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The exposure and incidence of the lexical negation in the school practice

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Abstract

The study deals with the theme of lexical negation - operationalized as the use of verbs with prefix ne- (no-, un- in English). The aim is to verify that the teacher’s active dictionary affects pupils' vocabulary. Research is carried out in the natural conditions of primary school practice. There were created two new research tools: Q-sort of negative and positive statements cards and comics with 6 school situations that evoke the use of lexical negative statements - both have proven to be suitable for this type of research. This study demonstrated that children have in their active vocabulary high proportion of lexically negative statements (79 %). It seems that certain situations cause the educators and subsequently children to increased need to use lexical negation in their verbal expressions: first, the situations in which pupils behaviour is beyond the rules, second, the situations where the teacher draws attention to the pupil’s error or mistake and third, the situations that requires a quick solution. The positive variants of statements are less common because the teachers are not accustomed to use them, they do not have automated sentence patterns and it takes them longer to formulate them.

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1. Introduction

The project is based on the concept of positive psychology and follows up previous descriptive research of lexical negation (Havigerová, Karásková, 2012).

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Positive psychology posited at the turn of the millennium following the current of humanistic psychology (Seligman, Csikszentmihalyi, 2000). Previous research from the field of cognitive psychology points out inter alia the direct coherency between experiencing and thinking (Sternberg, 2000). The change in thinking demonstrably affects the change of experiencing and this relation is reciprocal. Fredericks (2009) describes this relation with the help of a metaphor of a radio receiver – we are sending and receiving such impulse which we are tuned to. The tuning is while often influenced by insignificant stimuli as a few words or a nice cup of a hot drink as has been repeatedly done by experimental evidence see conceptual, postural or sequence priming (e.g.Kantowitz H.B., Roediger H.L., Elmes D.G., 2009) and has many other different consequences.

The preponderance of negative thoughts leads to negative experiencing (see depression research) and vice versa. Analogically the research has repeatedly shown that there exists a direct coherence between thinking and paying attention (Sternberg, 2000). The basic characteristic of attention is selectivity. We choose from a never ending current of impulse those which are at that moment important. The focus of attention is influenced by interpretation of events and a type of induced memories in mind – positive thinking is connected with positive interpretation of events and is supported by recalling memories in mind (Diener, Biswas-Diener, 2008).

External expression of thinking is a speech, which is made by linguistic utterances (e.g. Plháková, 2004). The sentences in Czech language have the positive or negative form. The positive sentence can be used to express a predication, a command or a wish. Negative sentence is used by the speaker when denying the validity content or he/she forbids realization of the sentence content or does not want to wish its realization at all.

The variability of linguistic means allows that the same thoughts could be formulated by more than one way. Several formations might have different impact on the receiver. Negative and affirmative sentences increase activation in different areas in the brain (Christensen, 2009); negation caused changes in activation levels (MacDonald & Just, 1989).

The speech is the primary means of pedagogical communication (Bendová, 2011) and as Bartošová (2008) mentioned, is the basis of communication in spoken and written form too. Number of observations in pedagogical practice can be measured in terms of valence as positive psychology or a negatively formulated statement. Based on the findings from the field of positive psychology can proceed inter alia following assumptions:

- **Negative teacher´s statements are indicators of**
  - Negatively oriented teacher´s experience,
  - Negatively oriented teacher´s attention,
  - Negatively oriented thinking,

- **Negative teacher´s statements influence**
  - Focus of pupils ´attention towards negative phenomenon,
  - Pupils ´experiencing towards negative emotions,
  - Pupils ´thinking towards negative interpretations,
  - Pupils ´memorising (less extend of memorizing, memory storing with the connection to negative emotion),
  - Classroom climate.

We have focused in this research on the problem of lexical negation. The negations in the Czech language is created by a typical national morpheme in a prefix, negation – ne – no, un. This is a remain of protoindoeuropean time (Kosta, 2001). *Lexical negation* is understood by using negational morpheme (prefix, negation ne-no) to create negative formation of words, e.g. substantive (*nepřítel, nedochvilnost* – enemy, tardiness), adjectives (*nelaskavý, nestálý* – unkind, unstable) and adverbs (*nedobře, nezajímavě* – no good, uninteresting) (Mikulová et al., 2005). The negative sentence can be made by negative morpheme ne- (in Czech language = no- or un- in English language), which has kept is characteristic position standing before a verb (*nebude, nevěřím* – not will be, *I do not believe*). This study is focused on negative verbs made by prefix ne- no, not, un (so called *Lexical negation*).

For further understanding look at these following statements:
• Neboj se, tohle není na známky. Do not worry, this is not going to be marked.
• Nezapomeň, že zítra pišeme test. Do not forget that we are due to write a test tomorrow.
• Neříkej, že jsme to neprobírali. Do not say that we hadn’t learnt it.
• Neopisuj od souseda. Do not cheat and copy from your partner.
• Nevykřikuj. Do not shout.

