

LEVEL OF CRITICAL THINKING SKILLS FOR GRADUATE STUDENTS IN SOCIAL WORK

Prof. Nabil Mohamed Mahmoud Aboulhassan

Professor of Social Work, Social Work Dept. College of Social Sciences, Um Al-Qura University

Abstract:

Critical thinking has recently become a necessary and important goal due to the rapid and successive progress in the world, especially in science in all its branches, and it has become broadcast daily around the hours a huge and huge amount of data and information from several sources, and thus the educational field and educational institutions are facing a real challenge to build the personality of a student or scientific researcher capable of choosing from multiple alternatives and making a decision. The current study aimed to determine the level of critical thinking skills among graduate students majoring in social work. In Egyptian universities, the study was applied to a simple random sample of graduate students (diploma, master, doctorate) in the five Egyptian universities that have graduate programs, and the sample size was (306) male and female students. The results of the study showed that most graduate students in the field of social work possess critical thinking skills at an moderate level, except for the skill of reasoning that came at a high level, and The overall average critical thinking skills was at moderate level also with average (3.24), which shows that there is a necessary need to develop the content of courses and teaching methods to allow students to develop other critical thinking skills such as The skills of interpretation, conclusion, knowledge of assumptions, and evaluation of discussions, which contribute to the development of their research capabilities and independence in critical analysis and the development of their creativity and innovation skills.

Keywords: Critical thinking – critical thinking skills

Study problem:

Critical thinking and its skills have become one of the main topics in contemporary education, but it is a prerequisite for personal compatibility, the individual's ability to think critically is a major requirement for all segments of society, the individual who has the capabilities is independent in his thinking and able to make the right decisions in his life, and aware of social and economic systems and politics and other changes in his homeland (Al-Hallaq, 2007, p. 42).

The need for critical thinking to be inherent in university curricula by encouraging faculty members at the university to train their students on successful critical thinking strategies through their teaching practice in the courses they study, and some research that Conducted on critical thinking in higher education suggest indicates that students' progress more easily in the course When critical thinking goals are stated to them during teaching Furedy, 1983)).

Al-Nabhani study (2010), which aimed to determine the level of possession of critical thinking skills by students of the College of Applied Sciences in Nizwa in the Sultanate of Oman, and the results of the study showed that the degree of students' possession of critical thinking skills is below the required level of (80%), and the results of the study showed that there are differences in

the level of critical thinking skills due to the gender variable in favor of females and there are no differences in critical thinking skills due to the specialization variable.

Al-Omari study (2010), which aimed to determine the impact of studying two university courses in the development of critical thinking among students of the Faculty of Educational Sciences, Mutah University, and the experimental study was applied to two samples, one of them for students enrolled in the educational computer course, numbering (26) male and female students, and the other for students enrolled in the course of educational materials for children, numbering (28) male and female students, and the results of the study showed that there are statistically significant differences in critical thinking skills between the two groups in favor of the group that studied the educational computer course.

The study of Al-Sharqawi & Al-Mazer (2013) aimed to test the effectiveness of integrating critical thinking skills in the curriculum for social work students at the University Studies Center in Ulaisha in Riyadh, and the program was applied to two groups of students, one experimental and the other an officer and 30 students. The results of the study showed the effectiveness of the program in developing critical thinking skills among social work students.

The study of Qawasmeh (2014), which aimed to identify the degree of possession of students of the College of Science and Arts in Al-Mualla critical thinking skills through the California test of critical thinking skills model (2000), and the results showed that the skill of reasoning came first among the critical thinking skills of students, then the skill of induction, analysis and evaluation and finally the conclusion, and the results showed that there are statistically significant differences attributed to the gender variable in favor of female students, while the results did not show that there are statistically significant differences in the level of skills Critical thinking attributable to the variable of specialization.

Osman's study (2015) aimed to test the effectiveness of a training program to provide social work students with critical diagnostic skills in working with individual cases in the school field, and the program was applied to 20 students who obtained the lowest score on the scale of critical diagnostic thinking skills, and their number was 120 male and female students. The male and female students who obtained the lowest score on the scale were divided into two groups, one experimental (10) students and the second officer (10) students. The results of the study showed the effectiveness of the training program in providing social work students with critical diagnostic thinking skills.

Maajini study (2015) aimed to identify the levels of critical thinking skills among a sample of preparatory year students at King Abdulaziz University in Jeddah, the study was applied to a sample of 337 male and female students and applied the Cornell Critical Thinking test. The results of the study showed that all critical thinking skills and the total degree came at the average level of critical thinking skills, and the results of the study showed that there were differences in the skills of induction and deduction in favor of students of the scientific department, and the differences were statistically significant in favor of students in the skills of induction and deduction.

