



Predicting academic achievement among deaf students: emotional intelligence, social skills, family communications and self-esteem

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Abstract

The objective of this study was to investigate multiple relationships between emotional intelligence, social skills and self-esteem with academic achievement of deaf or hard of hearing high school student in Isfahan. We survived 106 (51 boys and 55 girls) deaf or hard hearing student which were selected with available sampling method using emotional intelligence questionnaire (Petrides & Furnham, 2001), Social skills inventory and Family communications Scale. Results indicated that there is meaningful and positive relationship between emotional intelligence and academic achievement while there isn't meaningful relationship between social skills and academic achievement. Also in this study, was found that there is positive and meaningful relationship between family communications and academic achievement. According to this study, personal factors and family communications must be considered in academic achievement of these students.

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Keywords: Academic achievement, students with hearing problems, emotional intelligence, social skills, family communications, self-esteem.

1. Introduction

The explanation and prediction of academic achievement is an important area of Research in educational psychology (Schiefele, Krapp & Winteler, 1992). Academic achievement refers to the goals which teachers hope their students reach to them such as: to read at grade level or above, to do well in sciences, mathematics and technology, to persist for high school and university graduation, to be appropriately identified and served for any special needs, obtain good grades, have access to and do well in academically challenging courses, have opportunities to apply their knowledge while the students are in school (through work-based learning or service-learning), follow a coherent course sequence leading to postsecondary education take standardized and college entrance exams (e.g. Stanford 9, California Achievement Test, SAT, ACT, Achievement, and Advanced Placement tests) and obtain competitive scores, make thoughtful guided decisions about college attendance and financing enrolment in college have no need for remedial education in college, sustain financial aid (reapply as needed) and fulfilling work in their chosen career. (Walker-James, Jurich, & Estes, 2001).

The prevalence of research efforts in this area reflects the fact that many decisions reached in the modern educational system are based upon predictions of school success (Schiefele, Krapp, & Winteler, 1992). The study of effective factors on students' academic achievement, for decades, was more interested by educational and upbringing specialists (Schiefele, Krapp & Winteler, 1992). In this relation, the students' academic achievement which needed special services for talents and abilities development, in particular, deaf or hard of hearing students has been observed (Hallahan & Kaufman, 2006). Qi and Mtichell (2012) during longitudinal research found that

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deaf and hard of hearing students can have efficient academic functioning in school with intensive educational programs.

In a research which was done by McCain and Anita (2005) on 1st and 4th grade students, researchers found that even though deaf students have differences in academic achievement with normal peers but these students had continuous academic achievement during three years.

Convertino, Marschark, Sapere, Sarchet, and Zupan (2009) during a research which was done on deaf students of collage found that deaf students' academic preparedness was considered as important prediction for their academic achievement. Also auditory and communicational variables had meaningful effects in both sign and speech language on academic achievement prediction. The Huber and Kipman (2012) in a study on 7 to 11 years deaf and hard of hearing students observed that these students performed weakly in the chain, of numbers and vocabulary comprehension and words treasures. Also their cognitive function related to the first facilities for hearing (for example, hearing aid or helix plant) and academic- social field.

1.1. Emotional intelligence

One of features seemed to be effective in academic achievement is emotional intelligence (Sunbul & Aslan, 2007). Mayer and Salovey (1997) knew emotional intelligence as self and other's emotional comprehension ability and suggested that emotional intelligence included four main components (1). Emotional perception and expression: which included recognition and to bring in verbal and nonverbal information to emotional systems 2). To facilitate thinking with emotion means employing emotions as part of cognition like creativity and solve the matters. 3). Emotion's comprehension and cognition that included emotional cognitive processing and obtained knowledge about self and others emotions/ feeling 4).Emotion management and adjustment by self and others that included controlling emotional affairs by self and other people (Mayer & Salovey, 1997). Bar-on believed that emotional intelligence is a collection of skills and abilities that equipped person for adaptation with environment and achievement of success. Bar-on Emotional Intelligence Model included 15 components that involved emotional self-awareness, decisiveness, self-honor, self-actualizing, independent, sympathy, interpersonal communications, responsibility ,problem solving, the measurement of reality, resilience, pressure tolerance, impulsive control, happiness, optimism (Bar-On, 2011). Goleman (1998) believed that persons who benefit from high emotional intelligence have more talent to obtain the information and have more enjoyable life. He believed emotional intelligence as general construct which can be the cause of persons' success in life's different aspects.

The most of done researches show that there is relationship between emotional intelligence and academic achievement. For example: Petrides, Frederickson and Furnham (2004) in research which they did about emotional intelligence role in academic function and deviant behavior, they reached to this result that even after personality variable control, emotional intelligence have effective role in academic function and deviant behavior. In another research Parker, Hogan, Eastabrook, Oke, and Wood (2006) determined that different stages of academic achievement (students with high academic achievement, relative successful students, and non-successful students) which were graded upon their sub scores had a high relation with different dimensions of emotional intelligence. In another research Parker et al. (2006) showed that students who had more effort in their studies, from view point of emotional intelligence and social competency were placed on a higher level. Marquez, Martin, and Brackett (2006), found that emotional intelligence had relationship with social competency and academic achievement among high school students.

