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Critical Thinking in Social Work Training

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Abstract

It is the look at the that leads us to questioning and the answers guide us to updating and the production of knowledge. There is always, in the debates of social work professionals, the question of the search for an intervention project that gives a new meaning to the profession in order to respond, not only theoretically coherent but also efficiently, to the demands placed upon them. The purpose of this chapter is to highlight the importance of critical thinking in the training of social workers. The research is based on an exploratory study carried out with recently graduated university students, whose results point to the benefits of this soft skill in the ability to analyze, understand interactions, detect inconsistencies, systematic problem-solving, reflect on beliefs and values, and reintegrate information as a whole.

Keywords: critical thinking, social work, education, soft skills, knowledge

1. Introduction

The development of skills in critical thinking by students of higher education is nowadays, faced by the challenges of society and the job market place, essential for professional and personal success. This theme has been the subject of increasing reflection and encouragement by different national and international bodies and entities, such as A3ES,[1] the European Commission, OECD, the World Economic Forum, etc. However, despite the interest expressed, there is still a long way for critical thinking to be a generalized priority in the pedagogical practices of teachers, promoted in an intentional, systematic, and transversal way to any area of knowledge.

Thinking about it, in 2009, the Soft Skills Lab (SSL) with the intention of giving students the possibility of complementing their curriculum with soft skills, among which is critical thinking, was created in our university.[2] Being both teachers in social work and critical thinking at the LCT, we decided to carry out this exploratory study to understand the impact of this curricular unit on newly graduated students.

A partial and non-critical view can compromise the performance of any professional, and it is no different with social workers. Common sense concepts are so embedded in our society that even social work students, most of the time, at the beginning of the graduation have a completely wrong idea about what the profession is. The knowledge provided by common sense lead people to believe that the

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[1] A3ES is our National Accreditation Agency for higher education courses.

[2] It is a public University with 15 graduations, 49 masters, 22 PhDs, and around 8868 students.

social worker is a kind of a *good Samaritan,* and this is only one of the challenges students are going to face.

Over time, reality is altered and new conceptions are incorporated into the way of living, learning, acting, interacting, and thinking. The new resources that are constantly added to the already existing ones have or should have the purpose of better serving the individual and society in general. Dealing with the new and complex situations of the contemporary world requires more and more expertise in ways of thinking and acting and relating. Faced with this reality of constant transformations, how can we find autonomy to decide on what is relevant, important, pertinent, and ethical? Critical thinking fits into this question, when it serves as a filter to select what should be harnessed or discarded in this actual avalanche of instantaneous information.

Reflective analysis on the theoretical foundations and intervention models allows social workers to re-equate the directionality of professional action in the context of critical thinking that frames objectivity and questions the reality where it is intervened, as well as the meaning of this intervention in its micro, meso, and macro levels from local to global and from global to local, an exercise that social works constantly need.

As Granja says:

Knowing in Social Work means understanding the social problems as total social phenomena that arise from the operation of the structures and social relations, without denying the particularity of the individual processes and act with a mission to prevent and repair the structural inefficiencies that prevent the poorest from accessing indispensable resources for building themselves as full citizens [1].

Knowledge about the transformation of social reality requires an investment that results from a reflexive activity involving professionals, in a link between theoretical knowledge and practice, through an interdisciplinary approach that requires a theoretical synthesis built with other areas of social sciences, namely psychology, sociology, anthropology and economics, law, public and social policies, among others, which aims to "change the systems of opportunities, promote social relations dynamics and overcoming the deficit of civic participation" [1].

Social work practice focuses on social problems, that is, lack of income, unemployment, isolation and breakdown of social ties, domestic violence, children and young people at risk, school drop-out and failure, and migrants and refugees, among many others which by their complexity require a multidimensional combination of vulnerability and the articulation with structural phenomena and current social policies.

It is better evident for all the importance that critical thinking has in the education of future professionals, although it is nothing new, given the fact that is always in the debates of social work professionals the question of the search for an intervention project that gives a new meaning to the profession in order to respond, not only theoretically coherent but also efficiently, to the demands placed.

Social work as a profession has always demanded critical abilities and qualities from its practitioners because decisions have to be made "on the spot" and under pressure. With practice situations being so complex, the consequences of any decisions and action are extremely important [2].

