LEVEL OF REFLECTIVE THINKING AND ITS RELATIONSHIP WITH SOME VARIABLES AMONG THE VISUALLY IMPAIRED

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ABSTRACT
The current study aimed to identify reflective thinking and its relationship to some variables to the visually impaired, the sample of the study consisted of (120) Visual handicapped students, and they were (60 partially visual impaired, 60 Blinds were randomly chosen from schools of Visual impairment in Jordan, in the year 2017/2018, the researchers used a true and firm measures of reflective thinking for the purpose of the study and use mathematical averages and standard deviations and bilateral analysis of variance (Tow way ANOVA) means data processing and the statistical analysis found the following results:

- Overall average of measure reflective thinking (3.34) and standard deviation (0.77821), and the General level for reflective thinking was average.
- Statistically the studies found significant differences between genders in reflective thinking, and was in favor of the females.
- There is no interaction between the intensity of visual disability and gender in level of reflective thinking of chosen sample.

Recommendations and proposals were developed based on the findings of the study such as: conduct a similar study to the visually impaired to identify the nature of reflective thinking they have and the extent of school's influence to the thinking visually impaired.

KEYWORDS: Reflective thinking, Visual impairment, Jordan.

INTRODUCTION:
Reflective thinking is one of the important thinking to the educator’s community dramatically demanding needs to be taught and integrated into the curriculum out of traditional style and indoctrination to learning style based on using the thinking skills, as reflective thinking helps build student personality and invests in their abilities through the consolidation of the principle of organizing thinking among educated groups.

(Al-zagol pointed out 2009) the use of reflective thinking skills help the learner to adapt in different situations, and (Lyons said 2010) pointed out that reflective thinking depends on various subjects give importance to the brain and arranged of importance to the person. Also (Lim & Angelique, 2011) said that to many positives in the exercise the reflective thinking in the education process and contribute to greater reflection and improve education and lead to new ideas and concepts and raise awareness of the needs of the learner and improving the learning process. (Kovalik & Olsen, 2010) added that there are a need to take some teachers when procedures reflective thinking skills training and development programs and activities and teaching methods to help students to experience and previous experience related to the main topic, in addition to using appropriate educational strategies and programs such as the use of daily schedules and written procedures to ensure that they know how student learning in frame with enough time to reach understanding and complete tasks.

(Barakat suggests 2013) there are some theories that interpreted reflective thinking in the field of education was divided into two parts which focus on education and teacher preparations and some of these theories theory of “Sean and Clark, and Peterson” while other theories explained reflective thinking in terms of study profile and dimensions, characteristics and effect on student behavior during learning. (Al Jawaldeh and Qamash 2016) reconfirm that a person is a contemplative character that conservative and serene mood and reluctant to speak or dispose of conventional methods in education. To help visually impaired students to interact while giving them to educational material so, the visually impaired programs in this field focus on and encourage on those visually impaired, or those with residual vision, that are used to the greatest extent possible, in addition to the reactions of the parents could also contribute to reducing the mental growth through extra protection that prevents the child from doing an independent behavior to identify surrounding environment (Smadi et al, 2003).

Different degrees of Visual impairment effect on mental development depending on the severity of disability, low vision which allows some degrees of vision leads to significant changes in relation to the information available to the visually impaired child, unlike the blindness which prevents the child from getting any information from the surrounding environment, so, the visually impaired programs in this field focus on and encourage on those visually impaired, or those with residual vision, that are used to the greatest extent possible, in addition to the reactions of the parents could also contribute to reducing the mental growth through extra protection that prevents the child from doing an independent behavior to identify surrounding environment (Smadi et al, 2003).

Problem of the study:
The current study seeks to identify the level of reflective thinking to the visually impaired.

Study questions:
The study attempted to answer the following questions:

1. What level of reflective thinking of visual disabilities?
2. Are there any statistically significant differences at the level of (α = 0.05) at the level of the meditative thinking I have visually impaired due to variable gender (male, female) and the degree of Visual impairment?

Importance of the study:
Theoretical importance: Shows that important in looking at level of reflective thinking of the visually impaired to provide educational literature for researchers interested in the education of the visually impaired, and detect the level of reflective thinking and its relation with sex and degree of full or partially disability. The present study shows the importance of reflective thinking skills as it allows visually impaired students to interact while giving them to educational material and dispose of conventional methods in education. To help visually impaired students use reflective thinking skills to enable them organize experience and contemplate what they can comprehend and acquisition.