Adeymo (2007) found that emotional intelligence and academic self-effective had meaningful relationship with academic achievement. Sunbul and Aslan (2007), reached to this results that there is a meaningful and positive relationship between emotional intelligence and academic achievement. In another study Mavroveli, and Sanchez-Ruiz (2011) found that the students who had abnormal behavior, they were placed on lower level of emotional intelligence. In addition, students with special needs in comparison with students who didn't have special needs, showed lower emotional intelligence. Deniz, Tras and Aydogan (2009) performed a study about academic retardation, control location, emotional intelligence, and showed that there was a negative relationship between emotional intelligence and academic retardation.

Some studies were performed about emotional intelligence of persons with hearing problems. For instance, Cambra (2006) showed that emotions and feelings in deaf teenagers meaningfully determined by hearing lack of degree, gender and age caused meaningful differences that posed the needs to academic-social programs about keeping friendship relation and awareness of the social environment. Also the results of Farrugia and Austin' study (1980) indicated that deaf students in residential schools and hearing students in public schools were the most similar in all areas of development. Hard-of-hearing students and deaf students in public schools appear to demonstrate lower levels of self-esteem than other students. Deaf students in public schools also appeared to demonstrate lower levels of social, emotional, and mature behaviors. In a study which was done by Furstenberg and Doyal, (1994) Results showed that deaf and hard of hearing students generally scored high on the outcome competencies and their emotional-behavioral functioning was within the normal range and Statistically significant correlations were found between many of the performance outcomes and emotional-behavioral functioning. Oyler, Oyler, and Matkin (1988) revealed that hearing loss can make academic failure in deaf children.

1.2. Social skills

Another construct seemed to be related to academic achievement is social skills (Feitosa, Del Prette, & Del Prette, 2012). Social skills can be defined as the set of skills people use to interact and communicate with one another. They are based on the social norms of our society and they tell us what attitudes and behaviors are considered to be normal, acceptable and expected in a particular social situation (Patrick, 2008). Walker (1983) believed social skills as a collection of competences that allows the person to start positive social relations and keep them, participate in group and have a satisfactorily academic adjustment and effectively adapted with large social environment (Steedly, Schwarz, Levin, & Luke, 2008). Also, social skills are competencies that help to people that interact effectively with others and can play a positive role in their success. (Baron & Markman, 2000).

Eleby (2009) found that social skills' lacking have negative effects on high school students' academic achievement. Singh and Thukral (2010) found that there was meaningful relationship between social maturity and academic achievement and found no meaningful difference among male and female students. In another research Durlak, Weissberg, Dymnicki, Taylor, and Schellinger, (2011), observed that social skills and emotional reinforcement in high school students caused a better academic achievement.

Feitosa et al. (2012), found meaningful and positive relation between social skills and academic achievement. Some studies have investigated social skills' rate and it's relation with academic achievement in special persons and persons with hearing problems. Richardson and Woodley (2001) showed that deaf students act like normal students about social relationship, even though carelessness and fear of failure was seen more among them. In another study which was done by Lukomoski (2007) about comprehensions of deaf learners of emotional-social adjustment, showed that deaf learners knew themselves having more problems in life in comparison with normal learners and from view point of gender differences, deaf women felt more anxiety than deaf men. Rieffe and Terwogt (2006) found that deaf children show their anger more differently than normal ones and show less sympathy in comparison with normal children when somebody is hurt. Kremieyer, Crooke, Drye, Egbert, & Klein (2000) found that sign or gestural language has positive impact on relationships between deaf and hard of hearing students with their hearing classmates and promotes their academic achievement. Stinson & Whitmire (2000) showed that academic and social performance of adolescents who are deaf or hard of hearing is affected both dramatically and subtly by the communicational barriers which are created by their hearing loss. According to Polat (2003)' research, student-related backgrounds (such as degree of hearing loss, additional handicap and age at onset of deafness) and parent-related variables, school-related factors, and teacher-related variables have impact on psychosocial adjustment of deaf students.

1.3. Family Communications

The other factor that seemed to be related to academic achievement is family communications. Family is made a group of people which have emotional relationships and linked to each other structurally and they have interaction

in feelings, thoughts and even behaviors (Koerner & Fitzpatrick, 2004; Noller & Fitzpatrick 1993, quoted of Prasitthipab, 2008). Based on Beaver's model, there are two dimensions about family's functions: Competence and style. Family's Competence is related to structure, flexibility and How to inform to each other in a family. Families who have flexible structure can discuss to each other, have better functioning and in the face of stressful events are more successful. Family's style refers to satisfaction and gratification in family relationships (Amado, 2005). Based on Bowlby's Theory, trust and confidence to the environment and the world, has direct relation to the person's attachment with his/her parents during the childhood. If parents' support be more, it leads to less worry and anxious and a better view to the life when he /she grows up and is a way from the parents (Amado, 2005).

Almost all of Studies showed that there is a positive and meaningful relationship between family communications and academic achievement (for example, Makewa, Role & Otewa, 2012; Karbach, Gottschling, Spengler, Hegewald, & Spinath, 2012; Potter & Roska, 2013; Rutter & Maughan, 2002; Yang & Tam, 2004).

