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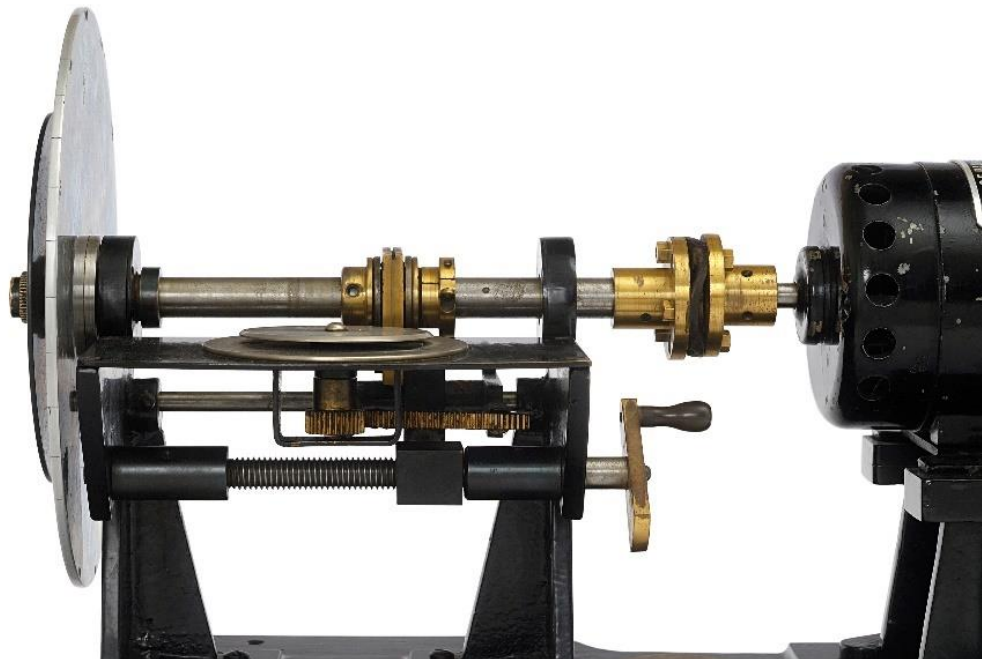
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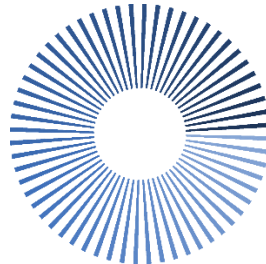FACULTY OF PHILOSOPHY, UNIVERSITY OF BELGRADE

EMPIRICAL STUDIES IN PSYCHOLOGY

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FACULTY OF PHILOSOPHY, UNIVERSITY OF BELGRADE

Institute of Psychology, Faculty of Philosophy, University of Belgrade

Laboratory for Experimental Psychology, Faculty of Philosophy, University of Belgrade

Belgrade, 2020

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"We must do what the leader says" – Children's understanding of the rules of cooperation

Smiljana Jošić (smiljana.josic@gmail.com)
Institute for Educational Research, Belgrade

Abstract

How do ten-year-olds conceive cooperation? What meanings do they assign to the rules of cooperation? Do children interpret the rules of cooperation the same way as adults? Why do ten-year-olds consider it natural for every group to have a leader? This paper offers possible answers to these questions based on the analysis of spontaneous dialogue between children on the topics of cooperation and the rules of cooperation.
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Keywords: cooperation; ground rules, ten-year-olds; conversational analyses

Introduction

Productive cooperation is one of the highly valued social skills in today's world. Therefore, it is not surprising that research has greatly focused on the topic of cooperation and its realization across different contexts and ages. In this study, efficient cooperation was defined as continuous joint dedication of two or more peers to achieving a common goal, solving a problem together or construing new knowledge (Mercer & Littleton, 2007). An ample body of empirical evidence has shown that social interactions between peers are not necessarily efficient, do not always lead to development, and do not inevitably constitute cooperation (e.g. Galton & Williamson, 1992; Mercer & Littleton, 2007). In light of these findings, numerous projects have focused on the adequate acquisition of these skills (Mercer, Dawes, Wegerif, & Sams, 2004; Mercer, Wegerif & Dawes, 1999; Rojas-Drummond & Mercer, 2003; Wegerif, Littleton, Dawes, Mercer, & Rowe, 2004). One of the key elements of trainings aimed at encouraging cooperation is the existence and establishment of the ground rules of cooperation (Dawes, Fisher, & Mercer, 1992).

