

## CONTENT ANALYSIS OF THE WRITTEN COMMUNICATION FORM OF DEAF CHILDREN

Naim Salkić<sup>1</sup>  
Husnija Hasanbegović  
Emira Švraka

*Original scientific paper*

*Centre for Hearing and Speech Rehabilitation Sarajevo, Faculty of Health Studies Sarajevo, Bosnia and Herzegovina*

*Faculty of Education and Rehabilitation Tuzla, Institute for Human Rehabilitation Tuzla, Bosnia and Herzegovina*

*Faculty of Health Studies Sarajevo, Association of Persons with Cerebral Palsy FBiH*

Received: 17.6.2018

Accepted: 25.7. 2018

### ABSTRACT

*The aim of this research was to examine the communication and linguistic competence of a meaningful understanding of the written communication form of deaf persons. In this study, a qualitative method of content analysis was used. The study was done on a sample of 70 deaf respondents. Deaf subjects were divided into two groups. One group wrote letters to another group on a topic of free choice, and the other group responded to the letter. After these correspondences, the letters were analysed in a way to search for understanding the content. Letters were agrammatic with a large number of omitted letters and syntactically difficult to understand. However, children who are deaf, perfectly recognized the context, and responded to letters with understanding. The results of the research showed that the deaf respondents have communication, but not linguistic competence in the written form of communication.*

**Keywords:** *deafness, linguistic competence, communication competence, letter.*

### INTRODUCTION

Hearing impairment, as a form of sensory impairment, causes multiple consequences in the overall development of the child and can be reflected in cognitive, emotional and social development and communication (Švraka, Salkić et al., 2016). Communication is shaped by language, and language emerges as a result of linguistic experience, exposure to spoken or sign language and innate abilities to adopt

certain types of language forms (Coppola and Newport, 2005). Adoption of language and the formation of language competence arises exclusively in the conditions of active voice communication, which enables the understanding and use of numerous speech-language constructions, i.e. operations with meaningful language units, phonemes, morphemes, words and sentences (Luria, 2000). "Speech is very important in human development" (Hasanbegović, 2012).

#### <sup>1</sup>Correspondence to:

Naim Salkić, Centre for Hearing and Speech Rehabilitation Sarajevo, Faculty of Health Studies Sarajevo, Bosnia and Herzegovina

Phone: +387 62 345 220

E-mail: salkicnaim@yahoo.com

Language competence or linguistic knowledge implies knowledge of language system units at all levels: phonological, morphological, lexical, syntactic, semantic and textual, and knowledge of the rules for combining language units and their organization in higher order units (Jelaska, 2007). Language competence can be linguistic and communicational. Linguistic competence implies language knowledge (Chomsky, 1979). Communication competence is the ability of the speaker to choose between the various language subsystems the one that is most suitable for him or the use of language in everyday communication situations (Hasanbegović & Kovacevic, 2014). Practical application of these competencies refers to the teaching of grammar, listening, speaking, reading, writing and creative expression. Linguistic competence includes theoretical knowledge of language, and communication competence includes practical knowledge of language, that is, the practical use of theoretical knowledge (Aladrović, 2007). "People with hearing disorders make a very heterogeneous population" (Hasanbegović, Beha & Mahmutović, 2013). The problem of children with prelingual hearing impairment is not primarily in the articulation and vocal elements of speech, but in the linguistic elements and in the meanings of the word. Problems arise with the use of dictionaries, meaning of words, grammatical rules, syntax, reading, writing, difficulties in word memory, speech comprehension or in expression (Hasanbegović & Mahmutović 2004). Children with hearing impairment produce short sentences of simpler syntactic structures than their own peers, have a poor vocabulary, demonstrate lexical rigidity, problems with the use of substitutes, show problems in the lexical, morphological, syntactic, pragmatic aspect of written speech, and the most prominent problems in the field of morphology (Yoshinaga-Itano & Downey, 1992). Deaf people due to hearing loss are not able to spontaneously learn oral-voice speech and language (Švraka, Salkić et al., 2018). "Children who are deaf can have their speech and language disorders rehabilitated" (Hasanbegović & Mahmutović, 2014). Most reading difficulties of deaf children are due to the fact that they are using a written language that they have not yet mastered verbally. The reason for the difficulty in reading is a significant lack of environmental information that is crucial for the interpretation of the text, because reading combines what is on the paper with previous knowledge, and if it does not exist then it is difficult to establish this type of connection (Rodriguez, 2007). People with hearing impairment show difficulties and challenges in learning effective and fluent writing (Kimberly, 2007). About 50% of young deaf people after finishing high school

are reading and writing worse than a ten year old hearing child (Traxler, 2000). The writing of deaf people is characterized by the use of short sentences, several subordinated sentences, and several independent fused sentences with simple verbal forms (Yoshinaga-Itano, Snyder & Mayberry, 1996). Deaf children encounter the written information they need in their daily life, and they are forced to learn the visual order of graphs that they recognize in practical contexts in everyday life (Salkić, 2015).

