

Innovative Problem Solving and Mental Perception and Their Relationship to Social Information Processing

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Identifies the research problem by the scarcity of research in a relationship related to T between the ability to solve problems and creativity and the perception of social information for mental processing. Among the justifications for the researchers' complaint, students lack the ability to solve problems, the creator said, and the absence of the target did not appear and was less mature and responsive to the processing of social information. He pointed out (Berry and Berry, 1987: 12) even many undesirable forms of social behaviour that appear in the sites of activity, may be due to a lack of one of the social information processing skills. Ramadan (200) mentioned that this ability works to extract the relationships between vocabulary to formulate assumptions and come up with solutions of a creative nature, Thorne (1979) believes that for an individual he can practice this type of innovation that must destroy multiple and varied sources and different skills, the parties and this does not happen only in the sites of activity that allow freedom of thinking to include areas of thinking The vast exponents of alerts, which encourage innovation within the framework of mental perception, have been found as raw materials provided by activity. This position is one of the key vocabulary in my visualisation work where this process is on environmental vocabulary.

Key words: *Creativity, Perception of Information, Social Address, Extract Relationships.*



Introduction

The Importance of Research

1. Shedding light on the new relationship (within the limits of the researcher's knowledge) between solving innovative problems, mental awareness and the variable of social information processing.
2. To adopt informational discussion from the perspective of the listener of our concepts and terminology to explain social reality.
3. The research adopts the Dodge model and attempts to verify its effectiveness.

As for the Practical Importance

1. This research has benefited from changing students' attitudes towards practicing university activities due to its educational benefit.
2. Returning interest in organising university activities on scientific grounds until achieving the desired goal.
3. Increase the excitement of students at the university with the place of its phrase to practice hobbies.

Research Objectives

1. Differences with d/ statistics in the ability to solve innovative problems by variable gender and specialisation.
2. Differences with D in machine statistics in mindset by gender and specialty.
3. Differences with d for automated statistics in the treatment of social information by gender and specialisation.
4. The extent to which creative problem solving and mental visualisation contribute to social information processing skills

Research Limits

The current research is being determined by Al-Mustansiriya University students for study in the early morning and for the academic year 20-20-201.

T.Iron Terminology

1. Creative problem solving Creative problem solving Abu Gado and Novell, 2010 define it as a practical and creative approach that leads to an effective result.
2. Mental perception Mental Imagery He knows Muhammad Hassan Allawi (1997: 252) is the process by which the individual conjures up the physical characteristics of stimuli or

situations and gives them up as if they were in front of him completely and is being modified

3. Social information processing skills Information processing skill social. Little Perry Dodge definition Dodge (12 :1987) of this change as being the learner's mastery of the stages of coding, coding, and formulating a response to social attitudes in the presence of others.

Theoretical Framework

The first - problem solving: an innovative grid: a small metal (19 97: 110). The creative state of problems is the process by which a person takes advantage of the energy, materials and information available in the environment, to transform it in a way to improve efficiency and effectiveness in performance to achieve specific, clear and clear goals. A specific definition of problems requires clarification. The environment associated with the problematic situation and linking the various information available together and the relationship of all the components associated with the main problem with each other, Thorn .R (1979: 156) that the effective solution to any problem is very complex and is affected by a number of creative factors and results that depend on the balance of these factors and attention to some details Small ones that are still open options and prevent rush to make judgments only in time and original and new results often occur when an open method of training is used, and this includes using resources, people and methods in a varied way to achieve results that ensure development for all. (Al-Zayat, 2009), Sternberg (1999: 364) believes that the student needs to see his pain the whole concept of a new and different perspective so that he does not limit the advantages of an effective solution to problems is creativity through which the individual has not been addressed to expand the possibilities of making choices so far, it can He solved many traditional problems by creating and discovering a sector that broadens his ability at the beginning of the so-called sensitivity to Guildford's problems Sensitivity to one's problems in being aware of inconsistencies and unclear problems (Dillon, 1982; 67 (Basadur, Green, Wakabayashi)) 1990 is the most important thing that distinguishes Steps to solve creative problems About creative problem solving are the following:

1. The stages of solving an innovative problem depend on clear and organised steps to solve vague and not well-defined problems, provided that they are solvable at the present time and that the fermentation stage for ideas is short.
2. Innovative problem solving is a skill in which divergent thinking is used in its various phases, as well as group thinking (convergence) skills, but specifically.

