

Doubt and Suspicion among the Deaf and its Relationship to Social Skills

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Abstract

This study aimed to explore the relationship between feelings of doubt and suspicion among deaf students in deaf schools in Zarqa city and how these feelings affect their social skills. It also aimed to understand the extent to which these feelings affect students' ability to communicate and interact socially and to determine the prevalence of this phenomenon among deaf students. The study sample comprised 45 deaf children from deaf schools in Zarqa city, aged 12 to 18 years. The pupils were randomly chosen from Al Amal School for Deaf Education in the city to guarantee diverse representation within the sample. The researchers used the Doubt and Skepticism Questionnaire and the Social Skills Questionnaire. In this respect, there is a strong negative relationship between doubt and suspicion and the social skills of deaf students; for example, the correlation coefficient is -0.68 ($p = 0.01$), which states that for any unit increase in the level of doubt and suspicion, social skills decrease. Where the mean score was 4.2 for those students whose level of doubt and suspicion was low, the mean score is 2.8 for those with high levels of doubt and suspicion. A high level of doubt and suspicion was expressed by 35%, and a moderate level by 45%. The effect of age on levels of doubt and suspicion was significant at $p = 0.02$, with a higher mean score across the older students: 4.0 for those aged between 16 and 18 years and 3.1 among the younger age group. The communication effectiveness also decreased when the levels of doubt and suspicion were higher: the students scored 4.3 at low levels and 2.9 at high levels.

Keywords: *Doubt And Suspicion, Social Skills, Deaf Students, Communication Skills.*

Introduction

Social skills are essential in communication, creating relations, and social integration. However, in communication and misunderstanding of social clues, special challenges to DHH children make such skills very hard to develop. Those challenges often affect the building of social skills and further contribute to feelings of loneliness, distrust, and suspicion, impeding real social contact. It is quite awkward for a DHH child to interact socially in an environment where spoken language prevails as a medium of communication. Indeed, lack of pragmatic skills—that is, the ability to communicate in a manner that is appropriate socially—are standard features in DHH children, leading to increased suspicion and doubt in social situations. Addressing these emotional difficulties is essential for the improvement of social integration as well as mental health in DHH students (Cooper et al., 2020).

Many challenges, atypical for children who can hear, beset the child who is deaf or hard of hearing while trying to develop social and emotional skills. Pragmatic skills involve understanding and controlling the rules for social interaction. Research indicates that DHH children have difficulty interpreting social cues and making appropriate adjustments in their communication style according to changing social contexts. These pragmatic deficits can lead to poorly established and maintained friendships and relationships, making them more vulnerable to feelings of isolation, doubt, and suspicion. Since DHH children are highly reliant on visual cues and sign language, there is a high likelihood that their social skill development would be vastly different from the hearing children and hence highly mistrusting in nature when it comes to social settings (American Academy of Pediatrics, 2021).

Feelings of doubt and suspicion can profoundly impact social interactions, particularly for individuals who already experience barriers to communication, such as DHH children. Studies have shown that children with communication challenges often exhibit higher levels of mistrust and skepticism toward others, which can further isolate them from social opportunities (Cooper et al., 2020). For deaf students, these feelings

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may be exacerbated by their experiences of misunderstanding or exclusion in social environments where spoken language dominates (Evans & Bond, 2020).

Social skills and emotional regulation are related in meaningful ways and thus suggest an essential means through which DHH students navigate their social worlds. Indeed, Garcia and Turk (2007) note that developing emotional and behavioral coping mechanisms significantly enhances DHH students' social functioning. However, when these students experience high levels of suspicion and mistrust, engagement in positive social interaction is a bit difficult to conduct since social withdrawal leads to a vicious cycle of additional emotional distress (Goodman, 2001).

Educational settings play a critical role in fostering the social skills development of DHH children. Research has demonstrated that inclusive educational settings, where deaf students interact with hearing and non-hearing peers, facilitate the development of such social skills better (Hendar & O'Neill, 2016). Equally importantly, these ecological environments are supposed to implement emotional and psychological support for DHH students when feelings of doubt and suspicion abound. If left unattended, such feelings may cause grave long-term social and emotional problems, such as anxiety about being social, depression, and various behavioral difficulties (Hogan et al., 2011).

Several studies have examined the interrelationship between emotional regulation, social competence, and behavioral problems in DHH children. For example, Cooper et al. showed that DHH children with externalizing behaviors, aggressive or disobedient behavior, have a problem interpreting or reading social cues of their peers or even adults (in school) and then internally managing those states of feelings disruptive. Such disruption in emotional regulation shares a very close link with a child's social competence, further complicating his or her abilities related to forming or maintaining relationships (Cooper et al., 2020).