The study of Al-Sharif, Khalid (2017), which aimed to determine the degree of possession of a sample of 138 male and female students from the College of Education, King Faisal University,

for critical thinking skills, and the results of the study showed that the degree of possession of the degree of possession of critical thinking skills by male and female students came below the educationally acceptable level, reaching (68.84%).

The study of Al-Miqdadi & Malik (2019), which aimed to measure the impact of the Crocodile software in developing the level of critical thinking skills among students of King Abdullah II College of Information Technology at the University of Jordan, and the study was applied to a sample of (60) male and female students, who were divided into two groups, one experimental and numbering (36) male and female students and the other a control group and the number (24) male and female students, and the researchers used the California test (2000) for critical thinking skills, and the results of the study showed that there were statistically significant differences between the average scores of the control and experimental groups. in telemetry in favor of the experimental group.

The study of Al-Khazaaleh & Al-Huwaiji (2019), which aimed to identify the most practiced critical thinking skills among students of the College of Education at King Faisal University, and the researchers used the California test (2000), and applied it to a sample of 500 male and female students. The results showed that the analysis skill was the most critical thinking skills practiced by students, while the least was the practice of the deduction skill, and the study showed that there were statistically significant differences in the practice of critical thinking skills attributable to the gender variable in favor of females, and the results of the study did not show statistically significant differences in the practice of critical thinking skills attributable to the academic level variable in all skills.

Naji & Al-Rasheed's study (2019), which aimed to measure the effectiveness of a training program in developing critical thinking skills among Saudi students enrolled in the university stage, and the critical thinking skills consisted of deduction, deduction, revealing postulates, presenting arguments, and interpretation, and the program was applied to 40 Saudi undergraduate students in the Department of Psychology at King Saud University aged between 18-23 years. The results of the study showed the effectiveness of the training program in developing the critical thinking skills of the study sample in the general ability of critical thinking as well as in its sub-abilities.

Sahwan study (2019) aimed to test the impact of a training program based on critical thinking skills in developing scientific research skills among graduate students at the Faculty of Education, Sadat University, the study was applied to two groups, one experimental (23) students and the other control (23) students. The results of the study showed that there are statistically significant differences in the dimensional measurement of the level of critical thinking in scientific research in favor of the experimental group.

The study of Old Women & Atallah (2020) aimed to reveal the level of critical thinking among Zarqa University students using the California Test of Critical Thinking Skills, the study was applied to a stratified random sample of 387 university students, and the results of the study showed that the level of critical thinking came to a medium degree, and the study recommended the need to take into account the construction of curricula according to critical thinking skills.

Importance of the study:

1. The skill of critical thinking is a skill that must be acquired for students of social work so that the student is able to participate socially and politically and has the ability to reshape life.
2. The skill of critical thinking is among the indicators of the standard of curricula and field training of the global standards for social work education set by the International Association of Schools of Social Work

Objective of the study:

The current study aims to determine the level of critical thinking skills of graduate students majoring in social work in Egyptian universities.

Study Questions:

What is the level of critical thinking skills of graduate students majoring in social work in Egyptian universities?

Study concepts:

The concept of critical thinking

Purposeful mental activity based on cognitive abilities for reasoning, which leads to good results in interpretation and subjecting information and data to the process of sorting and analysis and realizing the facts in the information in an objective manner and making distinct judgments on this information represented in the evaluation as well as accuracy in examining the facts and realizing the framework of the correct relationship without extremism in opinion or influencing the emotional aspects and common traditional opinions (Ibrahim, 2006).

A mental process in which the learner develops through the processes of interaction in which he or she shares with environmental materials, experiences, situations and events, reaching new conclusions, assumptions, metals and expectations (Katame, 2007).).

It is a mental process based on a set of cognitive skills that can be used individually or societally without commitment to a specific order in order to understand, analyze, perceive and deduce the facts and assumptions in the information, interpret them and make judgments on this information in an objective manner away from the subjective or emotional aspects, and critical thinking includes the following abilities (interpretation, conclusion, evaluation) (Jaljal, 2020).

Al-Khalili (2004) defines it as a mental activity carried out by an individual when faced with a situation that requires him to make a judgment or express an opinion, and this is done by examining beliefs, proposals, subjecting information and data to mental and logical tests in light of the evidence supported by the relevant facts, using the rules of logical reasoning, and avoiding common errors in judgment.

