

Psychosocial Adjustment among Profoundly Deaf Children Aged 10 to 13 Years

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Abstract:

The present study aimed to explore the level of psychosocial adjustment among deaf children (profoundly deaf) aged between 10 and 13 years. It also sought to examine the differences in the level of psychosocial adjustment according to the gender variable. The study sample consisted of 30 deaf children of both sexes enrolled at the School for Young Deaf Children in Baraki, Algiers. The descriptive method, which is appropriate for the nature of the study topic, was employed.

To collect data, the Study Adjustment Scale by Abdullah Nawaf was used, focusing on its psychological and social dimensions. The psychometric properties of the scale were validated within the Algerian context. The findings revealed that the participants demonstrated an average level of psychosocial adjustment, and no significant gender differences were observed in their psychosocial adjustment.

Keywords: Psychological adjustment, social adjustment, deaf child.

I. Introduction

Human beings interact with various surrounding social factors, thereby achieving both psychological and social adjustment. This interaction with others often results in a sense of psychological stability and self-worth. As social creatures by nature, humans seek ways to engage with their environment from birth.

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Hearing plays a vital role in facilitating this interaction, enabling individuals to respond appropriately, build relationships, and navigate social situations within their environment. Psychosocial adjustment is thus considered one of the fundamental indicators of healthy development in children, as it reflects their ability to manage themselves and relate effectively to their social context.

Adjustment is a broad concept that requires the individual to adopt behaviours appropriate to the surrounding conditions. In other words, one must adjust to oneself, conform to societal expectations, and adapt to the environment by adhering to social norms governing behaviour. This alignment allows the individual to satisfy both primary and secondary needs, and to avoid conflict between personal drives and societal constraints.

The importance of such adjustment is even greater among children with special needs, including profoundly deaf children, who face heightened difficulties in communication, comprehension, and coping with the demands of daily life.

Deaf children are a group that requires particular attention, as they have specific needs comparable to their hearing peers. From birth, they must learn how to achieve adaptation and harmony with their psychological and social circumstances. However, the deaf child often faces challenges in expressing and understanding emotions due to limitations in spoken language.

1. Problem Statement

Psychosocial adjustment is considered one of the fundamental components of healthy development in children, due to its critical role in establishing stable relationships with family and peers, fostering self-understanding, regulating emotions, interacting appropriately with social situations, and acquiring skills for adaptation and integration. The importance of adjustment increases significantly for individuals with special needs in general, and for deaf children in particular, owing to the challenges they face, which negatively affect their integration and interaction within the social context.

Within the field of special education, which encompasses various categories, hearing impairment is among the most impactful in terms of language development and social communication. This necessitates a precise definition of the concept. Al-Ma'ayta defined hearing impairment as "a complete loss of hearing or a reduced ability to hear sounds due to a dysfunction in the auditory system, which hinders its proper functional performance." (Sanoua & Quraishi, 2018)

Adjustment is one of the psychological and social processes that is influenced by a person's impairment. It has been defined as the individual's ability to cope with new internal and external events in order to maintain psychological balance (Saadawi & Achauri, 2024). From the integrative perspective, Thorp and Clark define psychological and social adjustment as "a relative sense of satisfaction and fulfilment resulting from resolving personal conflicts in an attempt to reconcile one's desires with surrounding circumstances" (Issa, 2021).

The level of psychosocial adjustment among deaf children is an important indicator of their psychological and social balance, and serves as a criterion to assess how well they adapt to psychological and social life demands. Several studies have addressed the reality of psychosocial adjustment among deaf children, including the study conducted by Donia Issa (2021), and entitled *Psychosocial Adjustment among Deaf Children (Aged 6-13 Years): A Field Study in Laghouat as a Model*. The study aimed to assess the level of psychosocial adjustment using the Psychosocial Adjustment Scale for Children, applied to a purposive sample of 90 deaf children aged between 6 and 13 years in the Wilaya of Laghouat. The results showed that deaf children exhibit a low level of psychosocial adjustment.