Since the presence of deafness in a family has the potential to affect all aspects of family life (Jackson & Turnbull, 2004) and can cause stress in coping with this situation among parents and their deaf children (Fehrer-Prout, 1996), There are some studies that rely on the relationship between family communications and academic achievement in deaf children, for example: The findings of Calderon 'research (2000) indicated that although parental involvement in their deaf child's school-based education program can positively contribute to academic performance, parental communication skill is a more significant predictor for positive language and academic development. Also the results of Mitchell and Karchmer's study (2004) showed that there is difference between deaf and hard of hearing students with hearing ones who have one or two hearing-impaired parents so that effects on their children's academic achievement. An investigation which was done by Powers (2003) on deaf students aged 16 indicated that family has impact on the academic status but the degree of hearing loss is more effective in educational settings. Moeler (2000) showed that early intervention (especially in the first five years of life) of parents with their deaf children is related to better vocabulary skills in their children. Also Martineau et al (2010) found that the type of relationship with parents and socioeconomic environment is effective in educational settings in deaf students.

1.4. Self-esteem

Self-esteem is literally defined by how much value people place on themselves. It is the evaluative component of self- knowledge. High self-esteem refers to a highly favourable global evaluation of the self. Low self-esteem, by definition, refers to an unfavourable definition of the self. Thus, high self-esteem may refer to an accurate, justified, balanced appreciation of one's worth as a person and one's successes and competencies, but it can also refer to a n inflated, arrogant, grandiose, unwarranted sense of conceited superiority over others. By the same token, low self-esteem can be either an accurate, well-founded understanding of one's shortcomings as a person or a distorted, even pathological sense of insecurity and inferiority (Baumeister, Campbell, Krueger, & Vohs, 2003).

Self-esteem is an important factor in mental health and coping styles among deaf students with their families and their teachers and classmates at school (Jambor & Elliot, 2005). Most of studies showed that there is positive correlation between self-esteem and academic achievement (for example: Harris, 2009; Rubin, 1978; Hansford & Hattie, 1982; Lockett & Harrell, 2003). The findings of some researches confirmed the relationship between self-esteem and other similar concepts with academic achievement in deaf and hard of hearing children. For instance: Nantango (2008) revealed that self-esteem has a significant relationship with perceived academic competence of Deaf learners. Also Attiye (2006) found that the low self-esteem can cause poor academic achievement in deaf students. Brunnerberg, Bostrom, and Mats (2007) found that hard of hearing students with additional problems reported themselves as who have more problems in their educational settings and have poor self-reported mental health. According to the study of Van Gorp (2001), deaf students who are more successful in educational program, have better self- perceptions. This study investigates the multiple relationships between emotional intelligence, social skills, family communications and self-esteem with academic achievement of hard of high deaf and hard of hearing school students, because until now, it hasn't been found any study about this matter among Iranian students.

2. Method

2.1. Participants

Participants of this study included 106 deaf and hard of hearing students (51 boys and 55 girls) who studied in high school (from 1st to 3rd). because deaf and hard of hearing persons due to hearing defect are weak in words and verbal communications field, (Hallahan & Kaufman, 2006), according to special education managers' view they often don't enter to theoretical branches and have more tendency to enter to vocational- technical and art branches, so in this study deaf and hard of hearing students who studied in theoretical branches were not found and deaf and hard of hearing students who studied in art schools, entered to this research. Generally, in Isfahan city there is one male art school and one female art school especially for deaf, and all of the students of these schools entered to this research (51 boys and 55 girls).

2.2. Procedure

In this study the relationship between emotional intelligence and social skills with academic achievement is investigated among deaf or hard of hearing students in Isfahan city. This plan was performed by getting permission of special education organization and the education Office of Isfahan province and with the teachers' and managers' collaboration of the deaf special institutes.

2.3. Materials

2.3.1. Emotional intelligence questionnaire.

Short questionnaire form of emotional intelligence (Petrides & Furnham, 2001) is a self-evaluation scale. The main and first form have 144 items and 15 subscales of harmony, daring, Emotions and affects control, emotional adjustment, the comprehension of feelings and emotions, sympathy, happiness, Arousal, optimism, self-initiation, social skills, Self-honor, social competency and control of stress (Petrides & Furnham, 2003).

Short form consists of 30 items which is graded to each question on a seven point likert scale ranging from strongly disagree (1) to strongly agree (7). Grading to items 2, 4, 5, 7, 8, 10, 12, 13, 14, 16, 18, 22, 25, 26, and 28 was reverse. By collecting obtained scores from each item, the total score of each scale is obtained (Petrides & Furnham, 2001). Test validity coefficient which is obtained from inner similar coefficient by Cooper and Petrides (2010) was equaled to 0.87 until 0.88. In present study, the similar coefficient of this questionnaire, calculated by Cronbach's Alpha is equaled to %65.

2.3.2. Social skill's questionnaire.

Social skills questionnaire (Riggio, 1989) includes 90 questions which is presented as a short self-report but comprehensive that measures social skills in two emotional levels (expressive, sensitivity, control) and social (expressive, sensitivity, control) and includes 6 scales. These scales consist of emotional expressive scale, emotional sensitivity, emotional control, social expressive, social sensitivity and social control. For scoring items, the 5 degree scale of strongly disagree (1) to strongly agree (7) is used. Riggio in 1989 evaluated test validity by using reevaluating method and Cronbach's Alpha test between. 0.62 to 0.96 and showed that all of this questionnaire's scales have positive correlation with each other. In this study, inner similarity of this questionnaire calculated by Cronbach's Alpha was 0.85.

