

درجة ممارسة مهارات التفكير الناقد لدى معلمي اللغة الإنجليزية في مدارس
الأونروا في شمال قطاع غزة

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The Degree of Practicing Critical Thinking Skills among English Teachers at UNRWA North
Gaza Schools

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الملخص:

هدفت هذه الدراسة إلى قياس درجة ممارسة مهارات التفكير الناقد الأساسية لدى معلمي اللغة الإنجليزية في مدارس الأونروا في شمال غزة، وكذلك قياس أثر النوع الاجتماعي وسنوات الخبرة في درجة الممارسة تلك.

استخدمت الباحثتان المنهج الوصفي ومقياس (واطسون جليسر) للتفكير الناقد، تم تعديل هذا المقياس ليتناسب والفئة المستهدفة ليشمل (٢٩) فقرة، حيث تم اختبار صدقه وثباته، وتم توزيعه على عينة من (٤٣) معلم لغة إنجليزية في مدارس الأونروا شمال قطاع غزة.

أظهرت نتائج الدراسة أن درجة ممارسة معلمي اللغة الإنجليزية لمهارات التفكير الناقد كانت متدنية وأقل من النسبة المقبولة تربوياً (٧٥٪) على مقياس واتسون جليسر. كما بينت النتائج عدم وجود فروق ذات دلالة إحصائية في درجة ممارسة معلمي اللغة الإنجليزية لمهارات التفكير الناقد تعزى لمتغير النوع، ولا توجد فروق ذات دلالة إحصائية في ممارسات مهارات التفكير الناقد لدى هؤلاء المعلمين تعزى لسنوات الخبرة. واقترحت الباحثتان عمل دورات تدريبية لتنمية مهارات التفكير الناقد لدى معلمي اللغة الإنجليزية.

الكلمات المفتاحية: مهارات التفكير الناقد، درجة ممارسة معلمي اللغة الإنجليزية، النوع، سنوات الخبرة، مدارس الوكالة شمال غزة.

ABSTRACT:

This research aimed to measure the degree of practicing the basic critical thinking skills of English teachers at UNRWA North Gaza Schools and investigate the impact of gender and years of experience. The researchers adopted the descriptive approach in order to describe and explain the way teachers develop the critical thinking skills, and they used Watson-Glaser critical thinking scale, which was modified to better suit the sample. This scale had (29) paragraphs, the researchers measured its validity and reliability, then it was distributed to a sample of (43) English Language teachers at UNRWA North Gaza Schools.

The results showed that the total degree of English teachers' practice of critical thinking skills was low and did not reach the educational acceptable level of (75%) on Watson-Glaser Scale. There were no statistically significant differences in the degree of English teachers' practice of critical thinking skills attributed to gender. Meantime, the results showed that there were no statistically significant differences in practicing critical thinking skills among teachers attributed to the years of experience. Finally, the researchers suggested delivering sustained training courses to develop English Language teachers' critical thinking skills.

Keywords: critical thinking skills, English teachers' practice, gender, year of experience, UNRWA North Gaza schools.

Introduction:

Developing critical thinking in teaching-learning activity is a major concern for educational institutions, and delivering appropriate learning model interventions certainly provides an assurance to successfully develop competitive graduates for the fourth Industrial Revolution and its challenges, mainly in the education sector (Brookfield, 2008).

Critical thinking skills are among the basic skills that teachers should focused on and develop inside classrooms to get rid of traditional methods of teaching that merely focus on storing information and retrieving it when necessary. Through critical thinking, the student learns how to ask, when to ask, how to infer, and when inference is used. Furthermore, critical thinking is a mental cognitive activity based on accuracy in observing facts. Such facts include discussing and evaluating this mental activity, adhering to the framework of the correct relationships to which this reality belongs. They also include drawing conclusions in a logical manner, considering the objectivity of the process and the distance from the subjective factors such as being affected by emotional aspects, previous ideas, or traditional opinions (Cattrell, 2017, 1).

By visiting some schools, the researchers noticed that a lot of teachers are able to

convey the cognitive content to their pupils, while the majority fail to teach the students how to think about the content. Thus, thinking about scientific material is a difficult process of critical thinking and the ideal way to develop it within the classroom. Also, according to Ramahi (2015), critical thinking is a major issue in Palestinian curricula. vital thinking abilities are vital, yet there are issues with fostering critical thinking skills in instructors and students (7).

In addition, many studies indicate that there is a weakness in the practices of teachers in all stages of education in general. For example, Brown (2007) stated that EFL teaching should emphasize both language skills and critical thinking skills. He explained that by doing so, students will improve their ability to deal with challenges they had never encountered before. Brown added that students will become able to obtain knowledge in a new topic from a variety of sources based on their skills of critical thinking and intelligences despite the lack of prior expertise. Meantime, Majiet (2016), critical thinking is not a new research source, but it has been around for centuries and is still practiced by many specialists today.

Obviously and logically, the importance of teaching critical thinking lies in the early stages of a childrens' education that fosters his mature personalities. In this aspect, Facione (2011) pointed out that teacher's

practice of critical thinking skills represents an important dimension in the life of students, because these skills represent a great importance in their achievement against the rapid changes taking place in the third millennium. Different aspects of life, as students are exposed to different types of information that they receive from many sources, and this information is often called contradictory, which requires students to practice a set of critical thinking skills that they have learned in the classroom. As a result, critical thinking abilities have emerged as a prominent problem in the field of teaching English as a foreign language (EFL).