Either practical significance of current research results shown by draw attention...
to some educators how importance of training in the use of reflective thinking skills for teachers with visually impaired students, and work on building programs and activities in the sensitive thinking levels and capacity among the visually impaired by giving importance to integrate academic content thinking skills and learning methods and techniques change building on the thinking. And providing researchers with high-cytometry properties measurement of reflective thinking

Study terms:
Reflective thinking: directional reflection towards the mental and planning processes for a specific goals and plan for self-awareness actions and knowledge of self-reflection and generate ideas depend on verification and look deeply into things and findings and result analysis for making the right decision and validated to resolve the problem. (Alfar 2010)

Blind: The people who turned their disability without their learning by normal means, so they need modifications in teaching materials and in methods of teaching in the school environment. (Al-Rousan, 2001).

Visually impaired: The people who can read and write using magnifying lenses and books in uppercase. (Akgwaldh, 2012)

Study limitations and boundaries:
Sample: This study was limited to students who are blind and partially blind.

Tools: The results of this study are determined in the light of the study sample response.

Generalization: The study used tool and psychometric characteristics extracted and research methodology used and accuracy as well as treated expats response study tool.

Previous studies:
1. Developing Reflective Thought in Preservice Educators: Utilizing Role-Plays and Digital Video; LeAnne Robinson, Kelley; First Published June 1, 2007)

This study was designed to investigate the role of video in the growth of written reflective responses between two groups of preservice teachers. Fifty-four students enrolled in four sections of a required special education course that focused on family-professional collaboration participated. Subjects included candidates seeking general and special education certification and a teaching endorsement in special education. Participants were divided into two groups. Group 1 students participated in three role-plays, reflected on their actions, and then wrote reflections after each role-play. Group 2 students participated in three role-plays that were recorded with digital videotape and placed on a streaming server. Students watched each video, reflected on their actions, and then wrote reflections. A developmental coding rubric was used to score students' written reflections following the role-plays. Analysis of the written responses and follow-up focus discussions demonstrated an increase in reflective thought in the written reflections of the students who used videos. Findings also showed positive attitudes about the use of technology for personal reflection. Implications for future practice and the use of digital video technologies are discussed.

2. Assessing Students' Self-Reflective Thinking in the Classroom: The Self-Reflective Thinking Questionnaire; Joke H. Van Velzen; First Published December 1, 2004)

The development of a questionnaire to assess students' use of self-reflective thinking in the classroom is described. On the basis of a literature search, items were selected. The items are students' self-report measures and open-ended questions. The participants were 96 fourth grade secondary vocational students from six classes in The Netherlands, all of whom were used to learning in cooperative groups. Complementary data were selected to validate this questionnaire. Visual inspection of the students' written responses was used to validate the questionnaire. The use of the questionnaire to assess students' self-reflective thinking within the classroom are discussed.

3. Using Problem Solving and Effective Teaching Frameworks to Promote Reflective Thinking in Preservice Special Educators; Lisa A. Dieker, Lisa E. Minida-Amaya; First Published January 1, 1997)

As the number of teacher preparation programs that focus on developing reflective practitioner’s increases, there exists a need to define the components of reflective practice and to examine how various techniques affect preservice teachers’ reflective thoughts. The purpose of this study was to determine the impact of training and reflective frameworks on the reflective patterns of preservice teachers. The frameworks (a series of questions that allow for systematic reflection on teaching) and training focused on aspects of effective instruction and problem-solving. A multiple baseline design across subjects was used to evaluate the effectiveness of training and reflective frameworks on levels of problem-solving in daily journal entries. Results of the study indicated that the effective teaching frameworks had minimal impact on preservice teachers' levels of problem solving. In contrast, direct training and the use of a problem solving framework increased the degree to which preservice teachers reflected on problems encountered in classroom instruction.

4. Day School or Residential School: Which is Better for Development of Creative Thinking Abilities of Blind Children?; Glennelle Halpin; First Published August 1, 1977)

The creative thinking abilities of 81 functionally blind 6-through 12-year-old boys and girls attending public day schools or residential schools for the blind were studied. Both types of schools seem to be equally good with regard to the development of the creativity of blind children for the boys and girls in this study who attended day schools or residential schools did not differ significantly in verbal fluency, flexibility, or originality. The younger and older children in both types of schools were comparably fluent and original; the older children were more flexible than the younger.