As you remember Russ (470 ,1998) that the differences in the categories of important cognitive processes that appear in innovative problem solving:

1. Bifurcated thinking, which reaches a system of relationships between stimuli, to reach a new knowledge pattern

2. Transformational capabilities.

Guilford described them as important in a creative solution to problems in all their steps and stages. Branching thinking takes various paths and freely links them. As for the transformative capabilities, the individual can transform it and reformulate it in new patterns and specifications that correspond to the original image of the vocabulary.

(Al-Taie, 2007: 1: 165) Steps to solve the innovative problem:

Asborn came to these two phases, bringing him to five steps: discovering facts, discovering problem and idea, discovering solution and accepting solution. As for Isaac and Turner, they added a sixth step: finding a dead end. Steps six:

1. Discovering the impasse or blurry problem
2. Discover facts, alarms and information
3. Detect the problem and determine the appropriate selection
4. Discover the idea by which to reach a solution.
5. Discovering the solution, which is the stage of presenting this solution
6. Accepting the solution, which is the stage of presenting this solution

The scientists divided it into three stages, shown below. The first stage - understanding the problem, understanding the problem, as Elwell sees (19 83 83). The first step in dealing with the problem is to reach a point that the student focuses on in order to achieve the beginning of creative thinking or questioning this problem, and this component is reached by the individual through:

1. Awareness of the problem of motion blur (before identification) was mentioned (Mumford et al). All creative problems are often poorly defined, there is no doubt that an individual's awareness of them represents the first steps in a solution, and an individual's discovery of the problem poses the birth of the problem. If a natural image of the child was presented with something irrational, we find that he explores it and says (I must correct this image, there must be a mistake required) or we find it when describing the image and remember it was a mistake
2. Data collection : It is a brainstorming process using the principles of divergent and convergent thinking to collect the related data or that are useful in forming perceptions of the solution, and Trivinger believes that to determine the data to be collected, the questions must be answered (who, what, why, where, and how)
3. Defining the problem :The student here is arriving at a clear identification of the problem and finds a desire to solve it, and in this the individual puts multiple formulas for multiple problems, and here the individual undertakes activities, processes and events that precede

the solution, as it is useful in focusing on the degree of homogeneity in the components of the problem in addition to formulating it In different oral or symbolic ways.

4.

Dillon, 1982; 65 (There is no doubt that each stage of the creative problem is judged by the availability of conditions for innovative thinking skills, namely:

1. Fluency Fluency Torrance defines it as being able to summon as many appropriate responses as possible to a particular problem or stimulus during a given time period.
2. Flexibility it is the ability to change the mental angle through which the individual views multiple things or situations so that he can be freed from actual inertia and move between different categories of ideas without being confined to one category of them.
3. Originality means the ability to produce ideas that are novel and novel or reflect the ability to penetrate beyond the clear, direct and familiar ideas as it is based on far-reaching implications in terms of time or logic (Al-Otoum and others, 2009: 56-58).

Second: The theoretical framework for mental perception : Muhammad Al-Arabi Shamoun (1996: 46) sees that mental perception is the core of successful thinking processes, and it is a reflection of things and appearances that the individual has previously experienced in his experiences , as he knows him (Fishkin, 1989) As one of the types of representations defined in human memory, it is in fact mental records of conversations, lectures, and experiences that the individual has gone through.Jaber Abdel Hamid and Alaa Kafafi (1991: 673) stated that the perception in the lexicon of psychology and psychiatry is that it is a grouped mental image and that it is a distinctive feature of the human being whose senses depend as one of the sources of knowledge such as visual perception or auditory perception. Muhammad Hassan Allawi (1997: 259) states that mental perception is an acquired skill that can be learned and developed with training ,because it is useful in improving performance in terms of speed, understanding, accuracy and efficiency in establishing abstract relationships between the perceived events .Muhammad Hassan Allawi (1997: 253) believes that mental perception is linked to many dimensions, including:

1. Use all senses to retrieve and evoke topics and images.
2. Conceptual experiences are similar to sensory and cognitive experiences, i.e. the individual exercises a viewing of a picture or a sense of the accompanying movements during the retrieval process.
3. Being fully aware of conceptual experience as one of the differences that distinguishes it from daydreaming.
4. It also increases the efficiency of the recall of memory.

He mentions Cox 1994the brain uses mental perception to provide repetition ,detail, intensity, and a sequential display of important motor skills.