Studying the relationship between deafness and the level of psychosocial adjustment helps in understanding and explaining the behavioural and communicative difficulties experienced by the child. This was demonstrated in the study by Souad Hachani and Chahrazad Nouar (2021), entitled *Psychosocial Adjustment among Children with Profound Hearing Impairment*, which concluded that impairment in the communication channel may cause problems in social interaction. This can negatively affect the child's psychosocial adjustment, leading to behaviours such as aggression, shyness, social isolation, withdrawal, feelings of anger, frustration, and other issues.

Furthermore, the study by Hussein Al-Qasim (2005), entitled *Levels of Psychosocial Adjustment and Their Relationship to Certain Variables such as Gender, Age at Onset of Disability, and Degree of Hearing Loss*, helped explain the variance in levels of psychosocial and social adjustment. The findings revealed statistically significant differences between hearing-impaired students and their non-disabled peers in the five domains of the Psychosocial Adjustment Scale and the three domains of social behaviour, in favour of hearing-impaired students. The study also found statistically significant differences attributable to the degree of hearing loss in the domain related to low self-concept.

Hence, the importance of the current study lies in assessing the level of psychosocial adjustment among profoundly deaf children aged between 10 and 13 years, and in identifying statistically significant differences between the sexes in levels of adjustment.

Accordingly, our research questions are as follows:

- What is the level of psychosocial adjustment among profoundly deaf children aged 10–13 years?
- Are there statistically significant differences in the level of psychosocial adjustment among profoundly deaf children aged 10–13 years attributable to gender?

2. Hypotheses

- Profoundly deaf children aged 10–13 years exhibit a moderate level of psychosocial adjustment.
 - There are statistically significant differences in the level of psychosocial adjustment among profoundly deaf children aged 10–13 years, attributable to the gender variable, in favour of males.
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3. Significance of the Study

- To understand the nature of psychosocial adjustment in profoundly deaf children at a critical developmental stage (ages 10–13), characterised by significant emotional and social transitions.
- To highlight a specific group often underrepresented in psychological and educational research profoundly deaf children.
- To assist families and educational institutions in recognising the importance of promoting adjustment skills in deaf children as a fundamental prerequisite for academic and social success.
- To provide a scientific foundation and reference point for future researchers to explore new variables related to adjustment, such as degree of deafness, parenting styles, and family and educational support.

4. Objectives of the Study

- To assess the level of psychosocial adjustment among profoundly deaf children aged 10–13 years.
- To determine whether there are statistically significant differences in psychosocial adjustment levels based on gender.
- To contribute to the enrichment of psychological and educational literature concerning this specific group — children with profound deafness.

5. Operational Definitions

- **Adjustment:** Refers to the individual's ability to bring about internal and external changes that enable compatibility and adaptation to surrounding psychological and social variables.
- **Psychosocial Adjustment:** A psychological and social process that reflects the individual's level of responsiveness to surrounding conditions. It is represented by the total score obtained by the participant upon responding to the items of the Psychosocial Adjustment Scale.
- **Deaf Child (Profound Deafness):** A child aged between 10 and 13 years who suffers from severe or total hearing loss, with a hearing threshold of 90 decibels, resulting in a complete inability to hear sounds. This definition is based on official medical reports.

6. Delimitations of the Study

- **Geographical Delimitation:** The study was conducted at the School for Young Deaf Children in Baraki, Algiers.
- **Temporal Delimitation:** The study was carried out in February 2023.
- **Human Delimitation:** The study involved profoundly deaf children aged 10 to 13 years.

