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Undergraduate

# Acceptance of Deaf Children in Mainstream Schools and their Academic Success

## A Literature Review

By Karen Lara

### **Abstract**

Deaf and hard-of hearing students have been thrown into public schools, in a practice known as “mainstreaming,” in the hope that inclusion will lead to better academic performance. While most people would assume that mainstreaming is beneficial for deaf and hard-of hearing students, little is known about their academic success. Current information claims that when D/HH students are accepted in mainstream schools they have better academic success, while other research claims that acceptance has no effect on the academic success of deaf and hard-of-hearing students. This article will identify the problems in the available studies and show why there is yet no clear answer on whether or not acceptance of deaf and hard-of-hearing students by their hearing peers and teachers has any effects on their academic success. The answer is not clear because the existing research is limited in availability and flawed in method.

### **Introduction**

In 1975, Congress passed the Public Law (PL) 94-142 under the Education of all Handicapped Children Act; now known as the Individuals with Disabilities Education Act (IDEA). IDEA was made to provide disabled students an equal education alongside their peers

without disabilities (Foster, Long, & Snell, 1999; Luckner & Muir, 2001). The act resulted in an 83% increase in attendance of deaf and hard-of-hearing students in public schools (Luckner & Muir, 2001). The increase of deaf and hard-of-hearing (D/HH) students in mainstream schools prompted researchers to look at the success of the integration. For the purposes of this review “mainstream” will refer to general education public schools, “integration” will refer to the attendance of a D/HH student at a mainstream school, and “inclusion” will refer to the acceptance of the D/HH student by their peers, teachers, and school setting. Most research involving the integration of D/HH students in mainstream schools focuses on inclusion. The results show that the D/HH students are only integrated but not included in the mainstream school. The available research is limited and contains flaws that do not allow for a conclusion on whether or not the acceptance of D/HH students by their peers and teachers has an effect on the D/HH student’s academic success.

## **Methods**

The research available has proven ineffective due to the methods researchers have used. Many of the articles use qualitative methods such as questionnaires, surveys, and peer ratings to gather their data. Teachers’ nominations and peer ratings were used to select the D/HH student that would be interviewed. In Martin & Bat-Chava’s (2003) study, parents were interviewed as the method of research. The parents involved in this study were the ones who provided all the information about their D/HH child, such as their child’s peer relationships. Information given by the parents does not reflect the feelings and thoughts of the D/HH children. In another case, hearing students ages 10-20 were the ones who were evaluating the D/HH students on 19 different items (Cambra, 2002). That same study also resulted in negative evaluations from the hearing students on the D/HH student. The opinions of hearing students who are not accepting of D/HH students being integrated in their classroom is not reliable data. The methods of research used in the studies are questionable and the results cannot be seen as reliable.

The initial number of D/HH participants in the studies is small, which makes the results invalid (Wauters & Koors, 2007; Cambra, 2002; Nunes & Pretzlik, 2001; Hung & Paul, 2006; Angelides & Aravi, 2007; Powers, 1999; Wolters et al., 2011). A small number of D/HH students compared to a large number of hearing students defeats the purpose of the study. Wolters et al. (2011) include 672 hearing students and only 87 D/HH students in their research where the 87 D/HH students received peer ratings and nominations from the 672 hearing students. Similarly, Cambra (2002) had 792 hearing students and only 34 D/HH students participate in her research. The opinions and views of the hearing students overpower those of the D/HH students because they have been outnumbered.

Researchers did not provide enough detail to allow other researchers to replicate their results. As suggested by Stinson & Antia (1999), not all of the research settings involve full integration, but integration in particular classes such as art or physical education. Specific definitions in the use of terms such as integration, inclusion, and mainstreaming have slightly different meanings according to each article. For example, Hyde et al. (2005/2006) claim that inclusion is the outcome of schools attempting to provide for all students needs, while Stinton & Antia (1999) suggest integration to be the result of inclusion. Their articles, among others, share different views on the terms and how they use them when referring to the placement of D/HH students in mainstream schools and their acceptance.

