

ÖSSZEFOGLALÓ

A 2008-ban született fiú-lány ikreim beszédfejlődése során szerzett tapasztalataimról számolok be. Az ikergyermek nyelvi fejlődésének megfigyelése lehetőséget ad arra, hogy a nyelvsajátításban az örökletesség és a környezet hatásait valamilyen mértékben kimutassa, bizonyos fókig szeparálja.

Az ikrek később kezdenek el beszélni, és nehezebben hozzák be a lemaradásukat, mint nem iker kortársaik. Később alkotnak mondatokat, nehezebben tudják önmagukat kifejezni, nehezebben hagyják el a dajkanyelvet, és lassabban kezdenek el felnőtt nyelvet használni. Rövidebb mondatokat alkalmaznak, de előfordul, hogy szavakat, szótagokat hagynak el. A szegényesebb szókincs miatt beszédük kevésbé színes, választékos, a hanglejtés is eltérhet a megszokottól. Gyakran fordul elő artikulációs probléma, beszédhiba. Ugyanakkor tudományos vizsgálatok igazolták, hogy az ikrek passzív szókincse megegyező a kortársakéval, megértik a felnőttek beszédét, megfelelően reagálnak rá, és a beszéd gyorsaságában sem mutatnak eltérést.

Kulcsszavak: ikrek, páros izoláció, megkésett beszédfejlődés, beszédhibák, rossz artikuláció

ABSTRACT

The purpose of this paper is to account for the language acquisition process of my own fraternal twins, born in 2008. The aim is to relate my personal experience with findings of scientific studies monitoring the language acquisition phenomenon to assess to what extent is the process influenced by genetics and, on the other hand, by environmental factors.

It is assumed that twins generally start talking later and they show a delay catching-up in normal language development compared to single-born same-age children. Twins start building whole sentences later, and have greater difficulties to get their meaning across. They are also slower at leaving baby talk behind, so twins take a longer time to start expressing themselves in standard adult language. Moreover, their sentences are usually shorter and it happens that they leave out certain syllables. As a consequence of their limited vocabulary, their speech sounds flat, less polished, and their intonation might also differ from conventional modulation. In addition, it is not uncommon for their speech to present articulatory disorders as well. However, scientific studies have shown that the twins' passive vocabulary corresponds to single-born children of the same age group. Twins therefore are capable of understanding their parent's language and react accordingly, and their speech rate does not show a perceptible difference either.

Keywords: twins, cryptophasia, speech delay, articulation disorder, faulty speech



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LANGUAGE DEVELOPMENT IN TWINS

Az ikrek nyelvelsajátítása

Učenje jezika za blizanaca

Research in twin language development

Due to the fact that birth of multiples were rare in the past, the related scientific studies were scarce as well. The assisted reproductive technology medical procedures have brought a significant increase in the birth of multiples, and consequently also a greater need and demand for more research on the subject. Additionally, the increase in births has made the research easier and more prevalent.

To be more precise, the birth of twins has doubled since the 1970's in the developed countries. For example, in Austria in 1970, there were 9 multiples born out of thousand pregnancies, while in 2005 the number showed an increase to 15. In the United States from 9,4 the increase was to 16,4; in Great Britain from 10,4 to 14,9; in Denmark from 9,4 increased to 22,4 for every thousand pregnancies (Pison G.; Couvert, 2004) In America, in 2006 from 1000 births, 32 were twins (Swallow 2011) The Hungarian numbers from 2012 have been similar: 32,2 (KSH 2014).