Types of Mental Perception

A- The internal mental perception :where the individual calls the juvenile or the situation in which he was trained and mastered, but without a kinetic act for him, that is, he practices his mind and reviews it.

B - External mental perception: It is that the individual claims that he is observing himself from the outside and directing it and stopping at a specific point of performance that he chooses selectively to emphasise the technical and technical aspects of health in it(Lim, 2002; 190)

Mental Visualisation Theory

Show Allan Paivio (1997)his theory is called the dual coding theory ,which holds that individuals encode stimuli in a visual and verbal form, and this undoubtedly leads to retaining expertise in verbal form and in the form of descriptive characteristics, which facilitates retrieval operations) .Quamma, 2005; 203 As for Hebb (466 :1986)He mentioned in his theory the cell structures where the mental image is formed when the nervous system structure is activated in the absence of visual or auditory supply processes for the senses and this structure can be classified into two categories:

1. A structure with low-level compositions: which is evoked by specific optical frames and is found in the eye network.
2. A structure with high level combinations that can be stimulated and aroused through ideas, conclusions and assumptions.Roshka, 1990: 77)

Third - Social Information Processing

In a study titled Social Skills, (1975 Tomes Stephen) (Abbas Ragheb, 1993, 31) stated that education should contain a factor of social behavior growth alongside cognitive or academic behavior, especially since school is a typical community of similar great society, where The learner needs to interact with the values, behaviors, and ideas that have already matured, and Bellanca & Fogrity (1991: 50) indicates that school social skills must be prepared within a plan by which they are identified to achieve a set of near and long-term goals. Add to this the opinion of both Cummings & Haggerty (1997: 28) that teachers who use strategies to develop social skills are more comfortable and satisfied with general teaching classes, compared to teachers who do not follow this curriculum, and (Riggio) 1987 (mentioned in Hani Ibrahim Atris (14.14.1997) that social skills are strategic education T-Giat and are determined through special cultural and social standards that govern how people communicate and communicate between them, and this strategic T Tiat can be trained to achieve the individual's internal balance and adapt to the requirements of the environment used by social opinion to see that social competence manifests itself In three skills

1. Social expression :It represents the ability to participate with others in social conversations and influence others. It is called Reggio, the communication skill (Mamdouh Salama, 1990, 162). This skill may appear in extreme forms as Ibrahim Atris (1997: 18-21) states in the form of scarcity. Talking or chatter there is no doubt that these two types of faults represent major obstacles in social interaction.
2. Social sensitivity : Reggio defines it (in Muhammad al-Sayyid Abd al-Rahman 1998: 6) as the ability to understand the norms and norms of appropriate conversation ,commitment, and awareness of what an individual does during a social situation by considering the individual as a receiver and sender of certain social messages .
3. Social Control :Reggio defines it (in Muhammad Al-Sayyid Abdul Rahman 1998: 6) as the ability to play the role and self-evaluation of society in a manner that is appropriate and unavoidable in any situation and the ability to harmonise with different people in backgrounds and interests .

Social Information Processing Skills Social Information Processing Skills

Dodge mentioned in 1986 in (perry1987: 12) that when analyzing problems of social behavior from aggression and violence that appear in several forms, he managed to reach a number of cognitive processes or media skills under which any social reaction of individuals and the most beautiful of these skills in His five-step model, which I consider to be the intermediate variables that influence different social situations, and I agree with him on that Lemerise et al (2000: 107). Social information processing cases integrate cognitive and emotional processes together, as there have been neurological physiological signs of the emotional aspects that appear during an individual's social decision-making regarding any situation. Dodge summed up these steps or skills as follows:

* Encoding social forecasts: It means the individual's ability to record and translate some of the social signs, signs and hints that are in the situation because these signs are the first alert message that comes in any situation and each culture may be identified by a set of signs or their own predictions and give them the appropriate indication and for this These predictions can only be evaluated in light of one's own culture .This step represents the first administrative response, which calls for the individual to think and reflect on the situation, just as these predictions after which the individual expects the direction and strength of the social position, and these predictions that the individual records and give them meaning as a key to what follows from them, they represent Icon Shorthand.

* Interpretation of behavior :This step represents the individual's interpretation of the behavior of the predictors that came to the individual or that are issued by him. There is no doubt that the predictor differs from the interpretation of the behavior. In the current step, the individual converts the predictions into certain interpretations and connotations that have an

emotional and emotional content in addition to having cognitive content Sometimes, in this step, the individual identifies the problem that he finds stopping his attention with, and there is no doubt that the alarm takes on a different meaning if it is in a specific social form .