**The aim of the research** was to examine the existence of communication and linguistic competence of a meaningful understanding of the written form of deaf people communication using the method of content analysis.

## METHODS

The experiment used an experimental method, which mainly relies on experience and often uses induction in analysis, and is directed to the discovery of certain relationships between things and phenomena. Specific types of relations have been created, which are characterized by the necessity of understanding the information sizes, that is, communication legitimacy. Among the relationships that are discovered through the experimental method are particularly important causal relations in which the essential characteristics of the written communication content response by the recipient of this content to the sender are measured and vice versa. The comprehensibility of speech and communication competence was examined through topics that are the subject of the interest of the deaf between the sender and the recipient.

## Sample

The study was conducted on a sample of 70 respondents. The sample was selected according to the following criteria: that the age of deaf children encompasses a period of 10 to 18 years old, attending primary or secondary school, that they are covered by a program of rehabilitation of listening and speaking, that they have preserved their intellectual status and that their average hearing loss is below 75 dB. Considering that the contents of the letter were of the choice of the respondents in relation to the thematic unit, the recipients of those letters, as well as the number of letters written, there were in total 90 individual letters. As a single sample, communication content, a letter from the sender and the recipient was analysed. In total, 45 communication contents, written correspondences.

## Measuring instrument

Letters of deaf subjects on free-choice topics were used as a measuring instrument. In order to assess competencies, deaf subjects were subjected to experimental conditions, which were provided by the method of subjecting respondents to communication exchanges through letters. The analysis of the letters led to a methodology that implies a response to six key questions for each content analysis: Which data are analysed?, How are they defined?, What is the sample of the population from which they were drawn?, In which context are these data analysed?, Which are the boundaries of the analysis?, What is the goal of the conclusions?. The research used the basic content analysis questions formulated by Harold Lasswell (Who says what; to whom it says: Why it says: How extensive and with what effect). In the methodological processing, applying the method the Holsti Ole R model was used, which ranks the application of content analysis into three categories: draw conclusions about the predecessors of communication; describe and draw conclusions about the characteristics of communication; draw conclusions about the effects of communication.

## Method of conducting research

The experiment consisted in giving deaf people the task of real postal sending of letters, as mysterious content they were individually supposed to write to their schoolmates, of their own choosing. The experiment was conducted in such a way that the respondents shared envelopes and improvised mail delivery by engaging the "letterhead", so that by their own choice of recipients, respondents sent a postal item to the recipient. Delivery of letters to written addresses was provided, whereby recipients were not aware that they would receive letters. The letters were copied in the transport process, and the originals were delivered to the recipients. After the receiver received the letter, read it without the control of the researcher, and then wrote a response and re-engaged the letterhead, the sender of the letter received the answers to the sent letter. Based on the answer to the letter, the comprehensibility of the written letter was assessed, and therefore the communication and linguistic competence of the deaf respondents.

## RESULTS

### Content analysis

In order to analyse the content, a letter was used as a graphic system of signs that records a language written

on paper, analysed as communication content, shaped by words, styles and sentences, indicating that there is a problem of deafness that significantly affects the disorder of verbal communication, which is reflected on graphical disturbances and linguistic and communication competences as well. The deaf children were subjected to an experimental program of writing and messaging on a free subject across the entire sample of experimental group research. The free writing choice method was used to provide an insight into the linguistic and communication competence of understanding the written text based on respondents' responses to a letter sent based on the personal interests of the deaf children. Interest in events in the objective and subjective world of the deaf population can be the basis for the development of literacy strategies and the choice of the conceptual conceptualization of linguistic content in the education of deaf children. The basic assumption is that the words and phrases most frequently used in the research texts reflect the most important issues of communication competence, in the way that content analysis exceeds the quantitative counting of the word, but rather the qualitative context of the words used in the communication content.

### The results of the research on the content analysis of the written communication form of deaf children

**Letter 1.** The answer of the recipient of the letter to the question posed reflects communication competence, but not at the same time linguistic. Based on the communication elements and the questions raised between the two respondents, an analysis of the elements of the sources of the process of encoding messages, questions and usefulness of the communication content in the context was made, and it can be concluded **that the sender has a meaningful understanding of the communication and linguistic competence of the text, and the recipient has meaningful understanding and communication competences of a textual task exclusively.**

**Letter 2.** In the response that is reflected in three questions posed and one answer to the question asked, one can conclude that a meaningful understanding of the text has been achieved, thus **the level of communication competence was achieved, but not the level of linguistic competence that is reflected through the agrammatism of the text, and syntactic structure.** The above claims are reflected in the answer to the question in which the receiver accurately responds using the exact date of departure and a well-defined sentence construct. Linguistic incompetence is reflected in all other sentences, but it indicates a contextual understanding of the read and non-repudiation of the thematic whole of the received letter.