5. Strategies for Knowledge Acquisition from Cartographic Maps by Blind and Visually Impaired Adults; Simon Ungar, Mark Blades & Christopher Spencer Pages 93-110| Published online: 18 Jul 2013

Two experiments are reported both of which employed a research design originally used by Thorndyke and Stasz (1980) to elicit the spontaneous strategies of map readers, and to relate these to their skill in map reading. In Experiment 1, blind, visually impaired and sighted children explored a tactile or print map while “thinking aloud”. The protocols obtained were analyzed according to a set of strategy types. The children were also asked to produce a copy of the map to test knowledge of it. These were according to accuracy. Experiment 2 used the same basic copy procedure with blind, visually impaired and sighted adults, who explored a more complex town map and a plan of a building. Sighted participants produced more accurate copies of the map, and used strategies that focused on global spatial relations on the map, while blind and visually impaired participants tended to focus on individual localized elements of the map. However, those blind and visually impaired participants who produced more accurate copies of the maps, tended also to adopt a more global focus.

6. The Relationship between Critical Thinking Skills and Development of Reflective Judgment among Adolescent and Adult Women. Brabeck, Mary Margaret

Many educators believe that, regardless of innate abilities and acquired skills, students at different educational levels do not think in the same way. To account for these differences, 119 female students representing four educational levels (high school seniors to graduate students) completed the Watson-Glaser Critical Thinking Appraisal Form A and the Reflective Judgment Interview (RJI). The results supported previous reflective judgement studies in which RJI scores increased with educational level. This finding suggests that the development of reflective judgement is separate from and involves something other than the acquisition of thinking skills, although attainment of critical thinking skills is still necessary for the development of reflective judgement levels. (JAC)

Descriptors: Academic Achievement, Adolescents, Age Differences, Cognitive Style, Comparative Analysis, Critical Thinking, Females, Higher Education, Intellectual Development, Logical Thinking, Secondary Education, Young Adults

Publication Type: Reports - Research; Speeches/Meeting Papers
Education Level: N/A
Audience: N/A
Language: English
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Authoring Institution: N/A


In reflective practice, social work students are encouraged to undergo self-reflection. It is a process of self-analysis, self-evaluation, self-dialogue and self-observation. Under appropriate conditions, social workers' self-reflection can be very constructive, resulting in self-enhancement. However, under inappropriate conditions, social workers' self-reflection in reflective practice can be destructive and create problems for their professional and self-development.

8. Evidencing Reflective Practice in Social Work Education: Theoretical Uncertainties and Practical Challenges; George Wilson, The British Jour-
The aim of this study is to examine the relationship between the 7th and 8th grade students' reflective thinking skills towards problem solving and their attitudes towards mathematics, the arithmetic mean and standard deviation between levels of reflective thinking and problem solving skill levels, and a positive relationship between teenagers from visual disabilities and adolescents are sighted in the average level, the results showed no statistically significant differences in the dimensions of the study sample of adolescents except after evaluation, the average level, the results showed no statistically significant differences between teenagers from visual disabilities And adolescents are sighted in thinking and problem solving skill levels, and a positive relationship between levels of reflective thinking and problem solving skill.

11. In the Study of AlWazeez 2016* aimed at identifying the development of reflective thinking visually impaired students in the second year of secondary school and the teacher guide for cognitive operations unit of psychology and social processes models unit of sociology to sophomore students, use the scale level of reflective thinking and problem solving skill level among adolescents of visually impaired and sighted peers, use the scale level of reflective thinking and problem solving skill.

12. In the Study of Hatemia 2016* aimed at identifying the development of reflective thinking towards problem solving and their attitudes towards mathematics, the arithmetic mean and standard deviation between levels of reflective thinking and problem solving skill levels, and a positive relationship between teenagers from visual disabilities and adolescents are sighted in the average level, the results showed no statistically significant differences between teenagers from visual disabilities And adolescents are sighted in thinking and problem solving skill levels, and a positive relationship between levels of reflective thinking and problem solving skill.

Method and Procedure:
Study: researchers use descriptive method which is best suited for this kind of studies.

Study samples: the study consist of (120) students distributed among two classes as the following: visually impaired students class, sex (male, female) and severity of disability (Visual disability, partial visual impairment). It should be noted that students have been excluded from non-visually impaired, medical examiners' Official and approved by the study personnel. Have been using simple random selection method study.

Table 1 shows the distribution of visually impaired students study members by sex and severity of disability.
Correct measurement of reflective thinking:
The reflective thinking consists in its final form (25) paragraph. To judge the subject's estimates are using gradient Quintet (always, often, sometimes, rarely, never). The meter was corrected by giving former staging numbers (5, 4, 3, 2, 1) in case of positive paragraphs, and reverse in case of the negative weighted paragraphs, so the highest mark obtained is (75) and the lowest mark is (25). To judge the level of reflective thinking

The following criteria were used:
• (1.0 to 2.33), low level.
• (2.34 less than 3.67), medium level.
• (3.67 to 5.0) a high level.

