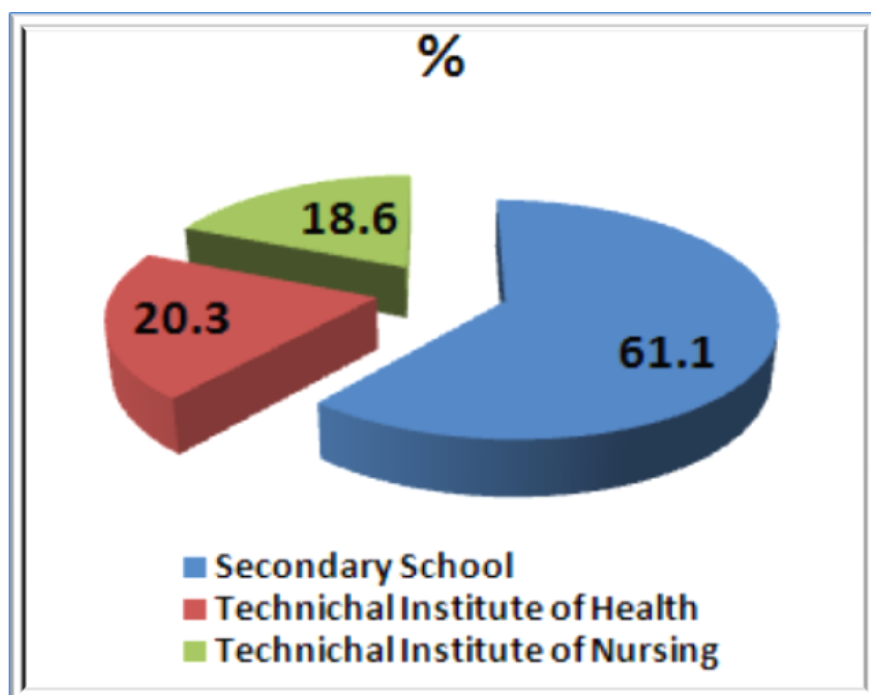


**The results of the study will be presented in the following sequence:**

- Part I.** Distribution of second year nursing students according to educational qualification before faculty enrollment. Figure 1
- Part II.** Components of critical thinking dispositions as reported by second year nursing students. Tables: 1-8
- Part III.** Components of critical thinking skills as reported by second year nursing students. Tables: 9-21
- Part IV.** Critical thinking dispositions and critical thinking skills among second year nursing students regarding their educational qualification. Table: 22
- Part VI.** Correlation between critical thinking dispositions and critical thinking skills among second year nursing students. Figure 2



**Figure (1):- Distribution of second year nursing students according to educational qualification before faculty enrollment.**

This figure shows that more than two thirds (61.1%) of second year nursing students have secondary school qualification while 18.6% of them are with Technical Institute of Nursing.

**Table (1):- Mean scores of truth seeking of critical thinking dispositions as reported by study subjects. (n=172)**

| Items of truth seeking   | Max score | Mean $\pm$ SD                     |
|--|-----------|-----------------------------------|
| 1-It is never easy to decide between competing points of view                  | 6         | 4.25 $\pm$ 1.37                   |
| 2-If there are four reasons on favor and one against I would go with the four. | 6         | 4.44 $\pm$ 1.26                   |
| 3-Even if the evidence is against me, I will hold from to my beliefs.          | 6         | 4.14 $\pm$ 1.48                   |
| 4-Every one always argues from their own self interest including me.           | 6         | 4.83 $\pm$ 1.01                   |
| 5-When have to deal with something really complex, it's panic time.            | 6         | 4.30 $\pm$ 1.42                   |
| 6-Being impartial is impossible when I'm discussing my own opinion.            | 6         | 3.00 $\pm$ 1.52                   |
| 7-I believe what want to believe.  | 6         | 4.07 $\pm$ 1.26                   |
| 8-I look for facts that support my view not facts that disagree.               | 6         | 4.41 $\pm$ 1.39                   |
| 9-Many questions are just too frightening to ask.                              | 6         | 4.13 $\pm$ 1.43                   |
| 10-I know what I think, so why should I pretend to ponder my choices.          | 6         | 4.14 $\pm$ 1.36                   |
| 11-It's impossible to know what standards to apply to most questions.          | 6         | 3.51 $\pm$ 1.43                   |
| 12-To get people to agree with me I would give any reason that worked.         | 6         | 5.24 $\pm$ 1.06                   |
| <b>Total mean</b>  | <b>72</b> | <b>4.21 <math>\pm</math> 0.55</b> |

This table portrays that, the mean score of students' truth seeking was (4.21 $\pm$  .55), and the highest mean score as reported by students was related to the item of "To get people to agree with me I would give any reason that worked." (5.24 $\pm$  1.06), while the lowest mean score was related to the item of "Being impartial is impossible when I'm discussing my own opinion" (3.00  $\pm$  1.52).