**Letter 3.** The sender of the letter raises four clear questions to which the recipient responds adequately, on the basis of which it can be concluded that a meaningful understanding has been achieved and that **communication competence has been achieved**. The achieved communication competence is confirmed by the joint assurances of the interlocutor that at the time of going out to the city it will be dark and cold, and recommendations to be well trained. **No single respondent in this communication content has achieved linguistic competence**, which can be clearly seen from the agrammatic sentences of the respondents of this communication transcript.

**Letter 4.** The letter of the sender reflects the agrammatic structures of the poorly used lexical discourse. The letter shows the use of simple constructions, an illogical syntax sequence, but there is also a certain binding of the word **that indicates the communicative comprehensibility of portable communication content**. Although the sentences are linguistically non-systematic, without syntactically used lexical units as well as an incomplete grammatical structure, the entity understood the sent message and confirmed with its response that it was about understanding the written text. By inspecting the content of this letter and responding to the sent letter, it can be noted **that there are elements of comprehensibility of the communication content, although there is no linguistic competence** of the written letter.

**Letter 5.** In response to the received letter, the respondent responds to the received letter in very modest, simple sentences. From the content of the letter, the poor language competence of the entities can be noticed. By inspecting the content of the response, it can be noticed **that the respondent achieved the minimum comprehensibility of the letter sent**, which leads to the conclusion **that the entity is about reduced communication competence and linguistic incompetence**.

**Letter 6.** In the letter, it can be noticed that the respondent who wrote the letter had a **relatively good linguistic organization of sentences**. In the sent letter, a relatively good organization of a syntactic organization of a sentence can be noticed that is not composed of two to three words, as is the most common case in the deaf population, but it also has a more complex linguistic structure with the use of adjectives, verbs and attachments, which is rare in the case of harder to hear population. In the entity's response except for inversion sentences and observed substitutions in words, the impression is gained that the recipient of the letter understood the questions asked and tried to respond through one form of non-systematic scheduling in relation to the informative value of the linguistic construct and communication content.

Noting that this is a **linguistic incompetence, it can be noted that the partial understandability of the written form of communication is achieved** in relation to the analysed response.

**Letter 7.** The letter used classical questions that are in the deaf population in the communications spectrum. It can be noted that the structure of the written form of communication in deaf children is almost always focused on thematic events in the immediate time interval, which is also logical for the educational efforts to bring the deaf children closer to everyday life, and they abound in everyday life with those events that are in line with the educational program. In addition to agrammatism, this letter points to indications of linguistic communication potential because sentences are not so simple enough to justify this claim. However, communication contents and their comprehensibility can be analysed using the method of content analysis only based on reaction and response in relation to the written text, so in this case it can be concluded **that communication competence has been achieved, but the linguistic competence not completely**. Pointing to the agrammatic structure of the sentences, the presence of omissions, substitution and lexical inversion, which diminishes the linguistic value of a written form of communication, in this case, **it is completely possible to talk about communication competence**.

**Letter 8.** The letter reflects linguistic incompetence and a very poor vocabulary that points to poorly posed questions and ambiguity of the linguistic construct. In response to the question raised, linguistically incomprehensibly written constructions are observed, where the answers are shortened in a way that they only refer to some communication solutions, but it does not notice what the answer is and the question asked. Some communication features suggest that some of the issues are understood. By entering into the analysis of the content of the respondent in communication, one can speak of sentence constructs that refer more to internal speech schemes, described by Chomsky as an unarticulated speech in generative grammar that remained at the level of generativity and did not suffer syntactic and semantic speech production. In this communication content, **limited communication competence can be identified, and not a sign of linguistic competence**.

**Letter 9.** In the letter, there is a very wide selection of lexical units, but the sentences are constructed to reflect the complete incomprehensibility of the construct, so it is difficult to find the content of the text in a linguistic construct. Understanding is made difficult, but the letter notes the message of introducing a person into a communication that knows the sign language and alphabet.

In response to the letter, it is noticed that the communication content does not follow the flow of the read letter. From this communication written form **linguistic competences could not be noticed**, and **communication competence can hardly be seen in terms of understanding the written form of communication**.

**Letter 10.** In the letter, a very poor sentence structure is observed. In response to the letter, a well-organized linguistic construct is observed, showing the tendencies of **complete linguistic competence**. However, this incomprehensible written communication message was decoded by the respondent, indicating a deeper psychological recognition of the respondent's mental complex who sent the letter, and the entity corresponds with absolutely correct sentences. In this case, **communication competence and understanding** of the content of the letter can be talked about, and the impression that deaf children have the ability to predict their thoughts in the communication chain is justified, which justifies this letter in which the respondent is in the role of the decipher, regardless that the linguistic discourse in a written form of understanding has not been achieved, but the intention is recognized for the purpose of making such conclusions.

