

Cooperation: A Concept Analysis

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Abstract: In recent decades, there has been an increase in scientific production on cooperation in the educational context, more specifically in the context of Higher Education, what makes the clarification of this concept of great importance. In order to promote this clarification, this text proposes to analyze cooperation, starting from different areas of knowledge, identifying the basic attributes that make up each of the thoughts, their possible antecedent factors and consequences, in the search for understanding and facilitating its practical applicability. The concept analysis framework proposed by Walter and Avant guided this study. It involved the reading of the selected cooperation concepts, with the identification of the registration units that comprise attributes, antecedents and consequences. The results allowed to confirm as antecedents of the concept the social interdependence, individual responsibility, otherness, intentionality, social and communication skills. Regarding the attributes of cooperation, it is possible to say that relationship, interaction, association, group work, collective goal, common goals and mutual benefits were identified as attributes. With regard to the consequences, it was pointed out the promotion of the quality of university life through the increase of social skills and psychological health, integration into the academic community, as well as advancement in academic performance. Based on the analysis of the concept, it was possible to define cooperation as a social practice that brings individuals together in search of complementarity of interests. It is based on associative relationships and on the interaction between individuals, through which they seek explanations and solutions to common problems, through collective actions. And all benefit from the results.

Key words: Higher Education • Cooperation • Concept Analysis

INTRODUCTION

Cooperation is one of the forms of collective action that most aroused interest in study, once the society itself is understood as an extensive network of collaboration among the most diverse social actors [1]. And as it is a form of collective action essential to the integration of society, cooperation has been analyzed from different angles.

Although the term cooperation related to learning began to appear in the scientific literature in the late 1940s [2], it is only in recent decades that scientific production on cooperation in the educational context has increased. Clarification of this concept is, therefore, of great importance. Such an increase stems from the search for alternatives to competitive learning, in which students work against each other to achieve an academic goal and to individualistic learning, in which students work solitarily to achieve their

goal. Both still rule the educational context and they have been proved to be ineffective in promoting academic success.

Cooperation has been considered as one of the most important tools that universities can use to promote constructive and positive attitudes in students related to learning [2]. Therefore, in addition to searching for the etymology of the word, concepts of cooperation from Sociology, Economy, Politics, Administration, Ecology and Education were chosen in order to verify the basic attributes that make up each one of the thoughts. The purpose was to broaden the understanding of this concept, to establish its foundations and to make it applicable effectively when inserted into practice and in researches in the educational context.

Methodology: Walter and Avant [3] propose a concept analysis technique that comprises eight defined steps, although some may occur simultaneously [4, 5, 6, 7].

The selection of the concept should reflect the topic that has aroused attention in seeking understanding. The determination of the aims of the concept analysis refers to the purpose of the analysis that is to be carried out, which can comprise from the clarification of the meaning of a concept, the refinement of a concept when it has multiple meanings, the adjustment between its definition and its applicability, or the development of an operational definition. The identification of the uses of the concept refers to the review of the literature, in order to verify how the concept of interest has been focused or applied in the most different contexts. In the sequence, the determination of the basic or essential attributes requires the identification of words or expressions that appear repeatedly in the literature, which show the essence of the concept. The development of a model case is intended to illustrate the concept through an example that contains the essential or defining attributes of it. The development of other cases - borderline, related, contrary, invented, illegitimate - can be reported during concept analysis to assist in deciding on the really essential attributes. The identification of antecedents and consequences of the concept refers to the identification of incidents or events that occur prior to the phenomenon, that is, are necessary for its occurrence and events or situations that arise or result from the presence of the phenomenon. The last step of concept analysis is the definition of empirical references to defining attributes. Empirical references are categories or classes of observable phenomena. When they are present, they demonstrate the occurrence of the concept.

In the following section, we will present the analysis of the concept of cooperation in which the model described was used.

