El individualismo como conducta sustentable respecto al trabajo en equipo en la educación superior

Individualism as sustainable behavior regarding teamwork in higher education

Individualismo como comportamento sustentável em relação ao trabalho em equipe no ensino superior

Mario Martínez García
Centro Universitario de los Valles, Universidad de Guadalajara, México
mario.mgarcia@academicos.udg.mx
https://orcid.org/0000-0002-5816-8434

Omar Israel González Peña*
Universidad Internacional de la Rioja, Departamento de Educación, España
Tecnologico de Monterrey, México.
ogonzalez.pena@gmail.com
https://orcid.org/0000-0001-7327-6145

Ricardo Pérez Zúñiga*
Universidad de Guadalajara, Sistema de Universidad Virtual, México
perezuniga@udgvirtual.udg.mx
http://orcid.org/0000-0001-9377-6083

Ernesto Mena Hernández
Universidad de Guadalajara, Sistema de Universidad Virtual, México
ernesto.mena@udgvirtual.udg.mx
http://orcid.org/0000-0002-1975-9784

*Corresponding authors

Resumen

El trabajo en equipo no es una habilidad intrínseca en la evolución individual, de ahí que suela requerir condiciones específicas para su funcionalidad y efectividad en el ámbito educativo. De hecho, los elementos fundamentales para alcanzar objetivos grupales dependen en gran medida de la capacidad individual y su interacción estimulante dentro del equipo. Por tal motivo, el presente trabajo se enfocó en responder la siguiente interrogante: ¿cuál es el estado actual del conocimiento sobre la relación entre el individualismo y el trabajo en equipo en el contexto de la educación superior? Para ello, la metodología consistió en una revisión narrativa orientada a identificar tres dimensiones de análisis: 1) individualismo, 2) aprendizaje cooperativo y trabajo en equipo, y 3) aprendizaje cooperativo o trabajo en equipo en conjunto con el individualismo. Los hallazgos demuestran que el trabajo en equipo se incorpora en el sistema educativo con el propósito de fomentar la construcción de conocimiento. No obstante, la literatura señala la necesidad de abordar la falta de atención de los alumnos para obtener resultados más favorables. Por otro lado, se observa que el individualismo demanda que los alumnos posean las competencias necesarias y la disposición para colaborar y aprender, a fin de lograr la máxima eficacia en el trabajo en equipo.

Palabras clave: evaluación de la educación, innovación pedagógica, creatividad, cognición, pensamiento crítico.

Abstract

Teamwork is not a common skill in the evolution of the individual and, in general, certain conditions must be met to achieve its functionality and effectiveness in the educational environment. Consequently, the basic elements to achieve group objectives depend to a great extent on the individual capacity and its stimulating interaction with the team. In this sense, this study focused on answering the following question: What is the current state of knowledge about the relationship between individualism and teamwork in the context of higher education?

The methodology was a narrative review aimed at identifying three dimensions of analysis: 1) Individualism, 2) Cooperative learning and teamwork, and 3) Cooperative learning or teamwork together with individualism.

This review highlights that teamwork is integrated into the educational system with the objective of promoting knowledge construction. However, the literature indicates that it is necessary to study the lack of attention in students in order to obtain more favorable results. On the other hand, it was observed that individualism requires that students have the necessary skills and willingness to collaborate and learn, in order to achieve maximum effectiveness in teamwork.

Keywords: Educational assessment, educational innovation, creativity, cognition, critical thinking.

Resumo

O trabalho em equipe não é uma habilidade intrínseca à evolução individual, por isso normalmente requer condições específicas para sua funcionalidade e eficácia no campo educacional. Na verdade, os elementos fundamentais para alcançar os objectivos do grupo dependem em grande parte da capacidade individual e da sua interacção estimulante dentro da equipa. Por esta razão, este trabalho centrou-se em responder à seguinte questão: qual o estado atual do conhecimento sobre a relação entre individualismo e trabalho em equipa no contexto do ensino superior? Para tanto, a metodologia consistiu em uma revisão narrativa que objetivou identificar três dimensões de análise: 1) individualismo, 2) aprendizagem cooperativa e trabalho em equipe, e 3) aprendizagem cooperativa ou trabalho em equipe em conjunto com individualismo. Os achados demonstram que o trabalho em equipe está incorporado ao sistema educacional com o propósito de promover a construção do conhecimento. Contudo, a literatura aponta a necessidade de abordar a desatenção dos alunos para obter resultados mais favoráveis. Por outro lado, observa-se que o individualismo exige que os alunos possuam as competências necessárias e a vontade de colaborar e aprender, de forma a alcançar a máxima eficácia no trabalho em equipa.

Palavras-chave: avaliação educacional, inovação pedagógica, criatividade, cognição, pensamento crítico.