2.3.3. Family Communication Scale.

Family Communication Scale is made on Parent-Adolescent Communication Scale. Parent-Adolescent Communication Scale has 20 subscales. Family communication scale is a shorted scale and can be used for various families. The questions of this scale is included: communication style, expressing feelings, cooperation, sharing problems with each other, viewing with each other, answering honesty, perception of feelings' each other, anger

control & genuine expression of emotions that For scoring items, the 5 degree scale of completely disagreed to completely agreed is used. With collecting the scores, the total of scores is calculated (Olson & Barnes, 2003). In this study, inner similarity of this questionnaire calculated by Cronbach's Alpha, was 0.75.

2.4. Tables of characteristics of the sample

In this research, after collecting the questionnaires, the following data obtained on the number and percentage:

Table 1: Characteristics of the sample By Gender

Gender	Number	Percentage
Male	51	%48/1
Female	55	%51/9

Table .2: Characteristics of the sample by educational field

Educational Field	Number	Percentage
Electric	16	%15/1
Carpentry	14	%11/21
Graphic	13	%12/3
Computer	1	%0/09
Painting	11	%10/4
Dressmaking	8	%7/5
Public	1	%0/09
Planning & sewing	2	%1/9
Unmarked	36	%34

Table .3: Characteristics of the sample by the education' degree of Father

Education' degree	Number	Percentage
Under diploma	85	%66/36
Diploma	22	%20/8
Upper diploma	4	%3/17
Unclear	8	%7/5

Table .4: Characteristics of the sample by the education' degree of Mother

Education' degree	Number	Percentage
Under diploma	77	%73/45
Diploma	15	%14/2
Upper diploma	5	%4/7
Unclear	9	%8/5

2.5. Analysis of obtained findings from research data

Obtained data from questionnaires' performance, were analyzed. The first mean descriptive indexes and criteria deviation were offered. Then according to study's assumptions, Pearson' correlation coefficient's results offered in order to investigate the relationship between study's variables and finally in order to predict academic achievement, step by step regression analysis results was offered according to criteria variable.

3. Results

To response to research questions, data was examined in two steps. The first step was to examine the inter correlations matrix between dependent and independent variables. The results showed academic achievement was significantly and meaningfully associated with emotional intelligence ($r = .292$, $p = .009$). There were no significant coefficients between other independent variables with academic achievement. The results are presented in table 5.

Table 5. Mean Standard Deviation and Correlation Coefficients between research variables, N= 105

Variables	Mean.	SD	1	2	3	4	5	6	7	8	9	10	11
1. Academic achievement	15.74	2.36	1	.050	.080	-.022	.063	.122	.130	.151	.367 ^{**}	.162 [*]	.176 [*]
2. Total social skills	281.07	19.70		1	.514 ^{**}	.695 ^{**}	.387 ^{**}	.639 ^{**}	.218 ^{**}	.451 ^{**}	.434 ^{**}	.444 ^{**}	.320 ^{**}
3. Emotional expressivity	46.08	4.99			1	.313 ^{**}	.013	.233 ^{**}	-.068	.173 [*]	.120	.045	-.005
4. Emotional sensitivity	48.16	6.42				1	.298 ^{**}	.379 ^{**}	.130	.188 [*]	.362 ^{**}	.411 ^{**}	.205 ^{**}
5. Emotional control	46.6	5.84					1	.268 ^{**}	-.017	.151	.344 ^{**}	.308 ^{**}	.216 ^{**}
6. Social expressivity	46.97	4.99						1	-.005	.386 ^{**}	.405 ^{**}	.361 ^{**}	.343 ^{**}
7. Social sensitivity	48.70	6.84							1	-.243 ^{**}	.118	-.013	.296 ^{**}
8. Social control	42.29	6.61								1	.293 ^{**}	.504 ^{**}	.197 [*]
9. Emotional intelligence	129.57	17.01									1	.422 ^{**}	.396 ^{**}
10. Self-esteem	42.83	6.13										1	.229 [*]
11. Family communications	34.82	2.66											1

3.1. Predicting academic achievement

Multiple regression analyses was conducted to responses research questions in relation to predicting academic achievement. Academic achievement was entered as a dependent variable, and social skills and its dimensions, self-esteem, emotional intelligence and family communication entered as independent variables. Summary data are presented in Table 6.

The results indicated a significant model fit, $F = 16.20$, $p = .000$, and that the independent variable (emotional intelligence) included in the model was able to account for 13.5% of the variance ($R^2 = .135$).

Table 6: Stepwise multiple regression of academic achievement based on social skills and its dimensions, emotional intelligence, self-esteem and family communication

Model	Variables	B	SEB	Beta	T	Sig
1	Emotional intelligence	.064	.016	.367	4.02	.000

3.2. Lateral findings

In this part, one question was investigated. "Is there any relationship between social skill's subscales with academic achievement?" In order to answer this question, step by step regression analysis was used. So the academic achievement entered to step by step regression analysis as criteria's variable and 7 subscales of social skills as predictive variables entered too.

