Deposited in *Repositório ISCTE-IUL*:
2022-02-04

**Deposited version:**
Accepted Version

**Peer-review status of attached file:**
Peer-reviewed

**Citation for published item:**

**Further information on publisher’s website:**
10.21125/edulearn.2021.1858

**Publisher’s copyright statement:**
This is the peer reviewed version of the following article: Rocha, H. B. & Martins, I. C. (2021). Critical thinking and its importance in the present days for social workers. In Gómez Chova, L., López Martínez, A., and Candel Torres, I. (Ed.), EDULEARN21 Proceedings. (pp. 9222-9228). Online Conference: IATED Academy., which has been published in final form at https://dx.doi.org/10.21125/edulearn.2021.1858. This article may be used for non-commercial purposes in accordance with the Publisher’s Terms and Conditions for self-archiving.
CRITICAL THINKING AND ITS IMPORTANCE IN THE PRESENT DAYS FOR SOCIAL WORKERS

H. Belchior-Rocha, I. Casquilho-Martins

Centro de Investigação e Estudos de Sociologia (CIES-Iscte); Iscte - Instituto Universitário de Lisboa (PORTUGAL)

Abstract

Critical thinking is multidimensional, it encompasses the intellectual (logic, rationality), psychological (self-awareness, empathy), sociological (in terms of socio-historical context), ethics (norms and moral evaluation) and philosophical (meaning of nature and the human being).

As a competency, or set of competencies, critical thinking can be developed and assessed. In this sense, the exploratory study that we intend to present aims to contribute to the evaluation of the importance that students attribute to critical thinking, as well as to the evaluation of critical thinking as a competence in the present situation.

Before the pandemic situation we conducted a study with a universe of the 1st year social work students recently graduated, whose training included the critical thinking curricular unit in their study plan, we used as a data collection technician, a questionnaire with likert scale to measure the students opinions. The results were very positive and students admit that it helped them to analyze information (the importance of details), to practice curiosity and skepticism (to ask questions and compare with other sources) and to question (particularly, their own beliefs), including problem solving or decision making.

With this recent challenge, consequence of Covid-19, it was necessary to alter all the previous model and adjust it to the pandemic situation through distance learning. Due to the characteristics of this curricular unit, we understand that in addition to the contents and usual dynamic, it was important to support students in adapting to the new methods and use this situation in favor of the benefits of thinking critically. Being a new situation for all (teachers and students) systematic evaluations were made to perceive if the results of the changes introduced were promoting the desired effect.

Subsequently, in a total of 6 classes, with about 35 students each, we selected a non-probabilistic sample of 2 students of each class and each student was asked to make a critical assessment of the impact of this curricular unit in their learning process. Among other results that we intend to present, the key was to achieve a balance between the need for security and the need to know other ways of doing or thinking and classifying the critical thinking skills acquired as potentialities to support the uncertainty of the moment. This is where critical reflection (especially involving others) can play a key role in building trust by analyzing strengths-based practice, but it also allows considering alternative options, points of view, increase their ability to assess and position themselves in different contexts and learn to be prepared for unexpected situations.

Keywords: Critical thinking, distance learning, soft skills, Social Work.

1 INTRODUCTION

The changes permanently occurring in society, not only at the technological level, but also at the social, economic, and political levels, require qualified professionals. Today, public, and private institutions consider that recent graduates do not possess skills that enable them to think critically or creatively, solve problems, communicate effectively, work cooperatively and organize or prioritize tasks at work [1].

Having well-developed critical thinking is crucial to future personal, professional, and political choices, as well as to the ability to analyze the world that challenges us all the time. In this sense, thinking critically allows to draw sensible conclusions from a frame of information and to separate what is useful from what is not, when making decisions.

Although critical thinking skills can also be used to expose fallacies, it is unquestionable that can play an important role in cooperative reasoning and constructive tasks and that this should be the result of a solid construction in training, which is the role of education [2].
Therefore, in this paper we intend to present the evaluation of the importance that students attribute to critical thinking, as well as to the evaluation of critical thinking as a competence in the present situation (COVID19) in which we move from face-to-face teaching to online teaching.

We know that the development of critical thinking is directly linked to socio-emotional skills and the management of emotions, which implies that face-to-face teaching is very important for working on this competence. It is not a merely technical work, each student brings his particular baggage of socialization and life experience, aptitudes and insecurities, which influence his behaviour, a way of looking at and perceiving the world and other people [3].