Introduction

Teamwork is essential both in the work environment and in the educational field, where it has acquired great relevance (Conde *et al*., 2021), since collaboration is commonly carried out within the classroom (Alabdallat *et al*., 2021). For this reason, and as part of his or her responsibilities, the teacher must supervise and organize didactic activities in order to encourage joint participation and establish an evaluation system that measures the effectiveness of teamwork (Tadesse *et al*., 2021). To guarantee effective collaboration, it is crucial that the teacher stimulates each individual's reflective capacity, so that individual contributions enrich group work and promote the acquisition of knowledge (Hole and Sortland, 2022).

From this perspective, it is relevant to highlight individual work as a constructivist learning method that is implicitly integrated into the cooperative effort to promote cognitive development (Jemberie, 2020). Furthermore, it is the personality of each individual that acquires and possesses the skills required to achieve results in both personal and group activities (Salman *et al*., 2020).

According to some research, the teacher's participation in the training process and individual work are two aspects rooted in the conventional educational model. These elements represent important milestones that facilitate the transition towards a student-centered cooperative learning approach (Torres-Díaz *et al*., 2022). In educational environments, several elements influence the functionality of team integration, among which individualism stands out. However, this topic has received little attention in the scientific literature, and researchers have underestimated the importance of solitary work as a key element in enhancing cognitive learning. In fact, most academic literature focuses on teamwork and cooperative learning as recurring themes.

Consequently, there is a notable lack of investigations that delve into the level of mastery of the skills and abilities necessary to collaborate effectively in teams (De Prada *et al*., 2022). This aspect is highly relevant, given that individual development plays a crucial role in collaborative performance, which can become dysfunctional and inefficient if not given due attention. Therefore, it is essential to recognize that each individual must have the minimum skills and competencies so that individual actions add up and promote a successful collective effort.

Another point of interest lies in the teacher's work in the face of the challenge of collaborative tasks, since he must be prepared to encourage the development of group

activities. However, in practice, it is common for educators to encounter obstacles in supporting teamwork due to the multiple preconditions that must be met for effective results. Therefore, it is valid to allow students to work independently of the group if they wish (Diggele *et al* ., 2020).

With the above explained, this narrative review focuses on analyzing the scientific literature from the Clarivate Web of Science (WoS) on teamwork, cooperative learning, and individualism. To this end, the following research question has been formulated: what is the current state of knowledge about the relationship between individualism and teamwork in the context of higher education?

The final objective of this study is to conduct a systematic review of the existing scientific literature in order to critically and reflexively analyze research on the impact of individualism on teamwork in higher education.

Methodology

The methodology used in this study consisted of a narrative review that is based on the current state of knowledge, extracted from scientific and review articles, about teamwork, cooperative learning and individualism. First, an exploration of the controlled technical language was carried out using the ERIC Thesaurus, where the connections, associations and relationships between the following terms were investigated: *teamwork* and *individualism*. In this regard, it was observed that teamwork is closely related to cooperative learning, while individualism is not related to other terms. Considering the results obtained from the Thesaurus, a search was carried out using the Clarivate database of the WoS (table 1).

Table 1. Search methodology used in Web of Science (until May 2023)

Search descriptors in this study and filtering steps		Number of records obtained
Search Web of Science Core Collection		
Index : SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI, CCR-EXPANDED, IC		
Keywords used in topic 1: " individualism " AND education " (Topic)		1166
Filters		
English language		1065
Type of documents: Articles and review articles		932
WoS categories : Education Educational Research & Education Science Disciplines		330
Time Frame : 2010 to 2023		263
final search string		
individualism (Topic) and education (Topic) and English (Languages) and Article or Review Article (Document Types) and Education Educational Research or Education Scientific Disciplines (Web of Science Categories) and 2023 or 2022 or 2021 or 2020 or 2019 or 2018 or 2017 or 2015 or 2016 or 2014 or 2013 or 2012 or 2011 or 2010 (Publication Years)		
Search Web of Science Core Collection		
Index : SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI, CCR-EXPANDED, IC		
Keywords used in topic 2: " cooperative learning " OR " teamwork " AND " education " (Topic)		9138
Filters		
English language		8613
Document type: Articles and review articles		6277
WoS categories : Education Educational Research & Education Science Disciplines		2684
Time Frame : 2010 to 2023		2362
final search string		
" cooperative learning " OR "teamwork" (Topic) and education (Topic) and English (Languages) and Review Article or Article (Document Types) and Education Scientific Disciplines or Education Educational Research (Web of Science Categories) and 2023 or 2022 or 2021 or 2020 or 2019 or 2018 or 2017 or 2016 or 2015 or 2014 or 2013 or 2012 or 2011 or 2010 (Publication Years)		
Search in Web of Science Core Collection		
Index : SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI, CCR-EXPANDED, IC		
Keywords used in topic 3: " cooperative learning " OR " teamwork " AND " individualism " AND " education " (Topic)		24
Filters:		
English language		24
Document type: Articles and review articles		18