Based on the previous facts and experiences, it is the responsibility of teachers to enable students and learners develop their critical thinking during their learning of English. The educationist Ibrahim (2023, 13) stated that the teacher is no longer a box of knowledge, or the only source of it, but rather he/she has to be a thinker, planner, motivator of learning, and facilitator of his students' learning, capable of developing their intellectual and analytical abilities, and preparing them to face the demands of life. The presence of academic content that includes critical thinking skills, and a classroom environment that encourages its practice, in addition to prior preparation and planning by the teacher,

and that the teacher be a practitioner and trained in those skills in a perfect manner, so the current research was interested in studying the degree of English teachers' practice of critical thinking skills in UNRWA North Gaza Schools.

Based on the previous introduction, the current researchers realized the study's problem through their work as English language teachers. They found that teachers in general and English language teachers in particular neglect the use of critical thinking skills in the teaching process. Accordingly, this negligence effects the level of thinking of their students. This problem is deepened by the scarcity of local relevant studies on thinking skills in teaching and learning processes that hinders the functional practice of critical thinking skills by both English language teachers and their students.

Literature Review

The outcome of thinking began when individuals realized their thoughts. Thinking is one of several characteristics that distinguish humans from other creatures. Also, thinking is the transformation of certain internal representations. It is remarked that when individuals start to ponder, they apply their knowledge to achieve certain objectives (Halpern, 2003, 84). Moreover, critical thinking has recently received a lot of attention in the area of education and language training. Many scholars have attempted to provide accurate definitions and

explanations for this phrase; yet, it cannot be articulated clearly.

Critical Thinking: there is a consensus among scholars that critical thinking is a conscious meta-cognitive, e.g. thinking about thinking, and cognitive thinking is a behavior in which a person reflects on the quality of the reasoning process while reasoning to a conclusion. The thinker has two equally vital goals: finding a solution and increasing his or her reasoning ability. In this regard, Fisher (2001, 4) pointed out that critical thinking is a way of thinking about any issue, situation or theme in which the person who thinks enhances the excellence of his/her thinking by remarkably considering the architecture built into thinking. Similarly, (Open University, 2008, 7) defined critical thinking as examining and evaluating new ideas against what you already know.

Moreover, critical thinking is "the unemotional and factual analysis and process of determining the worth of something in order to formulate a decision" (Oxford Dictionary, 2019). Furthermore, Halpern (2003, 5) defines critical thinking as the consequence of deliberate planning and trying something, which is reasoned and goal driven. He also described it as "problem solving, making educated guesses based on what we know, calculating chances, and drawing conclusions."

According to the previous definitions, the current researchers believe that critical thinking is operationally a mental process in

which man concentrates on deciding what to trust or do.

Critical Thinking Skills

For critical thinking is a multi-layered field of study and teaching, it is described as one of the complex skills that consists of several component abilities, such as analyzing arguments, making inferences through deductive or inductive reasoning, evaluating or judging, and problem-solving, stated Rivas et. al (2023). He added that while possessing background knowledge is necessary, it is not sufficient for developing critical thinking within a subject. Moreover, critical thinking involves cognitive skills and dispositions, which are like habits or attitudes of mind. These include being open-minded, fair, inquisitive, flexible, having a desire to learn, and being respectful towards diverse perspectives. Critical thinking has both general and domain-specific aspects, and research shows that people begin developing critical thinking skills at a young age. While adults can sometimes demonstrate weak reasoning skills, everyone can be taught to think critically. Watson-Glaser (2002) divided the critical thinking skills into: Inference – Recognizing assumptions – Deductive – Interpretation – Evaluation of Arguments.

The Critical Thinking Processes

Understanding how students experience critical thinking is crucial to teach it. When adults are asked to explain their most significant learning, they rarely use the phrase critical thinking, but instead discuss

parts of the critical thinking process (Brookfield 2008, 49). According to Paul and Elder (2006), critical thinking should not be seen as something we do in addition to other things, but rather as the way we do everything. Some authors have attempted to explain the critical thinking process. According to Nosich (2012, 5) critical thinking consists of three components: Inquiring; attempting to answer those inquiries by reasoning them out; and believing the outcomes of our reasoning. Also, activities promoting critical thinking at the micro and macro levels: Students must be able to read and write critically, engage in discussion, reason dialectically, and follow underlying questions in addition to identifying assumptions, evidences, conclusions, implications, and consequences. In addition, Paul and Elder (2006) argued that to think critically, one must focus on the following aspects of thinking: its aim, question, information, inference, assumptions, concepts, implications, and point of view. Supporting this idea, Howell and Kemp (2015) added that the process of competent critical thinking is to have strong reasons to believe in what we believe or to avoid believing in what we disagree with. In conclusion, the researchers emphasize that while different authors have varied perspectives on the process of critical thinking, they all agree on a set of talents and sub-skills. Furthermore, the majority of

authors state that Critical thinking requires asking questions, gathering knowledge to answer these questions, inference, and assumptions.

Methods used to measure critical thinking skills

A lot of methods and assessment tools are used to measure critical thinking skills of learners and teachers through requesting the truth and having open-mindedness, analytical skills, systematic approaches, confidence, and curiosity. In this respect, there are several methods that can be used to measure critical thinking skills, according to Auld S. (2019), these commonly used methods include:

1. Critical Thinking Assessment Test

(CAT): The CAT is a standardized test designed to measure a person's critical thinking skills.

2. Holistic Critical Thinking Scoring

Rubric (HCTSR): It measures critical thinking based on the quality of a person's written or oral responses to specific prompts.

3. California Critical Thinking Skills Test

(CCTST): The CCTST is a standardized test that measures critical thinking skills in various areas, including analysis, interpretation, evaluation, and inference.

4. Cornell Critical Thinking Test (CCTT)

The CCTT is a standardized test that measures a person's ability to think

critically in various areas, including verbal reasoning, social studies, science, and math.

International Critical Thinking Test (ICTT): It assesses critical thinking in areas such as cultural awareness, ethical reasoning, and global problem-solving.

Watson-Glaser Test (WGT): primarily evaluates a candidate's capacity for analytical and critical thought.