A reflexive practice leads to thinking through the mediation of concepts and allows to reconstruct the problems and to construct new ways of solving problems. The ability to select data and identify patterns in the professional activity in order to be recognized and transmissible to become sources of knowledge and to be prepare for lifelong learning. For the development of this reflection, it is necessary to have a structured thought about the phenomena that allow analyzing and constructing operational representations.

This requirement goes beyond "competent practice" and demands "critical practice" [3], and the development of "critical being," that is, a person who not only reflects critically on knowledge but also develops their powers of critical self-reflection and critical action [4].

In the research that Ford et al. [5, 6] made on criticality with students in social work education, these ideas have been explored and they conclude that the intellectual resources for critical thinking are: (1) background knowledge; (2) critical concepts; (3) critical thinking standards; (4) strategies; and (5) habits of mind. This allows us to realize that this process has to be permanent and rooted as a mindset.

The more we know about a situation and the circumstances that caused it, the better we can articulate with a structural question, be it social, economic, cultural, or political, including beliefs, values in order to clarify the range of available options and solutions, so that the professional can make an informed decision about the problems that are dealing with.

Beginning to deal with this type of "how to" knowledge is where a practitioner's ignorance becomes obvious and can cause anxiety. It may well be the reason why many new qualified workers take a very prescriptive, rule-based approach to try to ensure they do not do anything wrong. In many ways such a focus on detail and correctness ensures that practitioners can be more critically aware of what they are doing than experienced workers who have established routines [2].

Gray et al. add that "Social workers need to examine closely the strengths and limitations of research evidence. Regardless of how strong the evidence for a particular intervention might be, social workers are in a position where they must critically reflect on their work in the political, social, organizational, and interpersonal contexts, make professional judgements, engage in debate with decision-makers about resource allocation, negotiate appropriate practices and, when necessary, argue convincingly for the effectiveness of the work that is done. This requires skills in formulating and presenting well-supported arguments and the interpersonal and written communication skills to convey a position convincingly" [7].

Based on these assumptions, we did a review of the literature and developed an exploratory study with the aim of understanding the perception of recent students in social work about the importance of critical thinking.

2. The importance of critical thinking in education

According to the literature, the importance of critical thinking skills is recognized in the academic and professional contexts, in which the need to implement measures that facilitate their development and awareness of their usefulness is mentioned.

We find several approaches to critical thinking, some more vague, others more objective, but we cannot easily find a consensus between them, either in terms of definition, in terms of the terminology used, or in the type of methodology designed to develop it [8, 9].

The scientific areas in which we can find greater literary production and investigation around critical thinking are philosophy, psychology, and education [10–12].

We find different contributions from the disciplinary areas mentioned above in an attempt to define critical thinking, and there are no definitions that fit exclusively in one or another area, since many of these authors cross the areas in terms of the research they develop. It is not our goal to find the best definition of critical thinking, or even the most complete one. The various theories focus on different aspects, put the focus on different circumstances, conceptualized in a way that is not always consensual and sometimes even antagonistic. Despite the differences,

we find, in these definitions, points of convergence that we think allow us to have a perception about what critical thinking might actually be [10, 13].

An argument goes from the premises to the conclusion and is one in which there are good reasons for the assumptions to be true, and in addition, the premises have good reasons to support or support the conclusion.

It is focused initially on the holistic assessment of a situation, not explicit reasoning and analysis. In other words, they establish the inductive or deductive links necessary to bring the different parts of a situation into a meaningful whole, to allow it to make sense. Every situation one experiences and faces may be different, but it is imperative to know enough of the parties to make general sense of the whole in order to start dealing with it.

The foundation for critical thinking defines critical thinking as:

the type of thinking—about any subject, content, or problem—in which the thinker improves the quality of his thinking by competently analyzing, evaluating and reconstructing it. Critical thinking is self-directed, self-disciplined, self-monitored, and self-corrective. It presupposes consent to rigorous standards of excellence and a conscious control of its use. It implies effective communication and problem-solving skills, as well as a commitment to surpass our natural egocentrism and sociocentrism [14].