WoS categories : Education Educational Research & Education Science Disciplines	7
Time Frame : 2010 to 2023	5
final search string	
" cooperative learning " OR teamwork (Topic) and individualism (Topic) and education (Topic) and English (Languages) and Article or Review Article (Document Types) and Education Educational Research or Education Scientific Disciplines (Web of Science Categories) and 2021 or 2017 or 2015 or 2013 (Publication Years)	

Source: self made

Inclusion and exclusion criteria

Research articles and reviews were searched in publications ranging from 2010 to May 2023, in English. The information was organized into three topics or descriptors: 1) individualism and education, 2) cooperative learning and teamwork in education, and 3) cooperative learning or teamwork and individualism in education. Books, book chapters, early access, editorial materials, letters, meeting summaries, procedural documents and corrections were excluded from this search (Table 2).

Table 2. Search descriptors in this study

	Exclusion criteria	Quality criteria
English language	Documents not written in English	Provision of relevant information on the central topic of individual or cooperative learning
Documents published between 2010 and 2023	Documents published before 2010	
Documents that include the keywords from Table 1 in the abstract, title or keywords	Documents that did not include the keywords in Table 1 in the abstract, title or keywords	
Information in WoS	Information not documented in WoS	

Source: self made

Definition and contrast of concepts

Teamwork is widely recognized in scientific literature as a transversal competence (Graczyk-Kucharska *et al* ., 2020) and an accepted methodological strategy (Gökçe Erbil , 2020). It is assumed that teamwork is a competence aimed at improving learning results in higher education institutions, with the supervision and guidance of teachers.

However, there is a lack of scientific information about individualism, much less a connection between both work dynamics. Therefore, this work aims to deepen the study of this relationship with its own approach, as well as to carry out, for the first time, a theoretical reconstruction and a qualitative analysis based on various recent scientific contributions and on personal conceptions arising from reflection. on both topics.

Consulting the ERIC Thesaurus (Sciences Institute of Education , nd) confirms the importance of pointing out that both the terms *teamwork* and *individualism* are included in the controlled technical language. When investigating the existence of terms related to teamwork, such as *cooperative work* and *collaborative work*, it is found that the only related synonym is *cooperative learning*.

Likewise, when investigating the terms related to individualism, such as *individual work*, *autonomous learning*, *self-didacticism*, *self-management* and *competitive learning*, no record or association was found in the glossary of controlled terms, which suggests that these words are in the scope of colloquial, and non-technical, language.

From the above, the importance of accurately understanding the concepts *of teamwork* and *individualism stands out*. In individualism, each person works autonomously and directs their own voluntary contribution to achieve their personal goals for their own benefit, without considering other colleagues (Morgenshtern and Schmid , 2021). This means that the achievement or not of a student's personal goals is not conditioned by the way in which his or her classmates achieve theirs or not (Martínez Benito, 2017).

On the other hand, teamwork is a competence that involves knowledge, principles and concepts related to the tasks to be carried out. Its purpose is to foster an effective team in developing appropriate skills, behaviors, and attitudes on the part of its members (Malykhin *et al* ., 2021). For its part, cooperative learning refers to the interaction between students within a team to carry out tasks or projects, as long as certain conditions are met (Jaiswal *et al* ., 2021; salim *et al* ., 2019). In both forms of cooperation, the role of teachers within the classroom is largely based on facilitating group work (Alabdallat *et al* ., 2021; Werth *et al* ., 2022).

Results

Analysis of practical difficulties in the context of teamwork: a reflective approach

As will be seen below, teamwork is a topic that generates controversy due to the wide diversity of opinions that have arisen on the matter, both about its mastery or lack of mastery in the procedures and about the conditions in which it occurs and its ability to be functional or dysfunctional. Furthermore, there is little scientific information that addresses individualism exhaustively, and even more precarious is that which relates individualism to teamwork (figure 1).