**Letter 11.** The letter was sent to the hearing person and therefore the response to the letter was not analysed. The sender's letter is analysed for a complex sentence that reads: "I how are me other enida much now only please I love you bye". In the content of the sentence you can see well-placed lexemes such as "how; you; me; other; much; please; I love you; bye", but the letter **does not show understanding of this construct**.

**Letter 12.** In response to a letter, the respondent tries to answer the questions raised, which **in a linguistic sense are absolutely incompetent** for any form of written communication if viewed out of the context of the response to the letter sent. On the basis of the above, it can be noted that the sender of the communication content reflects the basic elements of literacy through a relatively comprehensible grammatical construction. **It cannot be said that the recipient of the letter masters linguistic and communication competence**.

**Letter 13.** From the content of the letter it can be indicated what the sender wanted to say to the recipient, but it is a linguistic disorderly written material that, in a linguistic sense, does not reflect the absolute understanding of the articulated complex and could previously be called nonarticulate speech. The recipient of a letter corresponds to a letter with sentences that are not in accordance with the received letter. From analysed

communication content, it can be noted **that neither linguistic nor communication competence has been achieved** in terms of understanding communication content.

**Letter 14.** In the sender of the letter, a well-organized linguistic discourse is observed through linguistically correctly constructed sentences, well-posed questions and conclusions. Expressive speech can be fully understood, and it can be stated that the **he understands both syntactic and semantic sentences enriched with grammatical constructs**. In a response, a less linguistically competent entity, it is noted that he understood the question. By inspecting the contents of this written form of communication expression, it can be noted that the recipient of the letter understood certain questions and gave conditionally stated adequate answers to the questions asked, **which indicates the presence of communication competence**. Considering the fact that the recipient of the letter is less linguistically competent than the sender of the letter, it can be concluded that he was not able to adequately respond to the received content, and in the shortened versions of the answer it can be noted that **the incomprehensibility of the written text is characteristic to this entity** which can be seen in syntactic, lexical as well as grammatical incompetence.

**Letter 15.** The subject of the sender of the letter cannot adequately differentiate due to short statements and present omissions and substitutions in sentences. From the content of the text in response to the received letter, it can be stated that the written text does not reflect any connection with the received written material. **It is difficult to see communication competence**, but the impression is that respondents understood the letter as an obligation to write something, anything, and not write an adequate response to the received letter. It can be clearly seen that respondents **lack linguistic competence**.

**Letter 16.** In the letter respondent uses long and complex sentences with relatively good use of semantic and syntactic constructions as well as attachment provisions for place and time. A poor grammatical construction is noticed. In response to the received letter, the poorer linguistic competence of the recipient is noticeable, which obviously does not have an adequate understanding of the read script. In addition to clearly visible weak communication and linguistic competencies, the entity on the received letter still fits. Based on the content of the letter, **it is difficult to determine the existence of communication competence** based on a written form of expression, but a complete linguistic incompetence is obvious.

**Letter 17.** The letter notes the order of the questions that are well constructed in the linguistic sense, and **satisfy linguistic competence**. The answer is designed in such a way that **the communication competence is fully achieved** between the two respondents, although in some language construct, they are understandable to them, and can be expressed in the jargon as it reflects some sort of content ambiguity.

**Letter 18.** By analysing the content of the sent letter, **it cannot be stated that the respondent masters the correct linguistic and grammatical structures in communication**, but from the answer to the received letter it can be noticed that the comprehensibility of the written content occurred. It can also be noted that the recipient absolutely understands the sent communication content **reflecting the communication competence**, but the sentences are so agrammatical that it would be difficult to talk about the comprehensibility of the communication content between this person and the person who masters linguistic and grammatical rules of communication.

**Letter 19.** The letter from the sender is structured exclusively from questions, which are short linguistic constructions typical for the deaf population, which deaf people learn well in the form of questions. The response to the received letter contains completely incomprehensible language expressions that the entity uses through sentences. In response, in addition to recognizing the name of the sender of the letter, **no linguistic and communication competence in linguistic exchange of content can be noticed**.

**Letter 20.** In the letter between the two respondents, there are brief questions such as "How are you?"; "What's up?"; Analysing these communication contents, **it can be concluded that there is communication competence with very few self-selected linguistic constructs** between the two respondents.

**Letter 21.** In the letter of exchange of communication contents, it can be noticed that the sender of the letter has a much better linguistic discourse than the respondent who is the recipient of the letter. From the content of the text of the respondent who writes the letter, one can see what the responder is writing about. The understandability of the short sentences found in this letter is inherent to the deaf population, and these short sentences are composed of two or three words. When a respondent tries to compose a sentence of more than three words, there is a grammatical and syntactic confusion that makes understanding difficult. This inheritance of the deaf population can also be seen in this respondent. The sentences are grammatically and syntactically unclear. The recipient of the communica-

tion content in the response to the letter **does not indicate the understanding of the read script** and only corresponds with the sentence: "Dear Elmir", and in such a way, reflects the conclusion that it is only able to recognize the sender of the letter because it does not give any other answers to the received communication content.