**Table (2):- Mean scores of open-mindedness of critical thinking dispositions as reported by study subjects. (n=172)**

| Items of open-mindedness  | Max score | Mean $\pm$ SD                     |
|---|-----------|-----------------------------------|
| 1-Considering all alternatives is a luxury I can't afford.                              | 6         | 3.99 $\pm$ 1.27                   |
| 2-It concerns me that I might have biases of which I'm not aware.                       | 6         | 2.66 $\pm$ 1.47                   |
| 3-Men and women are equally logical.  | 6         | 4.51 $\pm$ 1.38                   |
| 4-You are not entitled to your opinion if you are obviously mistaken.                   | 6         | 3.89 $\pm$ 1.18                   |
| 5-Open-mindedness has limits when it comes to right and wrong.                          | 6         | 4.79 $\pm$ 1.11                   |
| 6-It's important to me to understand what other people think about things.              | 6         | 5.16 $\pm$ 0.99                   |
| 7-Foreigners should study our culture instead of us always trying to understand theirs. | 6         | 4.16 $\pm$ 1.52                   |
| 8-Frankly, I am trying to be less judgmental.   | 6         | 4.27 $\pm$ 1.22                   |
| 9- I shouldn't be forced to defend my own opinions                                      | 6         | 4.98 $\pm$ 1.23                   |
| 10-It makes a lot of sense to study what foreigners think.                              | 6         | 4.55 $\pm$ 1.19                   |
| 11-Being open-minded about different world views so less important than people think.   | 6         | 3.70 $\pm$ 1.32                   |
| 12-Others are entitled to their opinions, but I don't need to hear them.                | 6         | 2.70 $\pm$ 1.47                   |
| <b>Total mean</b>   | <b>72</b> | <b>4.11 <math>\pm</math> 0.51</b> |

This table clearly shows that, the mean score of students' open-mindedness was (4.11 $\pm$  .51), and the highest mean score as reported by students was related to the item of " I shouldn't be forced to defend my own opinions " (4.98 $\pm$  1.23), while the lowest mean score was related to the item of " It concerns me that I might have biases of which I'm not aware" (2.66  $\pm$  1.47).

**Table (3):- Mean scores of analyticity of critical thinking dispositions as reported by study subjects. (n=172)**

| Items of analyticity  | Max score | Mean $\pm$ SD                     |
|---|-----------|-----------------------------------|
| 1-It bothers me when people rely on weak argument to defend good ideas.     | 6         | 4.80 $\pm$ 1.36                   |
| 2- I pretend to be logical, but I'm not.                                    | 6         | 2.97 $\pm$ 1.52                   |
| 3-I must have grounds for all my beliefs.                                   | 6         | 5.00 $\pm$ 1.16                   |
| 4-People need reasons if they are going to disagree with another's opinion. | 6         | 4.93 $\pm$ 1.07                   |
| 5-Frequently I find myself evaluating other people's arguments              | 6         | 4.40 $\pm$ 1.10                   |
| 6-You could describe me as logical.   | 6         | 4.44 $\pm$ 1.14                   |
| 7-Getting a clear idea about the problem at hand is the first priority      | 6         | 4.96 $\pm$ 1.15                   |
| 8-There is no way to know whether one solution is better than another       | 6         | 3.45 $\pm$ 1.38                   |
| 9-I'm known for approaching complex problem in an orderly way.              | 6         | 4.35 $\pm$ 1.21                   |
| 10 -Life has taught me not to too logical.                                  | 6         | 3.52 $\pm$ 1.42                   |
| 11-Others look to me to decide when the problem is solved.                  | 6         | 4.35 $\pm$ 1.19                   |
| <b>Total mean</b>   | <b>66</b> | <b>4.29 <math>\pm</math> 0.49</b> |

This table clearly shows that, the mean score of students' analyticity was (4.29 $\pm$  .49), and the highest mean score as reported by students was related to the item of "I must have grounds for all my beliefs" (5.00 $\pm$  1.16), while the lowest mean score was related to the item of "I pretend to be logical, but I'm not" (2.97  $\pm$  1.52).

**Table (4):- Mean of systematicity of critical thinking dispositions as reported by study subjects. (n=172)**

| Items of systematicity   | Max score | Mean $\pm$ SD                     |
|--|-----------|-----------------------------------|
| 1-My trouble is that I'm easily distracted.                                | 6         | 4.22 $\pm$ 1.50                   |
| 2-I always focus the question before I attempt to answer it                | 6         | 4.75 $\pm$ 1.31                   |
| 3-I can talk about my problem for hours and hours without solving anything | 6         | 3.23 $\pm$ 1.51                   |
| 4-It's easy for me to organize my thoughts.                                | 6         | 4.54 $\pm$ 1.14                   |
| 5-It's important to me to keep careful record of my personal finances.     | 6         | 4.24 $\pm$ 1.40                   |
| 6-People say I rush into decisions too quickly.                            | 6         | 4.04 $\pm$ 1.51                   |
| 7-People think I procrastinate about making decisions.                     | 6         | 3.81 $\pm$ 1.41                   |
| 8-My opinion about controversial topics depends a lot on who talk to last. | 6         | 3.63 $\pm$ 1.38                   |
| 9-If I have to work on a problem; I can put other things out of my mind    | 6         | 4.01 $\pm$ 1.35                   |
| 10-I'm good at developing orderly plan to address complex problems.        | 6         | 4.36 $\pm$ 1.11                   |
| <b>Total mean</b>  | <b>60</b> | <b>4.08 <math>\pm</math> 0.68</b> |