* Generate response alternatives or seek response :in this step it is mentioned Dodge The individual generates internal responses to him and reactions that are expected to be responses to previously perceived stimuli , that these responses are through various experiences that the individual has gone through before and test their quality to control situations or solve problems as these alternatives to response depend and the values that the individual lives in his community and the extent of his relationship with one another , found him in the social and characterised the move as broad as may include numerous and non - final of responses depending on the specific types of experiences in which the individual enters with the other in various activities or practices of.

* Initiation of the response :mention Tur kaska (2984 :1993that in this step the dimensions of the chosen response are formed and are reappear able but rather appear already and the individual then monitors the reactions resulting from the response and the emergence of any other predictions that actually lead to returning to practice these steps again in pursuit of the next response.

Previous Studies

The researcher did not find, within the limits of his work ,studies that dealt with the relationship between the variables and some of them. Therefore, the researcher will address the studies of each variable separately:

First - Studies that tackled innovative problem solving:

1- A study fisking (1999)It was entitled Efforts of the difference in the creative solution to problems and the impact on creativity and direction of control among gifted children, and that was on (116) students in the elementary stage where (65) children were trained on enrichment programs in order to improve the solution to the creative problem outside the framework of the school curriculum. (51) Students as a control group receive these exercises, and the results showed that the experimental group performed better than the control group in terms of solving the creative problem and self-concept of creativity.

2- A study firestion & Treffinger (1988)it was entitled the effect of training on solving the innovative problem of communication behaviors and the quality of the resulting ideas in small groups. The subjects were observed through video filming and were analyzed based on a number of criteria, including the amount of participation, the extent of regularity in participation, oral indicators of criticism, oral indicators of criticism, and indicators that are not Oral evaluation was also made of the amount of ideas produced and ideas generated, identified and the participants' satisfaction with them .The study showed an improvement in the

performance of the experimental group, which exceeded the enemies of the control group, where they were more able to generate ideas, as the participants were less able to direct criticism and less unity, and they also showed more fun tendencies than untrained groups.

3- A study Elisabeth (1988) entitled Creative solution to problems and its effect on second year prep students. The study aimed to find out the effect of training on creative solution to problems on creative thinking and artistic products issued by students. The study sample consisted of students from the age of (13-14) years and exposed students to a program that promotes fluency and flexibility Authenticity and details. The results showed that the activities of the creative solution to the problems were influential and effective in a clear and distinct way in improving the creativity of the participants, as was shown in the students' artistic production.

Second -Studies that dealt with mental perception:

1. Study both (Amabile, 1999) They emphasised that the mental practice of mathematical work as a strategy of knowledge is more effective than lack of practice, but it is less effective than physical exercise, so their training must coincide together.
2. Study Hird and Landers and Thomas and Horan (1991) indicates that the ratio of physical to mental practice is of particular importance, as it represents 75% to 25%. (Guyll, 2005)

Third - Studies that address social information processing skills:

1- A study Van Ouden (98 19) entitled Local behavior and total thought, in which he made some recommendations related to social behavior, processing of information and scientific advancement, where it was found that many children revolve around them many events and stimuli that they do not care about, which makes them behave with limited and narrow suspicion, but they were directed to think about the changes Surrounding during the issuance of their judgments and making their decisions because social behavior depends on gaining a general overall view and not limited to the variables in attitudes surrounding the individual only, but to others as well. Van The children when they are drawing attention of these variables are selecting more than they respond implementers orders opportunity and thus elevate their perceptions towards adults.

2- A study Perry (1987) is entitled Application data model Dodge processing information of a social to study the personal behavior of children ,where he found that children at the age of Riyadh until the age of 8 years are building standards coincide with adults who love them also believe that the social competence of the child depends on the efficiency of the factors Knowledge in this social behavior practiced by the child as represented in the steps of processing social information.

3- Study of Press & Landshock (Price & Landsuerk, 1998) Entitled "Providing social information and the principles of treating mothers who are at risk towards their children, as it

was found that the decrease in social information processing skills decreases with it the skills of psychological control and negotiating behavior.

4- D head Tur Kaspas & Bryan Tanis (1994) Banoa n processing skills and social information for students with learning difficulties , where he found that they had lower five skills presented by Dodge , which appeared in their choice of solutions to unfamiliar and inappropriate social situations.