What do these statements have in common? Firstly all of them come from school. Secondly all of them have been said by the teacher towards pupils. Thirdly and this is essential that they have the monitored phenomenon of negation. We are aware that this system also works in the family (e.g. Skutil, Faberová, & Bartošová, 2011), but it is not at this stage the subject of our research.

Our previous study (Havigerová, Karásková, 2012) - analysis of teaching process in initial education in the Czech Republic in terms of lexical negation - suggests that Czech teachers do use negative words routinely (9361 words used in 204 lessons) and unnecessarily (all 409 verbs in the imperative form could be positively reformulated while maintaining the sense). Many of them have the form of questions or tags, such as Nezapomněla jsi, co …? - Didn’t you remember what …?, Víš, co děláme, ne? You know what we’re doing, don’t you? (Havigerová, & Haviger, 2012). In this follow-up study, we wanted to determine whether experience with negative verbs the teacher’s verbal behaviour leaves influence in the choice of words of pupils.

2. Method

2.1. Purpose of study

To verify that the teacher’s active dictionary affects pupils' vocabulary. The measured criterion is the incidence of lexical verbs in the negative form (words with the prefix ne-).

2.2. Participants

This part of research was conducted in one second class with 23 children present. Children were 8-9 years old.

2.3. Material and procedure

Research is carried out in the natural conditions of primary school practice, during the art lessons. Research has the character of priming experiment. This paper presents the preliminary part of an experiment. Purpose is to verify the methodology, using of two methods: q sort and blind comics.

Q sort - 50 cards with the most common statements of the teachers created on the basis of research in lexical negation at the corpus SCHOLA2010 (Havigerová, Karásková, 2012). 25 of them contain statements in the lexical negative form (for instance don’t crib) and 25 contain their positive reformulations (work singly). These cards ensure that all pupils have equal input. Pupils stick the cards into the template for the q sort. Cards manipulating is followed by regular art lesson. At the end of lesson comics is distributed to pupils. Blind comics consist of 6 common school situations that may evoke the use of lexical negative statements. Pupils are tasked to add text to the empty bubbles at the mouth of the teacher. Number of lexically negative verbs used in teacher’s bubbles is measured.
3. Results

There were obtained of the 124 valid responses which contained 98 verb with the prefix no- (ne-). That is 79% of sentences containing lexical negation.

Table 1: Number of lexical negative verbs in comics situations: Descriptive statistics (N=23)

| Variables – comics situations | Sum | M    | SD   | Min | Max |
|-------------------------------|-----|------|------|-----|-----|
| Error in drawing              | 10  | .48  | .512 | 0   | 1   |
| Pupils crib                   | 20  | 1.00 | .459 | 0   | 2   |
| Homework assignment           | 6   | .30  | .571 | 0   | 2   |
| Too small letters             | 14  | .67  | .577 | 0   | 2   |
| Swinging on the chair         | 22  | 1.05 | .384 | 0   | 2   |
| Scoff at classmate            | 26  | 1.24 | .700 | 0   | 3   |
| **Total**                     | 98  |      |      |     |     |

From the table 1 it can be seen that some of the images evoked use of lexical negation more than others.

4. Discussion

Many of priming-based experiments and researches (f.e. Huttenlocher, Vasilyeva & Shimpi, 2004) shows that there is a demonstrable effect between the way adults talk and speech of children. This study demonstrated that children have in their active vocabulary high proportion of lexically negative statements (79 %). In the context of the findings from our previous study (teachers use increasingly lexically negative statements) we believe that largely teachers are guilty of this situation.

It seems that certain situations cause the teachers, respective the pupils increased need to use lexical negation. This is, in our case, the situation in which one student mocks another (Scoff at schoolmate); one student describes the second (crib pupils) and pupil swinging on a chair (swinging on the chair). What do these three situations have in common? Firstly, pupils in them beyond the rules and second, the situation requires a quick solution.

The situations where the student draws something wrong (error in drawing) and writes the wrong (too small letters) result in the use of lexical negation less often. In both cases there is a situation where the teacher draws attention to the error.

Last situation, homework assignment, aroused in the preliminary research for at least negative sentences. Label of the situation above picture was word for word "teacher enters homework." This label we mistook for "teacher reminds homework." The mini study on four children occurs that this changed label evokes the increased use of lexical negation. It seems that if sb. wants someone to remember something, it is typical for Czech speakers to warn "do not forget".

5. Conclusion

There were created two new research tools based on the results of previous research (lexical negation in the corpus SCHOLA2010) - 25 cards with the most common lexical negative statements of teachers and 25 lexically positive reformulations and comics with 6 school situations that evoke the use of lexical negative statements. Currently on going experiment with pre-test (q sort of negative statements and subsequently the lesson with an
increased incidence of the lexically negative statements) and post-test (q sort of positive statements and after it the lesson with an increased incidence of the lexically negative statements by trained teachers).

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Appendix A. Comics method

Six comics’ situations that may evoke use of both lexical negative and neutral verbs.
A.1. Error in drawing

A.2. Pupil cribs

A.3. Homework assignment
A.4. Too small letters

A.5. Swinging on the chair

A.6. Scoff a classmate