

THE PERSONAL NEED FOR CONSTRUCTION AND SELF- REGULATION AND ITS RELATIONSHIP WITH THE COGNITIVE INSIGHT AMONG SECONDARY SCHOOL STUDENTS

Asst.Prof. Nahla N. Mokhtar, Ph.D

*College of Education/IbnRushd for Human Sciences
University of Baghdad*

ABSTRACT

The main problem of the current paper is attributed to the following inquiries:

Are secondary school students distinguished for being able to avoid the ambiguous and meaningless situations? Are they distinguished for having high tendency towards enhancing cognitive awareness in the framework of their perception of cognitive structure? Are they able to avoid all that calls into question in the certainty of their cognitive construct? Are they characterized by a disposition to organize their conduct and behavior by means of visualizing results and explaining the changes resulted from self-adjustment processes? Are they able to control their behavior and give rise to changes in the surrounding environment for achieving their aims and goals? Are they marked by a high degree of perception which help them to form the relation regardless of the situation formulated into the vividness of perception ? That is to say ,what is the nature of the personal need for construction and self-adjustment and their relationship with the cognitive insight?

Thus , the current paper aims at finding out :

- 1. the personal need to construct among secondary school students of the sample according to the variables of gender and specialty.*
- 2. self-regulation among the secondary school students of the sample according to variable of gender and specialty.*
- 3. the cognitive insight among the secondary school students of the sample according to the variables of gender and specialty.*
- 4. the correlational relationship of statistical significance between the perception need to construct and cognitive construct among the sample and according to the variable of gender and specialty.*
- 5. the correlational relationship of statistical significance between the self-regulation and cognitive insight among the sample and according to the variable of gender and specialty.*
- 6. the extent to which the personal need contributed to the construction and self-regulation in explaining the variance resulted from cognitive insight according to the variables of gender and specialty.*

To achieve the aims of the current study, three instruments are adopted: Thompson and Others (2001) to measure the personal need for construction, the second is (Brown and Lawendowski, 1999) to measure self-regulation, and (Beck and Others, 2004) for the measurement of cognitive insight. After checking the statistical and standard characteristics of the three instruments and processing the data statistically on a sample of 400 students, the results of the research showed the following:

1 Students in the preparatory stage are characterized by a good degree of personal need for construction.

2 The preparatory school students have the ability to organize themselves in their responses to the different situations they face in their daily and school life.

3 Preparatory school students have a good ability of cognitive insight.

4 The nature of the relationship between the personal need for construction and cognitive insight is statistically significant in the sample as a whole.

5 The nature of the relationship between self-regulation and cognitive insight is positive and statistically significant in the sample as a whole.

6 There is a multiple correlation between the variables of the current study.

Based on the results of the study, a number of conclusions were reached and a number of recommendations and proposals were formulated.

Keywords: *cognitive insight / personal need to construct / self-regulation*

INTRODUCTION

Kruglanski's theory is regarded as one of the contemporary trends in explaining knowledge acquisition by normal people about what surrounded them in the world in which they live including personal skills and experience and challenges in similar way to that of what they acquire from cognitive construction relating to their lives according to scientific method (i.e. they acquire scientific knowledge).

Kruglanski's theory, thus, reflected the theoretical framework that explains and tackles the term the need to construct and this concept reflects the differences between (individual differences) in creating senses that surrounded them in their outside world with the degree of high certainty, vividness and cohesion (Newberg and Newsom, 1993:133). Kruglanski has introduced (1990) the need to construct as a part of the comprehensive cognitive theory that is described as the need to some knowledge about certain subject (i.e., it is the knowledge unlike the ambiguity to approach quickly to conclusions about situational issues that they encounter). Accordingly, the need to construction stimulates learners to arrive at quick decisions when they undergo pressure of time or because of goal limitation. Nevertheless, Newberg and Newsom (1993) hold that the concept of the need to construct is like the desire to simple construction and they suggest that one method for learners for conducting a large quantity of

information together with the motivation which they experience every day since these learners who are characterized by high level of the need to construction have the tendency to grasp ready-made realizations unlike these learners who are characterized by low level of the need to construct because they have no tendency to cognitive construction since their cognitive construction is incomplete and this led to problems such as fanaticism, social fanaticism, and inclining to stereotypical solutions for problems they face (Routledge et al 2012:4)