The results showed that in primary correlation investigating; only self-esteem variable had positive and meaningful relationship with academic achievement. ($p = .048$ and $r = .160$) and other variables didn't have meaningful relationship with academic achievement. Finally, self-esteem didn't enter to academic achievement predictive equation. Then not only social skills were not able to predict academic achievement but also its subscales didn't have this power.

4. Discussion

In according to this study's results, there was meaningful and positive relationship between emotional intelligence and academic achievement of deaf and hard of hearing students, so that with emotional intelligence increasing, the academic achievement of these students is increased. The Hypothesis findings of this study sympathized with obtained findings of Petrides, Fredrickson and Furnham (2004); Parker et al. (2006); Cambra (2006) and Farrugia and Austin (1980) studies. In definition of relationship between emotional intelligence and deaf and hard of hearing students' academic achievement, it can be said that persons with higher emotional intelligence, with self-emotional control, have more insistence on their objectives and benefit more success of life and work. (Parker et al., 2006). One of the emotional intelligence components is responsibility (Bar-On, 1997). It seems that persons with higher emotional intelligence feel more responsibility to themselves and others are more faithful about their commitment, have more collaboration feeling and use their inherent abilities better (Bar-On, 1997).

Also the result of this study showed that there wasn't any meaningful relationship between deaf and hard of hearing students' social skills and academic achievement. So the second main hypothesis of the research was rejected and determined that social skills' increasing didn't have effects on auditory hurting students' academic achievement. These findings aren't sympathized with obtained results of the studies were done by the other researchers (Eleby, 2009; Singh & Thukral, 2010; Durlak et al., 2011; Feitosa et al., 2012). Social skills help persons to have effective relation with others and act more successfully in educational environments from view point of teaching (Baron & Markman, 2000). But deaf and hard of hearing students due to sensory impairment and resulted deprivations of it, can't create suitable and mutual social skills with others and have problems with social and emotional adaptability. (Stinson & Whitmire, 2000).

Polat (2003) found that the psychosocial adjustment of deaf students is related to relationships with their parents who are deaf or hearing and communication methods which are used at school. So to describe this study's finding, it can be said that social skills' growing matter in special education and also in families especially in deaf or hard of hearing students wasn't paid attention to, in another word, deaf or hard of hearing students social interactions were ignored.

This study showed that there is positive relationship between family communications and academic achievement that supports the findings of previous researches such as Calderon, 2000; Moeler, 2000 ; Mitchell & Karchmer, 2004; Powers 2001 that all rely on this point that if family communications have less problems, can be effective on academic achievement of the deaf and hard of hearing students.

Deafness in the family has the potential to affect significantly on family quality of life (Jackson & Turnbull, 2004). More than 90% of deaf children bring stressful experiences in their hearing parents, not only in response to the initial diagnosis, but in adapting to the unique needs of their deaf child (Moores 1987, Quoted of Feher-Prout, 1996). Also changes in responsibilities may be necessary. Moreover, families live within a larger community and within a larger culture. Messages from friends, neighbours, health care workers, the mass media, And the political systems have a major impact on the family (Feher-Prout, 1996) that can be effective on the academic status of deaf and hard of hearing students (Martineau et al., 2010). Also the study reached to this result that just self- esteem has meaningful and positive relationship in the initial correlations for sub-scales of social skills and finally the self – esteem didn't enter to regression predictive equation. The findings of the initial correlations for self-esteem are matched with the obtained results of the studies were done by the other researchers such as: Nantongo, 2008; Attiye, 2006; Brunberg et al. 2007, and Van Gurp, 2001.

Positive self-regard is important for successful functioning in everyday life and the self-evaluation of members of minority groups such as deaf people, however, is challenged by prejudice toward them on the part of the majority society (Jambor & Elliot, 2005). There are a number of coping strategies which deaf people may adopt to manage their everyday lives and protect their self-esteem. Withdrawal from society into a community of similar others can help to protect self-esteem, but at the same time it sets limits on those who adopt this strategy. It is assumed that those deaf individuals who have primarily deaf friends and are highly involved in a Deaf community usually have higher self-esteem. Nevertheless, since they remove themselves almost fully from the hearing society, they also have less chance of improvement or achievement in their life (Jambor & Elliot, 2005).

5. Conclusion

According to the performed study it can be concluded that:

1. The degree of emotional intelligence is related to academic achievement of deaf and hard of hearing students. As the emotional intelligence is more, the academic achievement would be better. This issue reveals the importance of emotional intelligence education and correct control of emotions in deaf and hard of hearing individuals.
2. The meaningless of social skills relations with the academic achievement of deaf and hard of hearing students doesn't mean that the social skills variable isn't important because some of the researchers like Singh and Thukral (2010), Feitosa et al. (2012) believed that there is positive and meaningful relationship between social skills and academic achievement. Also, a better academic function can be caused by social skills' reinforcement (Durlak et al., 2011). The results of this study emphasized on education and families' role and managers of education in related to control of emotions and emotional intelligence. Also education of social skills has impact on the auditory defected students and the other figurative results of this study is paying attention to academic status of these students and also emphasizing on the importance of the society's positive attitude toward these persons.
3. Family communications have impact on the academic achievement of deaf and hard of hearing students. This finding show that if the family communications are associated with great empathy and intimacy, these students are more likely achieved to academic success.
4. Self-esteem is effective on the academic achievement in initial correlations in this study that reveals if self-esteem and self- perception in deaf and hard of hearing people is in the greater degree, academic achievement in these students will progress.