Figure 1 . Comparison of scientific information related to individualism and teamwork
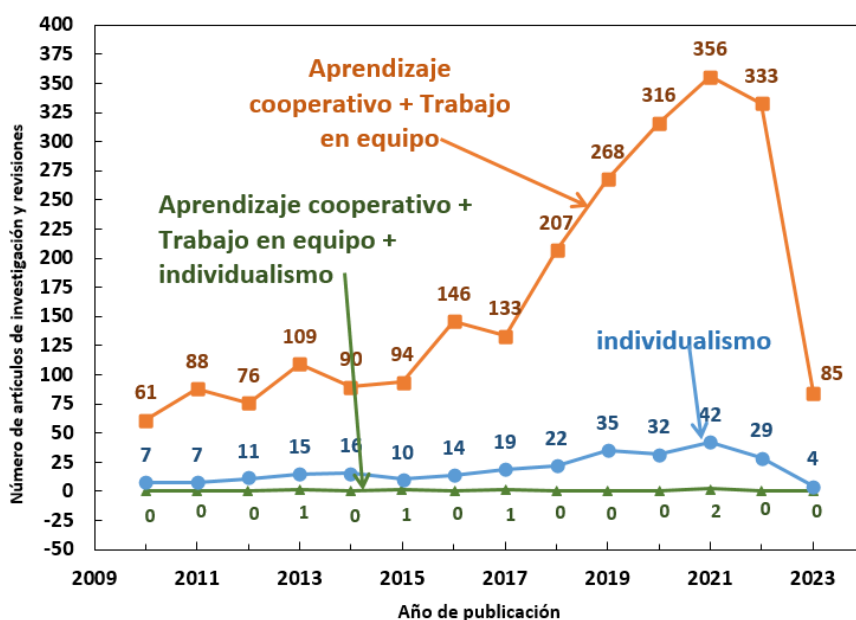
Source: self made

First of all, it should be noted that both individual motivation and shared motivation among team members are key requirements to achieve effective teamwork (Goñi *et al* ., 2020; zhao *et al* ., 2020). Furthermore, the importance of having appropriate team composition strategies to enhance creativity within the group is highlighted (Catarino *et al* ., 2019; Rais *et al* ., 2022). This means that achieving an appropriate team composition is not an easy task, as it requires effective performance in both procedural and attitudinal terms by everyone involved. The facilitation and enablement of teamwork goes far beyond what theory alone can explain, as it involves a wide and diverse range of approaches and practices that

are essential to fully understand its nature and scope as a measure. technical and methodological learning.

Consequently, both individualism and teamwork aim to encourage students to take responsibility for their own process, covering both behaviors and thoughts. Although both conceptions may seem convergent, in reality they represent two different approaches, and it is expected that the gap that exists between them will not affect the cognitive-behavioral disposition of the students, although it is worth noting that individualism is manifested in our daily life and stands out. for its quick and simple application.

Indeed, the autonomy of individualism, being detached from the responsibility of making commitments that depend on the capacity and behavior of other people, does not necessarily affect its functionality in achieving any objective. For this reason, it is relevant to mention that at a global level individualism is gaining ground as a trend that increasingly influences teaching and learning activities (Chappell *et al* ., 2021). In fact, in the context of higher education this practice is justified, given that all evaluations are carried out individually (Marginson and Yang, 2021).

On the other hand, teamwork implicitly highlights the importance of the good performance of each of its members, hence it is assumed that all members are competent and it is assumed that they possess the fundamental skills and abilities necessary to achieve an interaction. satisfactory teaching within a work structure.

Now, when reflecting on both concepts, it is evident that individualism has a significant impact in the educational field as an integral factor in the formation of the student. However, their contribution has not been recognized to the extent it deserves, despite being a primary activity that implies the will to work and acquire knowledge. Therefore, it is crucial to focus on both the fundamentals of competency training and individual personality characteristics in order to achieve the desired results (Mailybayeva *et al* ., 2020; Salman *et al* ., 2020).

Likewise, the adaptive capacity required in teamwork implies that the group of individuals coordinate and collaborate effectively with each other, both in transversal aspects (soft skills or transferable competencies) and in disciplinary aspects (technical competencies and curricular contents). . This must be added to the direction of the teacher as evaluator of the context and coordinator of the tasks, since he is the one who establishes the implementation of a descriptive weighted evaluation model to measure the level of performance of group work (Close *et al* ., 2020; Tadesse *et al* ., 2021).

Likewise, it is worth highlighting that the complexity of teamwork arises from group commitment, which implies a diversity of personalities with a common objective, so efforts must be made to reach agreements regarding the distribution and organization of activities to make decisions. This complexity entails responsibility at both the individual and collective levels. Furthermore, participation in group dynamics must lead to relevant learning results, both in the disciplinary part and in the transversal part. Therefore, the teaching staff must establish channels of collaboration and coordination between the teachers in charge of the subject to guarantee a comprehensive educational experience (Miller *et al* ., 2018). Likewise, the coordinated and effective participation of all individuals requires teamwork to achieve the desired quality of learning (Killic-Berek *et al* ., 2022).

Currently, it cannot be said that there is a teaching technique or methodology that completely guarantees the quality of learning, but it can be indicated that some are more efficient than others. Although there is a considerable number of studies on these topics, there is little research that focuses on students' perceptions of academic results and cooperative learning activities, as well as on the changes that are generated in the learning environment (Alansari and Rubie -Davies, 2021).

In addition to the above, it should be noted that in group work not all members participate homogeneously, since there are differences in cooperation, performance capacity and individual responsibility between members. In fact, the complexity of teamwork depends on the level of responsibility and the individualistic focus on specific aspects with the purpose of achieving a coherent integration of ideas as a whole.