Previous Studies:

Al Harbi (2022) study used a three-part questionnaire to achieve the objectives. The study sample consisted of (408) male and female teachers who were currently in the classroom. The results showed that Saudi teachers had a high level of critical thinking knowledge and their students had a positive attitude towards developing critical thinking skills. According to the statistics, the differences between "major in the sciences" and "major in the humanities" are particularly important. On the other hand, the factors "gender" and "years of service" did not show statistically significant differences.

Demir (2022) study aimed to investigate the critical thinking and analytical thinking skills of high school students. 433 students from different high schools passed the assessment of critical thinking and analytical thinking skills using the multilevel cluster sampling method. Data were descriptive analyses. According to research results, high school students have a strong capacity for criticism

and analysis. 57% of the variation in critical thinking can be explained by analytical thinking. The results revealed that students' critical thinking was influenced by their level of analytical thinking. The results also showed that students from high-performing schools had a greater tendency toward critical thinking and analytical thinking than students from low-performing schools. Finally, highly educated mothers had a greater impact on students' analytical and critical thinking.

Al Khalidy (2021) study aimed to explore the extent of critical thinking skills of Islamic education teachers from their perspective. The researcher used a descriptive survey method and designed a 25-item questionnaire that was sent to 617 teachers in the Eastern Province of Saudi Arabia. The results of the study showed that the practice of critical thinking of Islamic education teachers is moderate. In addition, the educational level variable showed a statistically significant difference in favor of a higher level compared to a lower level. In addition, the qualification variable showed a statistically significant difference, favoring obtaining a master's degree over a bachelor's degree. Finally, the results of the study showed a statistically significant difference in the teaching experience variable in favor of more experienced and less experienced teachers. However, the results showed no statistically significant difference between the sexes.

Al Khalili et al. (2019) study aimed to determine the critical and inventive thinking skills of university students in the West Bank, Palestine. It also looked into any connections between critical and creative thinking that might exist. With a descriptive correlational study methodology, a sample of (414) students was selected. Both the California Critical Thinking Test and the cognitive processes associated with creativity exam were used. The results showed that although students' levels of critical and creative thinking were both low. There was a statistically significant positive direction to the correlation coefficient. The results showed that students of humanities are more inventive than their peers in scientific fields. Saleem et al. (2019) study aimed to ascertain whether social studies instructors actually used critical thinking skills in the foundational years of education. It also looked into the impact of the teacher's gender, scientific training, and length of time in Aleppo. In order to achieve the objectives of the study, the researcher created a questionnaire that contained (25 items). The study sample consisted of (89) First Stage of Basic Education teachers. The results showed that critical thinking abilities were used in a generally moderate manner. The results also revealed that there were no statistically significant differences in the amount of critical thinking skills application based on gender or academic qualification,

but there were statistically significant differences in the amount of critical thinking skills application based on experience. From the teacher's perspective, there are significant variations in the amount of critical thinking skills application based on experience. Hamdan et al. (2017) study aimed to find to what extent teachers at the elementary teaching level were using the critical thinking skills, investigating the effects of gender and the years of experience of basic teaching throughout the first cycle years. The researcher used the descriptive approach and created a critical thinking skills test with paragraphs because it was necessary. The sample is (53) first-year instructors. The outcomes revealed that the research sample engaged in some mild critical thinking, the findings indicated that, male teachers and female teachers practice these skills in a similar manner, and that there were no statistically significant differences in the critical thinking skills practices of teachers based on their varying years of experience. Al Faqi and Al Kilani (2017) study aimed to ascertain the degree to which Islamic education instructors exercised critical thinking skills and how gender, scientific background, and educational experience affected that degree of practice. The study tool was the observation card. The findings showed that overall critical thinking skills were highly utilized by Islamic education teachers. The findings also indicated that

there were no statistically significant differences in the level of critical thinking skills employed by Islamic education teachers that could be attributed to gender, scientific background, and educational experience.

Al-Homari, A. (2018) study aimed to identify the degree of science teachers' practice of critical thinking skills and its relationship to scientific thinking skills and achievement among their students in the science course at the intermediate stage. The study population consisted of (43) science teachers and (43) students for the basic stage; To achieve the objectives of the study, she applied a critical thinking questionnaire for science teachers and a scientific thinking questionnaire for middle school students in Tabuk city. The results of the study showed that the level of critical thinking of science teachers was medium and weak among students, and there was a direct correlation between critical thinking among teachers and scientific thinking and academic achievement among students, and the existence of a correlation between scientific thinking and academic achievement among students when their relationship to critical thinking of their teachers is isolated, and the study recommends improving Teachers' critical thinking and students' scientific thinking skills.

Comments on the previous studies

The previous studies have addressed thinking skills in general, and in particular critical thinking such as the studies of Al-Harbi

(2022), Demir (2022), Al-Khalidy (2021), Saleem et al. (2019), Hamdan (2017). Some of which linked critical thinking to creative thinking, such as the Al-Khalili (20149), and others linked it to analytical, scientific thinking skills and academic achievement thinking skills, such as Al-Homari (2019) and Al-Faqi and Al-Kilani (2017). Some studies adopted critical thinking scale as a study tool, such as Al-Harbi (2022), Hamadan (2017), Al-Faki and Al-Kilani (2017), Al-Homari (2019).

The current research differs with some previous studies on adopting the tools of questionnaire, observation card, and California critical thinking test, for such tests have content derived from different life situations. However, in the current study, Watson-Glaser test was used for having comprehensive critical thinking tests and sub-tests. Also, they used a questionnaire on the effects of critical thinking skills used by English language teachers not by the learners or students of English. In the light of the foregoing, the two researchers felt that there was an urgent need for more similar studies, which are classified, for the researchers' best knowledge, as scarce studies that are carried out in the light of the use of a comprehensive test and historical context to determine the extent to which English course teachers possess critical thinking skills.

