forms, form A (parent's form) and form B (teachers' form). There are 30 questions in it and is one of the most prevalent questionnaires for exploring children's mental disorders [18]. Researches conducted in Iran reveal high reliability and validity for this questionnaire. Yousefi [19] investigated 1600 girls and boys, ranging from 6 to 11 by Rutter test. Test validity is reported about 0.90 by using retest method.

Children's Loneliness Scale [20]: This scale assesses child's feeling of loneliness and his/her social grievance in late of childhood and teen years. It has 24 items. 8 of its items are related to his/her favored entertainments and they are not scored. They are mentioned in this scale because by this, children can feel more comfort, calm, still and freedom during the test. 16 items are scored and each item has minimum score of 1 and maximum score of 5 and its domain ranging from 16 to 80.

A research conducted by score producers on 522 normal children at 12 years old demonstrated that grads for this scale had significant correlation with assessment grads for child's peers than to child and other sociometry methods. Reliability coefficient for this test was $r=0.83$ by using halving method and $r=0.91$ by Spirmann method and $r=0.91$ by Guttmann halving method [20].

In order to investigate capability of Asher's feeling loneliness index, its Persian translation was given to 396 students (186 girls and 183 boys) from first to third grade of junior high school. Results showed that discussed index has a good internal constancy. Kronbache'salpha coefficient is 0.81 and according to the correlation of 0.66 between two halves of the test and by using halving method, its internal uniformity is at an acceptable level so that after modifying by Spireman- Brown method, will be 0.79 to calculate reliability coefficient of total index. Guttmann reliability coefficient got about 0.79 that all were at the acceptable level and demonstrate proper reliability [21].

Peers' Rejection Questionnaire: This questionnaire has 15 items and is consistence with the results of three questions sociometry about the most beloved and the most unloved class's student and can be used as a self-report for children. Its method for affixing grade is based on Likert ranking scale and a grade between 1 to 5 is given to each question. Validity of this survey via internal uniformity is reported 0.91 by inventor (Kronbach'salpha coefficient). In the case of validation of this test, judgment of focused group andsociometry test are considered and reported as a proof of content validity. Using retest, reliability of this questionnaire is also reported about 0.93 [22]. This test specifies two major factors:

- Peers' acceptance that shows subject's acceptance among peers' group
- Peers' rejection that shows subject's rejection among peers' group

RESULTS

Based on results of the above table, the mean for behavioral statues component in integrated school is assessed 76.4 and in atypical schools 76.2; The mean for rejection component in integrated schools 73.07 and in atypical school 67.97; and the mean for feeling loneliness component in integrated schools 69.8 and in atypical schools 63.47. Hypothesis 1: There are behavioral statues differences between subjects in integrated and atypical schools.

Considering data in table (2), since amount of $t (t=1.662, with freedom degree 98) \alpha=0.05$ is not meaningful about behavioral statues, so null hypothesis confirmed and research hypothesis rejected with 0.95 level of confidence. In other word, there are no differences in sample's behavioral statues differences between subjects in integrated and atypical schools.

Considering date in table number (3), since amount of $t (t=2.383, with freedom degree 98)$ in $\alpha=0.05$ is not about behavioral statues is not meaningful, so null hypothesis rejected and search hypothesis confirmed in level of confidence 0.95. In other word, there is a difference in subject's rejection between integrated and atypical schools.

Considering date in table number (3), since amount of $t (t=2.383, with freedom degree 98)$ in $\alpha=0.05$ about behavioral statues is not meaningful, so null hypothesis rejected and search hypothesis confirmed in level of confidence 0.95. In other word, there is a difference in subject's rejection between integrated and atypical schools and students in integrated schools have more rejection.
Table 1: Descriptive index for research variables

<table>
<thead>
<tr>
<th>Group</th>
<th>Variable</th>
<th>Minimal</th>
<th>Maximal</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated</td>
<td>Behavioral statues</td>
<td>35</td>
<td>115</td>
<td>76.4095</td>
<td>20.33356</td>
</tr>
<tr>
<td></td>
<td>Rejection</td>
<td>31</td>
<td>113</td>
<td>73.0797</td>
<td>18.49278</td>
</tr>
<tr>
<td></td>
<td>Feeling loneliness</td>
<td>28</td>
<td>112</td>
<td>69.8040</td>
<td>21.35126</td>
</tr>
<tr>
<td>Atypical</td>
<td>Behavioral statues</td>
<td>35</td>
<td>114</td>
<td>72.6295</td>
<td>17.84229</td>
</tr>
<tr>
<td></td>
<td>Rejection</td>
<td>31</td>
<td>112</td>
<td>67.9757</td>
<td>15.16508</td>
</tr>
<tr>
<td></td>
<td>Feeling loneliness</td>
<td>28</td>
<td>112</td>
<td>63.4760</td>
<td>16.76093</td>
</tr>
</tbody>
</table>