6. Suggestions

According to the results of this study, it is suggested that academic achievement, emotional intelligence, social skills, family communication and self-esteem should be considered by educational systems and families. Also more investigations are recommended in these settings among deaf and hard of hearing people in the future.

7. Limitations

5. According to officials' view of especial education of Isfahan, Deaf and hard of hearing people are weak in the fields that are connected to speech communications. so they are not entered into theoretical fields and have more tendency to 342 technical courses; therefore, in this study, statistical society of the deaf and hard of hearing students who educate in theoretical courses have not been found and statistical society of deaf and hard of hearing students who educate in art-schools, entered to this study.
6. For the reason of existing laws at schools; observation and interview with deaf and hard of hearing students is almost impossible.
7. The lack of availability to students' families for interviewing and collecting more information.
8. The lack of collecting the information of research by the self-students and the lack of availability to other sources of information like interview with their friends and teachers.

References

- Adeyemo, D. A. (2007). Moderating influence of emotional intelligence on the link between academic self-efficacy and achievement of university students. *Psychology and developing societies*, 19(2), 199-213. doi: 10.1177/097133360701900204
- Amado, S. (2005). Emotional well-being of first-year university students: family functioning and attachment styles. A Thesis submitted to the graduate school of social sciences of Middle East technical University.
- Attiye, S. S. (2006). Inclusive Education: A means of Achieving Education for all in Zanzibar. Inside Voices, CBR Workers' stories, A CAN Publication.
- Bar-On, R. (1997). Development of the Bar-On EQ-i: A measure of emotional and social intelligence. Paper presented at the 105th Annual Convention of the American Psychological Association in Chicago, IL.
- Bar-on, R. (2011). The impact of emotional intelligence on health and wellbeing. To be published in Emotional Intelligence. Rijeka, Croatia: In Tech.
- Baron, R. A., and Markman, G.D. (2000). Beyond social capital: How social skills can enhance entrepreneurs' success. *The Academy of Management Executive*, 14(1), 106-116. doi: 10.5465/AME.2000.2909843
- Baumeister, R. F., Campbell, J. D., Krueger, J., and Vohs, K. D. (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Journal of Psychological Science in the public interest*, 4(1) 1-44. doi:10.1111/1529-1006.01431
- Brunnberg, E., Bostrom, L., Mats, B. (2007). School adjustment, self-rated health and substance use in -16 year old hard-of-hearing students: a comparative study: life and health: young people, umu.diva-portal.org
- Calderon, R. (2000). Parental Involvement in Deaf Children's Education Programs as a Predictor of Child's Language, Early Reading, and Social-Emotional Development. *Journal of Deaf Studies and Deaf Education*, 5(2), 140-155. doi: 10.1093/deafed/5.2.140
- Cambra, C. (2006). Feelings and emotions in deaf students. *Journal of Deafness and Educational International*, 7(4), 195-205. doi: 10.1002/dei.10
- Convertino, C. M., Marschark, M., Sapere, P., Sarchet, T., and Zupan, M. (2009). Predicting academic success among deaf college students. *Journal of Deaf Studies and Deaf Education*, 14 (3), 324-343. doi: 10.1093/deafed/enp005
- Cooper, A. & Petrides, K. V. (2010). A psychometric analysis of the trait emotional intelligence questionnaire-short form (TEIQue-SF) using item response theory. *Journal of Personality Assessment*, 92, 449-457. Doi: 10.1080/00223891.2010.497426
- Deniz, M. E., Tras, Z., and Aydogan, D. (2009). An investigation of academic procrastination, locus of control and emotional intelligence. *Educational sciences: theory and practice*, 9, 2, 623-632.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., and Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: a meta-analysis of school-based universal interventions. *Child development*, 82(1), 405-432. doi: 10.1111/j.1467-8624.2010.01564.x.
- Eleby, C. (2009). The impact of a student's lack of social skills on their academic skills in high school, online submission.
- Farrugia, D., and Austin, G. F. (1980). A Study of Social-Emotional Adjustment Patterns of Hearing-Impaired Students in Different Educational Settings. *Journal of American Annals of the Deaf*, 125, 535-541
- Feher-Prout, T. (1996). Stress and coping in families with deaf children. *Journal of Deaf Studies and Deaf Education*, 1(3), 155-165