According to the Delphi Report, referenced by Facione, in addition to the skills associated with critical thinking, there are still a set of aptitudes, divided into two approaches: one related to life skills in general, and another related to specific issues, doubts, and problems. Regarding the first, the Delphi Report describes the following as critical thinker's skills: (1) curiosity over a wide variety of issues; (2) concern about becoming and staying well informed; (3) alert to opportunities to use critical thinking; (4) trust in the rational research process; (5) confidence in your own reasoning abilities; (6) open mind regarding divergent views about the world; (7) flexibility when considering alternatives and opinions; (8) understanding of the opinions of others; (9) honesty in the evaluation of reasoning; (10) honesty when confronted by our own egocentric and sociocentric prejudices, stereotypes, and tendencies; (11) caution in the suspension, elaboration or alteration of judgments; and (12) predisposition to reconsider and revise viewpoints, where honest reflection suggests change is necessary [15, 16].

Regarding the approach related to specific issues, the Delphi Report refers the following as aptitudes: (1) clarity in affirming an issue or concern; (2) method in dealing with complexity; (3) diligence in searching for relevant information; (4) reasonability in the selection and application of criteria; (5) concern to focus attention on the subject; (6) persistence despite any difficulties that may arise; and (7) accuracy to the level allowed by subject and circumstance.

Critical thinking is multidimensional, encompassing the intellectual (logic, rationality), psychological (self-consciousness, empathy), sociological (in terms of socio-historical context), ethics (norms and moral evaluation), and philosophical (meaning of nature and human life) [17].

It is also due to its characteristics of transversatility and multidimensionality that the authors argue that critical thinking has for centuries been the basis for the creation and maintenance of a democratic and democratically participative society, qualified by an active, pluralistic, and autonomous citizenship [18–22].

In education, we highlight pioneering authors who have emphasized critical thinking (although with other terminologies), from the Greek philosopher Socrates and the concepts of "knowledge" and "maièutica," to the American philosopher, psychologist, and educator John Dewey, and reflection on "thinking" and "reflecting" [23, 24].

Dewey is even considered the "father" of the modern tradition of critical thinking [25] when, in the early twentieth century, he advocated the need for education

to prepare students for the complex demands of citizenship and the world of work [26].

The debate about the operationalization of critical thinking, the development and teaching of critical thinking, the skills of critical thinking, and the evaluation of critical thinking, are thus essential topics in education from the last decades of the twentieth century until now, specifically for social work, a recent study in this area recommends a future research agenda for critical thinking [27]. As competence, or set of competencies, critical thinking can be developed and evaluated. In this sense, the exploratory study presented here intends to contribute to the evaluation of the importance that students attribute to critical thinking, as well as to the evaluation of critical thinking as competence.

2.1 Social work education and critical thinking

The twentieth century imposes on contemporary social work the challenge of establishing theoretical categories and methodologies that broaden its interdisciplinary horizon and stimulate the conception of the human being as a builder of its own reality [28]. The increasing complexity leads us to the search for alternatives, skills, and a competence to manage the theoretical-practical process, related to the attempt to understand the reality in constant movement, the tendencies and the possibilities that are put to our daily lives.

Social work education in Portugal according to Branco [29] "focuses on the dynamics of break and continuity between its pivotal socio-political periods and international influences" the same author in its latest article marks these periods saying that:

The social work education itinerary in Portugal during the period between the Republican Regime foundations (1910), the constitution of Estado Novo (1933–1945), the succession of Salazar (1968), the revolutionary crises associated with the Carnation Revolution of 1974 and the academisation period (1989 to the present) [29].

Questions related to the production of knowledge and the dissemination of this same knowledge arise later (also for socio-historical reasons), with the affirmation of the profession as a specific area of knowledge. In Portugal, with the development of the academic career in the area of social work, (undergraduate, master, and doctorate), the theoretical and practical dimensions, namely training, intervention, and research, have been developing and, consequently, we have assisted to a greater theoretical production (in the form of theses, dissertations, articles, and books) and an intensification of the research effort and its dissemination, which has given to Portuguese social work a greater visibility among the scientific community [30].

Consequently, the construction of knowledge was imposed as a means of awareness of the subjects involved in the teaching-learning process, in a critical perspective of knowledge as a tool for the realization of the political-professional ethical project and for the transformation of the socio-institutional and political- cultural reality. This awareness has undoubtedly been one of the means for advancing professional maturity.