This curricular unit brings together students of different personalities and backgrounds to work together and logically, it is much more comfortable when students work with colleagues with whom they feel they have an affinity. But associating multiple personalities is essential to develop emotion management [3] and foster group harmony in critical thinking.

At the same time, we wanted to strengthen the skills of these students for a future, that teachers, are also facing. The uncertainty, insecurities and even in some cases lack of training for teaching through a platform, but with the premise that teachers should develop the same skills they need to teach students. And as such the purpose was to strengthen tolerance, resilience, self-confidence, respect, conflict management and boundaries. It was therefore important to explain to the students the purpose of this exercise and to say that successful joint efforts are a foundation for them to succeed when working with other people on future tasks, especially in the professional field.

Although some people mistakenly believe that critical thinking hinders creativity because it requires following rules of logic and rationality [4], we considered that it would be through this creativity that we could find a way to allow students to apply what they have learned to different situations, weigh up the pros and cons of a variety of possibilities and decide which ideas work best.

2 TEACHING CRITICAL THINKING DURING AND AFTER COVID-19 TO SOCIAL WORK STUDENTS

The challenge of teaching became much greater during the pandemic and the periods of confinement; if teaching critical thinking was already a complex task, it became even more so when we were faced with an endless load of contradictory information, where everything we had built as 'truth' in our lives was called into question. Even more complex is the fact that we are training social workers.

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. For example, the knowledge provided by common sense lead people to believe that the social worker is a kind of a good Samaritan, and this is only one of the challenges students are going to face [5].

In a world where 'fake news' don't stop increasing, where societies are changing quickly, and where there are big challenges to open democratic government, critical thinking is a vital skill for this profession. "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” [5].

Also, we cannot forget "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" [5].

Social Work has absorbed a general conception of critical social science ideas about the nature of the social problems that affect human existence and tries to understand society in all its dimensions to be able to transform it, in the objective of social change for better quality of life [6].

Therefore, the promotion of rational, self-conscious thinking in the process of personal and social emancipation needs the understanding of society as a totality social structure that orders the fundamental meaning of social relations, at institutional and individual levels and where local experiences arise as effects of a global social structure, determined by the social structure, highlighting the dimension of power, of the dialectical struggle between opposing social groups [7].
In the professional practice the idea is to develop a reflective practice which, rather than aiming to constitute stabilized knowledge, aims to develop reflexive and action skills, with a view to engaging "our 'truths', 'stories' and 'constructions' with those of others" [6].

The concept of 'reflective practice' is of vital importance in the teaching and professional development of social workers and can be defined as "a form of mental process with an anticipated purpose and/or effect that is applied to relatively complex and unstructured ideas for which there is no obvious solution" [8].

Understanding logical connections between ideas; identifying, constructing, and evaluating arguments; detecting common inconsistencies in reasoning; solving problems systematically; and identifying the relevance of ideas, beliefs and values [2] are all reasons for intentionally and explicitly integrating critical thinking into teaching and learning of these professional. In addition to this workplaces and society continue to evolve at an ever-increasing pace, so students need to be challenged to lifelong learning, adopting new technologies, ideas and skills to solve numerous situations.

2.1 Adapting to distance learning

During the confinement period we have experiencing the biggest challenge in this curricular unit, that was to engage students by stimulating them to reflect in a moment in which we could not give them any answers. So, we start from basic questions, especially open questions, which do not require a ready answer, offering them the chance to apply what they have learned and develop previous knowledge, stimulating them to look for evidence to help them build their arguments autonomously.

With some homework we gave students time to organize their ideas or reflect on their thoughts before sharing them with their group or the whole class. Encourage them to write down the evidence or ideas gathered, promote group activities, motivating critical thinking skills. This is because cooperative learning vitalizes dialogue and socio-emotional skills as it exposes students to the different reasoning processes of their classmates, while expanding their thinking and worldview.

As much of classroom discussions turn around the application of knowledge, we realize that this can be done even through digital resources such as tablets, smartphones, or PCs. Digital devices can be a great support tool for students to present their ideas, with images that can be shared with the class, which makes them understand that everyone has the right to participate and there is not only one way to approach a problem.