7. Previous Studies

- **Study by Donia Aissi (2021):** *Psychosocial Adjustment among Deaf Children (Aged 6-13): A Field Study in Laghouat as a Model*
This study aimed to highlight the importance of psychosocial adjustment behaviour in deaf children and the role it plays in shaping a well-balanced personality. The objective was to measure the level of adjustment using a descriptive exploratory approach to analyse the results of a Psychosocial Adjustment Scale for Deaf Children (developed by the researchers), applied to a purposive sample of 90 deaf children of both sexes, aged between 6 and 13 years, enrolled at the School for the Hearing-Impaired in the Wilaya of Laghouat. The results indicated that deaf children exhibited a low level of psychosocial adjustment, with statistically significant differences in psychosocial adjustment scores attributable to gender, in favour of males.
- **Study by Souad Hachani & Chahrazed Nouar (2021):** *A Clinical Study of Four Cases Entitled: Psychosocial Adjustment in Children with Profound Hearing Impairment*
This study sought to explore the level of psychosocial adjustment in a sample of four children aged between 12 and 13 years with profound hearing impairment, and to investigate the relationship between communication difficulties and psychosocial adjustment. The study found that impairment in the communication channel may cause problems in social interaction, which negatively affects psychosocial adjustment. This may lead to behavioural manifestations such as aggression, shyness, isolation, social withdrawal, feelings of anger, frustration, and other emotional difficulties. The study explored the impact of hearing impairment on the psychosocial development of affected children through a clinical method (case study) using the "Draw-a-Person" test.
- **Study by Taylor (1962):** Taylor conducted a study to examine the impact of the degree of deafness on social and personal maladjustment. He selected two groups of deaf children: the first included children with total deafness, and the second included children with partial hearing loss. Data were collected concerning the socioeconomic and cultural background of each child's family, along with information about the child's social relationships at home and at school. The study revealed the following findings:
 - Deaf children face numerous situations that evoke anxiety and confusion compared to hearing children.

- They tend to isolate themselves and show a marked inability to form social relationships with peers.
- The deaf child often experiences feelings of inferiority due to their awareness of being unable to perform like their hearing peers.
- The deaf child feels deprived of full autonomy, as they are frequently unable to direct their behaviour as they wish in various life situations.
- They often experience loneliness despite being surrounded by others, and report a lack of belonging to the group.
- Deaf children tend to avoid interaction with others, showing a preference for solitude and isolation.

Additionally, the study found clear signs of social maladjustment among deaf children, with maladjustment reaching a rate of 54%. Regarding the relationship between deaf-mute children and society, the study indicated that they often display a rebellious attitude, resisting authority and engaging in acts of vandalism and aggression towards others and their property. They also tend to seek immediate gratification of their desires.

In terms of their relationship with the family environment, the study concluded that deaf children often fail to form positive relationships with family members. They may feel that their mothers do not love or appreciate them, that their fathers treat them poorly, and that their siblings do not care for them. In many cases, this leads to feelings of insecurity within the family, which may contribute to rebellious behaviour.

• **Study by Hanaa Mahmoud Moussa (2012):** *Psychological, Social, and Academic Adjustment Among a Sample of Hearing-Impaired Children in Benghazi*

This study aimed to assess the psychological, social, and academic adjustment of hearing-impaired (deaf) children enrolled at the Al-Bayan Centre for Deaf and Hard of Hearing Education in Benghazi, and to explore the relationship between adjustment and academic achievement. It also examined the effect of gender, the presence of another deaf child in the family, and the child's educational stage (primary or preparatory) on their adjustment. The sample included 70 deaf children (40 males and 30 females). The study used the Adjustment Rating Scale for Deaf Children, developed by Abdel Wahab Kamel, to measure levels of psychological, social, and academic adjustment. The findings indicated that deaf children displayed good levels of adjustment in all three domains and that there was a positive correlation between academic achievement and levels of adjustment. The study also revealed statistically significant differences in psychological adjustment in favour of females, while no significant differences were found between males and females in social and academic adjustment. Furthermore, there were no significant differences in adjustment between deaf children from families with other deaf members and those without.

II. Theoretical Framework

1. Definition of Adjustment: Adjustment refers to the extent to which an individual is able to align with the demands of their environment and social conditions, as well as their capacity to modify beliefs and behaviours to overcome challenges. This is based on the understanding that the individual is in constant interaction with both their internal environment (the self) and external environment (society and the broader context), and that they both influence and are influenced by this interaction in order to achieve adjustment. (Bouamer, S., 2024)

2. Definition of Psychosocial Adjustment: Psychosocial adjustment is a continuous process through which an individual strives to achieve balance with themselves and others. It is essentially an interactive process between the individual and the environment, requiring behavioural modification by the individual to fit the environment, or adaptation of the environment itself. Change is thus considered a mutual characteristic of both the individual and the environment. (Gharaibeh & Tishtoush, 2016)

Social psychology has discussed this concept under the term “adaptation,” noting that a person who can harmonise with the natural environment is more likely to adapt effectively to surrounding psychological and social circumstances. (Bouamer, S., 2024)

3.Types of Adjustment

- **Psychological Adjustment:** Defined as “an interactive process between the individual and their environment, through which the person either adjusts their behaviour or modifies their environment” (as cited in Saraya, 2015). Personal adjustment refers to an individual’s ability to reconcile inner motives with conflicting social roles to achieve happiness and relieve anxiety and stress. (Bouti & Benbouziane, 2024)
- **Social Adjustment:** According to Abu Dalu (2009, as cited in Issa, 2021), social adjustment or adaptation to the social environment is “the individual’s ability to adjust to the external physical and social environment. The physical environment refers to all surrounding material factors and conditions, while the social environment encompasses human interactions, social cohesion, cultural exchange, and social norms.”