The concept of critical thinking skills in this study can be defined as follows:

- The ability of the graduate student in social work to judge data or events by examining them and scrutinizing their components to determine the possibility of accepting or rejecting them.
- The ability of a graduate student in social work to draw certain conclusions from assumed facts.
- The ability of a graduate student in social work to distinguish between the degrees of probability of the validity or error of a given result

- The ability of the graduate student in social work to realize the aspects that are related to a particular subject and identify its strengths and weaknesses.
- The ability of a graduate student in social work to avoid following common mistakes when interpreting a particular subject or result.

Critical thinking.

Critical thinking in recent times is a necessary and important goal due to the rapid and successive progress in the world, especially in science in all its branches, and it has become broadcast daily around the clock a huge and huge amount of data and information from several sources, and therefore the educational field and educational institutions are facing a real challenge to build the personality of a student or scientific researcher who is able to choose from multiple alternatives and make a decision, and thus able to solve the problems facing him, and is also interested in forming a personality that has the ability To distinguish between those who present them with facts and accept or reject what contradicts rational logic, and are not aligned or follow wrong ideas just because they are widespread or convinced by a large number of those around him. Therefore, critical thinking has become a pivotal and essential goal in designing and updating educational programs to build a human being who can deal with the data and problems of the modern era, and can keep pace with those rapid changes that occur in all fields and branches of science.

- **The importance of critical thinking.**
 - o Encouraging the spirit of questioning, research and questioning, and not accepting facts without investigation, which leads to expanding the intellectual horizons of students, and making them move away from self-centered guest (Myers, 1993).
 - o Enable the learner to judge, understand and evaluate things according to certain criteria by asking questions and making comparisons, studying facts accurately, classifying ideas to reach the correct conclusion, and transforming the process of acquiring knowledge from an inert process to a mental activity that leads to mastery, better knowledge content (Rabadi, 2004).
 - o Acquires acceptable explanations for the topics raised in a wide range of everyday problems (Al-Shatnawi, 2003)).
 - o It helps to acquire knowledge and independence in thinking and support the spirit of questioning and research and not to submit or accept facts without verifying their validity, thus transforming the process of acquiring knowledge from an inert process to a mental activity that leads to better mastery, a deeper understanding of the content and helps to find a citizen with an open and enlightened mind (Jarwan, 2007, p. 135).
 - o Helps the learner to make decisions, solve problems, organize information, and stay away from unnecessary information (Al-Ghazzawi, 2002, p. 43).

Features of critical thinking:

Jarwan defined it as the characteristics of a critical thinker to be able to observe, possess the ability to imagine, have sensitivity to problems, have the ability to make decisions, and the ability to reasoning and generate ideas (Jarwan, 2007, 182).

Critical Thinking Skills:

Critical thinking is a process that includes a set of skills that can be used individually or societally, without commitment to any specific order to verify the thing or reach a conclusion or generalization or decision, and researchers have identified skills for critical thinking such as distinguishing between provable facts and valuable claims, distinguishing between relevant and irrelevant information and claims, determining the credibility of the source, and identifying claims (Al-Qatami, 2001), Jaber (1997) also identified critical thinking skills in: estimating the reasonableness of ideas, supporting basic information, determining the accuracy of observations, determining the reliability of secondary sources, using evidence or interpretation on a solid basis, predicting on a good basis, deduction and generalization on a solid basis, reasoning and honest conditional argument, while Salah Arafa identified it in the following accuracy and assimilation, knowledge of logical contradictions, deduction and extraction of information, ability to predict, estimate the difficulty of proof, determination of strength Discussion and its importance (Al-Hamwi and Al-Waher, 1998).

While Odle and Daniels classified critical thinking skills into three categories:

Inductive thinking skills: It is a process of mental reasoning, aimed at reaching conclusions, or generalizations that exceed the limits of available evidence, or information provided by prior observations.

o Deductive thinking skills: It is a logical reasoning coin, aimed at communicating a new conclusion or knowledge based on objective assumptions or premises, and available information. Deductive proof takes the form of a symbolic or linguistic structure, the first part of which includes one or more hypotheses that pave the way for an inevitable conclusion.

O Evaluative thinking skills: It means the mental activity that aims to make a judgment about the value, integrity and quality of ideas or things.

Owl and Daniels believe that the previous skills of critical thinking are closely related to the level of intelligence of the individual, as the results of recent studies showed that the results of intelligence tests do not really reflect the level of intelligence, and that there are many manifestations of intelligence that affect critical thinking are not measured by intelligence tests ((Saunders & Lefever, 19995).