**Letter 22.** In the exchange of written communication content between the two respondents, it can be observed that there are structural inversions in written expression in both respondents. A letter sent by the sender is structured in each sentence used by inversion in terms of omissions and substitution of words, but some elements of metathesis are also noticed. In relation to the response to the received letter, it can be noted that **communication competence exists** in this exchange of communication content, because the impression is that the respondent understood the content of the text, but **no part of the letter suggests that there is a linguistic competence** of the respondents.

**Letter 23.** Immediately at the beginning of the letter you can notice the metatheses visible in the greeting. Metathesis is also noticeable in the response to the letter. In addition to the fact that the letter was completely agrammatically and synthetically illogical, as can be seen from the content of the letter, the impression that the respondent understood what is being done and in a similar style corresponds to a letter that does not differ from the received content. On the basis of the above, it can be noted that in this case it is **a communication competence**. It can also be noted that respondents in the written communication content **have no linguistic competence**, which is evident from the sentences that are written agrammatically and syntactically illogical.

**Letter 24.** In the communication content between respondents who have undergone a long-term rehabilitation process also **a communication and linguistic competence in mutual communication** can be seen. There are deaf children who, in communicational and linguistic terms, show exceptional talent, and besides having severe hearing impairment with such skills and adequate rehabilitation approach, they achieve besides communication and linguistic competence, as can be seen from the presented communication content.

**Letter 25.** In the letter, the sender asks the short questions that the recipient understands and gives answers that indicate the comprehensibility of the written content, which is also noticed in a more complex sentence sent by the sender. It can be noted that in this letter **there is communication competence, but not a linguistic competence**.

**Letter 26.** The written text of the letter is agrammatic. The text is written in a way that the syntactic relationship, but also the semantic performance, is disproportionate to the extent that the letter is difficult to understand and is probably the reason why this letter was not answered.

**Letter 27.** The letter is very short. The content of the letter points to an unclear concept in organizing text comprehensibility and a discrepancy in the linguistic construct. In response to the posted letter, **there is a lack of both communication and linguistic competences**, which can be seen in a short answer.

**Letter 28.** In a letter whose content points to both communication and linguistic competence and in which disorders can be seen in the use of attachment provisions, **communication competence can be noticed, but not a linguistic one**. Answers to the questions of the sender point to the conclusion that they are in correspondence with the received content, based on which it can be concluded that this is the communication competence of the respondents.

**Letter 29.** In the written content of the communication chain, the sender has posed brief questions to the recipient, and on the basis of the textual part, it can be concluded that the thought construct has conceptual relations of the terms used with respect to their meanings and without a lot of characteristic errors that would make the textual comprehension of the text difficult. On the basis of the answer received, it is noted that the communication content was understandable to the recipient, and through the linguistic construct **it can be concluded that successful communication has been made here and that comprehensibility is at the level of communication competence**.

**Letter 30.** At the communication level in the written content **we cannot talk about linguistic and also communication competence**, because the textual content in the response does not reflect the comprehensibility of the receiving content, which can be noticed in the sentences that indicate the fact that the recipient did not adequately analyse the content of the received letter.

**Letter 31.** The text written in the letter does not refer to a linguistic construct, but to language ideas, which deaf children learn and use without any problems. In response to the letter, a similar linguistic discourse is observed, **which does not point to either the linguistic or the communicative competence** of the respondents.

**Letter 32.** In the communication content **communication and linguistic competence is noticed**, where linguistic discourse is fully developed at the level of

complete understanding, and it can be concluded that respondents have mastered the language and written form of expression.

**Letter 33.** In the language discourse between the two respondents, **communication competence** is observed in a written communication form in response to the letter, because the content of the answer agrees with the content of the letter, but the agrammatism and the poor syntax structure point to the fact that **one cannot talk about linguistic competence**.

**Letter 34.** In the written communication between the respondents, a modest use of the words can be noticed, and the words that refer to simple questions are actual at a given moment. The answer to the received letter indicates that the respondent understood the textual content, and in a modestly interpreted linguistic form with the present omissions, substitutions, and metatheses responded in accordance with the received text. Based on the consistency of the linguistic constructions used, it can be concluded that **there is communication competence, but not a linguistic competence**.

**Letter 35.** In the language discourse, it can be noticed that the questions asked by the recipient of the letter with syntax errors are in the language construct. In answering each question, **we can notice an absolute communication competence, but not a linguistic one**.

**Letter 36.** In the communication content, the respondent sends a letter to a hearing person and replies to her letter. In the written exchange of communication contents **one can notice the communication and linguistic competence** of the deaf responder, with small linguistic inversions.

**Letter 37.** In the communication discourse, a modest selection of words is noted, which in the linguistic sense do not have an adequate competence level of understanding, but the answer to the letter written by the receiver indicates the presence of language competence. In this communication content **there is communication and linguistic competence**.