Some studies of language development in twins also deal with intra-uterine communication (Piontelli, 2010), as well as with telepathic communication (Segal, 2017) or with cryptophasia (Mérei, V. Binét, 1998). The different studies examine, besides language development, the expected social or group integration difficulties and delays. The central issue (Ganger, Jennifer; Dunn'Gordon 2005) points toward the question of differences observed as being attributable to genetic causes, or on the other hand, to the dissimilar aspects of social integration in multiples. Although there is no real consensus about which factors constitute the genetic language foundations in

human beings (Stromswold 2001), most authors consider the social circumstances as accountable for differences in development (Métneki, 2005)

Furthermore, in clinical pedagogy and psycholinguistic research the language development in twins groups were observed (usually not comparing them to not twins) where the atypical language development was assumed (e.g. Vassné Kovács 1969; Bishop et al. 1996) The finding pointed toward the delay of language and cognitive development of twins compared to single-born ones, in vocabulary or speech flaws, in grammar overall, as regarding their communications (Laczkó 2011). Furthermore, according to Mária Gósy and Marta Pregitzer (2019) numerous studies show linguistic, speech and reading difficulties in the case of twins. Although all the aforementioned findings pointing towards language development shortcomings in twins could be summed-up as an overview of the possible problems that might appear, and therefore by applying better care and attention to twins' language development, the problems might be obviated. In general, the language development delay in twins is attributed to the differing amount of speech stimulus they receive, according to specialists.

Twins grow-up in very special sociological circumstances (Laczkó, 2011) which is the main fact that accounts for the differences between single children's and twins' development. Single-born children learn from their community members about language usage. Moreover, the world in general is exemplified to them mainly by their older siblings and their parents. On the contrary, twins usually spend greater amounts of time with each other than with others, relying upon themselves for their exploration of the world around them. As a consequence, their language learning, phonetics and linguistic exploratory testing occurs mainly limited to one another and so they do not benefit enough from adults who have a correct knowledge of the language. While it is well known that single-born children do have the mentioned community advantages.

It is known that babies are inborn with speech organs that are capable of producing any kind of phonetic sound (Gósy, 2005), but during the babbling stages babies only develop the sounds that receive maternal reinforcement, e.g. a smile, repetition, praise, or fondling. Mothers react positively to sounds that actually exist in the mother tongue, they usually show a reinforcing signal accepting such sounds as "correct." In the studies, at the beginning, from a very wide scale of as many as 200 possibilities, only the mother tongue specific sounds are selected. The procedure is the same for superior language components as well. After all, developing children normally are continually testing their linguistic efforts by interacting with their mother; while the twins, due to their special family and sociological conditions do the same but with their analogous linguistic level companion, failing to obtain the ideal feedback as a result.

In effect, language development of twins is not considered slower or worse than in single-born children, but the process evolves in a different way, according to Julia Métneki (2005):

Normally, the language development takes place between two persons, mother and child in the case of single-born children; while regarding twins, there are three potential participants, and this fact complicates the situation [...] The fact that twins

use shorter sentences does not necessarily point toward their language development delay, but is actually the result of a need. A single-born child, when asked a question, will normally have enough time to formulate the answer. On the contrary, the twin does not always have the possibility, due to being three in the dialogue, therefore his answer might come with a lag and his sentence will be short, truncated, and tightly circumscribed to the meaning. This happens because all the former elements creating haste might be placed above in importance to the effort of following the conventional rules of language correctness by the twin. Therefore the option mentioned becomes the most effective way for a twin to succeed in saying what he wants.

Otherwise, twins usually react promptly to the interlocutor's speech and are also capable of perceiving when it is appropriate to keep quiet, and it is very rare to hear them both speak at the same time. Moreover, there is a mutual harmony and non-verbal communication between them, significant observations that are scientifically attributed to their simultaneous development, which has already started being together in the uterus. Note that the special circumstance mentioned above does not imply an advantage that twins would have over single-born children.

Socializing and Language Development of my Own Nursery-age Twins

As a young mother I expected my twins to normally develop both physically and psychologically. I hoped that their language development would also happen the same way, and that their eventual shortcomings, resulting from their condition of twins would make up the leeway before arriving at school age. My twins were taken care at home until the age of three, and went to preschool at the age of four.

Incidentally, I am showing here the speech-therapy evaluation results, as well as their perceived condition written by the nurse of the twins when at the exact age of 6 years and 5 days, answering my petition.