Research Major Problem

The research major problem can be stated in the following major question:

What is the degree of practicing critical thinking skills by English teachers at UNRWA north Gaza schools and its relation to gender and the years of experience?

Research Sub questions:

The following sub-questions arise from the major question:

1. What is the degree of practicing critical thinking skills by English language teachers at UNRWA north Gaza schools compared to the educationally acceptable standard at (75%) based on Watson-Glaser Scale of Critical Thinking Test?

2. Does the degree of practicing critical thinking skills of English language teachers at UNRWA North Gaza Schools differ attributed to gender?

3. Does the degree of critical thinking skills of English language teachers at UNRWA North Gaza Schools differ attributed to the years of experience?

Study Importance

The significance of the current study lies in the following major points:

- Shed light on the degree of English language teachers' practice of critical thinking skills at UNRWA North Gaza schools compared to the educationally acceptable standard at (75%) based on Watson-Glaser

Scale of Critical Thinking Test.

- Provide a list of critical thinking skills that can be used by those responsible for teacher

preparation programs and educational supervisors in evaluating the performance of English language teachers with regard to their use of these skills during their teaching.

- Opening the way for conducting research and other studies dealing with other types of thinking, such as creative thinking or problem-solving.

Research Objectives

The main objective of the current research is to identify the degree of practicing critical thinking skills among English teachers at UNRWA North Gaza schools attributed to both gender and years of experience.

Research Hypotheses

To answer the previously stated research questions, the following hypotheses were formulated and tested at 0.05:

There is a statistically significant ^{-١} difference between the degree of practicing critical thinking skills by English language teachers at UNRWA north Gaza schools and the educationally acceptable standard at (75%) based on Watson-Glaser Critical Thinking Test.

There are no statistically significant ^{-٢} differences between the averages of English teachers' practice of critical thinking skills in North Gaza UNRWA schools attributed to gender.

There are no statistically significant ^{-٣} differences between the averages of the English teachers' practice of

critical thinking skills in North Gaza
UNRWA schools attributed to the years
of experience.

Study Procedures

Study Approach

Both researchers of the current study used the descriptive approach for its relevancy for the study for data collection along with Watson–Glaser Critical Thinking Skills scale to measure the level of critical thinking skills of English language teachers at UNRWA schools in the North of Gaza and to find out the differences in the degree of practicing critical thinking skills in teaching attributed to gender and the years of experience.

Study Population

The study population consisted of all teachers of English language in the schools of the UNRWA in North Gaza, where the total number of English language teachers includes (189) male and female teachers (According to the statistics of the Directorate

of Education of UNRWA for the second semester 2023/2022).

Limitations of the study

Place limit: UNRWA Schools in North Gaza.

Time limit: The study applied in the second semester of the scholastic year 2022/23.

Human limit: English teachers at UNRWA North Gaza Schools.

Study Sample

The study sample consisted of English language teachers from UNRWA Schools in North of Gaza randomly selected from this population in the year 2022/2023. The selected sample included (43) teachers: (14) male and (29) female teachers.

Study Variables

The degree of critical thinking skills – ١
practice.

Gender (male /female). – ٢

Years of experience (from 5 to 10/ from – ٣
10 to 20/ and more than 20 years)

Table (1): Classifying the study sample according to various variables:

Variables	Categories	Frequency	Percentage (%)
Gender	Male	29	%67.4
	Female	14	%32.6
Educational level	Bachelor	31	%72.1
	Master	2	%4.7
	Ph.D.	10	%23.3
The stage that the teacher teaches	Elementary	15	%34.9
	Preparatory	28	%65.1
Years of Experience	Less than five	0	0%
	From five to ten	14	%32.6
	From ten to twenty	14	%32.6

	More than twenty	15	%34.9
Total number of the sample		43	100%

Study Tool

Critical thinking skills scale

To answer the questions of the study, the researchers adopted selected dimensions from the Watson–Glaser scale for critical thinking, which is a copy of the critical thinking scale developed in 1925 and modified by Watson–Glaser and finalized in 1964. The scale in its original version consists of five sub–skills (five skills), each

skill consists of thirty items. Then, a problem is presented and the respondent has to choose one option for each paragraph. Next, the researchers selected some problems from the five–skills (dimensions) of the scale. The following is the initial draft of the Watson–Glaser critical thinking test scale items adopted by the researchers:

Table (2): The initial draft of the critical thinking scale

Dimensions	No. of paragraphs	Relative weight (%)
Recognition of Assumptions	5	17.24%
Interpretation	4	13.79%
Evaluation of Arguments	4	13.79%
deduction	3	10.34%
Inference	13	44.83%
Total	29	100%

The scale was modified according to the correction rubric of the approved original scale. Dimensions of the scale include recognition of assumptions, interpretation, evaluation arguments on the proposed assumptions, deduction, and inference. If the answer is correct, it is given one (1), if it is false, it is given (0). The test also includes the variables of the study:

gender and years of experience.

Watson–Glaser Critical Thinking Scale and Its

Purpose:

For the purpose of the current study and in the light of the following information, the globally accredited Watson–Glaser critical thinking scale was used as the major tool for it is one of the most established and reputable global tests. In this sense, Kevin Possin (2014) argues that all versions of the Watson–Glaser examine the following critical skills:

1– Drawing inferences on whether certain data make a conclusion that is "definitely true," "probably true," "definitely false," or

"probably true" based on a number of hypotheses.

2- Recognizing assumptions on whether an assumption is required or not for a statement to be true.

3- Deductive reasoning to verify if a conclusion logically follows a collection of premises.

4- Interpreting arguments to examine whether a conclusion is based on a reasonable doubt from a previous assertion.

5- Assessing arguments to determine if a claim is "strong" or "weak."