The experience of this critical thinking course comes from the university, where the study was done through the creation in 2009 of a Cross Skills Laboratory to give students extra skills with the aim of developing a reflexive practice that, rather than aiming at the constitution of a stabilized knowledge, intends to develop the capacities of reflexivity and action; understand the importance of critical thinking in academic and professional context; identify the elements and analyze simple and complex arguments; recognize errors on daily speech; assess the quality of arguments and argumentative texts; and create simple and complex arguments in oral debates and written texts. The students that successfully complete this curriculum

unit will be able to analyze arguments regarding their structure and content; argue on an issue; identify the deductive validity on propositions; and question arguments, identifying its weaknesses.

According to Jones "Critical thinking can lead us to open up self-doubt and this is a good thing because it lead us to really examine why we think and act as we do" [31] and "Developing an ability to understand why you react and think as you do is part of a recognition of you own inner resources" [31] this author also argues that:

To be able to think about how we, and others, think—thinking about thinking. In doing this you will be thinking about the reasoning, motives and arguments of others. You will have the ability to see all sides of the question and analyze its strengths and weak-in these [31].

And is corroborated by other authors that alert us by saying that

The technical rationality model also fails to recognize how understanding is developed from the integration of theory and practice (…) Reflective learning incorporates both theoretical and practical themes and issues and seeks to integrate these—to open a dialogue between theory and practice [32].

It is a continuous process of reflection and allows the interveners to develop their theory directly from their experience. In addition, it allows you to "tailor" your intervention to each specific context using a range of non-defined skills and perspectives.

3. Methodology

The present study is exploratory and quantitative and aims to understand the perception of recent graduate students in social work on the importance of learning critical thinking in higher education and its impact on the labor market.

It aims to identify the potential of learning critical thinking during its formation, including future usefulness in the professional field. Although we do not intend to prove hypotheses, we seek to explore the results based not only on the perception of the respondents, but also to categorize the critical-thinking skills acquired as potentialities in teaching in social work and as knowledge of support to the professional exercise.

In a universe of 154 newly graduated students between 2015 and 2017, whose training integrated the curricular unit of critical thinking in their curriculum, we used an intentional sample of 79 individuals recently graduated in social work.

A bibliographical review was made on the subject and we used as a data collection technician, a questionnaire in which we used a Likert scale of level 5. The Likert scales [33] are widely used to measure postures and opinions with a higher level of a question of "yes" or "no," in this questionnaire was composed of a set of sentences (items) in relation to each one of which the respondents were asked to express the degree of agreement from the non-positive (level 1), until *very positive* (level 5). We also added two questions to understand the degree of satisfaction with the critical thinking training with a scale from 0 to 10, in which 0 was totally dissatisfied and 10 totally satisfied and an open question to perceive the benefits and disadvantages of learning critical thinking.

The questionnaire was divided into two parts: socio-demographic characterization and the identification of the importance of critical thinking contribution as training in its learning.

The age of the participants is between 21 and 45 years, with an average of 24.5 years, mostly females, 87.3, 91.1% Portuguese and 78.5% is inserted in the job market (as social workers) and 94.4% attended this curricular unit in the first year of the degree.

Five categories of analysis were established for the fifteen items of the questionnaire:

- Ability to analyze

- Systematic problem solving

- Understand interactions and detect inconsistencies

- Reflection on beliefs and values

- The reintegration of information as a whole

We are aware that one of the limitations of this study is that there is no credit for its generalization [34] given the fact that it has a small sample (although representative in terms of results for our university) and is exploratory.

Another limitation is that the respondents themselves may have given skewed responses because they know the purpose of the study, they may want to appreciate the university that formed them and give answers that they consider "correct." It was attempted to overcome this limitation by saying that both the institution and the participants would be anonymous.

We intend to continue this study in a first phase at national level with partnerships with other universities and later extend to a study in the Iberian Peninsula (Portugal-Spain).

4. Results

The results show that the majority of respondents considered that the contents seized in their critical thinking training were positive or very positive with Likert scores (1–5) between 4.53 and 3.89. The average of responses in the different categories considered the impact of the contents acquired positive 50.55% and very positive 35.27%, understanding this competence as an active element of learning as students, stimulating a clear, logical, and organized thinking, helping to develop the necessary skills during the frequency of higher education and currently in the labor market (**Figure 1**).