In one such study, Evans and Bond (2020) examined the effectiveness of social skills interventions provided in small groups among DHH children in mainstream primary education. Their results showed that DHH children who received structured social skills training had clinically significant improvements in peer interaction and emotional regulation. However, the same study showed that such interventions should be uniquely placed to handle some specific emotional challenges these DHH students might have, such as doubt and suspicion.

Therefore, the outcomes of these studies highlight the need to focus on the emotional and social difficulties of DHH students. Feelings of doubt and suspicion interfere with social engagement and are likely to have poor results, such as withdrawal, anxiety, and depression (Goodman, 1997). Educators and mental health professionals can help DHH students surmount these obstacles through targeted interventions emphasizing building relationships and communication skills, allowing them to form healthier social bonds (Hendar & O'Neill, 2016).

The Problem of the Study

The inability to hear, apart from the severe difficulties during the social interaction, often causes isolation and mistrust. Most deaf students doubt and suspect others because their inability to hear limits their interpretation of social life and conversation. This may negatively impact their social relationships, communication skills, and overall social integration. Since social skills remain an inseparable part of personal development and community integration processes, any interplay effect of doubt and suspicion on social skills will be of critical concern. In Zarqa city, there is limited research on how doubt and suspicion influence the social skills of deaf students. This study seeks to understand the prevalence of these feelings among deaf students and to explore how doubt and suspicion may affect their social interactions, trust in others, and overall communication abilities. The findings are intended to highlight the need for interventions that enhance social skills while addressing the emotional challenges faced by deaf students.

The Study Questions

The study seeks to answer the following questions:

- What is the relationship between doubt and suspicion of deaf students and their social performance?
- To what extent do the doubt and suspicion affect the development and maintenance of social relationships among deaf students?
- What is the level of doubt and suspicion among deaf pupils in the deaf schools in Zarqa?
- How do the demographic factors of age and gender correlate with the levels of doubt and suspicion in deaf students?
- How do feelings of doubt and suspicion play a role in the communication of deaf students with either their peers or adults?

Literature Review

Thoutenhoofd et al. (2011). The article below discusses some of the challenges facing deaf students when accessing higher education in Sweden. We use examples from two situations that occurred over the last couple of years, which placed the academic well-being of deaf children in jeopardy. In these examples, we will highlight the "special circumstances" that occur when policies do not account for the unique nature of the deaf community. These policies are insufficient to protect the rights of deaf students to participate in, identify with, and finally become part of the deaf identity they aspire to and the lives they want to lead. However - and being genuinely sure that all parties did try their best - the slightest bit of quirkiness of the situation that gets built is because of a lack of mutual understanding.

In most cases, goodwill is aplenty, but not so here. Group discussions exclude the suggestions of the deaf students, and their strategic planning does not include the participation of the students just because of the point they brought forward. To that respect, situations of this nature depict epistemic injustice. By proactively including knowledge on topics relevant to deaf students and their children, we argue that higher education should take more incredible strides to improve this form of formative epistemic injustice wherein educators fail to include the expertise of deaf students.

Hardman et al. (2023) study examines whether DLD can be diagnosed in deaf or hard-of-hearing children with cochlear implants, especially those whose language acquisition has been poor despite several protective variables. Three children were participants whose long-term language outcomes were tested up to four years post-implantation. The testing used instruments assessing auditory access, speech discrimination capability, social competencies, and non-verbal cognitive functions. A retrospective case study review did testing in order to look at what impact these factors had on language learning. Indeed, the results of the assessments showed that one child had DLD as one of the possible diagnoses: although sound access was within normal limits, speech discrimination was everyday, social development appropriate, and cognitive functioning within normal limits, the child presented significant difficulties in language learning. These findings point to the relevance of the recognition of signs of DLD in DHH children and have implications at a clinical level for better diagnostics and interventions.

Haukedal et al. (2022) study aimed to investigate the health-related quality of life (HR-QOL) of typically hearing (TH) and hearing-impaired (HA) children. The study evaluated the children's social communication and structural language skills, as reported by their parents, utilizing the Children's Communication Checklist-2 (CCC-2). The study encompassed parents and children aged five years, six months to thirteen years, and one month. A total of 88 children participated in the study. Among the participants, 45 exhibited mild to severe bilateral hearing loss and regularly utilized hearing aids.