This table illustrates that, the mean score of students' systematicity was (4.08 $\pm$  .68), and the highest mean score as reported by students was related to the item of " I always focus the question before I attempt to answer it " (4.75 $\pm$  1.31), while the lowest mean score was related to the item of " I can talk about my problem for hours and hours without solving anything" (3.23 $\pm$  1.51).

**Table (5):- Mean scores of self-confidence of critical thinking dispositions reported by study subjects. (n=172)**

| Items of self-confidence  | Max score | Mean±SD          |
|---|-----------|------------------|
| 1-I am proud that I can think with great precision.                         | 6         | 4.69 ± 1.23      |
| 2-Tests that require thinking, not just memorization, are better for me.    | 6         | 4.69 ± 1.21      |
| 3-Other admires my intellectual curiosity and inquisitiveness.              | 6         | 4.48 ± 1.13      |
| 4-My peers call on me to make judgments because I decide things fairly      | 6         | 4.44 ± 1.06      |
| 5-I pride my self on coming up with creative alternatives.                  | 6         | 4.63 ± 1.20      |
| 6-Others look to establish reasonable standards to apply to decisions.      | 6         | 4.29 ± 1.23      |
| 7-Being inquisitive is one of my strong points.                             | 6         | 4.05 ± 4.05      |
| 8-I take the pride in my ability to understand the opinions of others.      | 6         | 4.69 ± 1.16      |
| 9-Others look to me to keep working on a problem when the going gets tough. | 6         | 4.61 ± 1.17      |
| <b>Total mean</b>   | <b>54</b> | <b>4.51±0.66</b> |

According to this table the mean score of students' self-confidence was (4.51± 0.66), and the highest mean score as reported by students was related to the items of " I am proud that I can think with great precision" (4.69±1.23), "Tests that require thinking, not just memorization, are better for me"(4.69±1.21) and "I take the pride in my ability to understand the opinions of others" (4.69±1.16) while the lowest mean score was related to the item of " Being inquisitive is one of my strong points" (4.05± 4.05).

**Table (6):- Mean scores of inquisitiveness of critical thinking dispositions as reported by study subjects. (n=172)**

| Items of inquisitiveness  | Max score | Mean $\pm$ SD                     |
|---|-----------|-----------------------------------|
| 1- Studying new things all my life would be wonderful.                      | 6         | 5.35 $\pm$ 0.94                   |
| 2- Most college courses are uninteresting and not worth taking.             | 6         | 3.80 $\pm$ 1.46                   |
| 3- When faced with a big decision; I first seek all the information I can.  | 6         | 5.04 $\pm$ 1.08                   |
| 4- Required subjects in colleges waste time.                                | 6         | 3.61 $\pm$ 1.36                   |
| 5- It's just not that important to keep trying to solve difficult problems. | 6         | 3.34 $\pm$ 1.55                   |
| 6- I look forward to learning challenging things.                           | 6         | 4.57 $\pm$ 1.30                   |
| 7- Complex problems are fun to try to figure out.                           | 6         | 4.59 $\pm$ 1.17                   |
| 8- I really enjoy trying to figure out how things work.                     | 6         | 4.60 $\pm$ 1.15                   |
| 9-No matter what the topic; I am eager to know more about it.               | 6         | 4.29 $\pm$ 1.22                   |
| 10-Learn everything you can never know when it could come in handy          | 6         | 4.68 $\pm$ 1.13                   |
| <b>Total mean</b>   | <b>60</b> | <b>4.39 <math>\pm</math> 0.64</b> |

This table illustrates that, the mean score of students' Inquisitiveness was (4.39 $\pm$  0.64), and the highest mean score as reported by students was related to the item of " Studying new things all my life would be wonderful " (5.35 $\pm$  .94), while the lowest mean score was related to the item of " It's just not that important to keep trying to solve difficult problems" (3.34 $\pm$  1.55).