The need to construct is only a relatively constant desire of individual differences in enduring cognitive constructions that are incomplete. However, there are some situations that led individuals to motivate themselves toward the need to construct because of the advantages resulted from construction completion and reducing the ambiguity like the situations that require countless extra-treatment. (Kruglanski, 2006: 85). Thus, the personal need to construct can be used as a scale of individual differences. Nakartu (1991) confirmed that there are similar traces of socio-cognitive treatment can be achieved by processing the need to construct in which the role played by motivation in limiting the type of treatment since the individual differences in learners' motives act as an independent variable. From one hand, learners who are characterized by high level of personal need to construct showed high readiness in adopting a strategy in daily dealings more than those

learners who are characterized by low level of personal need for cognitive construction (Newberg and Newsom 1993: 176) .

The situational variables participate in forming the increasing virtual situation formed to construction which is imposed by shortage of submitted alternatives or mismatch in information with what it is available out of given hypotheses where these variables urge the individuals to stimulate the need to construct through adopting stereotypes that are characterized by the principle of cognitive economy which Browner has confirmed in reducing cognitive effects associated with increasing processing or treatment which are very low and under low limited capacity (Moskowitz,1993:134) .Generally speaking, the individuals that are characterized by high level of the need to construction , have flexible tendency towards information process and relying on pre-existed plans out of texts to infer them by simplifying the main complexities in external world.

Accordingly , one can say that , as a result of many studies that individuals differ in their needs to construct since they use different ways and methods of perception and realization for the sake of cognitive proficiency . Hunt and Sullivan(1974) showed that the need to construct is internal state for some individuals since there is pre-existed need to construction in the realm of learning .If this construction is not found the individual will re- establish this construction to satisfy his needs and thus the personal need to construct is one of the variables of individual difference among individuals and it is possible to depend on it in classifying individuals in terms of their personal traits(Moskowitz, 2001:39).The personal need to construct resembles the concept of uncertainty of ambiguity from different sides .On the one hand the tendency of learners towards completing the cognitive construction ranging from apparent praise and eulogy to avoiding and condemnation of extremists .On the other hand , the uncertainty of ambiguity which ranges from performance of things to non – Performance.(Kruglanski ,1989:05)

The individuals with personal need to construct are characterized by the following characteristics:

1. Avoiding ambiguous situations.
2. Avoiding meaningless situations.

3. The tendency towards increasing the cognitive awareness in the framework of perception of cognitive construction.
4. Avoiding everything that called into question in certainty of cognitive construction .(Moskowitz et al , 1993: 170)

Bandura confirmed that learners have different potentials and abilities that can help them to be able to positive interaction with stimuli of environment because they are not only experiencers of reaction of external stimuli but they are part of these events and learners use mental abilities in processing environmental stimuli which can be achieved by arranging those learners to their ideas , information and believes (Bandura ,1997:55).

Self-regulation is not reinforced or restrained by personal knowledge or motivation .Yet , contextual factors should be available .To put it another way , self –regulation is based mainly on the individual’s interaction with experience that he or she encountered in social situations.

Self –reactions are associated with the formal situation among individuals and it is also associated with his cognitive responses such s ideas and fantasies (Granvold and Wodarski ,1994:55).

Self-recognition includes a group of mental processes and behavioral reactions that enable the individual to achieve his goals and aims with the attempt to avoid constraints that can prevent his adaptation with the environment (Weiland, 2007:38).

When the learners has the capacity to regulate or organize his bahaviour by means of self-regulation processes and not by connection between the stimulus and response (Bandura, 1989:88). This can help him to reach the abrupt perception or realization of relatives that contrast the structure of formal situation and re-organize these relations again and this is called insight .Insight is defined as occurrence of sudden change in realize or figure out the meaning , significance or regulation in which a type of complete understanding of relations that control things can be fulfilled that led to this change and arriving at the solution of formal situation. Insight can be happened when the perceptual regulation is repeated since the learner’s success is solving problems is based on how to perceive the characteristics and determinants of formal situations.