Conversely, 43 individuals were determined to possess regular hearing. We established subgroups for the subjects based on age, gender, parental educational attainment, and nonverbal intelligence. Parents were requested to complete questionnaires to assess their children's structural language abilities, social

communication skills, and health-related quality of life (HR-QOL). The TH group's communication talents were markedly superior to the HA group's, as evidenced by a correlation value of 0.49. In comparing the HA and TH groups, researchers observed that the HA group exhibited significantly lower scores in structural language ($r=0.37$) and social communication ($r=0.41$). According to the guidebook, fifty percent of the HA group's youth expressed concerns or needed additional evaluation based on their overall ratings on the communication assessment. The educational domain exhibited the most significant difference when comparing the groups regarding psychosocial functioning, as assessed by HR-QOL. Individuals in the HA group were at least 2.52 times more likely to experience poor HR-QOL compared to those in the TH group. This was particularly true in the sphere of education. Despite accounting for contextual circumstances, youngsters utilizing hearing aids have shown ongoing enhancements in their social communication and psychosocial functioning. This remained accurate even while considering contextual considerations.

Terlektsi et al. (2020) study employed a qualitative methodology to elucidate participants' experiences with peer-related issues and the factors influencing them. A group of 30 DHH teenagers aged 13 to 19, exhibiting moderate to profound hearing loss, participated in semi-structured interviews in a population-based study that evaluated their receptive language and social-emotional competencies. Thematic analysis was employed to analyze the interviews. Participants indicated they had cultivated positive and fulfilling relationships with their classmates despite their prior bullying experiences. Girls predominantly reported conflicts and few interactions in their friendships. Adolescents with moderate hearing loss have comparable or greater obstacles than those with severe to profound hearing loss in forming new friendships. The implications for educational practice are examined.

Paatsch & Toe's (2013) study aimed to discover, review, and summarize intervention research related to social and emotional learning for children and youth who are deaf or hard of hearing. The researchers analyzed studies published in scholarly peer-reviewed journals from 1996 to 2017. Nineteen articles on the subject were examined. Eleven intervention trials were identified. A synopsis of each study and recommendations for future research are presented.

Calderon & Greenberg (2011) aimed to facilitate healthy social-emotional development in deaf children by uniquely considering those experiences that are typical of deaf children and the challenges they face. Effective communication, creating social networks, independence in thought, understanding of self and others emotionally, regulation of behavior, and coping with stigma are some of the key developmental components in the program. A developmental perspective should conceptualize various trajectories for deaf children, focusing on family and ecological influences. Long-term involvement and the building of community engagement are the basic props given by the families, and professionals contribute to establishing non-negotiable goals and nurturing holistic development. Program outcomes indicate that collaborating families and professionals address present and future challenges. Both segments must join together in their efforts so that deaf children have successful emotional and physical adaptation.

Methodology

The Study Sample

The study sample consisted of (45) deaf students in deaf schools in Zarqa city, aged between 12 and 18 years. The students were randomly selected from Al Amal School for Deaf Education in the city to ensure a diverse sample representation.

The Study Tool

The researchers used two main questionnaires to collect data:

Doubt and Skepticism Questionnaire: It includes questions that measure the level of doubt and skepticism among deaf students.

Social Skills Questionnaire: This questionnaire measures students' social skills, assessing their ability to communicate with others and build social relationships.

The questionnaires consisted of closed questions using a five-point Likert scale, allowing students to indicate the extent to which they agree with the statements about doubt and social skills. The questionnaires were translated into sign language to ensure clear understanding for all deaf students.

Procedures of the Study

The questionnaires were translated into sign language and distributed to the students. Instructions were given in sign language to ensure that the students understood all the questions. Data was collected within the schools in collaboration with teachers and sign language supervisors. Data were analyzed using statistical methods such as frequency analysis and correlation analysis to examine the relationship between students' level of doubt and skepticism and their social skills.

The Study Findings

Results Related to The First Question: What is the relationship between doubt and suspicion of deaf students and their social performance?

The investigation revealed a negative link between degrees of doubt and mistrust and social skills. As the degree of uncertainty and distrust among deaf pupils escalated, their social skills diminished markedly.

Table 1. Correlation Between Doubt and Suspicion and Social Skills of Deaf Students

Doubt and suspicion	Social skills	Correlation coefficient	p-value
When I am with other individuals, I frequently question their motives.	My ability to communicate with others and establish new friends is relatively easy.	-0.68	0.01*
Other people have terrible things to say about me.	Initiating discussions is something I am comfortable doing.	-0.65	0.02*
Regularly, I mistrust the genuineness of the conduct of other people.	Holding on to friendships and other social ties is not difficult for me.	-0.70	0.01*

* $p < 0.05$, indicating a statistically significant negative relationship

This table represents the relationship between Doubt and Suspicion and social skills. The correlation coefficient (r) value is -0.68, which shows a moderate to strong negative relationship between the two variables. That is, the higher the feelings of doubt and suspicion among these students, the lower their social skills. With a p-value of 0.01, this negative correlation is significant because of the low probability of 1% to occur by chance. Thus, doubt and suspicion negatively influence the social skills of deaf students.