• **Components of critical thinking:**

The process of critical thinking has five components, if you miss one of them, the process does not take place, as each of them has a close relationship with the rest of the components, the components are:

1. Knowledge base: It is what an individual knows and believes in, and it is necessary for a sense of contradiction to occur, the selection of information related to the subject and the marriage of facts and principles.
2. External events: stimuli that evoke a sense of contradiction (Hamouli, 1997, p. 51)
3. Personal theory: It is the personal formula that the individual derived from the cognitive base, which is the framework that is made in the light of trying to interpret external events, so the feeling of distance or contradiction or not.

4. Feeling contradictory or divergent: The mere feeling of this is a factor that entails the rest of the steps.
5. Resolving the contradiction: It is a stage that includes all the constituent aspects of critical thinking, where the individual seeks to solve the contradiction including multiple steps, and so this is the basis for the structure of critical thinking (Suleiman, 2011, p. 263).

Part II: Methodological procedures of the study.

First: the type of study.

This study belongs to the type of descriptive studies, as it sought to describe the studied phenomenon quantitatively and qualitatively through the data collected, classified and then analyzed in order to reveal the relationship between its different dimensions to explain it and reach general conclusions that contribute to understanding the phenomenon.

The current study seeks to determine the level of critical thinking skills of graduate students in the field of social work.

Second: The approach used.

The current study relied on the use of the social jQuery approach in the sample for graduate students in social work in the five Egyptian universities that teach social work (Helwan, Fayoum, Aswan, Assiut, Beni Suef).

Third: Fields of study.

- A - **Spatial field:** The spatial field is represented in the faculties of social work in Egyptian universities that teach postgraduate programs in social work (diploma, master, doctorate) and these universities are (Helwan, Fayoum, Aswan, Assiut, Beni Suef).
- B - **The human field:** The human field was represented in a sample of graduate students (diploma, master, doctorate) in the five Egyptian universities that have graduate programs, and the sample size was (306) male and female students who were selected by a simple random sample.
- C. **Time Range:** The time range is the four-month data collection period from December 15, 2023 to February 15, 2024.

Fourth: Study tools.

The data collection tools were:

- **Scale of the level of critical thinking skills of graduate students:**

Steps to build a model for measuring critical thinking skills among graduate students in social work:

- Previous studies conducted on critical thinking among different age groups and in different educational stages were reviewed, with the aim of benefiting from them in determining the theoretical framework for the model for measuring critical thinking skills among graduate students in social work.
- Tests designed to measure critical thinking have been referred to, such as the Watson & Glasser test.

- Statements were developed in the light of the theoretical framework of critical thinking skills according to what was determined by previous studies and also according to the Watson and Glaser test.
- The validity of the assumed structural model of critical thinking skills was tested by matching them with the sample data obtained, and it included viewing variables, which are (statements or paragraphs of the scale) and non-observed variables, which are (dimensions of the scale), which were represented in the five critical thinking skills (knowledge of assumptions, interpretation, conclusion, evaluation of discussions, reasoning).

Results:

1- Description of the study sample:

Table No. (1) Shows the distribution of graduate students in social work by university

<i>University Name</i>		<i>Frequency</i>	<i>Ratio</i>
1	Helwan University	68	22.2
2	Fayoum University	50	16.3
3	Aswan University	84	27.5
4	Assiut University	55	18.0
5	Beni Suef University	49	16.0
Total		3 06	%100

The previous table shows that:

The largest percentage of participants was students of the Faculty of Social Work, Aswan University, with a percentage of (31.2%), followed by a married group, with a percentage of (27.5%), then students of the Faculty of Social Work, Helwan University with a percentage of (22.2%), and the lowest percentage of participants was from the Faculty of Social Work, Beni Suef University.

Table No. (2) Shows the distribution of respondents by gender

<i>gender</i>		<i>Frequency</i>	<i>Ratio</i>
1	male	99	32.4
2	female	207	67.6
Total		3 06	%100

The previous table shows that:

The largest percentage of participants in the study was female, with a percentage of (67.6), while the percentage of males among the participants reached (32.4), which may explain the increase in the number of female students in graduate programs than male students.

Table No. (3) Shows the distribution of respondents according to graduate programs

<i>Program</i>		<i>Frequency</i>	<i>Ratio</i>
1	diploma	40	13.1
2	Master	213	69.6
3	PhD	53	17.3
Total		3 06	%100

The previous table shows that:

The largest percentage of respondents were students of the master's program, reaching (69.6), followed by students of the doctoral program by (17.3), and finally students of the postgraduate diploma program by (13.1), and this may explain the increase in the number of admissions to the master's program in various faculties of social work.