For the abovementioned reasons, Mercer emphasizes the importance of introducing ground rules before every activity in which children engage together (Mercer, 1996). These rules are necessary in order to maintain the kind of working environment in the classroom that is necessary for productive learning (Dawes, Fisher, & Mercer, 1992). Mercer and colleagues defined seven ground rules of cooperation (Mercer, Wegerif, & Dawes, 1999): (1) group members should exchange all information among themselves; (2) group members should always strive to achieve mutual agreement; (3) all group members share responsibility for decisions they reach; (4) group members are expected to anatomize the task at hand; (5) accepting challenges, that

is, acknowledging the existence of disagreements between group members and the need to discuss such disagreements; (6) deliberating on all suggestions put forward during conversation; (7) encouraging all group members to speak. The basic function of the first three rules is to integrate group members so they could construe knowledge together, through dialogue. The fourth rule emphasizes the need to analyze all group tasks, since it is common for group members to lack interest and fail to participate in problem-solving. The fifth rule pertains to accepting challenges and it is particularly important as it points to the fact that challenges in productive cooperation motivate interthinking and initiate knowledge construction. The penultimate rule requires group members to consider all the proposed alternatives before making the final decision. The last rule encourages all members to sound their thoughts in front of the group.

Available data on peer cooperation in Serbia reveal that in practice, teachers most frequently use group work as a teaching method that fosters spontaneous social interaction. Such interaction results in parallel individual work among students or dialogue marked by conflict (Antić, 2010). Empirical studies have shown that even this form of spontaneous group work is rare in practice: methods that commonly involve cooperation between students are employed in only 1% to 5% of all classes (Radulović & Mitrović, 2014). Moreover, teachers tend to believe that school is a place where students should develop their cognitive competencies (Džinović, Đević, & Đerić, 2013). In class, a fair number of teachers ask questions that require unidirectional correct answers. Thus, they fail to provide room for students to think, discuss, and actively participate in the dialogic learning process (Radišić, 2013). Furthermore, recent Serbia-based studies examining social interaction between children and its role in cognitive development have revealed that children's conversations more often feature conflict and cumulative dialogue in comparison to exploratory dialogue (Jovanović & Baucal, 2007; Jošić, Buđevac, & Baucal, 2012; Jošić, 2017; Stepanović & Baucal, 2018).

Research findings indicate that students are not provided with opportunities to explicitly learn what constitutes cooperation and to practice cooperation in class. Empirical data suggests that even when children go through explicit cooperation training, such training does not yield results (Jošić, 2017). It is reasonable to question whether students even recognize the value of collaboration in such contexts. In other words, the question is whether exchanging ideas and argumentation

are meaningful from the student perspective. This research aimed to examine the meanings of the ground rules defined by Mercer.

Method

Sample

The sample included 20 ten-year-old fourth-graders. The children were paired up with the goal of solving tasks together, through dialogue. There was no asymmetry in acquaintance length and gender distribution across pairs (Psaltis & Duveen, 2006). A total of 10 pairs of children participated in the research, with parents' written consent.

Instruments

The research used one of the tasks from the Thinking Together project (Talk for learning atKS2 – Traffic light activity: Dawes, 2008). The task was aimed at establishing the ground rules of cooperation that lead to the adequate use of language in problem-solving. The instrument comprised 16 sentences whose function was to establish the grounds rules of collaboration (Mercer, 1996). The task was translated into Serbian, adapted to suit pair-work, and adjusted for male and female dyads (Jošić, 2017). The task requires the child/children to identify good and bad rules of cooperation. Children should use the green pen to underline good ideas, while bad ideas should be underlined in red. Table 1 shows the sentences, their functions in the context of establishing the rules of cooperation (in brackets), and the frame of formulation (the plus sign stands for a positive formulation and the minus sign indicates a negative formulation).

Procedure

In the first part of the conversation between the pairs and the interviewer, the children were familiarized with the topic of cooperation as a topic relevant to their lives. In the second part of the conversation, the children had the opportunity to agree on the rules of good cooperation by solving the Traffic Light Activity task. The children read each sentence and identified the good/bad rules of cooperation. The condition was to reach the decision together. More specifically, it was important for both members of the dyad to agree on the common understanding of the sentence read. After this segment, the interviewer analyzed each sentence with the children in order to obtain explanations and comments or to resolve any dilemmas that might have arisen during pair-work. Audio and video recordings of all interactions were made for the purpose of subsequent transcription and analysis.

Data analyses

Sentences that represent certain rules of cooperation were isolated as units of analysis. Descriptive statistics were performed, calculating the number of correct/incorrect answers to each sentence/rule. Correct answers were the ones in which the pair used the right color to underline the sentence and offered the interviewer an explanation that supported the pair's decision to identify the stated idea as a good or bad rule of cooperation. All interactions were transcribed in accordance with the rules proposed by Jefferson (Jefferson, 2004), which are most commonly used in conversation analysis. A total of 160 dialogue sequences were obtained for analysis. This paper only includes sequences related to the sentence that received a disproportionate number of incorrect answers.