This serves as support to reflect on the fact that the ability to work in a team is not uniformly present in all students, including those in higher education, which poses other challenges, since working in a team is not an easy task in the school environment, since it demands the need to meet regularly to carry out the tasks by the students. This, logically, requires additional effort to maintain continuity and achieve the realization of the collective action associated with the cognitive demand.

Furthermore, it should be noted that students do not take responsibility for their own learning nor do they share knowledge, skills and experiences. In fact, the formation of groups is based on friendship or empathy, without considering the interest in collaborating in the acquisition of new knowledge, which contradicts the fundamental principle of cooperative learning and group organization (Sanz *et al* ., 2023 ; Seyoum and Molla, 2022). Likewise,

the time elapsed since the team began functioning is relevant to group work (Rajabzadeh *et al* ., 2022).

On the other hand, it must be guaranteed that the workload is distributed in a balanced manner and in the appropriate proportion among the team members to reduce the possibility of forming large groups in which not all members actively participate. Furthermore, it must be anticipated that in some cases the work can be carried out by all members, but not equally. When forming teams, therefore, we face the challenge of assigning individual actions in a coordinated and balanced way to achieve successful teamwork (Ramdeo *et al* ., 2022). According to this perspective, individualism requires less effort and involvement than carrying out team tasks, which include reaching agreements and making joint decisions to meet the assigned goal and achieve a good final result (Obukhov *et al* ., 2020).

Indeed, when forming teams, the importance of sharing responsibilities with other people and involving young people in tasks that generate knowledge and those that require action must be taken into account (Obukhov *et al* ., 2020). Therefore, it cannot be expected that the various ways of thinking, human behavior, the climate of competitiveness and the idea that "we all depend on each other" will result in a simple adaptation of those involved to the circumstances.

Without a doubt, both individual limitations and those inherent to group dynamics are an integral part of teamwork (Planas- Ladó *et al* ., 2021). For example, in terms of uniqueness in behavioral impact, the dominant attitude of one member can affect the overall behavior of the group. Likewise, the lack of participation of less industrious students can distort the collective result. Since learning is based on individual and voluntary action, rather than on a team structure, the latter must be relevant in its ability to provide a unique solution on the part of the group. Consequently, effective collaboration may not be the result of a rapid and progressive process, and does not always guarantee effective, gradual and constantly growing action.

However, in the searches carried out by the authors of this work, no studies were found in the literature that report on the implementation of cooperative learning through the application of psychometric evaluations to measure the compatibility of students in team formation. However, analyzing the constructs that define the attributes to be sought among students can be a difficult task due to the multiple factors that influence the formation of a "successful group." This topic is addressed in the next section, where the effects of individualism on the team are analyzed.

Analysis of the effects of individualism in the team

In team integration, commitment to individual performance is expressed in various ways, which entails agreements and disagreements regarding the purposes of collaboration within the team. In this sense, it is important to highlight that, to achieve a shared understanding of the change from an individualistic model towards a collaborative skills approach, it is observed that, from an epistemological perspective, the process seeks to develop and enhance the capabilities of each individual, taking into account take into account their individual characteristics. That is, the personality, previous education, age and experience in collective work of the members are variables that influence the formation and collaboration of the team (Allert *et al* ., 2021).

Likewise, it is necessary to take into account the skills and attitudinal habits of the participants in order to maximize effectiveness and efficiency in the process and progress of learning. Furthermore, the level of depth of the students in the group process must be optimal, and therefore it must be emphasized that both the plurality of actions and individual contributions must be based mainly on solid theoretical knowledge. This will allow the team to converge on common efforts in order to enrich learning and obtain good results in the assimilation of content.

On the other hand, in relation to the methodological principles, it is essential to take into account how teaching facilitation promotes the capacity for reflection in the knowledge acquisition processes of each individual in the context of teamwork (Hole and Sortland , 2022).

However, the academic community barely refers to individual work in specific aspects, specifically its functionality as an object of study, as well as its obstacles and limitations to contributing to teamwork. On the other hand, a large part of the scientific literature related to the topic omits to question the multifunctionality of teamwork, which is evidently complex in its execution (Liebech-Lien , 2020), and is associated with a transferable competence that is related to values. fundamental social, such as integrity, honesty, collaboration and the free flow of ideas and information (Sutton and Taylor, 2010).

In fact, it has been indicated that teamwork is a secondary strategy in theoretical classes, since its greatest success and efficiency is found in laboratory practices (Chinoy *et al* ., 2022). Even so, it is essential to focus on the priority development of basic capabilities in students, such as the degree of responsibility, participation, creativity and communication.

In this way, their interest and disposition towards the activities necessary to develop efficient teamwork, truly formative and focused on achieving learning objectives, is encouraged.