- Feitosa, F.B., Del Prette, Z. A. P., & Del Prette, A. (2012). Social skills and academic achievement: The mediating function of cognitive competence. *Termas em Psicologia*, 20(1), 61-70
- Furstenberg, K., and Doyal, G. (1994). The Relationship between Emotional-Behavioral Functioning and Personal Characteristics on Performance Outcomes of Hearing Impaired Student. *Journal of American Annals of the Deaf*, 139(4), 410-414
- Goleman, D. (1998). *Working with Emotional Intelligence*. New York: Bantam books.
- Hallahan, D. P., & Kaufman, J. M. (2006). *Exceptional Children: Introduction to special Education* (10th ed.). Needham, MA; Allyn & Bacon.
- Hansford, B. C., & Hattie, J. A. (1982). The relationship between self and achievement/performance measures. *Review of Educational Research*, 52, 123-142. Doi: 10.3102/00346543052001123
- Harris, S. L. (2009). The relationship between self-esteem and academic success among African American students in the minority engineering program at a research extensive university in the southern portion of the United States. PhD thesis, Louisiana State University
- Huber, M., and Kipman, U. (2012). Cognitive skills and academic achievement of children with cochlear implants. 10th European symposium on pediatric cochlear implantation.
- Jackson, C. W., & Turnbull, A. (2004). Impact of Deafness on Family Life: A Review of the Literature. *The Journal of Early Childhood Special Education*, (2), 167-184
- Jambor, E., & Elliott, M. (2005). Self-esteem and Coping Strategies among Deaf Students. *Journal of Deaf Studies and Deaf Education*, 10(1), 63-81. doi:10.1093/deafed/eni004
- Karbach, J., Gottschling, J., Spengler, M., Hegewald, K., and Spinath, F.M. (2012). Parental involvement and general cognitive ability as predictors of domain-specific academic achievement in early adolescence. *Learning and instruction*, 23, 43-51. DOI: 10.1016/j.learninstruc.2012.09.004.
- Karchmer, M. A., Trybus, R. J., & Paquin, M. M. (1978). Early Manual Communication, Parental Hearing Status, and the Academic Achievement of Deaf Students. Paper presented at the annual meeting of the American Educational Research Association, Toronto, Ontario, Canada.
- Koerner, A. F., & Fitzpatrick, A. M. (2004). *Communication in intact families*. In A Vangelisti (Ed.), *Handbook of family communication* (pp. 177-196)
- Kremieyer, K. H., Crooke, P., Drye, C., Egbert, V., & Klein, B. (2000). Academic and Social Benefits of a Co-enrolment Model of Inclusive Education for Deaf and Hard-of-Hearing Children. *Journal of Deaf Studies and Deaf Education*, 5(2), 174-185
- Lockett, C. T., & Harrell, J. P. (2003). Racial identity, self-esteem, and academic achievement: too much interpretation, too little supporting data. *Journal of Black Psychology*, 29(3), 325-336. doi: 10.1177/0095798403254216
- Lukomoski, J. (2007). Deaf college students' perceptions of their social-emotional adjustment. *Journal of deaf studies and deaf education*, 12(4), 486-494. doi:10.1093/deafed/enm008
- Makewa, L. N., Role, E., and Otewa, F. (2012). Parental factors affecting academic achievement of grade six pupils in Kisumu city, Kenya. *International Journal of Asian Social Science*, 2(11), 1984-1997
- Marquez, P. G., Martin, R. P., and Brackett, M. A. (2006). Relating emotional intelligence to social competence and academic achievement in high school students. *Psicothema*, 18, 118-123
- Martineau, G., Lamarche, P., Marcoux, S., and Bernard, P.M. (2001). The effect of early intervention on academic achievement of hearing-impaired children. *Journal of Early Education and Development*, 12(2), 275-288
- Mavroveli, S., and Sanchez-Ruiz, M.J. (2011). Trait emotional intelligence influences on academic achievement and school behaviour. *British Journal of Educational Psychology*, 8(1), 112- 134. DOI: 10.1348/0007-0998.002009.
- Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. Sluyter (Eds). *Emotional development and emotional intelligence: Implications for educators* (pp. 3-31). New York: Basic Books.
- Mc Cain, K. G., Anita, S.D. (2005). Academic and social status of hearing, deaf and hard of hearing students participating in a Co-Enrolled classroom. *Communication disorders quarterly*, 27(1), 20-32.
- Mitchell, R. E., & Karchmer, M. A. (2004). When Parents Are Deaf Versus Hard of Hearing: Patterns of Sign Use and School Placement of Deaf and Hard-of-Hearing Children. *Journal of Deaf Studies and Deaf Education* .9 (2), 133-152. Doi: 10.1093/deafed/enh017
- Moeller, M. P. (2000). Early Intervention and Language Development in Children Who Are Deaf and Hard of Hearing. *Pediatrics*, 106(3), e43. Doi: 10.1542/peds.106.3.e43
- Moore, D. (1987). *Educating the deaf: Psychology, principles, and practices*. Boston, MA: Houghton Mifflin.
- Nantongo, P. S. (2008). The relationship between self-esteem and perceived academic competence, a survey of deaf learners in special schools in Uganda. A thesis Submitted in Partial Fulfilment of the Requirements for the Degree of Master of Philosophy in Special Needs Education. Department of Special Needs Education, Faculty of Education University of Oslo.
- Noller, P., & Fitzpatrick, M. A. (1993). *Communication in family relationships*. Englewood Cliffs, NJ: Prentice Hall.
- Olson, D. H., & Barnes, H. B. (2003). Family Communication Scale. Life Innovations, Inc.
- Oyler, R. F., Oyler, A.L., and Matkin, N. D. (1988). Unilateral Hearing Loss: demographics and educational impact. *Journal of Language, Speech, and Hearing Services in Schools*, Eric, 19(2), 201-210
- Parker, J. D. A., Hogan, M. J., Eastabrook, J. M., Oke, A., and Wood, L. M. (2006). Emotional intelligence and Student retention: Predicting the successful transition from high School to university. *Personality and Individual differences*, 41(7), 1329-1336. doi: 10.1016/j.paid.2006.04.022
- Patrick, N. J. (2008). *Social skills for teenagers and adults with Asperger syndrome: a practical guide to day-to-day life*. Jessica Kingsley Publishers