Table 2: Results of the independent t-test related to comparing sample's behavioral statues in integrated and atypical schools

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>t</th>
<th>Freedom grade</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated school</td>
<td>50</td>
<td>77.19</td>
<td>19.6818</td>
<td>1.662</td>
<td>98</td>
<td>0.100</td>
</tr>
<tr>
<td>Atypical school</td>
<td>50</td>
<td>70.8931</td>
<td>18.17213</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3: Results of the independent t-test related to comparing subject's behavioral statues in integrated and atypical schools

<table>
<thead>
<tr>
<th>Variable Index</th>
<th>Number</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>t</th>
<th>Freedom grade</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated school</td>
<td>50</td>
<td>70.0743</td>
<td>17.68257</td>
<td>2.383</td>
<td>98</td>
<td>0.019</td>
</tr>
<tr>
<td>Atypical school</td>
<td>50</td>
<td>66.2948</td>
<td>14.83491</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4: Results of the independent t-test related to comparing subject's feeling loneliness in integrated and atypical schools

<table>
<thead>
<tr>
<th>Variable index</th>
<th>Number</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>t</th>
<th>Freedom grade</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated school</td>
<td>50</td>
<td>70.9440</td>
<td>20.58150</td>
<td>2.470</td>
<td>98</td>
<td>0.015</td>
</tr>
<tr>
<td>Atypical school</td>
<td>50</td>
<td>61.8760</td>
<td>15.82666</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Hypothesis 3:** There is a difference in subject's feeling loneliness between integrated and atypical schools.

Considering data in Table (4), since amount of t (t=2.470 with freedom degree 98) in α=0.05 about sample behavioral statues is not meaningful, so null hypothesis rejected and search hypothesis confirmed with level of confidence 0.95. In the other word, there is difference in subject's feeling loneliness between students in integrated and atypical and students in integrated schools have more feeling loneliness.

**DISCUSSION**

Hypothesizes which this study was going to investigate, are differences between hearing impaired students who are studying in integrated and atypical schools in the view point of behavioral statues, feeling loneliness and feeling rejection.

As results show, there is no difference between these two groups in terms of behavioral statues or behavioral abnormalities. Means, teachers haven't reported marked difference related to behavioral difference in these two groups of hearing impaired. This finding is in along with, Anderson, et al., (2005); Jenkins, et al., (1989); Kluwin, et al., (1985); Tavakkoli (2000); Rafieilrani (2003); Farajollahi, et al., (2010) researches and confirms them, but in the other hand is opposed with researches done by Luterman (2003); Burk, et al., (2002); Farrougia and Austin (1980).

Results in relation to other investigated components namely, feeling loneliness and rejection among students in integrated and atypical students, show that there is significant difference between them and this difference is that hearing impaired students who are studying in integrated schools report more feeling loneliness and rejection. Although a research that is exactly conducted in relation with this component in hearing impaired students was not found, but considering positive and negative effects of integrated education for this group with special needs, results are in along with, Lutermann (2003); Burk, et al., (2002); and Farrougia and Austin (1980) researches and is in opposed with obtained results of, Anderson, et al., (2005); Jenkins, et al., (1989); Kluwin, et al., (1985); Tavakkoli (2000); Rafieilrani (2003); and Farajollahi, et al., (2010).

In the case of obtained results, the point that may makes a contradiction in the mind of reader and researcher and should be considered is, although students report a high feeling loneliness and rejection while describing their situation, but their teachers don't differentiate between them from the viewpoint of behavioral.
In explaining this issue, we can say that, these students experience high feeling loneliness and rejection, these feelings themselves can lead to being more quiet, isolated and passive in these schools. Because of this state and since teachers usually suppose that a good student is somebody that doesn't have much activity and needs less control, they may assess behavioral problems lower than the actual reported.

In this regard, one of the researches' limitation that requires caution in generalization, is merely emphasize on teachers' assessment and involve only school. For example, we can assess parents' opinion about differences between these two groups of students.

Finally the predominant result of this study is feeling loneliness and rejection is experienced by hearing impaired students in integrated schools. In this regard, there is a need either some systematic and executive strategies be considered to improve and help to students' conditions in integrated schools, or in case of failure to reduce or eliminate these negative feelings, we more emphasize on special education in atypical schools.

REFERENCES