**Letter 38.** In the communication exchange, there is a discrepancy in the selection of words that indicate a type of activity and activity that the respondent is trying to tell the recipient. A deeper analysis can determine the intent of communication content, but in response to the received letter, **the linguistic competence of the recipient is noticed**. It is also noted that the recipient did not fully understand the received letter, which is seen from the sentences that are not in correspondence with the received written content, so that **this is not an absolute understanding between the respondents in the communication**.

**Letter 39.** The letter sent is written modestly, where, along with agrammatism, it sends several messages and emotional characteristics. In the answer, one can notice partial comprehensibility to one raised question that ends the communication, with no deeper communication details. In this case, **we cannot talk about the linguistic nor the communicative competence** of the deaf respondents.

**Letter 40.** The letter is a communication exchange in which the deaf respondent sends a letter to a hearing person and replies to her letter. By analysing the communication content of the deaf person one **can note the communicative competence** of the deaf person, who understood the answer to the letter of a hearing person. The sentences of the deaf respondent are agrammatical and **we cannot speak of linguistic competence.**

**Letter 41.** By analysing the communication content between the two deaf respondents, the comprehensibility of the written text can be established. Reasonableness is reflected through the answers to the questions asked. On this basis, it can be concluded that **there is a communication competence**, but the organization of the linguistic construct indicates that the **respondents are not linguistically competent.**

**Letter 42.** In communication between the two deaf respondents, one can notice the understanding of the written form of communication by the recipient of the letter, and conclude that there is a **communication competence.** Also, by analysing the sentences of both

respondents, it can be concluded that there is a **linguistic incompetence** of respondents.

**Letter 43.** The communication content shows the communication between the deaf and the hearing respondent. **The linguistic incompetence** of a deaf respondent is reflected in questions posed to a hearing person. Respondents' responses indicate the understanding of communication content, indicating **communication competence.** Based on this, it can be noted that even by analysing the written material of the deaf respondent, they can achieve communication competence in the exchange of communication content with the deaf.

**Letter 44.** In the communication discourse, the modest linguistic structure of the selected words is noticed, which in the simplest constructs are not adequately used, which can be noticed in the enclosed simple language structures sent by the sender. In his response, the recipient wrote a linguistically incompetent text that is inconsistent with the received content, and **communication and linguistic competence cannot be noticed.**

**Letter 45.** The communication content is about the exchange of letters between the hearing and the deaf respondents. By analysing the content of the response to a letter written by a deaf person, **the absolute existence of both the linguistic and communication competencies** of the deaf respondent can be identified. This letter shows that it is possible to understand and exchange written communication content between deaf and hearing people.