- Petrides, K. V., & Furnham, A. (2001). Trait emotional intelligence: Psychometric investigation with reference to established trait taxonomies. *European Journal of Personality*, 15(6), 425–448. Doi: 10.1002/per.416
- Petrides, K. V., & Furnham, A. (2003). Trait emotional intelligence: Behavioural validation in two studies of emotion recognition and reactivity to mood induction. *European Journal of Personality*, 17(1), 39–57. Doi: 10.1002/per.466
- Petrides, K. V., Frederickson, N., & Furnham, A. (2004). The role of Trait Emotional Intelligence in academic performance and deviant behavior at school. *Personality and Individual Differences*, 36, 277–293. Doi: 10.1016/S0191-8869(03)00084-9
- Polat, F. (2003). Factors Affecting Psychosocial Adjustment of Deaf Students. *Journal of Deaf Studies and Deaf Education*, 8(3), 325–339. Doi: 10.1093/deafed/eng018
- Potter, D., Roksa, J. (2013). Accumulating advantages over time: family experiences and social class inequality in academic achievement. *Social science research*, 42(4), 1018–1032
- Powers, S. (2003). Influences of Student and Family Factors on Academic Outcomes of Mainstream Secondary School Deaf Students. *Journal of Deaf Studies and Deaf Education*, 8(1), 57–78. doi: 10.1093/deafed/8.1.57
- Prasitthipab, S. (2008). Family Communication Patterns: Can They Impact Leadership Styles? Masters Theses & Specialist Projects. Paper 16. <http://digitalcommons.wku.edu/theses/16>
- Qi, S., Mitchell, R. E. (2012). Large-scale academic achievement testing of deaf and hard-of-hearing students: past, present and future. *Journal of Deaf Studies and Deaf Education*, 17(1), 1–18. doi: 10.1093/deafed/enr028
- Richardson, J. T. E., & Woodley, A. (2001). Approaches to studying and Communication preferences among deaf students in distance education. *Higher education*, 42(1), 61–83. doi: 10.1023/A:1017520102705
- Rieffe, C., & Terwogt, M. M. (2006). Anger Communication in deaf children. *Cognition & Emotion*, 20(8), 1261–1273.
- Riggio, R. E. (1989). *Social skills inventory manual*. Palo Alto, CA: Consulting Psychologists Press;
- Rubin, R. A. (1978). Stability of self-esteem ratings and their relation to academic achievement: A longitudinal study. *Psychology in the Schools*, 15(3), 430–433. DOI:10.1002/1520-6807(197807)15:3<430::AID-PITS2310150323>3.0.CO;2-2
- Rutter, M, Maughan, B. (2002). School Effectiveness Findings 1979–2002. *Journal of School Psychology*, 40(6), 451–475. DOI: [http://dx.doi.org/10.1016/S0022-4405\(02\)00124-3](http://dx.doi.org/10.1016/S0022-4405(02)00124-3)
- Schiefele, U., Krapp, A. and Winteler, A. (1992). Interest as predictor of academic achievement: A meta-analysis of research. In K.A. Renninger, S. Hidi and A. Krapp (Eds). *The role of interest in learning and development* (pp. 183–212). Hillsdale, NJ: Erlbaum.
- Singh, S., and Thukral, P. (2010). Social maturity and academic achievement of high school students. *Canadian Journal on Scientific and Industrial Research*, 1, 6–7.
- Steedly, K., Schwarz, S., Levin, M., & Luke, S. (2008). Social skills and Academic Achievement. *Evidence for Education*, 3(2). Retrieved from <http://nichcy.org/wp-content/uploads>
- Stinson, M., & Whitmire, K. (2000). Adolescents who are deaf or hard of hearing: A social psychological perspective on communication and educational placement. *Topics in Language Disorders*, 20, 58–73.
- Sunbul, A. M., & Aslan, Y. (2007). *The Relationship between Emotional Intelligence and achievement among 1st and 4th grade Faculty Students*. Seluk University BAP (Scientific Research Project) Coordination Council.
- Van Gorp, S. (2001) Self-Concept of Deaf Secondary School Students in Different Educational Settings. *Journal of Deaf Studies and Deaf Education*, 6(1), 54–69. doi: 10.1093/deafed/6.1.54
- Walker, H. M. (1983). *The ACCESS program: Adolescent curriculum for communication and effective social skills: Student study guide*. Austin, TX: Pro-Ed.
- Walker-James, D., Jurich, S., & Estes, S. (2001). *Raising Minority Academic Achievement: A compendium of education Programs and practices*. Washington, DC: American Youth Policy Forum paper.
- Yang, M. L., & Tam, T. (2004). Mental Health Inequality in the Adolescent Society: Family Background and the Paradox of Academic Success in Taiwan. *Academia Sinica, Taiwan*.