4.Personal Characteristics of the Deaf

- **Social and Emotional Characteristics:** Research findings consistently indicate the presence of impairments in the social functioning of children with hearing disabilities. These impairments are derived from multiple empirical studies. Most research agrees that children with hearing impairments tend to be less socially adjusted than their hearing peers. Deaf children are often characterised by emotional rigidity and either excessive or very low ambition.

Social and emotional characteristics are considered fundamental to the development of deaf children, encompassing several components such as (Calderon & Greenberg, 2012):

- Positive and effective communication
- Building social networks
- Independent and evaluative thinking
- Emotional and motivational understanding of self and others
- Self-control
- Self-direction
- Tolerance and flexibility in dealing with change and diversity
- Empathy
- Friendship-building skills
- The ability to cope with social stigma

Social adjustment in deaf children is often ambiguous. They tend to prefer tasks that do not involve significant social interaction. Vineland Social Maturity Scales have shown that hearing-impaired children are less socially mature. (Zemouri, H., 2016)

- **Emotional and Psychological Characteristics:** The emotional life of a deaf child is shaped largely by difficulties in language development and social growth, particularly those related to challenges in communication. These experiences frame the emotional trajectory of their lives. Research consistently shows that deaf children exhibit less emotional stability compared to hearing children, making them more prone to heightened reactivity, disproportionate anger, and emotional volatility, resembling the typical adolescent emotional profile.

However, aggression and anger are not the only responses observed among deaf individuals in social interaction; they may also resort to the opposite behaviour — withdrawal and introversion.

Earlier psychological literature on the personalities of deaf and hard-of-hearing children and adolescents described them as having atypical personality traits. However, recent developmental research has emphasised the importance of effective communication between parents and children as a foundational factor for healthy development in deaf children across several domains. The absence of hearing and the lack of effective parental and peer communication may hinder deaf children's acquisition of social nuances and maturity. This may be reflected in the development of specific personality traits, competence levels, and other individual differences. (Dammeyer, Marschark, & Zettler, 2018)

III. Methodology and Instruments

1. Research Method: The study employed the descriptive method, as it aligns with the nature of the research. The aim was to determine the level of psychosocial adjustment and to examine potential differences between male and female participants in terms of their adjustment levels.

2. Study Sample: The researcher used the purposive sampling method. The sample consisted of 80 profoundly deaf children, aged between 10 and 13 years, enrolled at the School for Young Deaf Children in Baraki, Algiers.

3. Instruments: The study relied on the School Adjustment Scale developed by Abdullah Nawaf, covering two dimensions: psychological and social, comprising a total of 71 items. The researcher calculated the psychometric properties of the scale by assessing its reliability on a sample of 30 deaf children (aged 10–13, from both sexes). The reliability coefficient was calculated using Cronbach's Alpha, yielding a high value of 0.94. The validity of the scale was established using the extreme group comparison method, and the T-test for two independent homogeneous groups yielded a value of 5.59. The scale included both positive and negative statements.

4. Psychological Dimension (34 items):

- **Positive items:** 6, 11, 21, 22, 24, 39, 45, 47, 48, 50, 51, 52, 57, 59, 61, 63, 70
- **Negative items:** 1, 2, 5, 7, 25, 26, 27, 31, 40, 41, 42, 43, 44, 46, 54, 64, 69

5. Social Dimension (37 items):

- **Positive items:** 3, 4, 5, 9, 10, 12, 16, 19, 20, 28, 29, 30, 32, 33, 34, 37
- **Negative items:** 8, 14, 17, 18, 23, 35, 36, 38, 49, 53, 56, 60, 62, 66

6. Scoring Procedure: The School Adjustment Scale consists of 71 statements, including both positive and negative items.

- For **positive items**, the responses (Yes – Don't Know – No) are scored (3 – 2 – 1) respectively.
- For **negative items**, the same responses are scored (1 – 2 – 3) respectively.