The individual's previous experience plays an important role in developing insight and it is also the individual's awareness of his past experience can help determine the increase of the degree of his insight. Furthermore, memory and visualization have a great impact on the development of the insight, i.e., insight experienced the integration of the individual's capabilities, mental, sensations and behavioral to have awareness about his actions and feelings in order to be able to confront life situations. (Boeree, 1998: 321).

Insight can be divided into three degrees:

1. Post-solution insight: This can be completed when the solution of formal situation was done in the individual's perceptual field.
2. Insight accompanying the solution: This can be done through revealing the solution of formal situation in the course of the individual's practices of his activity such as solving difficulties within the questions.
3. Pre-solution insight: This can be done when the individual realized the problem solution by means of processing it mentally, and before starting to attempt to solve the problem. This type of insight is widespread among smart and intelligent individuals (Al-Kandary, Al-Kanani, 1995: 462)

Accordingly, the individual's success in solving problems is based on the way the individual has perceived the determinants and characteristics of the formal situation which can help him to arrive at insight process by means of sudden perception of relations between methods or re-organization perception of the determinants of the formal situation (i.e., re-organization perceptual of the elements or determinants of the formal situation as well as the individual has transformed his previous experiences into insight situation.

There is a type of insight that might be called "the cognitive insight" that reflects the individual's capabilities into the certainty. The more the reflection degree rises, the more the self-certainty decreases. There are many factors that can influence the cognitive insight.

Statement of the Problem :

The main problem of the current research paper lies in attempting to understand the relation between the personal need to construction and the cognitive insight and the relation of self-regulation to the cognitive insight. To put it in specific way, the current study attempts to answer the

following questions: Are secondary students distinguished for having the ability to avoid ambiguous situation or meaningless situation? Are they marked by high tendency towards increasing the cognitive awareness in the framework of the cognitive structure perception?

Are they able to avoid being skeptic in the certainty of their cognitive structures?

Do they have the tendency of or they are obsessed to have ideas of relevant to the situations that they encounter so that they can reach right decisions?

To put it another way, do they prefer contents that can be marked by clarity, stability and consistency or they prefer ambiguous unstable contents? Are they able to organize their behavior in the way that they can explain accompanied changes?

Are they capable of controlling their behavior and their inclination to self-control and making changes in their behavior and in the surrounding environment with the aim of achieving self-satisfaction (achieving their goals)? Are they characterized by high degree of understanding and expressing that can help them to change from the relative ambiguity into clarity situation (Understanding and perception)?

Do they enjoy having the capabilities to think of their problems, thinking and identifying their mistakes and correcting them? i.e., what is the nature of relationship between the personal need to construct and self-regulation and cognitive insight among secondary students.

Importance of the Study

1. The importance of the current study stems from the fact that it deals with the psychological phenomenon in the field of psychology in general and educational psychology in particular represented by the personal need to construct and self-regulation and its relationship with the cognitive insight among secondary school students.
2. The significance of the present study is attributed to the fact that it sheds light on the concepts relating to the personal need to construct and self-regulation and the cognitive insight and the possibility of benefiting from them on the part of the scholars, educationalists, teachers in the educational institutions.
3. The current study is of great value because it fulfills the understanding and insight of the

factor that influenced in the personal need to construct , self –regulation , and the cognitive insight by explaining the role of the two variables of sex and field of specialization and exploring the nature of the relationship between the variables of the study.

4. The significance of the current study lies in the scarcity of Arab and world studies (according to the researcher) that surrounds the variables of the study .
5. The other aim of the current study lies in the fact that the sample of the study where the secondary school students are the main source of Arab Nation Awakening , progress and building its future represents the importance of the study .
6. The current research paper offers modern scales to measure the personal need to construct , self –regulation and the cognitive insight that can be benefitted from in the future researches.

Aims of the Study

The current study aims at finding out :

- 1.The personal need to construct among secondary school students of the whole sample and according to the two variables of gender and field of specialization.
- 2.Self-regulation among secondary school students of the sample as a whole and according to the variables of gender and field of specialization.
- 3.The cognitive insight among secondary school students of the sample as a whole and according to the variables of gender and field of specialization .
- 4.The correlational relation of statistical significance between the personal need to construct and the cognitive insight among secondary school students of the sample as a whole and according to the variables of gender and field of specialization .
5. The correlational relation of statistical significance between self –regulation and the cognitive insight among secondary school students of the sample as a whole and according to the variables of gender and field of specialization .