The results of the studies under discussion are not reliable and applicable to all D/HH students because only elementary school students were used. The young children, both hearing and D/HH were asked simple questions. In one study the hearing children were asked to respond to peer ratings by pointing to a face ranging from happy to sad to describe how much they liked playing with the D/HH child mentioned (Nunes & Pretzlik, 2001). Using faces for the children to point to is unreliable and the children can point to the face that they prefer. Younger children are

also more likely to favor or give a higher peer rating to a child they play with more often.

Interviewing a 7 year old and interviewing a 12 year old has different results. Cambra (2002) had older participants in her research ranging from ages 10-20 who show that age does matter. In Cambra's (2002) results the hearing students could provide reasons for why they would not accept a D/HH student in the classroom, while a younger child cannot provide reasons for not accepting a D/HH child. This difference in response due to age shows how the results that most people believe proves acceptance of D/HH students in mainstream schools is not applicable to all ages.

## **Results**

Not only were the methods in the research flawed, but the results are misleading. There are equal numbers of studies with favorable and unfavorable results. Some research shows that students are accepted in mainstream schools while other research contradicts these findings. Schools have had to integrate D/HH students but it is still unclear whether or not D/HH students are academically successful in mainstream schools.

## **Favorable results**

Research shows that mainstreaming is beneficial for D/HH students. D/HH students can be academically successful as long as there is administrative support, resources to meet their needs, scheduled time for teachers to receive training and time for teachers to make adaptations to their lessons (Reed et al., 2008). Teachers that were interviewed said that they changed their lessons in order for the D/HH to be included in their classroom. The teachers changed their lessons by simplifying the texts, using fewer words, and using an overhead projector instead of writing on the board (Angelides & Aravi, 2006). Simple changes in their teaching methods made a difference in the education of D/HH students. Other methods used by an interviewed teacher

were to monitor her D/HH students' progress regularly and reminded them of deadlines and to finish their work (Luckner & Muir, 2001). Other teachers found that calling on to answer questions or teasing the D/HH students was a successful method of inclusion. The teachers in the studies with favorable results showed they care and tried to include the D/HH student in their classroom.

The hearing students do not mind having D/HH students in their classrooms. Girls were more likely than boys to show positive attitudes to D/HH students and older hearing students were more accepting of D/HH students than the younger hearing students (Hung & Paul, 2006). The hearing students also say that they are willing to help the D/HH student with assignments and clarify anything they didn't understand. D/HH students discussed the importance of being accepted by their peers. When the D/HH students had close friends they were able to go to them for help or get specific examples (Luckner & Muir, 2001). Being accepted by the hearing students, the D/HH students have a greater chance of academic success.

## **Unfavorable results**

Unfavorable results show that mainstream education is too much for D/HH students to handle. The school only integrates the D/HH students but fails to include them in the classrooms. The school must provide an environment in which the integrated D/HH student can achieve academic success. The 1975 IDEA act, as well as other acts around the world, tells the schools to provide adequate educational services to D/HH students, but the schools have remained unchanged (Freire & Cesar, 2003). The schools fail to provide the teachers with the skills needed to integrate D/HH students in their classrooms (Freire & Cesar, 2003). Teachers feel incapable of teaching children with a learning disability will develop negative feelings toward the D/HH student (Freire & Cesar, 2003). Since the schools do not provide teachers any training it is up to the teacher to include the D/HH student in their classroom.

Hearing students reported that they did not like having D/HH students in their classroom. Older hearing students view integration negatively, they feel that D/HH students are better off at a special school where they can learn at their own pace (Cambra, 2002). It can be assumed that the hearing students were not talked to before the integration and that they simply do not know how to act around a D/HH student and that is why they fail to accept the D/HH student. Nunes & Pretzlik (2001) interviewed hearing students and asked them how they communicated with the D/HH students and received answers such as “I do nothing, I don’t know what to do to them if they can’t hear’ or ‘I try to make them my friends but sometimes they don’t listen, sometimes they...I just forget about it’”(p.133). Martin & Bat Chava (2003) found in their results that only 25.7% of the D/HH students were comfortable asking their hearing peers to repeat verbal statements if they didn’t understand something. If a D/HH student was not able to understand what was said and is too afraid to ask for repetitions they will miss a part of the lesson. Integration is difficult for the D/HH children and is not made easier when they are not accepted in the school by their hearing peers and teachers.