Possin concludes that Watson–Glaser concentrates on the most important critical thinking skills that are used to evaluate both deductive and inductive thinking, and it tests nearly all of the critical thinking skills (396). Therefore, this scale is defined as a complex concept with lots of links to a number of behaviors, attitudes and situations. It also overlaps with other concepts such as logic, problem solving, learning and knowledge theory (Ennis, 2011). Moreover, critical thinking is not a brand–new idea. It has been a focus of educational reform initiatives throughout educational history. Critical thinking is defined in a wide variety of ways. The definition of critical thinking used for this study has included the experts' definitions of critical thinking skills, which are mentioned below. In this view, Ennis (2011) defined critical thinking as a process of three main parts. The first part is a problem–solving in an interacting context

with all human beings. The second part is the process of reasoning process, informed by previous knowledge and acceptable inferences through induction, deduction, and value judgment.

In addition, Rumpagaporn M. W. (2007) argued this scale is meant to measure critical thinking for three objectives: (i) to evaluate student perceptions and attitudes about critical thinking, (ii) to identify students in need of support to develop their critical thinking, and (iii) to predict academic performance. Seventy–seven items were generated from focus groups, interviews and the critical thinking literature.

The critical thinking scale measures pertinent attitudes and beliefs on critical thinking techniques. It comprises of the following three elements: first, the participant's level of trust in their critical thinking is measured. Second, it measures critical thinking, which gauges the extent to which pupils understand its significance. Third, the avoidance of critical thinking or misperceptions of critical thinking component is measured. These elements appear to be in line with what students have said they have experienced in terms of challenges with confidence and self–efficacy, perceived utility, and resistance to critical thinking (Duro et al., 2013). In general, critical thinking is a general and comprehensive term that denotes the emotional and mental activities that an individual undertakes in order to discover his experiences to reach a new understanding

and a good estimation of practicing critical thinking skills.

In the current study, this scale is meant to measure the degree of practicing critical thinking skills of English language teachers at UNRWA North of Gaza Schools in relation to gender and experience duration.

Dimensions of the scale:

The researchers determined the dimensions of the scale for critical thinking skills, which are the same dimensions that appeared in the Watson–Glaser test for critical thinking skills. These five dimensions are used to measure the degree of critical thinking skills of English language teachers in the schools of UNRWA North Gaza through testing (recognition of assumptions, interpretation, evaluation of arguments, deduction, and inference).

Validity of the scale:

The scale was modified by educational referees to better suit the context in the Gaza

students and teachers. The researchers chose the same items to enhance the scale, and the scale became in its final form consisting of (29) items with on five dimensions of critical thinking skills (recognition of assumptions, interpretation, Evaluation of arguments, deduction, and inference).

A survey study was carried out for the test in order to control it and determine its statistical characteristics. The characteristics of the sample, and according to the data, Pearson's Correlation Coefficient was calculated; In order to identify the degree of correlation of each of the paragraphs of the scale with the total score of the scale.

Table (3) Pearson correlation coefficients for the scale paragraphs with the total score of the scale

Dimensions in order	No. of Paragraph	Correlation coefficient	Paragraph number	Correlation coefficient
Recognition of assumptions	1	.414*	4	.499**
	2	.556**	5	.513**
	3	.568**	—	—
Interpretation	1	.550**	3	.501**
	2	.721**	4	.641**
Evaluation of Arguments	1	.520**	3	.625**
	2	.547**	4	.532**
Deduction	1	.634**	3	.617**

	2	.541**	–	.537**
Inference	1	.587**	8	.430*
	2	.410*	9	.649**
	3	.398*	10	.751**
	4	.587**	11	.481**
	5	.525**	12	.618**
	6	.398*	13	.501**
	7	.456*	–	–

* The value of correlation coefficient r at 28 degrees of freedom and a level of significance (0.05) equals 0.361

** The value of correlation coefficient r at 28 degrees of freedom and a level of significance (0.01) equals 0.463

It is clear from Table (3) that the values of the correlation coefficient of each of the expressions with the total score are positive and statistically significant at (0.05) or less; This indicates the validity of the internal

consistency between the test statements, and their suitability to measure what they were intended to measure.

Validity of the study tool
Pearson's Correlation Coefficient was calculated in order to identify the degree of correlation of each dimension of the test with its total score, and the results were as shown in Table (4):
Table (4): Pearson correlation coefficient between each dimension and the total score of the test

The Scale of Dimensions	correlation coefficient
Recognition of assumptions	.940**
Interpretation	.798**
Evaluation of Arguments	.862**
Deduction	.893**
inference	.821**

It is clear from table (4) that the values of the correlation coefficient of each dimension with the total score are positive and statistically significant at (0.01) or less; This indicates the validity of the test domains, and its suitability for measuring it was intended to measure.

Reliability of the study tool

1– Cronbach's Alpha method

The stability of the study tool was confirmed by using Cronbach's Alpha (α) stability coefficient. Table (5) shows the values of Cronbach's alpha stability coefficients for

each dimension of the scale and for the total score of the scale.

Table (5) Cronbach's Alpha coefficient to measure the stability of the study tool

Dimensions in order	No. of phrases	Dimension constancy
Recognition of assumptions	5	0.870
Interpretation	4	0.861
Evaluation of Arguments	4	0.845
Deduction	3	0.834
Inference	13	0.912
General consistency	29	0.884

It is clear from Table (5) that Cronbach's general Alpha reliability coefficient is high, reaching (0.884), and this indicates that the scale has a high degree of reliability that can be relied upon in the field application of the study, and the reliability coefficient is high for each dimension of the scale.

2- The half-split method

Where the paragraphs of the scale were divided into two parts, then the correlation

coefficient was calculated between the scores of the paragraphs, after which the correlation coefficient was corrected by the Gutman equation; Because of the inequality of alpha and variance values for the two parts of the scale. (see Table 6).