Literature Review and Analysis: According to the *Online Etymology Dictionary*, the term co-operation is a noun derived from the Latin *cooperatio*, which means "a joint work". It in turn originates from *cooperari*, meaning "to work together," in which the prefix assumes the meaning of "together" and *operari*, which means "to work." According to the origin of the word, cooperation means, therefore, to work together, to work with, which supposes that there must be more than one person or entity involved in a productive activity.

Following, the concept of cooperation is presented in the literature of the different areas mentioned before. In the Dictionary of Social Sciences, the term cooperation is defined as "any form of working together in contrast to competition." Benzaquen [8] brings from Sociology a

concept of cooperation as a form of interaction, in which individuals strive to achieve a collective and common goal, thus being essential in the constitution of most social groups (p.2). In the area of economics, Arroyo [9] points out that cooperation is a cultural construction that is based on social interaction, where goals are common, actions are shared and benefits distributed with balance throughout the system. For Ecology, cooperation is an association between individuals of different species in which both benefit. Coexistence is not obligatory, though [10]. According to Afonso [11], cooperation in politics is the creation of mechanisms and the establishment of solidarity bonds, "a common work, collaboration and development aid" to compensate for differences between developed and developing countries. In administration, cooperation, according to Silva [12], means a joint work in which each partner makes his/her best, acting in a complementary way, even guaranteeing their independence. It is a relationship that occurs on a horizontal level with similar or different motivations between the partners, that generates mutual benefits. In the area of ??Education [2, 13], cooperation is understood as individuals working together to achieve shared goals, to leverage each other's learning and their own, seeking results that are beneficial to themselves and to all other members of the group. Rué [14] emphasizes that these goals are so bound together that "each individual can achieve his or her goals only if and only if, others can achieve theirs."

After verifying the concepts of cooperation in the different areas of knowledge previously mentioned, it is possible to identify the basic attributes that are evidenced by the selected thoughts: relationship, interaction, association, joint work, collective goal, common objectives, mutual benefits. The literature allows us to verify that cooperation is evidenced as a form of relationship, interaction, association between individuals, in which these individuals engage, help and make available what they have the best, working together, achieving a collective and common purpose, generating mutual benefits, regardless of whether the motivations are similar or different between individuals. It is important to emphasize the observation made by Ecology, as well as by Administration related to coexistence and independence. Both mention that despite the association, the partnership between individuals, which can be derived from different motivations, with each partner providing the best and with benefits for all members, coexistence is not mandatory, guaranteeing the independence of each individual.

From the identification of the attributes of the concept of cooperation presented, it is possible to interpret cooperation as a social practice that brings individuals together in search of complementarity of interests. It is based on associative relationships and the interaction between individuals, through which they seek explanations and solutions to common problems, through collective actions. All benefit from the results.

As model cases for cooperation, it is possible to cite two examples, one coming from Ecology and another from Education. The bird and the crocodile are an example of cooperation. Crocodiles that live on the Nile River, while sleeping, can leave their mouths open. The bird toothpick takes this opportunity to feed on the parasites and food debris found between the teeth and the mouth of the crocodile. In this way, the bird-toothpick frees the crocodile from undesirable parasites and, at the same time, feeds itself. Both the bird and the crocodile can live alone and therefore, the coexistence of both is not mandatory.

Another example of cooperation can happen when teachers promote peer discussions every twenty minutes of class, by asking a question about the content just presented. Each student formulates his or her own response and then shares it with his or her colleague, each one listening attentively to the other's response. Students create a new response that is superior to the initial formulation of each, integrating the two responses, rebuilding on each other's thinking and synthesizing, which requires students to cognitively process the material just presented.

As an example of the contrary, it is possible to mention a traditional lecture that is based on the transmission of knowledge from the teacher to the student, through verbal or written language. The basic premise is that it is enough for the teacher to present the content for students to learn. There are no opportunities for questioning and the evaluation of learning is based on the memorization of content.