To do this, of course, the teacher must design activities in a multifaceted way that guarantee student progress, promote the development of skills and values, and encourage the active participation of students in the teaching-learning process, so that recognize them as individuals, and not as simple objects (Erten , 2022).

In addition to the above, it is recommended that the teaching environment provided to the student be motivating and closely related to their context within the classroom, so that they can see themselves as an important element in teamwork (Canales-Ronda and Aragonés-Jericó, 2022; Van Dulment *et al* ., 2022). Another essential aspect that teachers must pay attention to is the learning of skills, which involves the student in researching and finding solutions on their own (Dogara *et al* ., 2020; Sumaryati *et al* ., 2020).

In one way or another, it is essential that students have adequate levels of skills so that teamwork can advance (Mendo-Lázaro *et al* ., 2018). Consequently, each student, as an individual, is influenced by his or her own abilities, many of which are foreign to collaborative work. In other words, teamwork, rather than being a method for teaching and/or learning, is actually a fragmentary structure of social integration of work. Therefore, it is the teacher's responsibility to cultivate this skill among his students in order to stimulate high-level cooperative learning.

From a broader perspective, for every individual, learning must be meaningful, that is, it must have an impact on the development of their capabilities and their sense of identity (Sjølie and Brandshaug , 2021). From the above it follows that, in order to achieve the desired level of cooperative performance, it is necessary to encourage individual work as an "engine" that initially promotes significant learning and, finally, leads to team contribution. Therefore, it is suggested to begin by accustoming students to working in teams until they develop a collective consciousness that allows them to share both responsibilities and the results obtained with their classmates.

Furthermore, while individual performance can be evaluated as appropriate or inappropriate, the reality is that cognitive progress originates from this subjective attitude and leads to the most essential element: learning. For this reason, it can be stated that individual work, by allowing metacognition , is important in solving problems (Sjølie & Brandshaug , 2021), by directing, supervising, regulating, organizing and planning individual

skills on their own cognitive processes. so that they are favorable to effectively enhance intellectual development (Rivas *et al* ., 2022).

Teaching organization strategies for group work

As can be inferred, it is the teacher's duty to actively intervene in the orientation of the team so that its members can function optimally and effectively. Likewise, the practical skills of the students are essential to carry out essential functions in the action plan that will be developed within the team. Therefore, the teacher's work must contribute to improving the practical skills of students, that is, guiding them in reflection, developing their problem-solving abilities, encouraging their critical thinking and promoting deep learning approaches (Port *et al* ., 2022; Virkkula , 2020).

Now, to achieve deep learning, it is necessary for students to acquire high-quality theoretical knowledge (Zhang, 2020), since in this way they will be prepared to solve various tasks (Žáčok *et al* ., 2020). Subsequently, it is necessary for the teacher to orient his activities towards an authentic evaluation methodology that involves elements such as self-reflection, the learning process and positive feedback (Sousa and Costa, 2022).

In relation to the formal evaluation of performance, it is essential that it is possible to quantify the degree of individual learning of students and that said measurement is reliable. For this, it is the teacher's responsibility to establish precise criteria that allow the desired level of knowledge to be accurately assessed in relation to the academic content.

However, the evaluation of performance in work teams requires a different approach and entails a more detailed and exhaustive effort on the part of the teacher compared to the evaluation of individual work (Karmina *et al* ., 2021). This implies more detailed monitoring of both individual contributions and team dynamics, since although one person may have an outstanding performance, the performance of the team as a whole may not be satisfactory, and vice versa (Farland and Beck, 2019). In summary, when evaluating group work, teachers face new challenges for which they are not always adequately prepared (Hammar Chiriac and Forslund-Frykedal , 2022).

Therefore, the teacher, in addition to assuming his role as leader in front of the group, must acquire skills regarding cooperative management (Aparicio- Hergueda *et al* ., 2021; Riivari *et al* ., 2021), such as autonomy, planning, knowledge, skills, methodological strategies, supervision, individual and collective evaluation, as well as learning results (Abril -López *et al* ., 2021) .

In this sense, it is significant to highlight the advantage of the teacher developing a support and advice plan, in addition to precisely defining the evaluation in said process. Also, keep in mind that the fact that the teacher randomly divides his group of students into work groups does not necessarily imply that he is promoting teamwork, since, in this case, he is simply separating them. Therefore, you must plan what activities students will do and what products or results of teamwork can be observed. All this must be accompanied by mutual feedback that promotes the development of analytical skills, problem solving and group work capacity (Sumaryati *et al* ., 2020).