Table (6) shows the results of the split-half method to measure the reliability of the study tool

Dimensions in order	No. of phrases	Dimension constancy
Recognition of assumptions	5	0.922
Interpretation	4	0.895
Evaluation of Arguments	4	0.876
Deduction	3	0.892
Inference	13	0.943
General constancy	29	0.902

It is clear from table (6) that the total stability coefficient is high with (0.902), indicating that the scale has a high degree of reliability that can be relied upon in applying the study tool.

The final draft of the scale
The number of the critical thinking test questions in its final form was (29) paragraphs distributed over the five

dimensions of the scale, where one point was allocated for each correct answer and zero point for the wrong answer. Thus, the teachers' score is confined between (0.29)

degrees. The number of paragraphs distributed on the skills as follows:

Table (7) No. of items for testing critical thinking skills

Dimension	Recognition of assumptions	Interpretation	valuation of the Arguments	Deduction	inference	Total
paragraphs	5	4	4	3	13	29

Study Procedures

The researchers carried out the following procedure to achieve the objectives of the study and answer its questions:

Reviewing the previous theoretical –١

literature and studies relevant to the critical thinking.

Identifying the study population –٢

from English Language teachers (male & female) from UNRWA North Gaza schools.

Selecting the study sample in a –٣ random way.

Presenting the tool in its initial form –٤ to a group of referees to modify it.

Measuring the validity and –٥ reliability of the tool in its final draft.

Applying the modified critical –٦ thinking scale of Watson–Glaser test to the study sample.

Calculating the average –٧ computational level of teachers' critical thinking skills.

Statistical processing of data –٨

obtained in special tables.

Presenting the results, analysis, –٩ suggestions and

recommendations.

Criterion adopted in assessing the critical thinking scale

In the light of the obtained results in the previous tables, the educationally acceptable level of critical thinking skills of English language teachers in the schools of the Gaza was approved at (75%), based on Watson–Glaser Scale after reviewing the educational literature and consulting some experts from local universities in the field of curricula and teaching methods and English language supervisors by handling them the scale in drafts.

Statistical methods used

To test the hypotheses of the study, researchers used the following statistical treatments:

One–sample T– test; In order to identify the level of critical thinking among teachers compared to the accepted standard.

Mann–Whitney U test in order to identify the differences between the levels of the study sample according to their variables, which are divided into two categories for data that do not follow a normal distribution.

Kruskal Wallis test for two or more independent samples. In order to identify the differences between the levels of the study sample according to their variables, which are divided into two categories or more for data that do not follow the normal distribution.

Results and Discussion

The questions were answered according to their order as follows:

Results related to the study questions, hypothesis and interpretation

First: results related to the first question and discussion:

The first question states: What is the degree of practicing critical thinking skills by English language teachers in UNRWA North Gaza Strip compared to the educationally acceptable level (75%) on Watson–Glaser Scale?

To answer the question, the following null hypothesis was formulated:

The level of critical thinking skills of English language teachers in the Gaza Strip does not

reach the educationally acceptable level (75%) on Watson–Glaser Scale.

To test this hypothesis, an electronic questionnaire on critical thinking skills was used to test the hypothesis and examine the degree of critical thinking skills of English language teachers in UNRWA North Gaza at the level of (75%). To verify whether there is a statistical significance of the differences between the means of the extent to which EFL teachers in UNRWA North Gaza schools in Gaza possess critical thinking skills on the overall test and its five dimensions and the arithmetic mean of the educationally acceptable level at (75%), one sample T–test was used as shown in table (8). This level of (75%) is equal to (23.2) of the total score of the test, noting that the total score of the test is (29), and at a value of (4.5) for the skill of recognition of assumptions, (3.2) for interpretation and evaluating the arguments, (2.4) for deduction, and (10.4) for inference. (see Table 8).

Table (8) A one–sample T test for the level of practicing critical thinking skills of English language teachers at UNRWA North Gaza Schools compared to educationally acceptable level (75%) on Watson Scale.

Dimensions in order	No .	Mean	Standard Deviation	Mean Difference	T– Value	sig.	Statistical Significance
Recognition of Assumptions	43	4.33	.778	.326	2.743	.009	significant Statically
Interpretation	43	1.93	.457	–1.270	–18.200	.000	significant

							Statically
Evaluation of Argument	43	3.56	.796	.358	2.951	.005	significant Statically
Deduction	43	.91	.718	-1.493	-13.643	.000	significant Statically
Inference	43	3.21	1.473	-7.191	-32.013	.000	significant Statically
Total Degree	43	13.93	2.649	-9.270	-22.944	.000	significant Statically

The total score of the critical thinking skills test:

Based on table (8), the value of sig. of the total score of practicing critical thinking skills test is equal to 0.000, which indicates that there are differences at ($\alpha = 0.01$) of practicing critical thinking skills of English language teachers in UNRWA North Gaza compared to the educationally acceptable level (75%) on Watson–Glaser Scale. Meantime, the level of practicing critical thinking skills among sample teachers was equal to (13.93), less than (23.2), compared to (75%) that indicates that the value of the (T) test was negative. This result shows that the level of practicing critical thinking skills among teachers is less than the level of proficiency at (75%).

The value of the major critical thinking skills:

Referring to table (8) too, the value (sig) of the major skills of recognition of assumptions, Interpretation, Deduction, and Inference is (.000) less than ($\alpha = 0.01$), which indicates that there are statistically significant differences for the level of teachers in the

major skills of (Recognition of assumptions, Interpretation, Deduction, and Inference) compared to the acceptable level of Watson–Glaser performance (75%), where it was found that the level of these skills among teachers is less than the educationally acceptable percentage (75%), and it was found that the value of the test (T) for each skill is negative, and this means that the level of skills (Recognition of assumptions, Interpretation, Deduction, and Inference) among teachers are less than the level of proficiency (75%).