Study variables:
Reflective thinking
Social thinking
Degree of disability

Results on the first question. "What level of reflective thinking of visual disabilities?"
To answer this question was extracted arithmetic and the standard deviation for the level of reflective thinking for visual disabilities,

<table>
<thead>
<tr>
<th>Table 2: arithmetic averages and standard deviations for the level of reflective thinking of visual disabilities in descending order according to the arithmetic</th>
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<td>Rank.</td>
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Table 3: mathematical averages and standard deviations for the level of reflective thinking of the visually impaired as variable gender (male, female) and the degree of Visual impairment

<table>
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<tr>
<td>Severity of disability</td>
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<tr>
<td>------------------------</td>
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<tr>
<td>Blind</td>
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<tr>
<td>Visual impairment</td>
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<tr>
<td>Total</td>
</tr>
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</table>

*Arithmetic in terms of paragraph.

Results on the second question: Is there a statistically significant differences at the level of (α = 0.05) at the level of the meditative thinking I have visually impaired due to variable gender (male, female) and the degree of Visual impairment?
To answer this question was extracted arithmetic means and standard deviations, and analysis of variance was performed binary analysis which reveals in tables (3-4).
The results shown in table (3) there is a virtual difference in average grades of reflective thinking depending on the severity of disability and sex variables and verification of differences according to sex and severity of disability are real differences, not by chance, a variance analysis due to differences shown in the table (4).

Table 4: analysis of variance of level of reflective thinking of visually impaired depending on the severity of disability and sex variables

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>Degrees of freedom</th>
<th>Average boxes</th>
<th>Value &quot;F&quot;</th>
<th>Level indication</th>
</tr>
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<tbody>
<tr>
<td>Social Kind</td>
<td>955.48</td>
<td>1</td>
<td>955.48</td>
<td>6.21</td>
<td>0.01</td>
</tr>
<tr>
<td>Sex</td>
<td>3875.80</td>
<td>2</td>
<td>1937.90</td>
<td>12.59</td>
<td>0.00</td>
</tr>
<tr>
<td>Sex Social Kind</td>
<td>367.99</td>
<td>2</td>
<td>154.00</td>
<td>1.00</td>
<td>0.37</td>
</tr>
<tr>
<td>Errors</td>
<td>60631.38</td>
<td>114</td>
<td>153.89</td>
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<tr>
<td>Total</td>
<td>65770.66</td>
<td>119</td>
<td></td>
<td></td>
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</table>

Shown in the table (4) statistically significant differences between gender in reflective thinking, the calculated value (f) (6.21) and statistical significance at (0.05), and the degree of freedom (1) and for females, the average reflective thinking they (88.95) and standard deviation (12.16) while the average male (87.02) and standard deviation (13.19).

And proven statistically significant differences in reflective thinking by severity of disability, the calculated value (f) (12.59) is greater than the value (f) at the table (0.05) and the degree of freedom (2) and for the visually impaired, average students in reflective thinking (90.88) and standard deviation (11.17) is higher than the average score for the total cessation of (93.17) and standard deviation (13.38), showed Results the lack of interaction between the degree of disability and gender, the calculated value (f) (1.00) is less than the value (f) at the table indication (0.05) and the degree of freedom (2).

RESULTS DISCUSSION:

The first question results showed that the level of reflective thinking moderately came around (3.3).

This will confirm and lead to conclusion that blind students still need to develop their reflective thinking through skills and training.

The partially/total visual impaired students contribute significantly to the inabil-

ities of the blind to use these skills on their own without being trained on this result agreed with study “Wazeeer, 2016; Joke H. Van Velzen, 2004; LeAnne Robinson, and Bridget Kelley, 2007” so that continuous training helps develop some skills of reflective thinking and academic achievement.

The results of the second question statistically significant differences between social reflective thinking, and in favor of the females.

This result can be explained in terms of the reflective thinking skills and needed specific personal style capable of reflection and feeling sympathy.

This thinking is considered one of the defining characteristics of females being spend longer time at home; differ than the who spend most of their time outside. Also the results showed statistically significant differences in reflective thinking by severity of disability, and can be explained by the fact that the visually impaired may have visual residue enables them to draw a picture frame for pho-
tos and events which helps them reflective thinking and did not agree with the result of “Hatimeh 2016, Huy Phan Phuong 2009 “in terms of differences between males and females.

The results showed the lack of interaction between the degree of disability and the social gender.

RECOMMENDATIONS:

1. Incorporate reflective thinking skills in the curriculum for blind and visually impaired

2. Subjection of the blind and visually impaired to training courses to develop the skills of reflective thinking they have

3. Working on further research on the skills of reflective thinking of other samples from people with disabilities

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ment among students in eighth grade unpublished master of Al-Azhar University, Gaza, Palestine