**Table (7):- Mean scores of cognitive maturity of critical thinking dispositions as reported by study subjects. (n=172)**

| Items of cognitive maturity   | Max score | Mean $\pm$ SD                     |
|---|-----------|-----------------------------------|
| 1-The best discussion of the idea is how to feel at the time.                                 | 6         | 5.08 $\pm$ 0.96                   |
| 2-truth always relied on your point of view.  | 6         | 4.13 $\pm$ 1.29                   |
| 3-can never know the truth about most things.   | 6         | 4.49 $\pm$ 1.23                   |
| 4-Cost advice would be paid entirely by.  | 6         | 4.76 $\pm$ 1.14                   |
| 5-The fact that you are open-minded means that you do not know what is real and that Meagher. | 6         | 3.28 $\pm$ 1.67                   |
| 6-Reading anything conditions avoided as much as possible.                                    | 6         | 2.87 $\pm$ 1.64                   |
| 7-The best way to solve the problem is a question for someone else to answer                  | 6         | 3.36 $\pm$ 1.38                   |
| 8-That similarities useful, as if by Windjammer in Plain.                                     | 6         | 4.21 $\pm$ 1.18                   |
| 9-Things are as they seem.  | 6         | 3.89 $\pm$ 1.37                   |
| 10-Persons powerful determine the right answer  | 6         | 4.16 $\pm$ 1.44                   |
| <b>Total mean</b>   | <b>60</b> | <b>4.02 <math>\pm</math> 0.69</b> |

According to this table the mean score of students' cognitive maturity was (4.02 $\pm$  0.69), and the highest mean score as reported by students was related to the item of " The best discussion of the idea is how to feel at the time " (5.08 $\pm$  .96), while the lowest mean score was related to the item of " Reading anything conditions avoided as much as possible" (2.87 $\pm$  1.64).

**Table (8):- Components of critical thinking dispositions as reported by second year nursing students. (n=172)**

| Items                | Max score  | Mean±SD                |
|----------------------|------------|------------------------|
| 1-Truth seeking      | 72         | 4.21 ± 0.55            |
| 2-Open-mindedness    | 72         | 4.11 ± 0.51            |
| 3-Analyticity        | 66         | 4.29 ± 0.49            |
| 4- Systematicity.    | 60         | 4.08 ±0.68             |
| 5-Cognitive Maturity | 60         | 4.02±0.69              |
| 6-Inquisitiveness    | 60         | 4.39 ±0.64             |
| 7-Self-confidence    | 54         | 4.51± 0 .66            |
| <b>Total mean</b>    | <b>444</b> | <b>312.86 ± 29.73*</b> |

\* Positive disposition toward critical thinking

According to this table the nursing students' critical thinking dispositions were positive with mean score (312.86± 29.73), and the highest mean score as reported by students was related to self-confidence (4.51± 0.66), while the lowest mean score was related to cognitive maturity (4.02± 0.69).

**Table (9):- Mean scores of tendency to evaluate external subjects of critical thinking skills as reported by study subjects. (n=172)**

| Items of tendency to evaluate external subjects                           | Max score | Mean±SD            |
|---|-----------|--------------------|
| 1- My judgment on things is constant in a state of anger or satisfaction. | 5         | 3.51 ± 1.19        |
| 2 - My judgment on matters depends on my mood.                            | 5         | 3.27 ± 1.16        |
| 3- My judgment is positive on matters that I like.                        | 5         | 3.82 ± 1.01        |
| 4- I judge matters through the circumstances that surrounds them.         | 5         | 3.83 ± 0.98        |
| 5- Others describe me with my right judgment on matters.                  | 5         | 3.57 ± 0.97        |
| 6- I get away from saying my opinion on most matters.                     | 5         | 3.11 ± 0.99        |
| <b>Total mean</b>   | <b>30</b> | <b>3.52 ± 0.59</b> |

This table illustrates that, the mean score of students' tendency to evaluate external subjects was (3.52± 0.59), and the highest mean score as reported by students was related to the item of " I judge matters through the circumstances that surrounds them " (3.83± 0.98), while the lowest mean score was related to the item of " I get away from saying my opinion on most matters" (3.11± 0.99).

**Table (10):- Mean scores of correct use of language in listening, writing and reading of critical thinking skills as reported by study subjects. (n=172)**

| Items of correct use of language in listening, writing and reading      | Max score | Mean $\pm$ SD                     |
|---|-----------|-----------------------------------|
| 1- I enjoy when others speak with me in correct language                | 5         | 4.37 $\pm$ 0.81                   |
| 2- I enjoy when I use the dictionary to find out the meaning of words.  | 5         | 3.88 $\pm$ 0.99                   |
| 3- I'm keen on correcting the language mistakes of others               | 5         | 3.67 $\pm$ 1.05                   |
| 4- I stick to the proper pronunciation of the language when I speak.    | 5         | 3.70 $\pm$ 0.98                   |
| 5- I listen to interest in the accuracy of each conversation with me.   | 5         | 4.02 $\pm$ 0.95                   |
| 6- I'm interested in the meaning of words and phrases spoken by others. | 5         | 3.90 $\pm$ 0.99                   |
| 7- I'm keen on arrangement of the words and sentences when reading.     | 5         | 4.00 $\pm$ 0.87                   |
| 8- I give every word the right pronunciation when I speak.              | 5         | 3.75 $\pm$ 0.92                   |
| 9- I'm keen on not to dwell on the usage of words when speaking.        | 5         | 3.75 $\pm$ 0.98                   |
| 10- I need the help of others in understanding words and sentences.     | 5         | 3.58 $\pm$ 1.04                   |
| <b>Total mean</b>   | <b>50</b> | <b>3.86 <math>\pm</math> 0.57</b> |