From this perspective, attention must be paid to the individual needs of each person, which requires assuming the role of mentor and promoting a supportive environment through two-way communication (Schmalenbach *et al* ., 2022). Likewise, the teacher's respect for the team is crucial in this process, since a healthy balance must be sought between individuality and the collective in the performance of academic work. In this regard, it should also be anticipated that, as previously mentioned, teamwork does not always guarantee the best performance of students, given that some achieve their highest academic level through individual work.

In conclusion, students must have solid skills and master different types of thinking, since these constitute essential elements to achieve effective and high-quality team execution (Suyundikova *et al* ., 2021). Likewise, it is worth highlighting that the various cognitive competencies and their relationship are essential to formulate effective intervention measures and strategies, which contributes to encouraging and motivating the change process of the group members. In this way, a new way is opened to foster a conducive environment that stimulates the ability to solve problems in the learning process (Hu *et al* ., 2021).

Therefore, it follows that, in the design of team activities, it is important that the instructor includes exercises that promote different types of thinking, such as scientific, critical, systematic, reflective, analytical, synthetic, strategic, metacognitive and creative, so as to ensure that team members do not selectively develop just one of them.

Discussion

The two variables examined in this qualitative study have significant relevance in the educational field due to their practical applicability. Regarding teamwork, as with any learning technique or methodology (Gökçe Erbil , 2020), its implementation can entail both significant advantages and disadvantages. However, it is crucial to highlight that if group members lack certain skills, which are not innate and which in many cases are acquired through practice, this can represent an obstacle to achieving efficient teamwork (De Prada *et al* . , 2022).

On the other hand, it is observed that individualism is characterized by its rapid application and is based on the autonomy and self-sufficiency of the individual, which allows establishing one's own time and place of work (Martínez Benito, 2017). This, therefore, is considered a constructivist learning method that contributes to cognitive development (Jemberie , 2020), and promotes self-management and metacognition . Furthermore, compared to teamwork, it does not require excessive effort or intense dedication (Rivas *et al* ., 2022; Sjølie and Brandshaug , 2021).

Indeed, the success of group work depends at all times on an efficient grouping of individual capabilities (Mailybayeva *et al* ., 2020; Salman *et al* ., 2020). Therefore, it is crucial that, before involving students in teamwork, the teacher focuses on developing their individual skills (Mendo-Lázaro *et al* ., 2018; Sumaryati *et al* ., 2020; Virkkula , 2020) so that, later, they are taught how teamwork is carried out (Ramdeo *et al* ., 2022).

In accordance with this idea, the actions and responsibilities that fall on teachers to strengthen joint efforts based on individualism, a key piece to improve teamwork, are mentioned below. First of all, the teacher must have a solid command of the academic content, as well as the direction of teamwork and the associated auxiliary didactic processes (Erten , 2022; Hole and Sortland , 2022; Sutton and Taylor, 2010).

Likewise, special attention is required in the process of forming the team or teams (Catarino *et al* ., 2019; Obukhov *et al* ., 2020; Rais *et al* ., 2022; Sanz *et al* ., 2023; Seyoum and Molla, 2022), for which it is crucial to take into account aspects such as the personality, age and experience of the students in collaborative work, given that these factors influence the effective collaboration of the work team (Allert *et al* ., 2021).

In addition to this, throughout the process, both individual and group motivation must be stimulated among team members. In this sense, the teacher plays a fundamental role by adopting a flexible, empathetic and affective guiding attitude that allows him to create an

environment conducive to the development of students' skills. Therefore, it is important to avoid impositions and coercion to provide students with the possibility of regulated autonomy if they so wish (Goñi *et al* ., 2020; Sumaryati *et al* ., 2020; Van Dulment *et al* ., 2022; zhao *et al* ., 2020). Furthermore, the time elapsed since the team starts working is relevant for collaborative work (Rajabzadeh *et al* ., 2022), so it is essential to distribute the individual tasks that must be carried out within the team in an equitable and coordinated manner (Jaiswal *et al* ., 2021; salim *et al* ., 2019).

Before involving students in teamwork, it is essential that the teacher prioritizes the development of basic skills necessary for this modality. Among them are the degree of responsibility and participation, creativity and communication skills. Therefore, teamwork should be considered as a complementary technique for learning, and not as one of the main objectives in itself (Hu *et al* ., 2021; Salman *et al* ., 2020).

Likewise, at all times priority must be given to the projection of formative learning as the essential component in education. The focus, therefore, should be on the comprehensive development of students to promote their growth and acquisition of knowledge, skills and competencies (Chinoy *et al* ., 2022; Killic-Berek *et al* ., 2022).

On the other hand, a clear support and advice plan must be created, along with a solid evaluative approach, in the teamwork process. This implies precisely defining the actions that students will carry out and the resulting products that will be evident (Abril -López *et al* ., 2021; Close *et al* ., 2020; Tadesse *et al* ., 2021). Likewise, it is necessary to establish a common rating model to evaluate performance in group work. To do this, criteria must be established that allow for a more precise measurement of the depth and breadth of knowledge in relation to academic content, individual contributions, and team dynamics (Karmina *et al* ., 2021).