Interpretation of scores:

- 0 to 60: Low adjustment
- 60 to 90: Moderate adjustment
- 90 to 150: High adjustment

7. Statistical Methods: To analyse the data, the study employed:

- Arithmetic mean and standard deviation to measure the level of adjustment
- T-test to identify differences between genders
- All statistical analyses were conducted using SPSS version 22.

IV. Results and Discussion

This section presents the findings of the study, which aimed to identify the level of psychosocial adjustment among profoundly deaf children aged 10 to 13 years, as well as the differences in adjustment levels between genders. The findings were as follows:

1. The first hypothesis stated: "Profoundly deaf children aged between 10 and 13 years exhibit a moderate level of psychosocial adjustment."

After conducting statistical analyses, the following result was obtained:

Standard Deviation	Mean	ID	Standard Deviation	Mean	ID	Standard Deviation	Mean	ID	Standard Deviation	Mean	ID
0.86	1.789	61	0.612	1.352	41	0.421	1.225	21	0.466	1.31	1
0.785	1.69	62	0.39	1.183	42	0.612	1.352	22	0.446	1.268	2
0.729	1.31	63	0.377	1.169	43	0.39	1.183	23	0.97	1.873	3
0.805	1.423	64	0.92	1.845	44	0.414	1.169	24	0.748	1.409	4
0.824	1.676	65	0.909	1.873	45	0.808	1.479	25	0.843	1.521	5
0.545	1.296	66	0.612	1.352	46	0.772	1.479	26	0.819	1.761	6
0.39	1.183	67	0.39	1.183	47	0.79	1.479	27	0.701	1.718	7
0.377	1.169	68	0.663	1.38	48	0.808	1.535	28	0.867	1.817	8
0.743	1.859	69	0.203	1.042	49	0.691	1.747	29	0.758	1.648	9
0.787	1.578	70	0.847	1.648	50	0.86	1.789	30	0.816	1.817	10
0.739	1.352	71	0.737	1.831	51	0.796	1.775	31	0.453	1.282	11

0.872	1.69	72	0.884	1.93	52	0.807	1.676	32	0.948	1.761	12
0.701	1.718	73	0.453	1.225	53	0.889	1.845	33	0.671	1.324	13
0.873	1.845	74	0.813	1.901	54	0.612	1.352	34	0.861	1.972	14
0.774	1.662	75	0.839	1.845	55	0.39	1.183	35	0.889	1.845	15
0.809	1.789	76	0.717	1.831	56	0.35	1.141	36	0.823	1.747	16
0.612	1.352	77	0.446	1.268	57	0.89	1.916	37	0.86	1.789	17
0.39	1.183	78	0.438	1.254	58	0.845	1.831	38	0.78	1.817	18
0.377	1.169	79	0.46	1.296	59	0.86	1.789	39	0.792	1.732	19
0.779	1.634	80	0.839	1.803	60	0.792	1.873	40	0.947	1.704	20

Table 1: Means and Standard Deviations of the Study Sample Participants on the Psychosocial Adjustment Scale

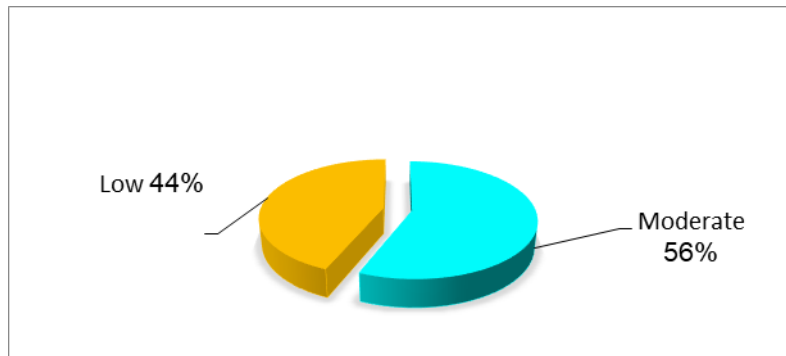


Figure 1: Levels of the Study Sample Participants Based on Their Mean Scores on the Psychosocial Adjustment Scale

Based on Figure 1 and in light of the mean scores of the study sample participants, it is observed that they are divided into two distinct groups:

- The first group consists of individuals with moderate levels of psychosocial adjustment, whose mean scores range from 1.5 to 2.49. This group included 45 participants, representing 56% of the total sample.
- The second group comprises individuals with low levels of psychosocial adjustment, whose mean scores range from 1 to 1.49. This group consisted of 35 participants, accounting for 44% of the sample.