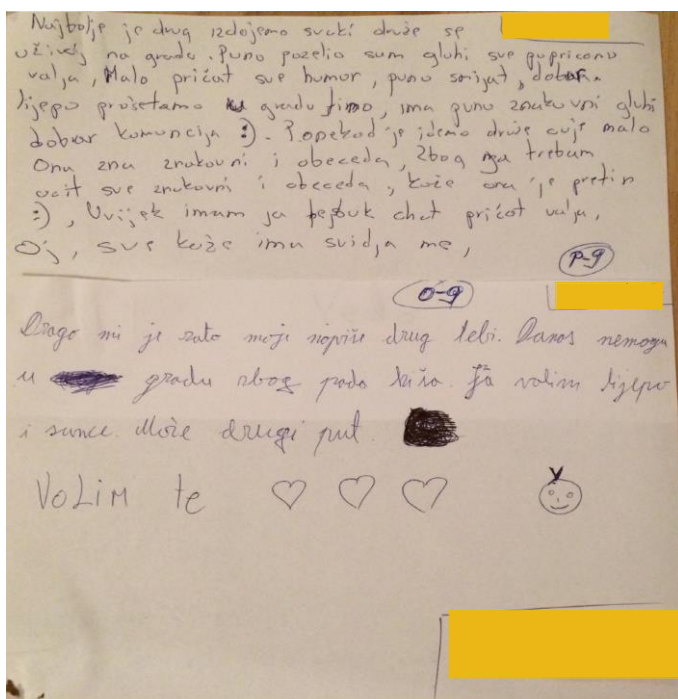


Figure 1. Example of a letter

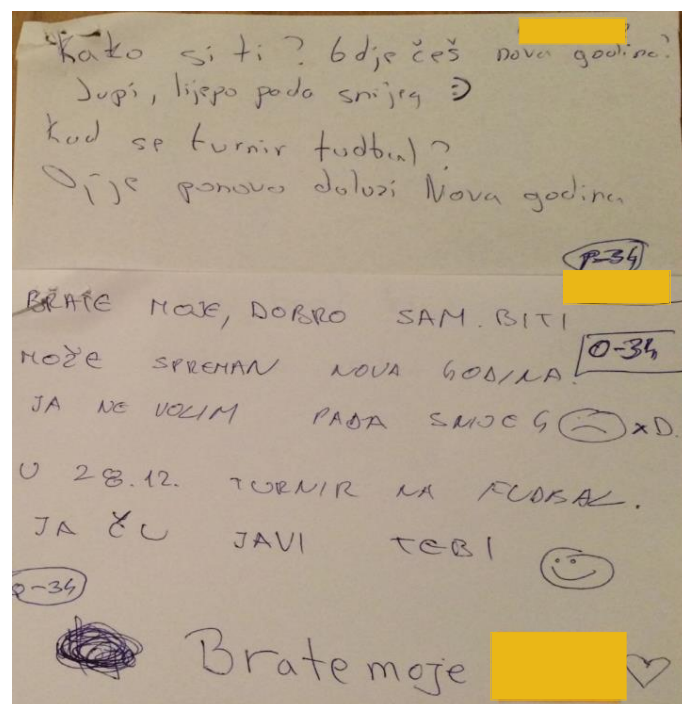


Figure 2. Example of a letter



## DISCUSSION

Based on a detailed analysis of the content of the letters, the commission for the assessment of communication and linguistic competence found that the communication and linguistic competence in this research was analysed through 45 communication exchanges (letters), which means that in this research could be attended by a maximum of 90 respondents and achieve a maximum of 180 linguistic and communication competencies. Considering that 4 interviewed respondents took part in this research, with which the deaf respondents responded, the total number of 180 communication and linguistic competences was reduced by 8, because their competences were not the subject of this research. In addition to the above, in the 2 communication processes the respondent's letter did not

arrive, so only the linguistic competence was analysed with the letter-transmitter, and the number of maximum possible competences was reduced by two more communication competences. From the above, we can conclude that the total number of linguistic and communication competences in this study is 170, of which 84 are communication and 86 linguistic competences and the same number of respondents (Table 1). By inspecting Table 1, it can be noted that most of the deaf respondents, or 82.14%, have communication skills, which means that the respondents understood the messages from the received letters and accordingly adequately responded to the written content. It can also be concluded that the majority of respondents, or 75.58%, lack linguistic competence and that education and rehabilitation processes should work on improving the linguistic competence of deaf people.

Table 1. Commission's conclusion on the existence of communication and linguistic competence

Variable	Communication competence		Linguistic competence	
	f	%	f	%
There is communication competence	69	82.14		
There is no communication competence	15	17.86		
There is linguistic competence			21	24.42
There is no linguistic competence			65	75.58
<b>Total</b>	<b>84</b>	<b>100.0</b>	<b>86</b>	<b>100.0</b>

Deaf people from the impossibility of converting an internal speech scheme into an expressive speech expression in mutual communication via letters maximize the use of shortened voice schemes that determine communication ability. By analysing the content of the written communication form of deaf people, one can speak of sentence constructs that refer more to internal speech schemes, which Chomsky described as an unarticulated speech in generative grammar that remained at the level of generativeness and did not suffer syntactic and semantic speech production. The structure of the written form of communication in deaf children is almost always focused on thematic events in the immediate time interval, which is also logical, due to the educational efforts to bring deaf children closer to everyday life, and they are abundant in everyday life with those events that are in line with the educational program. The deaf people in written communication are able to decode and correctly answer formed written communication content, indicating a deeper psychological recogni-

tion of the mental framework. The impression is that deaf children have the ability to propagate thoughts and the ability to decrypt communication contents in the communication chain. In the written correspondence between the deaf people, there is the comprehensibility of short sentences. These short sentences are composed of two or three words, and when a deaf person attempts to compose a sentence of more than three words, there is a grammatical and syntactic confusion that complicates understanding. The subject of a written form of communication in some deaf people cannot adequately differentiate due to short statements and present omissions and substitutions in sentences. The agrammatic structure of the sentences, the presence of omissions, substitutions and lexical inversions, reduce the linguistic value of the written form of deaf communication. The deaf children in their written communication use linguistic idioms, which they learn and use without any problems. Well-placed lexemes can be seen in the sentences.

There are deaf children who in communicational and linguistic terms show extraordinary talent, and besides having severe hearing impairment with such skills and adequate rehabilitation approach they achieve in addition to a communication competence a linguistic competence too. The hearing people through the written analysis of deaf people can make written communication in the exchange of communication content with the deaf.

## CONCLUSION

Deaf children from the impossibility of converting an internal speech scheme into an expressive speech expression in mutual communication through letters maximize the use of shortened voice schemes that determine communication ability. Most deaf children (82.14%) have written communication skills, understand messages from received letters and according to the topic adequately respond to written content. It can also be concluded that most deaf children (75.58%) do not have linguistic competence and that education and rehabilitation processes should work on improving the linguistic competence of deaf people. The agrammatic structure of the sentence, the presence of omissions, substitutions, and lexical inversions, reduce the linguistic competence of the written form of communication of deaf children. Linguistic competence in written communication have about 24.42% deaf children. In the written correspondence there is the comprehensibility of short sentences composed of two or three words. Deaf children in their written communication use linguistic idioms, which they learn and use without any problems. Well-placed lexemes can be seen in the sentences.