By having a clear support and advice plan, together with a well-defined evaluation model, a structured framework is provided that facilitates the monitoring and appropriate assessment of teamwork, which will provide a more complete understanding of the team's achievements and contributions. the students (Hammar Chiriac and Forslund-Frykedal , 2022).

Job Limitations

In the research carried out, the objective was to examine the relationship between teamwork and individualism. However, limitations were found due to the lack of homologation of the synonyms investigated and consensus in the educational field. As a result, terms that were not present in the controlled technical language controller (ERIC Thesaurus) were excluded , despite the fact that they are used in the scientific literature, such as collaborative learning, cooperative work and collaborative work. Furthermore, terms such as *individual work*, *autonomous learning*, *self-didacticism*, *self-management* and *competitive learning* were not considered.

Despite these limitations, a comprehensive review was conducted using results from the Thesaurus and the WoS search for recent articles . Importantly, the exclusion of the aforementioned terms could be addressed in future studies related to higher education. Furthermore, the need to review studies focused on the implementation of psychometric evaluations to measure the compatibility of students in the formation of work teams is highlighted.

Conclusions

The objective of our research was to conduct a review of the scientific literature in order to critically and reflectively analyze the impact of individualism on teamwork in higher education. To this end, three main topics were addressed in this study: 1) relationship between individualism and education; 2) the analysis of cooperative learning or teamwork in the educational context; and 3) interaction in the educational field between cooperative learning or teamwork and individualism.

When analyzing the results obtained for each of these topics, a marked disproportion was observed in the literature consulted. In the case of topic 2, the search returned a total of 2362 documents, which indicates a large amount of research related to this topic. In contrast, topic 1 presented a considerably smaller number of results, with only 263 documents found. Finally, topic 3 revealed a notable lack of research that addresses the topic of teamwork and individualism, with only 5 results available.

These findings highlight the need to promote research on topics 1 and 3 with the aim of expanding our knowledge about this important relationship. In this way, we can gain a more complete understanding of the effects of individualism on teamwork in higher education, which will inform action to improve educational practice.

On the other hand, it is worth mentioning that educational institutions have promoted a culture of division of labor with the aim of encouraging students to learn to look for synergies. However, implementing this practice in the educational field presents various difficulties, such as assuming that all students have the necessary skills and knowledge to work as a team effectively.

Furthermore, it is crucial that teachers prepare adequately to play a leadership role in said methodology. To do this, they must adopt a flexible, empathetic and affectionate attitude that generates an environment conducive to the development of students' skills, since learning is a personal behavioral process. In other words, it must be taken into account that cooperative work cannot be applied indiscriminately, since each student has unique strengths, weaknesses and preferences that must be considered. Furthermore, the educational context, including factors such as cultural and socioeconomic diversity, also plays a crucial role in designing effective cooperative learning experiences. This means fostering a culture of respect, trust and valuing individual contributions within work teams.

Finally, it should be emphasized that one of the teacher's main priorities is to ensure that his students learn, so the organization and choice of the pedagogical methodology take a backseat. This means that, at all times, the teacher must be aware of the possibilities, limits and predisposition of the group, whether to work individually or as a team. Not considering this aspect would be an anti-pedagogical attitude, since it would lead to inflexibility by imposing a complex learning methodology that would not give the expected results.

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Contribution Role	Author(s)
Conceptualization	Ricardo Pérez Zúñiga (principal).
Methodology	Omar Israel González Peña (main); Mario Martínez García (who supports) and Ricardo Pérez Zúñiga (who supports).
Software	N/A
Validation	Omar Israel González Peña and Ricardo Pérez Zúñiga (same).
Formal Analysis	Omar Israel González Peña (main); Ricardo Pérez Zúñiga (principal); Mario Martínez García (who supports) and Ernesto Mena Hernández (who supports).
Investigation	Ricardo Pérez Zúñiga and Omar Israel González Peña (same).
Resources	Ernesto Mena Hernández (main); Ricardo Pérez Zúñiga (main) and Omar Israel González Peña (supporting).
Data curation	Mario Martínez García (main); Ricardo Pérez Zúñiga (who supports).
Writing - Preparation of the original draft	Mario Martínez García; Ricardo Pérez Zúñiga (same).
Writing - Review and editing	Mario Martínez García and Ricardo Pérez Zúñiga (same).
Display	Ernesto Mena Hernández; Omar Israel González Peña and Ricardo Pérez Zúñiga (same).
Supervision	Omar Israel González Peña and Ricardo Pérez Zúñiga (same).
Project management	Ricardo Pérez Zúñiga and Omar Israel González Peña (same).
Fund acquisition	Ricardo Pérez Zúñiga (principal).