Accordingly, it can be concluded that the majority of participants exhibited a moderate level of psychosocial adjustment. This conclusion is supported by the independent samples T-test results:

- The mean score of the first group on the overall scale was 125.80, with a standard deviation of 7.18.
- The mean score of the second group was 90.82, with a standard deviation of 7.59.
- The calculated T-test value was 21.06, which is positive, indicating that the differences are in favour of the first group.

- This difference was statistically significant at a degree of freedom (df) = 78 and a significance level (α) = 0.01.

Therefore, it can be stated that the first hypothesis is confirmed: profoundly deaf children aged 10 to 13 years demonstrate a moderate level of psychosocial adjustment.

2.The second hypothesis stated:“There are statistically significant differences in the level of psychosocial adjustment among profoundly deaf children aged 10–13 years, attributable to gender, in favour of males.”

Adjustment Domain	Gender	Levene's F Test	Sig. (F)	Sample Size (n)	Mean	Std. Deviation	df	t	Sig. (t)	Decision
Psychosocial Adjustment	Males	0.661	0.437	37	108.37	19.38	78	-0.92	0.356	Not significant at 0.05
	Females			43	112.32	18.56				

Table 2:Gender Differences in Psychosocial Adjustment

As shown in Table 2, the value of Levene's test for homogeneity of variance for psychosocial adjustment was 0.66, which is not statistically significant. This result permits the use of the independent samples T-test.

Considering the T-test value, which was -0.92 for the psychosocial adjustment scale, it is clear that this result is not statistically significant at the alpha level of 0.05 (α = 0.05).

Therefore, it can be concluded that there are no statistically significant gender differences in psychosocial adjustment among profoundly deaf children aged 10–13 years. The confidence level for this result is 95%, with a 5% probability of error.

Hence, the second hypothesis was not supported, indicating that gender does not have a statistically significant effect on psychosocial adjustment among profoundly deaf children within the specified age range.

3. Analysis and Discussion of the Results

The findings indicate that profoundly deaf children aged 10–13 years exhibit a moderate level of psychosocial adjustment, as shown by the mean scores of participants on the Psychosocial Adjustment Scale. This result highlights several key points:

The deaf children did not reach a high level of psychosocial adjustment, suggesting that certain challenges remain within their social environment, whether in educational or familial contexts. This finding is consistent with the study by Donia Issa (2021), which concluded that deaf children display low levels of adjustment, indicating persistent difficulties in adapting. However, the participants did not exhibit severely low adjustment, which suggests the presence of supportive or stabilising factors, such as emotional or social support.

The results also revealed statistically significant differences between the two groups (moderate vs. low adjustment), with a notably high T-test value of 21.06, indicating a substantial and real effect in the level of psychosocial adjustment. Children in the moderate adjustment group demonstrated clearer abilities to adapt to their social environment, showed healthy social interaction, and exhibited appropriate emotional responses to various situations.

The relatively low standard deviation within both groups reflects the homogeneity of participants' adaptive behaviour within each group. This may suggest that some families provide sustained psychological and social support, enhancing their children's ability to adjust. This interpretation is supported by the study of Souad Hachani and Chahrazed Nouar (2021), which highlighted the negative impact of weak communication within educational settings on interaction and adaptive behaviour. Furthermore, variability in the quality of psychological and educational support at the School for Young Deaf Children may also play a role, along with individual differences, as some deaf children possess inherent personal abilities that facilitate adaptation. This idea is reinforced by Taylor's (1962) study, which highlighted individual variability among deaf children in how they respond to different situations, and by Issa's (2021) findings showing significant differences in adjustment linked to personal factors.