According to the results, the greatest impact of learning was reflected in the development of strategies for decision-making and in the capacity to train a rigorous analytical view, both with a mean score in the answers of 4.53 (Likert scale-Ls). These figures translate into the impacts of these two categories, which were considered positive by 36.71% of the respondents and very positive by 58.23%. It is also noted that 5.06% of the respondents consider neither positive nor negative.

The identification of the barriers to critical thinking obtained the highest percentage of answers with the classification of positives (67.09%) along with the diagnosis in problem solving (63.29%). In the categories of preparation for problem solving and articulation of daily information, there was a balanced preference for responses, mainly considering positive or very positive.

Respondents answered that the impact on the preparation for problem solving was both very positive (44.30%) and positive (44.30%), considering neither positive or negative 10.13% nor negative 1.27%. In the articulation of information with the everyday situations, 46.84% was very positive, 44.30 positive, and 8.86 neither positive nor negative.
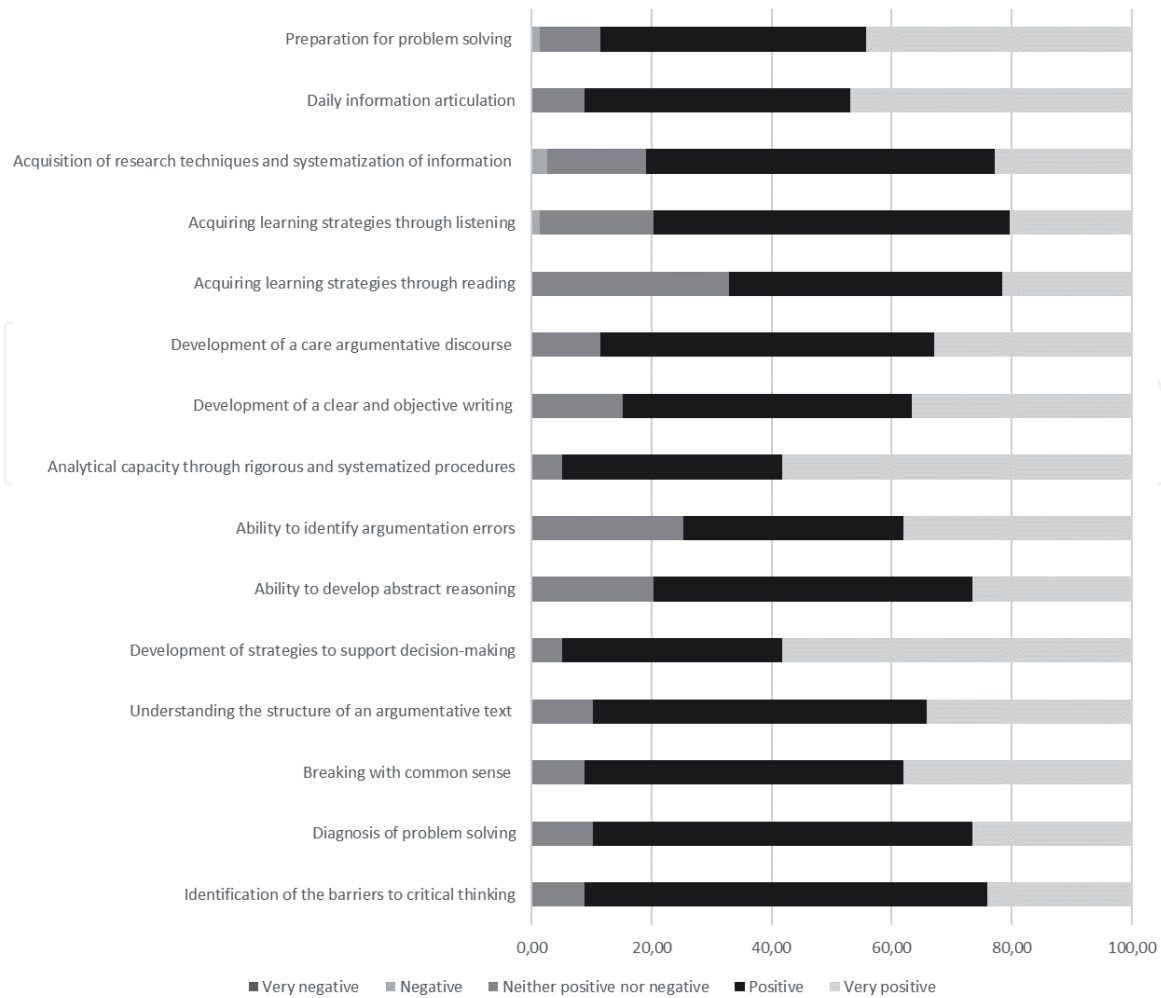
Figure 1.
Distribution of respondents' answers on the current impacts of content acquired during their training.