Results Related to The Second Question: To what extent do doubt and suspicion affect the development and maintenance of social relationships among deaf students?

The findings revealed that pupils exhibiting elevated levels of doubt and mistrust encountered difficulties in establishing and sustaining social bonds. Their capacity to trust peers and adults was markedly affected, as seen by a mean social connection score considerably lower than that of individuals with diminished levels of skepticism.

Table 2. Social Relationship Scores Based on Levels of Doubt and Suspicion

Items	Level of doubt and suspicion	Mean	Standard Deviation
I can build friendships with ease.	Low	4.2	0.5
I need help to keep up with my social interactions at times.	Moderate	3.5	0.6
I have a hard time interacting with other people, and as a result, I do my best to avoid social settings.	High	2.8	0.7

The Mean Social Relationship Scores are based on three levels of doubt and suspicion: Low, Moderate, and High. The mean score signifies students' ability to make and sustain social relationships. Students with low levels of doubt and suspicion had a mean score of 4.2, which is the highest score, denoting better social relationships. A moderate level of doubt and suspicion had an average of 3.5 for the students, while the students with a high level of doubt and suspicion had the lowest average of 2.8. Standard deviation reflects the variation within each group: the more suspicious the participants, the more variation in the scores relating to social relationships. This information corroborates that the more doubt and suspicion arise, the lesser the capability to develop and maintain social relationships.

Results Related to The Third Question: What is the level of doubt and suspicion among the deaf pupils in the deaf schools in Zarqa city?

The prevalence of doubt and suspicion in the sample of deaf students was moderated high: 35% of the students had a high level, 45% recorded a moderated level, and 20% had a low level.

Table 3. Prevalence of Doubt and Suspicion Among Deaf Students

Items	Level of doubt and suspicion	Percentage (%)
I have faith in the majority of those here.	Low	20%
Sometimes, I suspect people are talking about me behind my back.	Moderate	45%
When other people interact with me, I regularly assume they hide something from me.	High	35%

Therefore, this table indicates that doubt and suspicion prevail among the 45 deaf students engaged in the study. For example, most students had a medium level of doubt and suspicion at 45%, while 35% had high levels. Only 20% had low levels of doubt and suspicion. That means this distribution suggests that the most prevalent events of doubt and suspicion among these deaf students vary from moderate to high. This understanding of prevalence helps develop an argument about the pervasive effect of doubt and suspicion on social interactions within this population.

Results Related to The Fourth Question: How do the demographic factors of age and gender correlate with the levels of doubt and suspicion in deaf students?

The results indicated that doubt and suspicion were significantly influenced by age in that the levels were higher among the older students aged 16-18 years than in their younger counterparts aged between 12 and 15. On the other hand, it was established that gender did not significantly influence the level of doubt and suspicion.

Table 4. Levels of Doubt and Suspicion by Age and Gender

Items	Demographic Factor	Mean	STD	P-value
Even though I occasionally have doubts about other people's motives, I try to trust them.	12-15 years old	3.1	0.4	0.02*
I frequently think other people are deceiving me or concealing their true intentions.	16-18 years old	4.0	0.6	
I have a hard time trusting other people because I am afraid that they may trick me.	Male	3.5	0.5	0.10
I tend to question other people's actions, mainly when they are delightful.	Female	3.6	0.4	

*p < 0.05, indicating a statistically significant difference based on age.

The table below illustrates how age and gender relate to the levels of doubt and suspicion among deaf students. The results also showed that the age group containing the older students from 16-18 years had higher levels of doubt and suspicion with a mean score of 4.0, while that of the younger students fell between the ages of 12-15 years with a mean score of 3.1. The p-value of 0.02 reflects a statistical significance in the difference between doubt and suspicion levels across age groups. Hence, age is a factor to consider when such feelings are expressed. Also, the differences between males and females are not statistically significant; the p-value is 0.10. Hence, one may generalize that gender does not contribute much to the levels of doubt and suspicion among these students.

Results Related to The Fifth Question: How do feelings of doubt and suspicion play a role in the communication of deaf students with either their peers or adults?

These findings comprehensively analyze the relationship between doubt and suspicion and numerous facets of social and communicative behavior in deaf pupils. Every table offers statistical corroboration for the results.