Table (8) showed that the value of (sig) for the skill of (Evaluation of Arguments) is equal to (0.005), less than (0.01), which indicates that there are differences at ($\alpha = 0.01$) for the level of teachers' skill of (Evaluation of Arguments) compared to the level of acceptable performance (75%). Moreover, the level of the current teachers' skill was equal to an average of (3.56), a value that exceeds the educationally acceptable percentage (75%) with an increase of (0.796), and it signifies that the value of the (T) test for this skill is

positive. Therefore, this result means that the level of (Evaluation of Arguments) skill of the sample teachers exceeded the level of proficiency (75%).

The stated results may be attributed to the teachers' lack of knowledge of critical thinking skills, strategies, and methods of imparting them to students. The researchers may also attribute such results to the EFL teachers' educational views manifested by that teaching English is a mere process of transferring knowledge and to the lack of familiarity with the use of modern teaching methods and strategies that help challenge students' thinking, so that they have a deeper understanding of the cognitive content that leads them to independent thinking and not to accept facts without sufficient investigation.

Obviously, these results of this hypothesis are consistent with the results of Al-Harbi (2022), Demir (2022), and Al-Faqi & Al-Kilani (2017), which indicated that there were a statistically significant differences in the level of critical thinking skills attributed to gender and years of experience. Meanwhile, the value of (sig) for each dimension is greater than (0.05), which indicates that there are no statistically significant differences at (0.05) in the skills of (recognition of

assumptions, interpretation, evaluation of argument, deduction, and inference) attributed to gender.

Second: Results related to the second question and discussion:

The second question states: Does the level of critical thinking skills of English language teachers in the UNRWA North Gaza differ attributed to gender?

To answer the question, the following null hypothesis was formulated:

There are no statistically significant differences at ($\alpha \leq 0.05$) in practicing critical thinking skills by English language teachers in UNRWA North Gaza Schools attributed to gender.

To test this hypothesis, the researchers used the Mann-Whitney U test for two independent groups of data that did not follow the normal distribution to compare the average ranks of the sample's scores in the light of the total score in the level of critical thinking of teachers of English in UNRWA North Gaza Schools attributed to gender. (see Table 9).

Table (9): Mann-Whitney U test to reveal the statistically significant differences between the performance averages on the critical thinking skills scale of English language teachers in UNRWA North Gaza Schools attributed to gender.

Dimensions	Gender	No	Average rank	Sum of ranks	U-value	Calculated (Z) value	probability value (Sig.)	Statistical Significance
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The Degree of Practicing Critical Thinking Skills among English Teachers at UNRWA North Gaza Schools

Recognition of assumptions	male	14	18.68	261.50	156.5	-1.3	0.181	Not significant Statically
	female	29	23.60	684.50				
Interpretation	male	14	23.29	326.00	185	-0.7	0.511	Not significant Statically
	female	29	21.38	620.00				
Evaluation of Arguments	male	14	22.00	308.00	203	0	1.00	Not significant Statically
	female	29	22.00	638.00				
Deduction	male	14	24.64	345.00	166	-1	0.297	Not significant Statically
	female	29	20.72	601.00				
Inference	male	14	23.39	327.50	183.5	-0.5	0.606	Not significant Statically
	female	29	21.33	618.50				
Total	male	14	24.25	339.50	171.5	-0.8	0.408	Not significant Statically
	female	29	20.91	606.50				

In order to test the significance of the differences between the averages of the

respondents' responses to the overall test of critical thinking skills, in the light of the

gender variable (male, female), the arithmetic mean and standard deviations were extracted, and the "T" test was used for the independent samples, and the results were shown in Table (5).

Table (9) showed that in regard to the total score of the level of critical thinking skills of English language teachers in UNRWA North Gaza Schools, it was found that the (sig) value of the total score of practicing critical thinking skills by English language teachers in UNRWA North Gaza Schools, attributed to gender, is equal to 0.408. This result is greater than (0.05) and indicates that there are no statistically significant differences at (0.05) in the total score.

The results in table (9) tends to explain that the sample members of both genders were exposed to the same educational situations in teaching English language in terms of its philosophy, objectives, content, activities, and the teaching methods. Accordingly, their levels were close and somewhat similar in critical ability and possessing critical thinking skills. Meantime, the results may be attributed to the similarity of the educational environment in terms of preparation and training, the similarity of the social and economic environment, and the similarity of the mental abilities and preparations of the male and female teachers in their answers to the test items. Also, such results may be attributed to the common visions of EFL male and female teachers have about the functions

of such critical thinking skills, a thing that led to a unified attitude towards critical thinking skills, so their responses were also similar. These results are similar to those of Al Harbi (2022), Al Faqi and Al Kilani (2017) which indicated that there was a statistically significant difference in the level of critical thinking skills attributed to gender. Meanwhile, the value of (sig) for each dimension is greater than (0.05), which indicates that there are no statistically significant differences at (0.05) in the skills of (recognition of assumptions, interpretation, evaluation of argument, deduction, and inference) attributed to gender.

Answer to the third question:

The third question states: Does the degree of practicing critical thinking skills by English language teachers in UNRWA North Gaza differ attributed to the years of experience?"

To answer the question, the following null hypothesis was formulated:

There are no statistically significant differences at ($\alpha \leq 0.05$) in practicing critical thinking skills by English language teachers in UNRWA North Gaza attributed to the years of experience.

Also, to test this hypothesis, the researchers used the Kruskal Wallis test for two independent samples of data that do not follow the normal distribution to compare the average ranks of the sample scores in the total score at the level of practicing critical thinking skills by English language teachers

in UNRWA North Gaza Schools attributed to the years of experience. (see Table 10).