This table clearly shows that, the mean score of students' correct use of language in listening, writing and reading was (3.86 $\pm$  0.57), and the highest mean score as reported by students was related to the item of " I enjoy when others speak with me in correct language " (4.37 $\pm$  0.81), while the lowest mean score was related to the item of " I need the help of others in understanding words and sentences" (3.58 $\pm$  1.04).

**Table (11):- Mean scores of tendency to discern matters of critical thinking skills as reported by study subjects. (n=172)**

| Items of tendency to discern matters   | Max score | Mean $\pm$ SD                     |
|--|-----------|-----------------------------------|
| 1-I'm interested in searching for right and wrong in the matters that I am encountering. | 5         | 4.38 $\pm$ 0.74                   |
| 2- Rudder plays a key role for all matters.  | 5         | 3.54 $\pm$ 1.05                   |
| 3 -I check matters carefully.  | 5         | 4.29 $\pm$ 0.79                   |
| 4-I raise the attention of others to the important things they left behind.              | 5         | 4.03 $\pm$ 0.82                   |
| 5- Checking matters carefully is a waste of time.  | 5         | 2.78 $\pm$ 1.24                   |
| 6- I'm interested in comparing between the things.                                       | 5         | 3.84 $\pm$ 0.89                   |
| 7- I'm interested in comparing between the opposing views.                               | 5         | 3.86 $\pm$ 0.98                   |
| <b>Total mean</b>  | <b>35</b> | <b>3.82 <math>\pm</math> 0.51</b> |

According to this table the mean score of students' tendency to discern matters was (3.82 $\pm$  0.51), and the highest mean score as reported by students was related to the item of " I'm interested in searching for right and wrong in the matters that I am encountering "(4.38 $\pm$  0.74), while the lowest mean score was related to the item of " Checking matters carefully is a waste of time " (2.78 $\pm$  1.24).

**Table (12):- Mean scores of tendency to discuss matter objectively of critical thinking skills as reported by study subjects. (n=172)**

| Items of tendency to discuss matter objectively                  | Max score | Mean $\pm$ SD                     |
|--|-----------|-----------------------------------|
| 1- I make my views through my discussion with others.            | 5         | 4.24 $\pm$ 0.84                   |
| 2- I judge something through my discussion with others about it. | 5         | 3.91 $\pm$ 0.88                   |
| 3- My views receive acceptance from others.                      | 5         | 3.76 $\pm$ 0.89                   |
| 4- I insist on my view despite the refusal of others.            | 5         | 3.54 $\pm$ 1.10                   |
| 5- I differ with others in the views.                            | 5         | 3.77 $\pm$ 0.94                   |
| 6- I'm keen on criticizing others, no matter what difficulties   | 5         | 3.50 $\pm$ 1.07                   |
| 7- I feel angry when others criticize me.                        | 5         | 3.20 $\pm$ 1.16                   |
| 8- I avoid criticizing others                                    | 5         | 3.28 $\pm$ 1.13                   |
| 9- I feel happy when I listen to in-depth conversations          | 5         | 4.01 $\pm$ 1.02                   |
| <b>Total mean</b>  | <b>45</b> | <b>3.69 <math>\pm</math> 0.50</b> |

This table portray that, the mean score of students' tendency to discuss matter objectively was (3.69 $\pm$  0.50), and the highest mean score as reported by students was related to the item of " I make my views through my discussion with others " (4.24 $\pm$  0.84), while the lowest mean score was related to the item of " I feel angry when others criticize me" (3.20 $\pm$  1.16).

**Table (13):- Mean scores of caring about judgment of certain phenomena of critical thinking skills as reported by study subjects. (n=172)**

| Items of caring about judgment of certain phenomena                      | Max score | Mean $\pm$ SD                     |
|--|-----------|-----------------------------------|
| 1- I'm keen on judging the phenomena existing in the society.            | 5         | 4.18 $\pm$ 0.94                   |
| 2- my expectations are true when observing any phenomenon.               | 5         | 3.69 $\pm$ 0.84                   |
| 3- my expectations are wrong when judging the phenomena                  | 5         | 3.18 $\pm$ 1.05                   |
| 4- I'm interested in identifying the real causes of the phenomena.       | 5         | 3.92 $\pm$ 0.91                   |
| 5- I find it difficult to recognize the phenomenon and its consequences. | 5         | 3.48 $\pm$ 1.02                   |
| 6- I'm interested in the causes and consequences of phenomenon.          | 5         | 3.88 $\pm$ 1.01                   |
| <b>Total mean</b>  | <b>30</b> | <b>3.72 <math>\pm</math> 0.53</b> |

This table clearly shows that, the mean score of students' caring about judgment of certain phenomena was (3.72 $\pm$  0.53), and the highest mean score as reported by students was related to the item of " I'm keen on judging the phenomena existing in the society " (4.18 $\pm$  0.94), while the lowest mean score was related to the item of " my expectations are wrong when judging the phenomena" (3.18 $\pm$  1.05).