5- Another study Phels Suzan (2010) entitled Information Processing: Decreased contribution or aid among aggressive adolescents ,and that was on (148) adolescents. It was found that the performance of these adolescents appeared in a weakness in the choice of the target, which represents the second step of the Dodge model ,and weakness appeared in the correct choice. The solution represents the terrifying step in the same model.

6- a study Quamma (2005)It is titled Procedural Job and Social Problem Solving for Treated Children (Bakhshouna - Violently) and Ordinary Preschoolers, where (30) children aged between (4-5) years were tested and found that they had a lack of automatic attention and ability to Palm responses was associated with the first step of Dodge's steps, which is encoding social environments. As for the reduced planning, it was linked to the stage of generating responses.

Search Procedures

Research Methodology

en a relevant research with value related to Rtbat related to the approach followed by the researcher through the design of the research and specifying all the means and tools that will be used in the current research, and to achieve s, uh, daf search search for a job searcher for the descriptive relational approach, because it is more appropriate to achieve the goals of the research, It is considered one of the methods of scientific research, and it depends on the study of reality or phenomenon, as it is in reality and is concerned with the accuracy of the description, and expresses it qualitatively and quantitatively, so the qualitative expression describes us the phenomenon, and clarifies its properties, while the quantitative expression gives us a description that digitally illustrates the number of this phenomenon, or its size , And predicts that other variables will occur under appropriate statistical methods.

Find Community

Students of Al-Mustansiriya University student in such a research community with a total of (45281) students from morning studies for the academic year (2019-2020) and from both sexes (25390) students and students in the human specialty, including distributors (10019) male and (15371) female Scientific specialisation (19891) students from students (7855 (male and 12036) female).

The Research Sample

Means the number of individuals withdrawn from the original society which the study conducted by the methodology according to the scientific methods in order that adequate representation of society. The research sample consisted of (400) male and female students, who were chosen in a random, stratified manner with a proportional distribution of (8) colleges by (4) human colleges and similar scientific ones, by (216) male and female students from human colleges with (92) males and (124) females, (184) male and female students from the scientific colleges, by the rate of (52) males and (132) females, and the total of males (144), the total of females (256), and table (1) illustrates this.

C Doll 1: The research sample, by sex and specialisation

	Total	Type		Scientific colleges	Total	Type		Human colleges
		Female	Male			Female	Male	
Total Kidney	46	33	13	Administration and Economics	54	31	23	Education
	46	33	13	the pharmacy	54	31	23	Literature
	46	33	13	No medicine	54	31	23	Law
	46	33	13	Sciences	54	31	23	Languages
400	184	132	52		216	124	92	

Research Tools: The researcher designed the research tools to measure the variables of the research as follows:

First :The Innovative Problem Solving Test

After examining the researcher in the tests, metrics and studies related to the innovative solution to the problems, including the Torrance verbal and error test, Khairallah Test 1975 and a study (Anderson and King, 1993), the study (Olson, 1999), and a study (Liebman, 1991), and in light of this, The researcher relied on the innovative problem-solving test for the four sub-tests taken from one of the Torrens batteries for innovative thinking known as (Minnesota Creative). Thinking Test) regarding University of Minnesota, where Torrance worked in the Educational Research Unit:

1. Uses: In which the examiner is required to mention the largest number of uses that he considers unusual for both (tin can) and (the chair) so that these things become more useful and important and are in the form of two paragraphs and each paragraph is allocated a time period of (5) minutes.

2. Consequences: In which the subject is asked to state what happens if the system of things changes and becomes in a certain way, and this test includes two questions: What happens if a person understands the language of birds and animals? What happens if the earth is dug so that the hole appears from the other side? Each question is allocated a time period of (5) minutes.
3. Positions: in which the examiner is required to show how he can act in some situations, and the test consists of two situations: If you are appointed responsible for cashing in the club and one of the club members tries to enter into the thinking of colleagues that you are not honest, what do you do? If all schools were completely absent (or even canceled), what would you do to become an educator (5) ?minutes is allocated to answer each position.
4. Development and improvement: in which the examiner is asked to suggest several ways to correct some things familiar to him better than it is now such as (the degree) (ink pen) and the respondent should not suggest a method that is currently used to improve and develop this thing and he should also not care That his proposal can be applied now or not (5) . minutes is allocated for each question.