Connecting different ideas is key to critical thinking [2]. For example, a specific topic can be worked on in a cross-cutting way so that students understand different optics and that any solution has a number of variables and consequences. In addition, they are encouraged to understand that prior knowledge can be applied to new contexts. The more creative the activity, the more chances the teacher has of engaging their students.

In order to best express ourselves, we need to know how to break down texts, and in turn, improve our ability to comprehend, in this sense critical thinking allows us to analyze these ideas and adjust them accordingly [2]. Mastering the use of information is crucial for students' success in their future and in life. In this respect, one of the skills of critical thinking is knowing when to consider or discard information. To build their argument and make decisions, students must learn to accumulate the appropriate knowledge to feed their thoughts and distinguish what is irrelevant at that moment. It is about learning to explore knowledge to find the most reliable facts.

Also, we insist that critical thinking can help them better understand themselves and in turn, helps avoid any kind of negative or limiting beliefs, and focus more on our strengths [9]. Being able to share our thoughts can increase our quality of life.

3 METHODOLOGY

Critical thinking is multidimensional, it encompasses the intellectual (logic, rationality), psychological (self-awareness, empathy), sociological (in terms of socio-historical context), ethics (norms and moral evaluation) and philosophical (meaning of nature and the human being).

As a competency, or set of competencies, critical thinking can be developed and assessed. In this sense, this exploratory study aimed to contribute to the evaluation of the importance that students
attribute to critical thinking, as well as to the evaluation of critical thinking as a competence in the present situation.

Before the pandemic situation we conducted a study [5] with a universe of the 1st year social work students recently graduated, whose training included the critical thinking curricular unit in their study plan. We used as data collection technician, a questionnaire with a Likert scale of level 5 and this questionnaire was composed of a set of sentences (items) and each one of the respondents were asked to express the degree of agreement of the non-positive (level 1), up to very positive (level 5). Also, we added two questions to understand the degree of satisfaction with critical thinking training with a scale from 0 to 10, in which 0 was totally dissatisfied and 10 was totally satisfied. The results were very positive and students admit that it helped them to analyze information (the importance of details), to practice curiosity and skepticism (to ask questions and compare with other sources) and to question (particularly, their own beliefs), including problem solving or decision making [5].

With this recent challenge, consequence of COVID-19, it was necessary to alter all the previous model and adjust it to the pandemic situation through distance learning. Due to the characteristics of this curricular unit, we understand that in addition to the contents and usual dynamic, it was important to support students in adapting to the new methods and use this situation in favor of the benefits of thinking critically.

Being a new situation for all (teachers and students) systematic evaluations were made to perceive if the results of the changes introduced were promoting the desired effect. Subsequently, in a total of 6 classes, with about 35 students each, we selected a non-probabilistic sample of 2 students of each class and each student was asked to make a critical assessment of the impact of this curricular unit in their learning process. The key was to achieve a balance between the need for security and the need to know other ways of doing or thinking and classifying the critical thinking skills acquired as potentialities to support the uncertainty of the moment.

4 RESULTS AND DISCUSSION

Considering the answers and following the line developed throughout this study, it can be seen that there is, on the part of the students, an apparent knowledge that our behaviours and attitudes can be changed and molded, just as happens in the learning of technical contents.

From the 12 students selected just 11 students answer, but despite this limitation, in an already small sample, we can see that the effort to teach critical thinking at a distance model has produced positive results.

It is relatively easy to learn the techniques of critical thinking, but it takes a lot of effort and attention to our own attitudes and behaviour to “incorporate” critical thinking into our life.

On table 1 from the discourses of the students we can perceive that argumentative writing prompts students to actively participate in the critical thinking process. Sessions are linked to a core question, provoking debates, and collaboration with peers.

Students evaluate and synthesize what they have learned to build their own arguments, considering that thinking critically is important for every academic subject and for the profession.