## **Limitations**

The articles reviewed all shared common limitations. The biggest mistake done by all was the small sample size (Wauters & Koors, 2007; Cambra, 2002; Nunes & Pretzlik, 2001; Hung & Paul, 2006; Angelides & Aravi, 2007; Powers, 1999; Wolters et al., 2011). Researchers only had a few D/HH students, but had a majority of hearing students. The purpose of all the articles revolved around D/HH students, but they did not include many D/HH participants in their research. The D/HH student sample size was small because the schools where the researchers based their research on had a limited number of D/HH students enrolled. It is suggested that future researchers look for schools with a larger D/HH population and try to have an equal number of D/HH and hearing participants.

Another limitation shared by many of the articles was that the participants tended to be in elementary school, only a small number of the articles focused on an older age group of students. Future research needs to focus on other age groups other than the elementary school age. The little research done on the older age group showed that they have different views about integration compared to the younger children who do not have an opinion. Looking at the academic success of older D/HH students will be helpful because they can share how accepted they have felt in mainstream schools. D/HH college students can also provide new information that can show if integration is beneficial.

All the research done on D/HH integration and inclusion has been done by the same researchers. The articles looked at do not have different viewpoints causing most of the research to reach similar conclusions. New researchers should conduct research in the field and contribute their perspectives. The addition of new researchers in the area of D/HH students can provide a different conclusion or can prove past research is correct. The researchers also cite a lot of outdated data to support their findings (Reed et al., 2008; Hung & Paul, 2006; Foster et al., 1999; Stinson & Antia, 1999; Kluwin et al., 2002; Vermeulen et al., 2011; Martin & Bat-Chava, 2003; Wolters et al., 2011; Luckner & Muir, 2001). The chronic use of data before the year 1999 by researchers shows how little research has been done. It also shows how new research on the D/HH students is needed.

## **Conclusion**

Despite how little is known about the success of integration, integration of D/HH continues to be pushed. What is known about the acceptance and academic success of D/HH students has been provided by teachers and opinion based research methods. Taken as a whole, the current research is contradictory. There are equal amounts of studies with favorable and unfavorable results. Although the available research does provide some insight into the field,

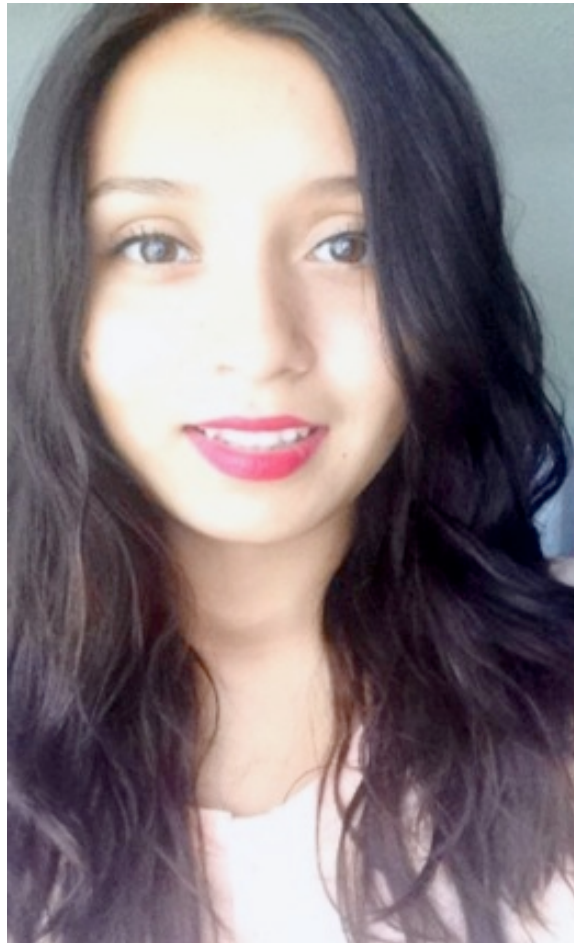


more research should be conducted. New research should avoid the small D/HH participant sizes, the same qualitative research methods and young age group. Learning more about the effectiveness of integration and the inclusion of D/HH students in mainstream schools can help provide a better education for the D/HH population and help them reach academic success.

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