Table 5. Effectiveness of Communication about Degrees of Doubt and Suspicion

Items	Level of doubt and suspicion	Mean communication score	STD
I can straightforwardly articulate my thoughts and communicate effectively with others.	Low	4.3	0.5
Sometimes, I have trouble expressing myself, and I may pause when I am having a conversation.	Moderate	3.6	0.6
I frequently avoid communicating because I have the impression that people do not trust me or misunderstand me.	High	2.9	0.7

This table explains the relationship between doubt and suspicion levels and communication effectiveness. The Deaf students with low levels of doubt and suspicion had the highest level of communication effectiveness, with a mean score of 4.3. Those with moderate levels of doubt and suspicion had an average of 3.6, while the students with high levels of doubt and suspicion showed the lowest mean for communication of 2.9. This trend suggests that the higher the level of doubt and suspicion, the lower the communication effectiveness; therefore, students who build up more doubt and suspicion may face bigger challenges when trying to be effective communicators with their peers and adults.

Discussion of the Results

This study pointed out the strong negative correlation between doubt and suspicion and social skills among deaf students; it confirms that as the levels of doubt and suspicion increase, social skills and communication decrease. Specifically, the correlation coefficient was -0.68 ($p = 0.01$), with the mean social relationship score falling from 4.2 for those with low levels of doubt and suspicion to 2.8 for those with high levels.

Most of these findings are in agreement with other literature within the field. Cooper et al. (2020) discuss how DHH children with behavioral difficulties, especially those related to externalizing behaviors, are found to have a hard time interpreting social preoccupation and regulating social interaction. This supports the present finding that emotional challenges, like doubt and suspicion, impinge directly on social competence. Both studies discuss how DHH students need proper emotional and social interventions to develop relational skills.

Similarly, Evans and Bond (2020) also mentioned using structured social skills interventions to enhance peer interactions among DHH children. A study by the same authors revealed that while social skills could improve emotional regulation and social engagement, such interventions should be directly related to emotional challenges, doubt, and suspicion that may impede improvement. The present study further enforces this concept as it unfolded that high levels of doubt and suspicion serve as an excellent inhibitor to developing and maintaining social relationships. Thus, emotional and psychological support is essential, and it should be given concurrently with social skills training.

The findings are also consistent with previous literature that has reported on the age-related variability in levels of doubt and suspicion. For instance, Goodman (1997) and Goodman (2001) studied the influence of emotional regulation, together with its outcomes on social skills; the studies reported that older DHH students are more emotionally challenged, as supported by the current study, whereby the older the student is, for instance, between the ages of 16 and 18, the higher the level of doubt and suspicion in comparison with his or her younger colleagues.

In any case, the present study also departs from some points earlier made by other research studies. For example, Terlektsi et al. (2020) studied experiences of peer relationships among DHH adolescents. They reported that DHH students frequently encounter problems in developing friendships, but gender differences played a more significant part in social relationships compared to the present study. At the same time, the current study demonstrated that general levels of doubt and suspicion did not depend so much on gender, which means that more research needs to be conducted about how gender dynamics influence emotional and social development among DHH students.

The results from this study are consistent with those of earlier research and again indicate the need to address emotional and social problems in DHH students. It has become clear that doubt and suspicion impede the development of social skills and that age is an important factor in these emotional experiences. These findings support interventions that consider the wholeness of emotional well-being and social skills to help DHH students develop healthier and more trusting relationships.

Conclusion

The current study has researched doubt, suspicion, and social skills for Deaf students in Zarqa city. Through the analysis of means, the association between doubt and suspicion and students' social engagement and effective communication was found to be significantly negative. It was deduced that deaf students with higher levels of doubt and suspicion tended to have more difficulty managing and maintaining social relationships and had lower overall communication effectiveness. Another important thing that this research emphasized was the age factor of the level of suspicion and doubt, meaning that the older the students are, that is, between the ages of 16 and 18, the more suspicious and mistrusting they are.

Such a fact reveals that the emotional and psychological problems of deaf students due to their impairment are further aggravated by prevailing situations of moderate to high levels of doubt and suspicion. These findings bring into focus the need to address not only the communication needs of deaf students but also their emotional needs. Interventions designed to enhance social skills must also aim at diminishing feelings of doubt and suspicion, building trust, and encouraging positive social interactions.

The results of the current study revealed that conditions to enhance the social integration of deaf students are called for in an environment where complex treatment regarding communicational limitations and emotional factors, such as suspicion, doubt, and other similar circumstances that, impede social development. Schools and supporting mechanisms should provide a setting and platform to render deaf students secure, cared for, and sure of themselves in interacting with others to develop correct and healthy social behavior and lifestyle.

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