<table>
<thead>
<tr>
<th>Student 1</th>
<th>Critical thinking make you better understand the perspective of others and can help you become more open-minded towards different views. The importance of critical thinking lies in its use and value in our day-to-day workplace and lives. To succeed in practically any career, you will have to use it to analyze information, solve problems and negotiate choices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 2</td>
<td>Critical thinking is an essential subject in any education because it teaches you how to teach yourself.</td>
</tr>
<tr>
<td>Student 3</td>
<td>This work will result in a theoretical deepening of the “art of argumentation”, but its fruits will be revealed throughout life, through a more considered, concrete, objective and rational argumentation that will contribute to a better analysis of situations, expression of opinions, demystification of fallacies, among others. Its application is not restricted to the academic or professional sphere, being a transversal competence, it also applies to personal and social dynamics. In short, the work carried out served essentially to put into practice the knowledge learned in class, which ends up accentuating better critical thinking practices.</td>
</tr>
</tbody>
</table>
Critical Thinking being a transversal skill, its skills will bear fruit in all the dynamics of my life, and this work was another way of reinforcing that skill. I would also like to thank for the work and dynamism in the zoom.

Student 4
After the completion of the curricular unit, I conclude that I have to improve my research techniques and text formation because that was where I felt more difficulties. I managed to overcome them through trial and error and text reformulation. Throughout the work I remembered, improved, and put into practice knowledge acquired in a zoom context. I consider the work relevant because it tests our knowledge and contributes to our growth at academic, cultural and personal level.

I really enjoyed having you as a teacher. You are a good professional and always transmitted a good energy/provided a good environment.

Student 5
With this work we can conclude that all the subjects taught in the curricular unit as well as the respective practical works and debates served to improve our speech, the way of being and the way of observing the society that surrounds us. On the other hand, it also reinforced the perspective of always seeking good information so that we can support our ideas in a clear way and so that we can acquire trustworthy knowledge. Finally, it alerted us to correct our argumentation errors and created more objective analysis tools.

Student 6
Being able to think critically, independently, clearly, with internal consistency, precision and logical consistency is the basis for a coherent and quality argument. Opinions that lack a firm foundation and flaws in the argumentation, from the content to the language, in the form or with the use of poor references, lead to the weakening of the argument and inevitably reveal the misuse of argumentative instruments.

Knowing how to identify, analyze and evaluate arguments enables us to understand the importance of argumentation, which then leads to a correct application, that is, both formally and informally, being able to protect our opinion based on critical thinking is essential for good argumentative.

Student 7
After the classes and the proposed work, I feel that the reflective and critical work of thinking and argumentation is facilitated: Since the analysis of the argument, to understand the premises proposed, and to make the bridge between the logical thinking and the conclusions obtained, the work then allowed an analysis of the quality of the premises more facilitated and objective and above all an introspection and self-evaluation regarding my argumentation. This argumentation ends up seeing improvements because in the future it will be done in a more conscious, thoughtful way and (from the information I consider most useful that the teacher gave us) in order to make my point of view known and to work in a discussion in a constructive way, because the great reason of the discussion and argumentation is not to feed the ego but to feed our knowledge and eventually convince people of our point of view in the process.

Student 8
In the final work it was proposed to make the analysis of an argument, consequently, identify the characteristics of construction, and finally, to produce an argumentative text, with one of the themes of choice. This final work of continuous assessment was a combination of exercises that had already been discussed and practiced before and was productive, that was another method of study to deepen the knowledge acquired over the lessons taught.

Student 9
With this evaluation work, we conclude that Critical Thinking is not a way of communicating, it is the way of communicating, and its flaws, either at the level of flaws in argumentation, understanding, confusion in writing, lead to the receiver of the message not decoding it the way the sender sent it, and may even create communication and interpersonal noise, compromising future communications and interpersonal/institutional relationships.

Having said this, it can be said that this work was an interesting challenge, whose text provided by the teacher became much more appealing after understanding it, after a second reading and analysis according to the “rules” of Critical Thinking, having provided a unique learning moment, because it was possible to understand the structure of a text that at first reading seems like a normal text, and maybe it is, but after analysis it was possible to identify the principles and details inherent to the composition of a good argument.

Student 10
The work presented, as well as the contents present in the classes, allowed the development and improvement of both argumentation and critical thinking, contributing to the development at a personal level. It also allowed personal development through the use of critical and evaluative analysis, not only of one’s own arguments, but also of other texts, mainly with the activity of identifying the positive and negative aspects of argumentation and with the exercise of creating an argumentative text around one’s own point of view, which guaranteed the practice and reinforcement of what was learned in this CU. Therefore, and finally, it is also worth mentioning that there were no major difficulties in carrying out the present work, since the material provided was easy to understand.