Results

The descriptive data presented in Table 1 reveal that the children had a good understanding of the ground rules of cooperation. In other words, the children adequately underlined a large number of sentences and clearly identified these ideas as helpful or detrimental to further collaboration. Among sentences that received incorrect answers, the third sentence ("We must do what the leader says") stood out, with as many as half of the pairs responding incorrectly, that is, identifying it is as a good rule that could help them cooperate successfully.

A qualitative analysis was conducted with the aim of examining the understanding of the third sentence: *we must do what the leader says*. The conversation analysis provided a better understanding of the dynamics of the dialogue and context within which the task/item was solved. For the purpose of the qualitative analysis, we isolated 5 dialogue sequences involving pairs that gave incorrect answers when solving the task. This sentence is a part of Mercer's third rule of cooperation, which states that all participants in the interaction share responsibility for the decision reached. The sentence was negatively formulated and stated that one person is responsible for the decision reached and this person is the one identified as the leader. In other dialogue sequences, reasons why children recognized this sentence as a good idea notably included: previous cooperation experience (sequence 1), the context within which the rule was evaluated, and refusing to accept the possibility of everyone being equal, that is, the possibility of the absence of a leader.

Table 1: Sentences that encouraged the establishment of the ground rules of cooperation

Sentence (function)	Frame	No. of incorrect answers
1. We will take turns to talk and to listen. (elaboration)	+	2
2. We will try to reach shared agreement. (establishing the common concept)	+	0
3. We must do what the leader says. (sharing responsibility)	-	5
4. No-one can change their mind. (deliberation)	-	2
5. Everyone will talk as loud as they can. (maintaining order)	-	1
6. We will try to get along with each other. (integrating dyad members)	+	0
7. We will listen and think about each other's ideas. (deliberation)	+	0
8. When a friend suggests a solution to a problem we will ask for reasons. (challenging)	+	0
9. We think it's best to share our thoughts. (integrating dyad members)	+	0
10. The person who is writing chooses the final decision. (establishing order)	-	1
11. If one of us finds it hard to join in, we can ignore that. (integrating dyad members)	-	0
12. We will keep our ideas quiet so that no-one else can copy. (maintaining order)	-	2
13. The person who speaks first will decide what to do. (sharing responsibility)	-	1
14. We understand that talking is thinking aloud together. (establishing the common concept and deliberation)	+	0
15. We will try to beat each other. (conflict prevention)	-	1
16. We will make group decisions that all can agree to. (establishing the common concept)	+	2

Sequence 1. [9]

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 1.   Mila: we need to do what the
            leader says ((reading))
 2.   Maša: yes =
 3.   Mila: = yes
 4.        ((2.0 looking at each other))
 5.   Mila: well yeah (.) that's right
 6.   Maša: yes (quietly)
 7.   Mila: well yeah (.)you know that
            the teacher chooses a leader
            when we work in groups
 8.   Maša: yeah yeah
 9.   Mila: and the leader is in charge
10.   Maša: the answer here is yes
            ((points to the sentence
            while looking at Mila))
11.   Mila: yes (.) underline it in
            green
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Final discussion

The results of this research indicate that at first glance, children's understanding of the rules of cooperation does not significantly differ from adults' understanding of the rules. Children can correctly identify and recognize listening, consultation, exchanging ideas and information, seeking argumentation for the proposed solutions, and motivating collocutors as ideas that contribute to efficient cooperation. However, the rule that emerged as the most challenging for the children in this research was the one underlying the sentence: „we must do as the leader says". This negatively formulated rule of cooperation speaks about group members sharing responsibility. This was the question that received the largest number of incorrect answers, with children thinking that it is a good idea to have a group leader and exclusively listen to the leader's suggestions. Some of the reasons why children incorrectly underlined this sentence indicate that we need to consider the meanings attached to peer collaboration. The analysis of these interactions highlighted the important role of previous cooperation experience, the influence of the teacher as the person who sets the rules of cooperation, and the context within which cooperation takes place. Depending on the context, some rules may not be valid or may require modification.

This finding has particularly important implications for the educational context in which teachers often disregard the meanings that children attach to certain group activities, along with the fact that students have different ideas about how problems should be solved in teamwork. Although sometimes it may appear like students are solving a task together or students may state that they how to cooperate, the question is how they

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[9] The names of all children who participated in the research have been replaced with other names for identity protection purposes.

conceive cooperation and which implicit peer rules they follow in such situations. Research on the effects of learning the rules of efficient cooperation has shown that these rules should be included in the systematic education of children.

Acknowledgments

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