6.The extent to which the personal need to construct and self –regulation can participate in explaining the difference between the cognitive insight according to the gender and field of specialization.

Limits of the Study

The current research paper is limited to secondary school students in the morning studies with its two branches (scientific and literary) of the scholastic year(2017-2018).

Definition of Terms

The personal need to construction :

Kruglanski (1980) defined it as the need to knowledge about certain subject to arrive at conclusions about issues or situations that the individual might face at the aim of reaching cognitive construction completion and maintaining it (Kruglanski , 1980:75).

Thomson (2000: 23) defined it as the desire in clarity , certainty and openness on experience and avoiding ambiguity since it is reflected the inflexible tendency towards processing information and depending on the pre-existed plans.

Self-regulation :

Bandura (1999:53) defined it as the individual ‘s capability on organizing his behaviour by means of explaining the main accompanied changes by self-regulation and not by connecting between the stimulus and response since it reflected a group of psychological functions that should develop and organize self – regulation. Miller and Brown (1994:54) defined it as the learner’s ability on acting according to internal plan and without any external support or reward (i.e., the ability to carry out the pre-planned procedures and follow them .Zimmerman (1995: 217) says that it is an organized cognitive and mental process by which the individual can participate actively in order to achieve his goals.

Pintrich (2000:455) holds that it is the process that enables the learner to put forward goals and plans and employ strategies to achieve his goals by directing his experiences to acquire informational experience .

Hrbackova and Vavrova (2015:138) defined it as individual’s ability for flexible activity of behaviours ,

emotions , cognitive abilities and observing them , and maintaining them as a reaction of a group of internal suggestion and environmental stimuli and feedback .

The Cognitive Insight:

Beck et al(2004:43) defined the cognitive insight as the individual's ability as the individual's ability to evaluate his incorrect experiences and non-typical explanations of events in order to identify the main mistakes and correcting them and it is the cognitive vision that implied the individual's ability to evaluate extraordinary experience and inquiring about the probable wrong conclusions that depend on the misleading beliefs and reevaluate the wrong explanations.

REVIEW OF LITERATURE

1.Studies Dealt with the Personal Need to Construction

Ritschel et al (2007) conducted a study to identify the impact of fear out of uncertainty of the relationship between the personal need to construction and the creative performance .The sample of the study consists of (270) male and female students in the university studies with the ratio of 30% out of male and 70% female and after analyzing the data , the results showed that fear out of uncertainty was high and the personal need was associated negatively with the creative performance and when fear out of uncertainty was low , the personal need to construction was associated positively with the creative performance.

Hamti and Hasmand(2012) conducted another study to identify cognitive hardness and flexibility and the personal need to construct among adults.

The sample of the study consists of (83) individuals by (33) males and (50) females. After analyzing the data, results showed that there is a statistical significant relationship between the personal need to construct and the cognitive flexibility and hardness.

2. Studies dealt with Self-Regulation

Zimmerman and Martenz (1990) conducted a study to identify the differences among students in self –regulation according to the variables of gender and school grade and using strategy .The sample consists of (90) male and females out of fifth , eighth and eleventh classes of talented schools. In New York state after a nalyzing the data statistically , the results showed that the eighth and eleventh

students have excelled on the fifth grade students on a scale of self-regulation.

A study conducted by Abdulahad (2006) to identify the nature of the relationship between time orientation and self-regulation .The study consists of (300) male and female in teacher preparing institution in Ninva province in Iraq. Results showed that there is correlational relationship between time orientation towards future and self-regulation which is higher than other relationship .

Filothan ,Wildridge and Fraser (2012) conducted a study to identify the differences in the level of self –regulation and motivation according to the variable of gender .The sample consists of (1360) male and female students out of intermediate and secondary schools .The results showed that there is a statistical significance differences in the level of self-regulation and motivation on behalf of male students in the secondary schools.