**Table (14):- Mean scores of tendency to reach conclusion correctly of critical thinking skills as reported by study subjects. (n=172)**

| Items of tendency to reach conclusion correctly                                  | Max score | Mean $\pm$ SD                     |
|--|-----------|-----------------------------------|
| 1- I'm interested in the real sources to get true results.                       | 5         | 4.42 $\pm$ 0.71                   |
| 2 - I'm interested in following-up the topics for the end to reach a conclusion. | 5         | 4.08 $\pm$ 0.92                   |
| 3 - I find it difficult to follow up the topics to an end.                       | 5         | 3.43 $\pm$ 0.99                   |
| <b>Total mean</b>  | <b>15</b> | <b>3.97 <math>\pm</math> 0.64</b> |

This table clarifies that, the mean score of students' tendency to reach conclusion correctly was (3.97 $\pm$  0.64), and the highest mean score as reported by students was related to the item of " I'm interested in the real sources to get true results " (4.42 $\pm$  0.71), while the lowest mean score was related to the item of " I find it difficult to follow up the topics to an end " (3.43 $\pm$  0.99).



**Table (15):- Mean scores caring about observation of matters and subjects of critical thinking skills as reported by study subjects. (n=172)**

| Items of caring about observation of matters and subjects            | Max score | Mean $\pm$ SD                     |
|--|-----------|-----------------------------------|
| 1- I observe the topics accurately.                                  | 5         | 3.93 $\pm$ 0.95                   |
| 2- I follow up the topics rapidly and transiently.                   | 5         | 3.65 $\pm$ 1.08                   |
| 3- I track the results of matters that have my interest.             | 5         | 4.02 $\pm$ 0.73                   |
| 4- Others describe my views as far from reality.                     | 5         | 3.09 $\pm$ 1.11                   |
| 5- I avoid making judgments on others.                               | 5         | 3.40 $\pm$ 0.97                   |
| 6 -I'm interested in issuing judgments on others and their proposals | 5         | 3.56 $\pm$ 1.03                   |
| 7- I'm interested in judging the actions of others.                  | 5         | 3.49 $\pm$ 0.99                   |
| 8 -I get away from saying my opinion on many matters around me.      | 5         | 2.26 $\pm$ 1.19                   |
| 9- I judge the matters through my knowledge about them.              | 5         | 3.88 $\pm$ 0.99                   |
| <b>Total mean</b>  | <b>45</b> | <b>3.59 <math>\pm</math> 0.51</b> |

According to this table the mean score of students' caring about observation of matters and subjects was (3.59 $\pm$  0.51), and the highest mean score as reported by students was related to the item of " I track the results of matters that have my interest "(4.02 $\pm$  0.73), while the lowest mean score was related to the item of " I get away from saying my opinion on many matters around me " (2.26 $\pm$  1.19).

**Table (16):- Mean scores of openness and flexibility in dealing with matters of critical thinking skills as reported by study subjects. (n=172)**

| Items of openness and flexibility in dealing with matters           | Max score | Mean $\pm$ SD                     |
|---|-----------|-----------------------------------|
| 1- I'm keen on renewing the way of my dealings with others.         | 5         | 4.27 $\pm$ 0.86                   |
| 2- I'm keen on doing the familiar I works.                          | 5         | 3.91 $\pm$ 0.96                   |
| 3-I listen to all opinions even those contradicting me in opinion.  | 5         | 4.04 $\pm$ 0.99                   |
| 4- I listen to different views supporting and opposing.             | 5         | 4.00 $\pm$ 0.99                   |
| 5- I refuse everyone contradicting me in my opinion.                | 5         | 2.81 $\pm$ 1.25                   |
| 6-I behave appropriately, whatever the circumstances are difficult. | 5         | 3.79 $\pm$ 0.95                   |
| 7- I respect the old and new traditions.                            | 5         | 3.95 $\pm$ 1.03                   |
| <b>Total mean</b>   | <b>35</b> | <b>3.82 <math>\pm</math> 0.54</b> |

This table clarifies that, the mean score of students' openness and flexibility in dealing with matters was (3.82 $\pm$  0.54), and the highest mean score as reported by students was related to the item of " I'm keen on renewing the way of my dealings with others " (4.27 $\pm$  0.86), while the lowest mean score was related to the item of " I refuse everyone contradicting me in my opinion " (2.81 $\pm$  1.25).