Student 11
Many teachers do not know how to effectively teach critical thinking or develop skills and are not able to incorporate exercises to stimulate critical thinking into the subjects they teach. For example, they claim to encourage students to develop critical thinking, yet they only talk about and use learning activities that mostly require memorization. I loved this curricular unit.
Considering the impossibility of in-person classes, the use of the zoom platform allowed to create discussion groups and reflection activities, to share useful documents, texts and worksheets which gives students some autonomy whilst helping their training.

The critical thinking online classes during lockdown were also important to promote online debates about themes chosen by students. These group dynamics with virtual sub-groups were relevant for discussion about fake news and its rise in society, which lead students to recognize how important it is for social work to be supported with facts and evidence in their research and practice.

The issue of the pandemic was a subject highlighted in critical thinking classes, while taking into account the involvement and resilience of social workers coping with the impacts of COVID-19, as well as the social, economic and environmental challenges that students will face in the future as citizens and professionals.

The teacher plays a decisive role in the student's future if he/she is able, in addition to their technical and professional preparation, to contribute to their integral formation/training as human being and citizen, for this it was important to make ourselves vulnerable to the students and to construct the sessions collaboratively and connect critical thinking with the ability to make informed decisions in our lives when we are faced with unpredictable situations.

5 CONCLUSIONS

There are countless decisions we make in our daily lives. Most of the time, we do it in an intuitive, automatic way, because our brain uses mental shortcuts to save energy. However, the fact that we think critically and deliberately in the course of these situations [10], especially nowadays in which we are "swamped" with information and that, unfortunately, much of this information is irrelevant, repetitive or simply false.

The excess of information also leads to anguish, because people lose the feeling of "control" over their own lives. This leads to many people looking for "simple answers to complex problems" and in the 21st century, more and more people believe in anything, things that end up giving them some "comfort", a feeling that the world is not so chaotic and "makes sense".

Critical thinking is a tool that helps to better define what should be believed and what deserves to be "taken seriously" [2]. In other words, it designates the difficulty for someone to move away from the influence of a first impression in responding to situations that require just the opposite.

Those who think that critical thinking is a quick, implicit, automatic, non-conscious and effortless process are mistaken. Critical thinking is something slow, deliberate and controlled, which involves commitment and dedication [2]. Which means thinking thoughtfully, explicitly and intentionally. It is a reflected and self-corrective process (it involves thinking about one's own reasoning), it involves principles and criteria of reasonableness (such as clarity, accuracy, relevance, precision, fairness), it addresses real problems and decisions, such as deciding what to do, how to do it.

Another thing to consider is that expository teaching is still a very popular teaching method in higher education. Both young and old teachers often adopt lecture-based, teacher-centered teaching, because it has a strong academic tradition and facilitates the presentation of large amounts of information. Unfortunately, it is very difficult to promote students' critical thinking skills in an expository lecture. Topics are presented sequentially, rather than critically, and students tend to just memorize the material. The student is placed in a passive role instead of an active role [13] and active learning can make the course unit more enjoyable for teachers and students and, most importantly, can lead students to think critically.

But critical thinking skills are not developed in front of a computer screen in isolation, they are developed in collaborative learning environments. Teaching and learning competencies [13] are effective when they relate the contents to the personal experiences of the students, who should be active agents in their own education by expressing themselves and when we talk about social workers everything intensifies because they will work with vulnerable people, in a triangle between the social issue, policies and the institution where they work.

This is where critical reflection (especially involving others) can play a key role in building trust by analyzing strengths-based practice, but it also allows considering alternative options, points of view,
increase their ability to assess and position themselves in different contexts and learn to be prepared for unexpected situations.

That is why the unlimited potential of technology will never replace teachers, COVID-19 must extend for a few years yet and the role of students in building a society cannot be underestimated.

Working for the construction of critical thinking together with Social Work students (or others) within the pedagogical projects adopted by universities and from their socio-cultural contexts, helps to forge not only the future of a community, but also guides in driving a constructive, democratic and ethical present.

ACKNOWLEDGEMENTS

This study was supported by national funds through FCT – Fundação para a Ciência e Tecnologia (Portuguese Foundation for Science and Technology) with the reference FCT UIDB/03126/2020. We are also grateful for the support given by the CIES-Iscte and to all the students that participated in this research.

REFERENCES