Table (10): Kruskal Wallis test to show the significance of differences in the level of

critical thinking of English Language teachers in UNRWA North Gaza Schools attributed to the years of experience.

Dimension	years of experience	No.	Average rank	U-value	probability value (Sig.)	Statistical Significance
Recognition of assumption	(5-10 years)	14	26.64	10.51	0.005	significant Statically
	(10-20 years),	14	25.54			
	More than 20 years),	15	14.37			
Interpretation	(5-10 years)	14	23.39	1.964	0.375	Not significant Statically
	(10-20 years),	14	23.39			
	More than 20 years),	15	19.40			
Evaluation of Argument	(5-10 years)	14	19.21	1.82	0.403	Not significant Statically
	(10-20 years),	14	24.32			
	More than 20 years),	15	22.43			
Deduction	(5-10 years)	14	22.21	0.576	0.75	Not significant Statically
	(10-20 years),	14	23.57			
	More than 20 years),	15	20.33			
Inference	(5-10 years)	14	28.43	6.724	0.035	significant Statically
	(10-20 years),	14	21.32			
	More than 20 years),	15	16.63			
Total	(5-10 years)	14	28.18	10.938	0.004	significant

	(10–20 years),	14	24.75			Statically
	More than 20 years),	15	13.67			

This table shows that the (sig) value of the total score for the total score of the level of critical thinking skills of English language teachers in North Gaza Schools according to the years of experience is equal to 0.004, which is less than (0.01), which indicates the existence of statistically significant differences at (0.01) in the total score. For the level of critical thinking skills of English language teachers in North Gaza, attributed to the years of experience, in favor of the category (5–10 years), it was found that it had the highest average rank among the rest of the levels.

Also, it was found that the value of (sig) for the dimensions (Interpretation, Evaluation of Arguments, Deduction) is greater than (0.05), which indicates that there are no statistically significant differences at (0.05) in (Interpretation, Evaluation of Arguments, Deduction) attributed to years of experience. Meantime, the results showed that the (sig) value of the two dimensions (Recognition of assumptions and Inference) was equal to (0.005 and 0.035) respectively, which is less than (0.05). this result indicates the existence of statistically significant differences at (0.05) in these two skills of recognition of assumptions and inference, attributed to

years of experience, in favor of the category (5–10 years). Yet, the result of the variable of years of experience was the highest average scores in the used the rest compared to the other dimensions.

The results can be interpreted by the fact that the number of teachers' years of experience is no longer a repetition of the first years in teaching English language, and that the teacher with long experience has possessed critical ability and became free from dependence according to specific standards, and gained an ability to make the right decisions and try alternatives more than the teachers with short experiences. The results may also be attributed to the fact that teachers with long experience have previous experiences in dealing with such skills, and the appropriate environment has been created for them to learn this type of thinking and to identify its skills and practices. These results differed with the results of studies (Khreisheh, 2001; Christensen, 1996).

These results are consistent with Al Harbi (2022), Al Khalidy (2021), Hamdan et al. (2017), Al Faqi & Al Kilani (2017) studies which indicated that there were no statistically significant differences at (0.05) in critical

thinking skills attributed to years of experience.

Overall comment on the previous studies:

The previous studies have addressed thinking skills in general, and in particular critical thinking such as the studies of Al-Harbi (2022), Demir (2022), Al-Khalidy (2021), Saleem et al. (2019), Hamdan (2017). Some of which linked critical thinking to creative thinking, such as the Al-Khalili (20149), and others linked it to analytical, scientific thinking skills and academic achievement thinking skills, such as Al-Homari (2019) and Al-Faqi and Al-Kilani (2017).

Some studies adopted critical thinking scale as a study tool, such as Al-Harbi (2022), Hamadan (2017), Al-Faki and Al-Kilani (2017), Al-Homari (2019). The current study agreed to most studies that the extent of practicing critical thinking skills is medium to weak, such studies include Al-Homari (2019), Al-Khalidy (2021), Saleem et al. (2019). Moreover, the current study is consistent with some studies that there were no statistically significant differences attributed to gender, they include Al-Khalidy (2021), Saleem et al. (2019), and Hamdan (2017). In addition, the current study agreed to Al-Faqi and Al-Kilani (2017) and Al-Harbi (2022) that there were statistical differences attributed to gender. Meantime, the current study also agreed with both Al-Khalidy (2021) and Saleem et al. (2019). The current

study also agreed with studies of Al-Harbi (2022), Hamdan (2017), and Al-Faqi and Al-Kilani (2017) that there were statistically significant differences attributed to years of experience.

The current research differs with some previous studies on adopting the tools of questionnaire, observation card, and California critical thinking test, for such tests have content derived from different life situations. However, in the current study, Watson-Glaser test was used for having comprehensive critical thinking tests and sub-tests. In the light of the foregoing, the two researchers felt that there was an urgent need for more similar studies, which are classified, for the researchers' best knowledge, as scarce studies that are carried out in the light of the use of a comprehensive test and historical context to determine the extent to which English course teachers possess critical thinking skills.

Study recommendations and suggestions

Based on the findings of the study and in the light of the previous discussions of such findings, the researchers recommend the followings:

Implementing training programs and courses to raise the degree of practicing critical thinking skills for English language teachers.

Providing English language students at universities with a practical training course for critical thinking skills.

٣. Conducting further studies and researches in regard to the critical thinking skills on various courses and materials.
٤. Preparing authentic proposals to consolidate the educational specialists' role to develop critical thinking skills in different fields of teaching and learning.
٥. Studying the relationship between critical thinking skills and professional growth for teachers.
٦. Conducting similar studies in other regions of Palestine
٧. The curriculum should include a variety of enrichment activities that develop students' critical thinking.
٨. Conducting comparative studies between various schools on critical thinking.

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