Regarding the ability to identify argumentation errors, 25.32% of the respondents answered that the impacts were neither positive nor negative. This is the category in which neutrality assumes greater expression, although it continues to be less than the responses that consider the very positive (37.97%) and positive (36.71%).

As for the less-valued aspects, but still with an average that considers these competences as positive, are the dimensions of acquisition of learning strategies through reading (3.89 Ls) and acquisition of learning strategies through listening (3.99 Ls). The responses in these two categories vary in their distribution, and the acquisition of learning strategies through reading 32.91% of the respondents considered that the impact of this competence was neither positive nor negative, while 45.57% considered that it was positive and 21.52% which was very positive.

Regarding the acquisition of learning strategies through listening 20.25% considered that was very positive, 59.49% positive, 18.99% that was neither positive nor negative, and 1.27 responded that the impact was negative.

In the acquisition of research techniques and information systematization, most of the answers were positive 55.23%, positive for 22.78% of the respondents, and 16.46% neither positive nor negative. This competence was the one with a residual value, presented the highest percentage of responses that considered the negative impact (2.53%).

The comprehension of the structure of an argumentative text and the acquisition of competences for an argumentative discourse were both considered 55 by 0.70% of the respondents as having a positive impact. The understanding of the

structure of an argumentative text also registered 34.18% of responses that indicate a very positive impact and 10.13% that consider that the impact was neither positive nor negative.

In the acquisition of competences for a care argumentative discourse 33.91% considered to have had a very positive impact and 11.39% did not have a positive or negative impact. The ability to develop abstract reasoning was for 26.58% of the respondents considered very positive, 53.16% positive, and 20.25% neither negative nor positive. The break with common sense was perceived as a competence with a very positive impact by 53.16% of the respondents, 37.97% answered that the impact on this competence was very positive, and the remaining ones were neither positive nor negative, 8.86%.

Finally, the acquisition of skills for clear and objective writing had 48.10% considering that the impact of the contents acquired was positive, followed by 26.71% of the responses as very positive and 15.19% which was neither positive nor negative. Other aspects analyzed were the satisfaction with the curricular unit of critical thinking and professional satisfaction, as well as the aspects that were considered as advantages or disadvantages in their training.

Using a satisfaction scale of 0–10 in which 0 is totally unsatisfied and 10 is fully satisfied, the highest number of equal answers with the classification 8 regarding satisfaction with the program they had in their training of critical thinking was 32.91% of the respondents and 34.18% with the same classification relative to the importance in the labor market. The answers ranged from 4 to 10 in both questions, with the average rating being 7.57 and 7.67, respectively.

In addition to the satisfaction with critical thinking learning in both academic and professional spheres, among the main advantages, respondents identified the improvement of their attention and observation abilities of the real world, as well as the contribution in the decision-making supported by an exercise of rational discernment. It was also mentioned the improvement of the capacities to identify key ideas avoiding irrelevant elements, the facilitation in the process of transmitting ideas and perspectives, and the development of this competence to various situations and contexts. There were no disadvantages to register except for the reference to the difficulty in interpreting texts and access to scientific sources of information.

About the importance of critical thinking associated with the issue of values and beliefs and of a more comprehensive thinking, respondents considered the knowledge acquired with critical thinking as extremely important because it allows them to question universal opinions, general judgments, and mind-beliefs, in order to be able to perform quality work in their intervention with people.