Validity of the test: For the purpose of validating the paragraphs (clear honesty), an innovative problem-solving test was introduced for (1) 0 arbitrators in educational and psychological sciences. To find out the correctness of its paragraphs, the Chi-square calculated value is a criterion for deleting the paragraph, if its calculated value is less than the tabular value, and its acceptance if the calculated value is equal to or greater than my table and it turns out that the value of the square like any calculated for all paragraphs is greater than the tabular value (3.84 (When the significance level is (0.05) the degree of freedom (1). The purpose of the stability test from problem solving, innovation was applied only to a persistence sample (60) students, and the researcher adopted the Fikrunbach method to extract persistence by analyzing the forms of persistence and the reliability factor has reached (0. 78 3) which is a good measure of indicator stability.

Second: Scale Perception of Mental

Prepared by Arab Environment Muhammad Mahmoud Khalil Saudi (1993), the scale consists of 20 paragraphs which are the answer to each sentence a yes report and answered by alternatives (often sometimes and never) that range from the degrees of these paths between (1,2,3,4) and become The maximum score in the test is 80 points. The scale value: For the purpose of validating the paragraphs of the scale to measure what was prepared for the measurement, the scale was presented to (1 0) arbitrator in the educational and psychological sciences. To find out the correctness of its paragraphs, a Chi-square calculated box is a criterion for deleting a paragraph, if its calculated value is less than the tabular value, and accepting it if the calculated value is equal to or greater than the table, and it has been shown that all scale paragraphs are usable because the value of the square is like any calculated for all paragraphs

Greater than the tabular value (3.84) when the significance level is (0.05), the degree of freedom is (1.) The stability of the measure: For the purpose of achieving the stability of the measure was applied to the stability sample (60) students the researcher adopted the method of testing the application and re-testing to extract the stability through Analyzing the forms of eye stability, and after a period of 15 days the correct answers between two applications were to find the correlation coefficient between students 'grades in the first application and grades in the second a correction so that the correlation coefficient“ Pearson ”(0. 826), which is a good indicator of the stability of the scale.

Third ,Testing R - Processing Social Information

The accredited researcher tested the information processing prepared by the researcher (Amani Saeed, 2007), the test adoption was designed according to what the theory of directives sees in the framework of the Dodge model, and the research adopted it in measuring social information processing skills, the test consists of 50 items and that the alternatives for answering each paragraph (yes, No) and scores (1.0) were given to measure the test feature. Thus, the total test scores will be (50). Validity of the test: For the purpose of verifying the validity of the test elements to measure what was prepared for the measurement, the test was submitted to (10) an arbitrator in education and psychological sciences. To find out the correctness of its paragraphs, a Chi-square Calculated box is a criterion for deleting a paragraph, if its calculated value is less than the tabular value, and accepting it if the calculated value is equal to or greater than the table. It has been shown that all test items are valid because the square value, like any calculated value for all passages, it is greater than the tabular value (3.84) when the significance level is (0.05), and the degree of freedom is (1).

Research results and discussion

The first goal: Identify the differences with the d zither the statistics in the ability_to solve problems of innovative depending on the variable sex and_specialisation .To verify the goal, the statistical data were analyzed for the scores of the research sample ,according to the variables (gender, specialisation), as the statistical method was used to analyze the binary variance) Two - Way Analysis Variance the results of the analysis are shown in table.(2)

Table 2: Analysis of variance with a bilateral interaction to denote differences in a test problem - solving innovative according to a) sex and specialisation

indication (0.05)	Value		Average squared range	Degree of freedom	Sum of squares	Source of contrast
	Tabular	Calculated				
Is D.	3.86	3.638	394.862	1	394.862	Sex
Is D.	3.02	1.828	198.369	2	396.739	Specialisation
Is D.	3.02	2.180	236.624	2	473.247	Sex / major
			108.531	394	42761.367	The error
				399	43635.040	Kidney

The researcher believes that the absence of differences in the degrees of solving creative problems of sex and specialisation is due to the curriculum and the method used in learning. It also gives students the opportunity to express their ideas in a better and more accurate way, and that students at this stage are more effective in achieving their future goals successfully and this is due to the fact that their ideas are close and their view is that the completion of a specific task is due to the nature of many factors, including the environmental conditions surrounding them.

The second goal: to identify differences with the disappearance of statistics in mental cognition, according to gender and specialisation. To verify the objective, the statistical data for the sample of the research sample was analyzed, according to the variables (gender, specialisation), where the statistical method was used to analyze two-way variance. Shown in table (3).