During their first nursery year, over their settle in period, they used to cry a lot when parted from each other, and often had to be lulled by the nurse. This period took longer in the case of the twin girl, since her classmates did not interest her yet, and she preferred to be with her teachers, enjoyed their company and being cuddled. During this time, the twin boy was already looking around in the group. Later on, the twins liked to play with each other, not being particularly interested in their classmates.

During their second preschool year, at the beginning the twins still cried once in a while, typically the girl initiated the crying and the boy continued it. Nevertheless, once the twins got over this period, they started getting interested in their classmates. Friendships formed with girls and they chose to busy themselves in the playroom during the mornings. The boy, on the other hand, preferred to follow the girl around because at that time he still did not have any friends.

By their third preschool year they started to go to a swimming pool on Friday afternoons, and on that day they did not take naps in the kindergarten. The twins used

to take their naps on three days in the institution and skipped one day, and this last day without naps filled both of them with tremendous joy. They also became more receptive towards their schoolmates at this time which can also be attributed to this schedule change that they ceased with the morning crying habit.

On their fourth year, the twins showed a looser and changing relationship to each other, but they always searched for each other when the going got rough. They did not spend as much time together at this time and rarely played with each other in groups, but rather did it separately with others. The boy found a regular playmate, while the girl drifted among various possible choices, according to the nurse's account, although the girl liked to play alone as well. When the nurse was substituted by a new one, the girl soon became very fond of her too and so she enjoyed being the teacher's pet. Specifically the girl asked many questions, also talked a lot about her experiences and enjoyed reading fairy tales. Moreover, by quoting from memory certain episodes, she often mentioned the stories, or asked for a particular tale. Once in a while, the girl also tried to become more communicative in the group, but her speech problems unfortunately got on the way to being clearly understood by her classmates. It should be noted that we as parents, only learned from the nurse herself about the girl's dependence on her nurse, because the girl at home only used to mention the same friends' names. In addition, the girl was endowed with a stronger character than her brother; therefore he remained obedient for a longer time, but his will-power and self-determination developed gradually up to the point that they became levelled. In fact, the girl tried to get her will across in the group too, which sometimes did not work, so she resorted to ask for adult help. The boy was more easy going while also liked playing focused in the activity, and he liked to do so indistinctly with boys or girls. He was also good at furthering the game by giving clever tips. Although it happened sometimes that misunderstandings arose between the twins, they usually were able to solve them by themselves. Otherwise, there were no mentionable cases of conflict or disagreement with their playmates.

Regarding my eldest single-born daughter, whom I took care of exclusively at home during her first three years of life, I would like to mention, that my own speech shortcoming, namely, the faulty pronunciation of fricative sounds, did not interfere at all with her learning of the pronunciation of all phonemes of the language perfectly. I should also mention the circumstance that placed the twins at the time in a more advantageous situation because my husband, who does not have any speech problems at all, was also at home, right at the time the twins were born, and beyond. Therefore, if the twins were exposed to my not completely impeccable pronunciation, they had the opportunity to also hear ideal speech modelling. Nevertheless, when the twins were five years old, we took them to a speech therapy evaluation soon after we noticed some mixed phoneme pronunciation. The valuation confirmed that there were no skipping of sounds (alalia), nor distortions (dislalia) and no other speech problems were found, but in order to take care of the mixing of sounds we took them to weekly

therapy sessions in their third year of preschool, at the same institution where they were studying. Their therapy went on until the fourth year and even extended to their first year of primary school. We had a speech therapist taking care of both of them. Later on, at the beginning of their fourth year, in September 11 of 2014, when the twins were six years and three days old, the new speech therapy evaluation confirmed that their speech organs were intact, their vocabulary ample, and their reproductive and productive speech of good quality. To be more precise, while repeating 10 meaningless words the boy only missed three, and the girl, five. Their listening comprehension was good: from a tale composed of six simple sentences, after only a single listening they could remember all the ten keywords. None of them showed problems with grammar. Otherwise, the study suggested that the twins needed articulatory development. The boy missed the correct pronunciation of *sz*, *z* and *c*; which sounds I also tend to have pronunciation problems with, namely: “*sz*” /s/, “*z*” /z/, “*c*” /ts/. These pronunciation problems occur in all situations, isolate, at the beginning of words or at the end, also in the middle or with other consonant sounds. Specifically, I had problems with the /z/ sound only at the beginning or at the middle of words, and the /v/ sound I confused with the /a/ at the beginning, at the end or in the middle, too. Otherwise, the girl had a considerable ample scale of sound substitutions and the misarticulated sounds she always substituted with:

1-3. Chart

The girl's sound substitutions in homogeneous groups

What is substituted	Substituted with:	What is substituted	Substituted with:	What is substituted	Substituted with:
ty /c/	t	sz /s/	t	r	l/j
ny /p/	n	s /ʃ/	t		
gy /j/	d	c /tʃ/	t		
		z /z/	t		
		cs /tʃ/	t		

In addition to the table's content, the girl, as well as the boy tended to substitute the sounds /v/ and /a/ in isolated positions or at the beginning, the end or middle position of words. In the girl's case the articulatory substitution shown in tables 1-3 were less problematic because she substituted different sounds with each other. During reading and writing, her stronger shortcomings were according to what is specified in chart 2 regarding sound substitution because, when speaking or listening she confused different sounds. Therefore it was natural for her not to write the appropriate signs for what she could not distinguish accurately during listening. In both twins, the same problems were observed, specially with the sounds /v/ and /a/ since both twins heard and pronounced differing phonemes the same way, so it followed that for them both sounds were indistinguishable in reading, writing or listening. It is well known that for the successful development of reading skills faultless pronunciation is not necessary, but a mental idea of the same is; therefore

if the difference is heard between two non-identical sounds, it would be enough for the acquisition of effective reading skills. Unfortunately, starting from the above mentioned phonetic assessment until the initiation of the school year was not enough time for the twins to overcome their articulatory problems. Although it should also be mentioned that with the help of the speech therapist, and the family together at home, persevered with the recommended phonetic exercises.

It is interesting to note that we tried to communicate at home according to Júlia Métneki's (2005) recommendations:

- We created situations furthering individual conversations, for example during bathing time with each twin.
- Both parents took care to speak separately with each twin. So, when we gave instructions or asked them for something, we spoke to each one individually. We also praised them separately repeating again the words for each, instead of doing so for both at the same time.
- We took care to finish our communication with each twin during play or other group activities, instead of starting talking to one and then continuing the rest of the communication addressing the other twin.
- It can happen that sometimes one of the twins is more talkative than the other, and even to act on behalf of the other, but we did not allow any of them to speak instead of the other.
- We also furthered a broader external social activity, and procured more diversified conversation settings.
- We recited many popular sayings, rhymes and tales.

My twins began their school year in September 2015, but their language development problems required a gradual adjustment, so they differed on the time needed to attain them. As expected, the twin girl presented greater difficulties regarding reading and writing due to her pronunciation problems, therefore she could not learn those skills on her first year. Because in Hungary it is not generally granted to repeat the first year of primary school, we asked for a change of institution to allow such plan. During her repetition year we did not notice any of the former shortcomings. Moreover, thenceforward she has been able to progress smoothly along with her peers and has actually become a good student. The boy has also made normal advancements, and we did not find any delays worth mentioning.

Summary

Articulatory problems in our twins were plausible due to my own pronunciation shortcomings of fricatives. Nevertheless, my eldest daughter was the only one to receive my full time care at home until the age of three years and never developed any language problems, notwithstanding that she did not have an impeccable listening example due to my own speech, and she did fine without any speech therapy. On the other hand, regarding the twins, even with the benefit of their father's perfect speech model to listen

to, they presented young age articulatory problems. I think that the twins' difficulties should mainly be attributable to their condition of being and growing up precisely as twins. In addition, note that they also had the advantage over their older sister of having the perfect speech example of my husband during their listening and pronunciation learning stages, to no avail.

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