5. Discussion

This exploratory study gives us the perception that the recent graduate students in social work who attended the critical thinking curricular unit valued this learning in their training, but also in the usefulness and articulation with the job market.

Participants' responses show that the majority of respondents considered that the competences learned in their training in critical thinking were positive or very positive, with critical thinking being an active element in their higher education, stimulating reflection and acting capacities in the service domain of a clear, logical and systematized form, helping to develop the skills needed during higher education attendance and currently in the labor market.

5.1 Ability to analyze

Among the dimensions analyzed stand the development of strategies to support decision-making and analytical capacity through rigorous and systematized procedures. The development of strategies for decision-making includes efficient, quick, and objective forms of planning in the analysis of situations. Here, it includes the ways of acting in complex situations that aim for more efficient and effective responses through thought patterns that can increase the confidence and assertiveness of the responses when implementing them.

The training capacity of a rigorous analytical vision leads to a cognitive reflection, free of opinions and value judgments, focusing on a critical action of analysis of information, facts and events, and managing to select and systematize what is significant in an idea developed or presented. It also promotes a process of evaluation of evidence and facts at the expense of opinions, as well as a reflection on the issues in a structured, logical, and informed way.

The acquisition of research techniques and systematization of information refers to the training of valid and reliable bibliographic research and the careful use of information sources. It is necessary to establish critical thinking in premises based on evidence, supported by theoretical or empirical data.

Although with a less significant expression, the competences of acquiring learning strategies through reading and listening are also present in the development of this competence. It is important to apply research and information selection processes in written texts, the analysis of written narratives, and documentary information to support the development of critical thinking, as well as the listening of oral, synchronous, or asynchronous narratives that allow the acquisition of information to support the construction of logical and consistent reasoning.

5.2 Systematic problem solving

It is also highlighted the importance of critical thinking as support for diagnosis and problem solving, focusing on the ability to analyze and evaluate situations, looking at them by different prisms, particularly in relation to issues associated with ideologies, religion, ethics, or human behavior.

The preparation of these professionals for the resolution of problems and for the articulation of daily information promotes competences for an accuracy in the way they reflected and act when facing questions that imply the analysis of a complex situation, dilemmas or unforeseen situations, developing the training for think and anticipate problems critically, generating solutions that are useful in solving problems, in project management or in the way different parts of an activity or task is developed.

In this field, the capacity to observe reality and current analysis through the collection and application of information in plural and multidimensional contexts is highlighted and allows the development of forms of analysis and adaptation in different areas and groups in the face of a diversified reality of constant transformations.

5.3 Understand interactions and detect inconsistencies

The understanding of the structure of an argumentative text and the acquisition of competences for the construction of a discourse are developed competences that allow the identification of reasons and conclusions, together with the evaluation of the premises that support the presented conclusions.

It encompasses the ability to identify points of view in a clear, systematic, and objective way, identifying simple and complex lines of reasoning. It also contributes to a better communication and interaction with others, achieving through a clearer

discourse to present convincing quality arguments and reinforcing points of view in a structured way.

This relates to a process that involves conscious choices, supported by evidence that gives strength to our discourse, be it oral or written, allowing cumulatively to be able to interpret and deconstruct our ideas and others ideas. It also allows for an evolution in the capacities of relationship and communication, making possible the selection about what is more or less relevant.

The ability to detect inconsistencies in performance, through the identification of fallacies, refers to the development of the ability to recognize the most common argumentations failures and to be attentive to failures in the arguments of others.

It makes possible to identify errors of argumentation with a competence that contributes to finding weaknesses and strengths in the discourses of others and be able to counteract them, as well as to formulate its own arguments. It also highlights the ability to recognize information manipulation techniques and fallacies and present a well-grounded, clear, and organized perspective in order to convince others. It also promotes a correct grammatical and conceptual use, avoiding abstract, vague or general terms that compromise attention-getting to what is central to the argument, through precise, specific, and concrete language.

5.4 Reflection on beliefs and values

The importance of overcoming the barriers to critical thinking are recognized as a relevant aspect that refers to the pertinence of the approach of this theme, resulting in the development of skills of conceptualization of criticism and overcoming inhibition to criticism and in the ability to be free of emotional influences or affective, avoiding that they affect the clarity of the reasoning and must be analyzed by the evidences.