Moreover, the results showed that Levene's test for homogeneity yielded a value of 0.66, which was not statistically significant. When applying the T-test for gender-based differences, the result was -0.35, which is also not statistically significant at the 0.05 significance level. This indicates that there are no statistically significant gender differences in psychosocial adjustment among deaf children aged 10–13.

This suggests that gender is not a determining factor in the psychosocial adjustment of profoundly deaf children in this age group. A possible explanation is that both boys and girls face similar psychological and social challenges, and that adjustment is influenced more by social context and individual circumstances than by gender. This interpretation aligns with the findings of Hanaa Mahmoud Moussa (2012), who reported no gender-based differences in social and academic adjustment, but contrasts with Donia AIssa's (2021) study, which found differences in favour of males.

V. Conclusion of the Study

This study concluded that the level of psychosocial adjustment among profoundly deaf children aged 10–13 years was moderate, and no statistically significant gender differences were observed. It was noted that hearing impairment clearly affects social interaction, yet it is not directly related to gender (male or female). Rather, it appears to be more strongly influenced by the child's social environment and the nature of support received.

Based on these findings, it is essential to implement tailored psychological and educational programmes that address the specific needs of deaf children. It is equally important to actively involve families and to train teachers to better understand and respond to the unique characteristics of this group.

As an extension of this work, future research could focus on:

- Expanding the programme to include different age groups,
- Comparing adjustment levels between children in mainstream and specialised schools,
- Exploring the relationship between psychosocial adjustment and variables such as social support or academic achievement.

VI. Références

Aissa, D. & Kaid, A. (2021). *Psychosocial Adjustment in Deaf Children (Aged 6–13): A Field Study in Laghouat as a Model*. Journal of Al-Rawaez, 5(1), 223–239. University of Batna 1, Algeria.

Bouamer, S. (2024). *Psychosocial and Cultural Adjustment of International Students: A Socio-Psychological Approach*. Journal of Human and Social Sciences, 13(3).

Bouti, D. & Benbouziane, A. R. (2024). *School Adjustment in the Digital Environment: An Analytical Study of the Relationship and Impact*. Journal of Media and Society, 8(1).

Calderon, R. & Greenberg, M. T. (2012). Social and emotional development of deaf children: Family, school, and program effects. In M. Marschark & P. E. Spencer (Eds.), *The Oxford Handbook of Deaf Studies, Language, and Education: Volume 1 (2nd ed.)*. Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199750986.013.0014>

Dammeyer, J., Marschark, M. & Zettler, I. (2018). Personality traits, self-efficacy, and cochlear implant use among deaf young adults. *Journal of Deaf Studies and Deaf Education*, 23(4), 351–359. <https://journals.uob.edu.ly/GLJ/article/view/696>

Gharaibeh, S. M. & Tishtoush, R. A. (2016). The level of psychological and social adjustment among upper basic stage students of Syrian refugees in Al-Zaatari Camp (Jordan) in light of some variables. *The International Journal of Research in Education and Psychology*, 4(1), 141–147.

Hachani, S. & Nouar, C. (2021). *Psychosocial Adjustment in Children with Profound Hearing Impairment: A Clinical Study of Four Cases*. Al-Baheth Journal in Human and Social Sciences, 13(1), 431-444. University of Kasdi Merbah, Algeria.

Levene's Test Table (Table 2). [As included in the present study's results section].

Moussa, H. M. (2012). *Psychological, Social, and Academic Adjustment and its Relationship with Academic Achievement among a Sample of Hearing-Impaired Children in Benghazi* (Master's thesis). University of Benghazi, Libya.

Saadawi, M. & Achaouri, S. (2024). *Psychosocial Adjustment in Individuals with Motor Disabilities: A Field Study in Skikda Province*. Journal of Psychological and Educational Sciences, 2(10).

Sanoua, N. & Quraishi, A. K. (2018). *Behavioural Disorders in Deaf Children: A Field Study*. Al-Baheth Journal in Human and Social Sciences, 33.

Taylor, I. G. (1962). *The Relationship of Degree of Deafness to Social and Personal Adjustment in School Children* (Doctoral dissertation). University of Manchester.

Zemouri, H. (2016). *The Value System of Deaf-Mute Children as a Basis for Designing a Guidance Programme* (Doctoral dissertation). University of Batna 1 Hadj Lakhdar, Algeria.