2. Descriptive Statistics

Table (4): Descriptive statistics

Scale	<i>items</i>	<i>Average</i>	<i>St-Deviation</i>
<i>Assumptions</i>	I verify the credibility of the sources of information that I see	3.97	.835
	Pain in the aspects and dimensions of the topics I am discussing	3.81	.927
	I scrutinize the content of what I am researching and studying	4.02	.811
	I don't rush to issue opinions on the subject I'm studying.	4.35	.786
	See the scientific developments in my field of specialization	4.34	.761

	I commit to not being biased when analyzing topics	4.18	.815
	I accept what suits me from new ideas	4.33	.811
Dimension's General average		4.14	20.8
<i>Interpretation</i>	I avoid following common mistakes when interpreting any topic	4.15	.791
	Be precise in the phrases he used in the dialogue	4.12	.783
	I put many alternatives to explain any topic	3.69	.896
	I explain the dimensions of the topics I study comprehensively	3.81	.945
	I rely in my thinking on general laws to explain phenomena	3.89	.924
Dimension's General average		3,93	.867
<i>inference</i>	Avoid relying on illogical views	4.12	.926
	I make sure my conclusions are accurate	4.23	.726
	I check the conclusions reached by others	3.90	.855
	Master conclusions based on scientific facts	3.79	.837
	I am good at distinguishing if the deduced conclusion can be justified or not	3.76	.902
Dimension's General average		3.96	.849
	I deal flexibly in my discussion with others who disagree with me in my point of view	4.04	.952
	I am good at distinguishing between opinion and truth	3.93	.911
	Master the judgment on whether the opinions raised are real or imaginary	4.12	.814
	Understand the thoughts of others	4.25	.834

<i>evaluation of discussions</i>	Master the analysis of debates on scientific topics	4.04	.884
	I expect the reactions of others in different situations	3.34	1.354
	I don't accept that anyone imposes his point of view on me	3.69	.911
Dimension's General average		3.91	.951
<i>reasoning</i>	I use factual evidence to justify my point	4.06	.809
	I am good at determining the strength of inference in my scientific activity	4.18	.721
	I refer to what is logical in supporting my point of view	4.19	.691
	I use evidence that fits the research topic	4.23	.821
	I use evidence that is clear	3.82	.918
Dimension's General average		4.19	.792
The overall average of the scale		3.24	.856

The previous table shows the mean and standard deviation values for each statement. From the previous table, it is clear that the skill (reasoning) has the highest degrees of approval, and this shows that the level of this skill is very high among graduate students, as its arithmetic average was (4.19), followed by the skill level (knowledge of assumptions) came at a high level and an arithmetic average (4.14), while the skill (evaluation of discussions) came with the moderate level as it came with an arithmetic average (3.69). The overall average of critical thinking skills was also at moderate level with average (3.24) and this indicates that there is a need to develop the critical thinking skills among graduate students

Discussion:

The results of the current study showed that the highest skill level among graduate students in social work is the skill of reasoning, and this is consistent with the results of the study of the Qawasma study (2014), which showed that the skill of reasoning ranked first among the critical thinking skills of students. The results of the study also showed that most of the students in the study sample had an average and not high level of critical thinking skills, and the study of Al-

Qadimat & Atallah (2020) agrees, which showed that the level of critical thinking among students came at an average level, and the study recommended the need to take into account the construction of curricula according to critical thinking skills. The results also showed that the general level of students' possession of critical thinking skills came at an average level, as the general average of all dimensions of the scale of the level of critical thinking skills (3.24) and this is spent with the results of the study of Maajini (2015), which showed that all critical thinking skills and the total degree came at a moderate level of critical thinking skills, and this shows that there is a need to adopt programs to develop critical thinking skills among graduate students in social work, and also develop the content of courses in a way that contributes to in the development of these skills in students.

Conclusion:

The results of the study showed that most graduate students in the field of social work possess critical thinking skills at an average level, except for the skill of reasoning that came at a high level, which shows that there is a necessary need to develop the content of courses and methods of teaching them to allow students to develop other skills for critical thinking such as interpretation skills, deduction, knowledge of assumptions, and evaluation of discussions, which contributes to the development of their research abilities and independence in critical analysis and the development of creativity and innovation in their professional interventions for social work, and in their preparation for research Field in various fields of social work.

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