Also, it is recognized that common sense is capable of creating absolutisms all the time and the tendency of the great mass of our society is to absorb them easily; creating a vision of the world capable of guiding our whole existence. We are hardly willing to question what is going on around us and seek a second opinion of the facts. Instead, we prefer the convenience of thinking like others, following the vast majority, prefer superficiality. Because it is hard work creating critical thinking, these students create added value in both professional and personal life and it's a lifelong tool.

5.5 The reintegration of information as a whole

The capacity for development of abstract reasoning aims to identify the positioning of others, arguments, and conclusions, leading to innovation processes. It develops concepts and ideas analysis skills from a more systemic and global perspective. Rupture with common sense contributes to the use of facts as support for action to the detriment of individual knowledge supported by lack of evidence, aiding in the foundation of arguments, and ideas that are proven theoretically or empirically.

Some research [35] refers that as they are in control of their thoughts, that is, they are aware, understand, self-direct, and self-evaluate; have "tacit knowledge" groups that form "patterns" and represent the learning and generalization of previous experiences, research, and theory; recognize other significant patterns and principles and irrelevant aspects in a situation and bind to these existing known patterns and thus assess in depth (patterns or contours formed in the mind) that when adapted to the problem suggest solution procedures and periodically checks us for review, progress, and evaluate results.

6. Conclusions

Teaching is a privileged context for the development of critical thinking in individuals, and the teacher plays a fundamental role in the conduct of this complex process with theoretical, practical, and motivational components of active learning [10].

Experts in the area of critical thinking collaborated in the definition of strategies and methodologies of approach for the operationalization of the development of these competences in educational contexts, as in the case of the Delphi Report already mentioned, that resulted from the meeting of a group of experts with the objective, through the Delphi Method, to constitute a set of propositions and recommendations that would act as guiding lines for education agents and other professionals related to this area, regarding teaching, and evaluation of critical thinking.

In pedagogical terms, there are different ways of teaching and exercising critical thinking among students. The two most common approaches are: the creation of a course or program specifically dedicated to the development of critical thinking; and the incorporation of the development of critical thinking in curricular subjects.

Based on the literature, we cannot say that one approach is more effective than the other, but we can say that the perception of the key benefits that our graduated students report in conducting our critical thinking programs refers to ensuring good practice that is already being realized through discussions with others and the link between theory and practice to rethink their practices, allowing them to perceive when they fall into the bureaucratic routine and adopt more appropriate methods and approaches.

An awareness and acceptance of uncertainty in the practice of any professional is an important way to lessen stress. There are no perfect solutions out there to find, so we cannot be called on to work perfectly. If we accept the fact that the things we do or decide on are still dependent on something uncertain or on future happenings, and work in a way that takes account of that (i.e. constantly reviewing the things we deal with, decide on, or do), then this is really what "thinking critically" is all about [2].

The key is to strike a balance between the need for certainty and the need to be aware of other ways of doing or thinking about practice. This is where critical reflection (especially involving others) can play a key role in building trust by analyzing practice based on strengths, but also allows consideration of alternative options, points of view, etc., within a space safe, and where uncritical rigidity is not established.

These characteristics should be present not only in the students but also in the teachers. They must know how to model the learning they want to pass. Is it possible to give classes that do not develop these skills but reach other academic goals? Of course yes. But, it is also possible to achieve academic goals, curricular goals, and programmatic content by developing these skills at the same time.

Not least, we find the evaluation. In order to gauge how the process is going, we must evaluate. It is a great challenge to evaluate these skills, it is true. It will be easier to evaluate if you have memorized dates and locations. But as it is a challenge to know how much a student contributed in a group work and not fail to do so, we cannot give up to train our students in skills that will be valid for the rest of their lives because of the difficulty we encounter in the evaluation and the technology resources that allow new forms of formative and summative evaluation.

It cannot be forgotten that the surprises with which every social worker is confronted in everyday contacts and relationships need to be analyzed not only with common sense look but also with critical thinking and the autonomy of a thought based on solid concepts should be a factor of considerable importance. This will mean that in each complex situation, the values that underpin knowledge are at the service of conscious decision-making.

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Conflict of interest

The authors declare no conflict of interest.

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