Table 3: Analysis of the dual variance of students' scores on the scale of creative motivation according to the variables (gender and specialisation)

Significance (0.05)	Value		Average squared range	Degree of freedom	Sum of squares	Source of contrast
	Tabular	Calculated				
Not significant	3.86	2.025	170.965	1	170.965	Sex
Not significant	3.02	2.230	188.264	2	376.528	Specialisation
Not significant	3.02	0.262	22.128	2	44.256	Sex / major
			84.441	394	33269.817	The error
				399	33.702.390	Kidney

The results showed that there are no differences in sex and specialisation in mental perception, and the researcher believes that there should not be differences in mental awareness and school specialisation and the interaction between them because it is an internal activity, that motivates students to work and persist in an effective way, and make them engage in cognitive psychological activities and transcend themselves (The limits of the process of socialisation and school curricula) that are influenced by external motives.

The third goal: to identify the differences with statistics in the treatment of social information by gender and specialisation. To verify the objective, the statistical data of the research sample scores was analyzed, according to the variables (gender, specialisation), where the statistical method was used to analyze two-way variance. Variation in bidirectional analysis - the results of the analysis are shown in Table 4.

Table 4: Summary of binary variance analysis according to gender and specialty variables

indication	Value	Average squares	Degree of freedom	Sum of squares	Source of contrast
0.002	9.542	2558.302	1	2558.302	sex
0.115	2.499	670.107	1	670.107	specialisation
		268.117	397	106442.437	Between groups
			399	109670.846	Kidney

The results indicate that there are differences between males and females, and since the average females are higher than the average of males, this means that females excel in the performance of males in the level of processing social information, and this difference can be attributed to the nature of the females and their characteristics, where they are distinguished by a tendency To tell events and stories in the smallest detail, and to invite them to believe that they must possess good social skills, and that they resort to using strategies and methods that help them develop social skills, every detail of the situation or event. This result coincides with the study of Risk Hassan Abdel Nabi (1993), which found that the practice of various activities led to the emergence of social features of respect, friendship, hygiene, honesty and cooperation, which made him recommend the need to include and enrich activities as an integral part of the school curriculum. Reggio (1987) also indicated that an external social environment can be transmitted through activity groups, and there is no doubt that Group training leads to the formation of successful social work strategies. These university activities also perform their educational and social function in addition to their educational function. Also, these activities make the university perform its educational and social function in addition to its educational function.

Fourth objective: Knowing the extent to which innovative problem solving and mental perception contribute to social information processing skills. To determine the extent to which independent variables (creative problem solving and mental visualisation) are used in the dependent variable (social information processing skills) multiple regressions as in table (5).

Table 5: Correlation coefficients and relationship determination

Estimate error	Multiple correlation coefficient squared	Correlation coefficient box	Coefficient of multiple correlation	variable
8.9611	0.049	0.054	0.233	Innovative problem solving
				Take pictures of my mind
				Social information processing skills

The results of the multiple regression analysis showed that the calculated F value that reached (11.349) is greater than the scheduled F value (3.02) by two degrees of freedom (379.2) at the significance level (0.05) as in Table (6)

Table 6: regression analysis, innovative problem solving and mental visualisation with social information processing skills

indication	The percentage	Average squares	Degree of freedom	Sum of squares	Source of contrast
D.	11.349	911.338	2	18822.677	Regression
		80.302	397	318789.713	The rest
			399	33702.390	Kidney

Among the statistical indicators of regression analysis, it was found that there is a relative contribution for each of the independent variables ,which has a contribution to the dependent variable.

Conclusions

1. There is no difference between sex and specialisation in innovative problem solving.
2. There is no difference between sex and specialisation in mental perception
3. There is a difference between male and female in information processing skills.
4. The problem - solving innovative contributes to the processing skills of social information.
5. Mental visualisation contributes to social information processing skills.



Recommendations

1. Attention to holding exhibitions and festivals to develop students' abilities to solve innovative problems.
2. Educating educators on the importance of developing social information processing skills and in increasing skills effectiveness.
3. Building educational curricula for all levels of study dealing with new educational curricula that help develop mental perception.

Suggestions

1. To reveal innovative problem-solving for other school stages.
2. Do not visualise the mental and its relationship to some other variables, such as academic achievement.
3. Creative motivation and its relationship to the ability to solve innovative problems.



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