The antecedents of cooperation, which refer to incidents or events that occur prior to the phenomenon and therefore are necessary to its occurrence, may be social interdependence, individual responsibility, otherness, intentionality, social and communication skills. Positive interdependence refers to the perception of group members that they need each other to perform the task assigned to the group. They are all part of a team. Teachers can structure this interdependence by establishing mutual, common goals in the sense that they need to learn to make sure that all other group members

also learn and are rewarded in the same way. Individual responsibility refers to the group members' perception that the individual and group results achieved depend on the quantity and quality of each individual's contributions. Individual responsibility also involves the group members' perceptions of those who need more support, assistance in carrying out what is under their responsibility. Teachers can also structure individual responsibility by assessing the quantity and quality of each member's contributions, presenting the results individually and for the group. Otherness predicates considering, recognizing, valuing and dialoguing with the other members of the group. In the relation characterized by otherness, the way of thinking and the life experiences are preserved and taken into account, in the search of learning with the different. Intentionality refers to the perception of the strategic direction students need to take toward the object. This perception involves knowing, being clear about the objectives of the activity, the functions of each member, as well as believing in the achievement of objectives and results. Social and communication skills include the ability to deal with and resolve conflicts, make decisions and the ability to lead in group interaction. It also refers to the perception that, in order to achieve a goal, it is essential that everyone engage in the discussion of all issues and problems involved.

The consequences of cooperation, which refer to events or situations that arise or result from the presence of the phenomenon, would be the promotion of the quality of university life through the increase of social skills and psychological health, integration into the academic community, as well as advancement in academic performance. In the context of higher education, increasing these skills can improve the quality of students' social adjustment to university life, their integration into academic life, reducing their uncertainties related to continuing university studies and reinforcing their commitment to remain in university [2].

The identification of empirical references is the last step of the analysis of a concept, according to Walter and Avant [3] and they refer to the observable characteristics that would indicate the existence of cooperation. The empirical references can be identical to the attributes that define the concept and that provide a way to verify the existence of the concept in a given context. It is possible to verify that there is a significant gap in the literature related to instruments that can measure the level of cooperation in specific contexts.

RESULTS AND DISCUSSION

The analysis of the concept of cooperation made it possible to observe, through the identification of basic attributes, antecedents and consequences, that many other concepts are tied to its own and that the purpose of learning with a focus on cooperation is to make each member of the group stronger with a better individual performance, which will result in more efficient and effective group work.

It is important to have in mind that not all efforts made by the group involve cooperation. Simply putting students together in groups and telling them to work together does not result in cooperative efforts. Such a procedure may even result in individual and competitive efforts. However, whenever there is interaction between two or more individuals, there is potential for cooperation. Cooperation, therefore, is only established under certain conditions, identified in this study as positive interdependence, individual responsibility, otherness, intentionality, social and communication skills.

Based on the attributes of the concept identified in this study, it is possible to suggest that the interpretation of cooperation presented here - a social practice that approximates individuals in the complementarity of interests, based on associative relations and the interaction between individuals seeking explanations and solutions to common problems in which everyone benefits from the results - is applicable in the scenario of Higher Education.

CONCLUSION

It is possible to suggest that cooperation provides a foundation to Active Learning Methods [2, 15], for it has the assumptions of people working together, involving the interaction and engagement of those involved in discussions, in which they build and expand the understanding of concepts to be learned for problem solving. It also provides learning opportunities that do not exist when working individually and competitively.

It might be possible to conclude, therefore, that an analysis of the concept of cooperation and clarification of its attributes, antecedents and consequences are important contributions for the accomplishment of future theoretical and practical researches.

We can also conclude that cooperation can add to the integral development of students in the cognitive, affective and emotional spheres. In addition, as a component aiming to foster "learning to learn", cooperation matches the current demands, as well as

assists in the emancipation and the process of citizenship building.

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