## REFERENCES

- Aladrović, K. (2007). *Rano učenje hrvatskoga jezika*. Prvi specijalizirani znanstveni skup. Zadar.
- Chomsky, N. (1979). *Gramatika i um*. Beograd. Nolit.
- Coppola, M., Newport, EL. (2005). Grammatical Subject in home sign: Abstract linguistic structure in adult primary gesture systems without linguistic input. *Proceedings of National Academy of Science of the United States of America*, 102 (52), 19249-19253.  
[http://www.bcs.rochester.edu/people/newport/pdf/Coppola\\_Newport05.pdf](http://www.bcs.rochester.edu/people/newport/pdf/Coppola_Newport05.pdf)
- Hasanbegović, H., Kovačević, J. (2014). *Sistemi komunikacije u edukacijskoj rehabilitaciji*. Institut za humanu rehabilitaciju Tuzla. ISBN 978-9958-0999-0-8
- Hasanbegović, H., Mahmutović, E. (2014). Syntax Development in Language Education of Children Who Are Deaf or Hard-of-Hearing by Usage of Modern Technology. *Sino-US English Teaching*, 11: 5, 307-31. <http://www.davidpublishing.com/show.html?16328>
- Hasanbegović, H. (2012). Letter transformation at linguistic understanding of deaf people. *US-China Foreign Language*, 10: 4, 1061-1066.
- Hasanbegović, H., Beha, A., Mahmutović, M. E. (2013). Differences of subjective evaluation of professional orientation between educators and deaf people. *Cahiers des sciences naturelles*, Revistas Academicas, 22: 5, 2-14.
- Hasanbegović, H., Mahmutović, E. (2004). Simpraktička struktura riječi kao ishodište semantičkog doživljaja u očitavanju govora i učenju jezika kod gluhih i nagluhih. Edukacijsko-rehabilitacijski fakultet Tuzla. *Defektologija*, 11, 39-45.
- Jelaska, Z. (2007). *Teorijski okviri jezikoslovnog znanju u novim školskim programima hrvatskoga jezika*. Komunikacija u nastavi hrvatskoga jezika, 9-33. Jastrebarsko, Slap, Zagreb, Agencija za odgoj i obrazovanje.
- Kimberly, A., W. (2007). Using Balanced and Interactive Writing Instruction to Improve the Higher Order and Lower Order Writing Skills of Deaf Students. *Journal of Deaf Studies and Deaf Education*, 13 (2), 257-277. <http://jdsde.oxfordjournals.org/content/13/2/257.full>
- Lurija, A. R. (2000). *Jezik i svest*. Beograd: Zavod za udžbenike i nastavna sredstva.
- Rodriguez, I. R. (2007). Sign Language Comprehension: The Case of Spanish Sign Language. *The Journal of Deaf Studies and Deaf Education*, 13, 378-390.  
<http://jdsde.oxfordjournals.org/content/early/2007/12/13/deafed.enm063.full.pdf+html>
- Salkić, N. (2015). *Sadržajno razumijevanje pisanog oblika komunikacije (doktorska disertacija)*. Edukacijsko-rehabilitacijski fakultet Tuzla.
- Švraka E, Salkić N, Podbičanin Dž, Mujezinović B. (2016). *Računa se sposobnost a ne onesposobljenje – sport i unapređenje kvaliteta života djece s cerebralnom paralizom i djece s oštećenjem sluha i govora i njihovih obitelji*. Savez udruženja osoba s cerebralnom paralizom FBiH. ISBN 978-9926-8010-1-4. COBISS.BH-ID 23243526
- Švraka E, Salkić N, Pašalić A, Klinić B. (2018). *Inkluzivna praksa I dio, re/habilitacija u inkluziji*. Biblioteka Socijalna inkluzija – 3 knjiga. Savez udruženja osoba s cerebralnom paralizom FBiH. ISBN 978-9926-8010-3-8, COBISS.BH-ID. 24916230
- Traxler, C. (2000). The Stanford Achievement Test, 9th Edition: National Norming and Performance Standards for Deaf and Hard-of-Hearing Students. *Journal of Deaf Studies and Deaf Education*, 5, 337-348.
- Yoshinaga-Itano, C., Snyder, L. S., Mayberry, R. (1996). How deaf and normally hearing students convey meaning within and between written sentences. *The Volta Review*, 98 (1), 9-38. <http://ebscohost.com>
- Yoshinaga-Itano, C., Downey, D. M. (1992). When a story is not a story: a process analysis of the written language of hearing - impaired children. *Volta Review*, 2, 131-158. <http://ebscohost.com>.