**Table (17):- Mean scores of identifying relations from subjects of critical thinking skills as reported by study subjects. (n=172)**

| Items of identifying relations from subjects                              | Max score | Mean $\pm$ SD                     |
|---|-----------|-----------------------------------|
| 1- I am seeking to link the new and old topics.                           | 5         | 4.34 $\pm$ 0.81                   |
| 2- I am seeking to recognize relationships between objects.               | 5         | 4.01 $\pm$ 0.88                   |
| 3- I am only interested in new things without linking them to old things. | 5         | 2.69 $\pm$ 1.19                   |
| <b>Total mean</b>   | <b>15</b> | <b>3.68 <math>\pm</math> 0.64</b> |

This table clearly shows that the mean score of students' identification of relations from subjects was (3.68 $\pm$  0.64), and the highest mean score as reported by students was related to the item of " I am seeking to link the new and old topics "(4.34 $\pm$  0.81), while the lowest mean score was related to the item of " I am only interested in new things without linking them to old things " (2.69 $\pm$  1.19).

**Table (18):- Mean scores of tendency to avoid rumors in judgments of critical thinking skills as reported by study subjects. (n=172)**

| Items of tendency to avoid rumors in judgments                                | Max score | Mean $\pm$ SD                     |
|---|-----------|-----------------------------------|
| 1-I believe the rumors, calling on others.                                    | 5         | 2.68 $\pm$ 1.41                   |
| 2- I exclude rumors in judging people.  | 5         | 3.66 $\pm$ 1.23                   |
| 3- I'm keen on referring to records to make sure that information is correct. | 5         | 3.91 $\pm$ 1.02                   |
| 4-I otroy much in judging things.   | 5         | 3.94 $\pm$ 1.04                   |
| 5- I am neutral in judging things.  | 5         | 3.64 $\pm$ 0.92                   |
| <b>Total mean</b>   | <b>25</b> | <b>3.57 <math>\pm</math> 0.60</b> |

According to this table the mean score of students' tendency to avoid rumors in judgments was (3.57 $\pm$  0.60), and the highest mean score as reported by students was related to the item of " I otroy much in judging things "(3.94 $\pm$  1.04), while the lowest mean score was related to the item of "I believe the rumors, calling on others" (2.68 $\pm$  1.41).

**Table (19):- Mean scores of adaptation to new situations of critical thinking skills as reported by study subjects.(n=172)**

| Items of adaptation to new situations                               | Max score | Mean±SD            |
|---|-----------|--------------------|
| 1- I have difficulty in dealing with new situations.                | 5         | 3.51 ± 1.08        |
| 2- I'm keen on learning new information.                            | 5         | 4.43 ± 0.75        |
| 3- Before beginning any work, I listen to the owners of experience. | 5         | 4.16 ± 0.85        |
| 4- I accept new information without discussion.                     | 5         | 3.26 ± 1.19        |
| <b>Total mean</b>   | <b>20</b> | <b>3.84 ± 0.64</b> |

This table portray that, the mean score of students' adaptation to new situations was (3.84± 0.64), and the highest mean score as reported by students was related to the item of "I'm keen on learning new information" (4.43± 0.75), while the lowest mean score was related to the item of "I accept new information without discussion" (3.26± 1.19).

**Table (20):- Mean scores of providing innovative solutions of critical thinking skills as reported by study subjects. (n=172)**

| Items of Providing innovative solutions                     | Max score | Mean±SD            |
|---|-----------|--------------------|
| 1-I prefer solutions that accessed by others before me.     | 5         | 3.54 ± 1.13        |
| 2- I always tend to reach ambiguous results.                | 5         | 3.47 ± 1.14        |
| 3- I reach solutions that are unfamiliar to others.         | 5         | 3.22 ± 1.17        |
| 4- When I have a problem I look for many solutions.         | 5         | 4.08 ± 0.93        |
| 5- I listen to more than a suggestion to reach what is new. | 5         | 4.12 ± 0.90        |
| 6- Others describe me that my suggestions are unrealistic.  | 5         | 3.75 ± 0.93        |
| 7- My suggestions receive a refusal from others.            | 5         | 2.91 ± 1.14        |
| <b>Total mean</b>   | <b>35</b> | <b>3.58 ± 0.61</b> |

This table clearly shows that the mean score of students' providing innovative solutions was (3.58± 0.61), and the highest mean score as reported by students was related to the item of " I listen to more than a suggestion to reach what is new "(4.12± 0.90), while the lowest mean score was related to the item of " My suggestions receive a refusal from others " (2.91± 1.14).

