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New Bulgarian University

**INTENSIVE PROGRAMME: SPECIAL ABILITIES  
AND TALENTS - PATTERNS OF COGNITIVE  
PROCESSES IN PEOPLE WITH DISABILITIES**

# The case of 'wild children' as evidence for Critical Period Hypothesis



**MILENA SEREIKAITĖ**  
**NORWAY**

# Critical period



- Hearing
- Binocular vision (both eyes are used)
- Language acquisition (L1, L2)

# Critical Period Hypothesis



- Lenneberg (1967) offers the Critical Period Hypothesis (CPH) embodying two ideas:
  - ✓ the biological basis responsible for language development can establish the critical period for the language acquisition, between the age of 18 months and early puberty
  - ✓ during the critical period the child's presence in the linguistically supportive environment is necessary as it leads into the successful language development

# Evidence for CPH



- **‘Wild children’:**
  - ✓ ‘the abandoned or isolated children who grow up without the normal condition for language learning, and so without language’ (Hudson, 2000. p. 175).
- **There are two groups of ‘wild children’:**
  - ✓ those who grew up in jungles or forest
  - ✓ those who grew up surrounded by the extreme social deprivation

# Research



- **Problem:**

- ✓ The investigation of CPH by using the cases of ‘wild children’ can contain the certain drawbacks because of the ‘language-deprived children’s’ extreme life conditions that may have damage the certain abilities to interact linguistically.

- **Aim:**

- ✓ critically discuss the case of ‘wild children’ as the evidences for the CPH
- ✓ what are the possible drawbacks of using such evidence and whether it is worth using it as evidence in spite of those drawbacks.

- **Analysis:**

- ✓ well documented cases of Victor and Genie

# Victor - 'The Wild Boy of Aveyron'

- 18th century, in France
- twelve-year-old boy who had been living in the woods, and when captured was unable to produce any utterance
- produced the sound 'li' referring to the daughter of his teacher
- acquired '*lait*' (milk), *Oh, Dieu* (Oh, God), was able to understand commands
- Understood the meanings of actions



Der Wäde von Aveyron.

# But...



- ‘Health state’
- ‘Experience in wilderness’: the emotional shock experienced in the feral surrounding.
- Ryan and Singleton (2004, p.47) state that Victor ‘occasionally underwent spasms, which appeared to indicate that his nervous system had been affected in some way’, he had ‘numerous scars on his body, including a long horizontal one across his throat’.
- Victor showed no emotional affection to women at the age of biological maturation.
- The case of autism or schizophrenia, cognitive deficiencies?



# Learning methods



- Match the objects with the right words
- If Victor made the mistakes by pointing to the wrong word, he would be punished by being put in a closet.
- Limited learning methods



# Case of Genie

- the language-deprived child who was kept in the isolation from the normal social intercourse by her father and found at the age of thirteen was incapable of speaking
- ‘Genie did not talk when she was first discovered <...> later she scored in the range of a normal 5-year-old on standard vocabulary’ (Hoff-Ginsberg, 1997, p. 407).
- She attained the special language training programme during which she produced utterances such as ‘I want mat his present’ or ‘Genie love Curtiss’ demonstrating that she developed her vocabulary and speech comprehension, but had a difficulty in acquiring syntax (Lust, 2006).



# Case of Genie



- She developed remarkable nonverbal communication skills (deep fascination with music, played with toys).
- Distinguished between plural and singular nouns, positive and negative sentence.
- Pronounced two/three-word sentences.

But:

- She could not produce correct wh-questions: ‘Where is may I have penny?’ (Curtiss, 1977)
- Failed to understand passive constructions and distinction marked by tenses
- Grammar was deficient in both production and comprehension: ‘Mama wash hair in sink’, ‘Father take piece wood. Hit. Cry.’ (Curtiss, 1977).

# But...



- Psychological and physical trauma caused by her father.
- ‘She was physically abused punished by her father if she made any sounds’ (Curtiss, Fromkin, Hrashen, Rigler, D & Rigler, M, 2004, p.127).
- Brain scans had shown some unusual features - in particular that Genie's brain was dominated by her right hemisphere, a left hemisphere that has never been used for language has lost its capacity
- Suffered from malnutrition
- We don't know whether she was a normal child before her terrible experience.
- Rymer (1993) points out that the scientists were performing too intense experiments with Genie's language that might have exhausted the girl at the same time affecting her interest in learning a language.

## Conclusion



- Regardless of how complex the linguistic domains of language can be, the individual experiencing language before the biological maturation may become the skilled user of language.
- Lenneberg's hypothesis is not proven, but it is strongly supported.
- The discussed cases highlight an idea that language learning process after the critical period may end up in a very limited language usage.
- Hence, critical period may exit just for the particular areas of language as showed in the case of Genie (acquisition of vocabulary).

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