**Table (21):- Components of critical thinking skills as reported by second year nursing students. (n=172)**

| Items  | Max score  | Mean±SD                |
|--|------------|------------------------|
| 1-Correct use of language in listening, writing and reading. | 50         | 3.86 ± 0.57            |
| 2-Caring about observation of matters and subjects.          | 45         | 3.59 ± 0.51            |
| 3-Tendency to discuss matter objectively.                    | 45         | 3.69 ± 0.50            |
| 4-Tendency to discern matters.                               | 35         | 3.82 ± 0.51            |
| 5-Openness and flexibility in dealing with matters.          | 35         | 3.82 ± 0.54            |
| 6-Providing innovative solutions.                            | 35         | 3.58 ± 0.61            |
| 7-Caring about judgment of certain phenomena.                | 30         | 3.72 ± 0.53            |
| 8-Tendency to evaluate external subjects.                    | 30         | 3.52 ± 0.59            |
| 9-Tendency to avoid rumors in judgments.                     | 25         | 3.57 ± 0.60            |
| 10-Adaptation to new situations.                             | 20         | 3.84 ± 0.64            |
| 11-Tendency to reach conclusion correctly.                   | 15         | 3.97 ± 0.64            |
| 12-Identify relations from subjects.                         | 15         | 3.68 ± 0.64            |
| <b>Total mean</b>  | <b>380</b> | <b>282.61 ± 29.69*</b> |

\* High level of critical thinking skills

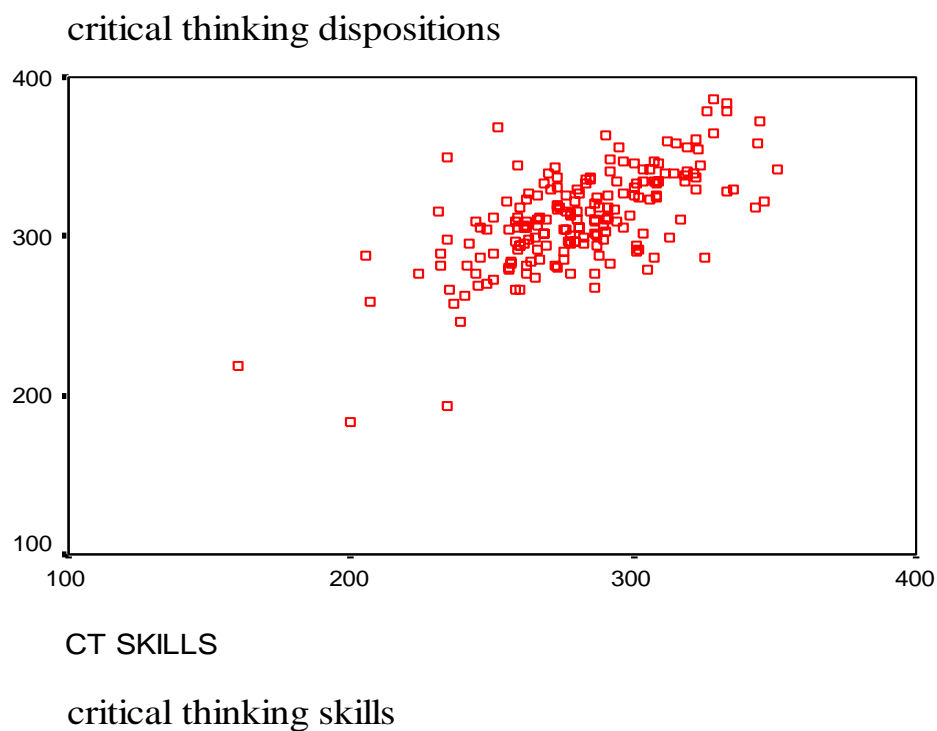
According to this table the nursing students' critical thinking skills were high with mean score (282.61± 29.69), and the highest mean score as reported by students was related to Tendency to reach conclusion correctly (3.97± 0.64), while the lowest mean score was related to Tendency to evaluate external subjects (3.52± 0.59).

**Table (22):- Critical thinking dispositions and critical thinking skills among second year nursing students regarding their educational qualification.**

| Items                            | Secondary school<br>(N=105) | Technical institute of health<br>(N=35) | Technical institute of nursing<br>(N=32) | F     | P-value |
|----------------------------------|-----------------------------|---|--|-------|---------|
|                                  | Mean±SD                     | Mean±SD                                 | Mean±SD                                  |       |         |
| 1-critical thinking dispositions | 313.86 ± 27.27              | 312.54 ± 34.05                          | 312.37 ± 32.23                           | 0.201 | ≥ 0.05  |
| 2- Critical thinking skills.     | 283.05 ± 30.37              | 280.48 ± 30.66                          | 283.50 ± 27.05                           | 0.115 | ≥ 0.05  |

This table shows that there was no significance difference between students' critical thinking dispositions ( $F=0.201$ ,  $P \geq 0.05$ ) and critical thinking skills ( $F=0.115$ ,  $P \geq 0.05$ ) in relation to their educational qualification.





**Figure (2):- Correlation between critical thinking dispositions and critical thinking skills among second year nursing students.**

It is clear from this figure that there was highly statistical significant positive correlation between students' critical thinking dispositions and critical thinking skills at ( $p \leq 0.001$ ).