Al-Faqi (2013) conducted a study to identify the nature of correlational relationship between self-regulation and level of ambition and future worry .The sample consists of (160) male and female students in the third grade of intermediate school in Banha city in Egypt. The study comes out with that there is a positive correlational relationship between self-regulation and future worry as well as there are no differences of statistical significance between the average of males and females marks in self –regulation.

3.Studies Dealt with the Cognitive Insight

Ali (2015) conducted a study to identify the non-adaptive cognitive structure and his relationship to insight among battered women .The Sample consists of (388) women after analyzing the data statistically .The results showed that refusal and hyper expectation and lack of independency are associated with default of the cognitive insight among battered women as well as high arithmetic mean over all the dimensions the non –adaptive cognitive structure and default of the cognitive insight as compared to non-battered women .

RESEARCH METHODOLOGY

The correlative descriptive research approach, which is appropriate to the nature and objectives of the present research, is used to investigate the relationship between two or more variables in terms of correlation and strength.

(Auda&Malkawi, 1992: 116).The correlative descriptive research approach is intended to find out the contribution of personal need for construction and self-regulation in predicting the cognitive insight of preparatory school students by calculating the correlation coefficients between personal need for construction and self-regulation and cognitive insight.

Research Population and Sample

The current research population consists of (33843) male and female students out of secondary school students subsidiary to directorates of Al-Rusafa Al-Awla and Al-Karkh Al-Awla , Baghdad governorate amounting to (13988) male students with the rate of (4%) and (19854) according to the scholastic branch amounting to (6195) male students in the literary branch with the rate of (44%) and (7793) male students in the scientific branch with the rate of (56%) and (9029) male students , in the literary branch with the rate of (45%) and (10825) female students in the scientific branch with the rate of (55%) of the scholastic year 2017-2018 .The sample of the study consists of (400) male and female students amounting to (164)male students and (236) female students distributed at (174) male students and female students in the literary branch and (222) male and female students in the scientific branch .

STUDY INSTRUMENTS

Scale of the Personal Need for Construction

Thompson et al (2001)conducted a scale to measure the personal need to construct after being translated by the researcher and verifying the authenticity of its translation .This scale consists of (12) items distributed into two branches:

- 1.The general need for construction .
- 2.The response to the shortage or weakness of construction.

Each item carries five options that the respondent should answer one of these options including (I agree to very large extent , I agree to large extent , I agree to medium degree , I agree to little degree). These options are given the grades (1 , 2, 3, 4, 5) respectively.

To ensure the suitability of the scale, its psychometric characteristic are checked as follows:

1. The Logical Analysis of Scale Items

The scale of personal need to construct has been verified by a group of references (educational and psychological specialties) and they delivered their remarks about the scale and the extent to which this scale can be suited to be applied on the sample of the study in the Iraqi environment .

The experts suggested that this scale has to be modified slightly on some of scale items and they approved this scale in 100%.

2.Experimenting the Clarity of Instructions and Items

The scale of the personal need to construct has been applied on a random sample consisting of (50) male and female students out of secondary school students. The result showed that the clarity of instructions of the scale together with its items and the elapsed time of answering these items ranging from (10) to (14) minutes.

3.Correction of Answers

The scale of the personal need to construct that has been adopted in the current paper is 5-point grading scale .Each item takes one of the following marks (1,2,3,4,5)

4.The Statistical Analysis of Scale Items

4.a Items Discrimination

The method of the two different groups have been used in the current paper to analyze the items statistically to find scale items discrimination since the coefficients of item discrimination are regarded as the psychometric characteristics of psychological standardization of item scale because this method discusses the ability of items to measure the individual differences (Ebel,1972 :399) and after correcting the answers and calculating the total mark for each individual and the two different groups in the total mark have been identified at the rate of (27%) for each group and the number of individuals in each group was (108) male and female students. T –test for independent sample has been used in counting item discrimination for each item.

The calculated T-value of significance difference in the mean of each item between the two groups in the total mark represented the discrimination force (Edwards,957:154) .Results showed that items are significant of the level of(0.05)

4.B Items Validity (Method of Internal Consistency)

The coefficient of correlation has been calculated between the marks of sample individuals of each item of the scale items and between the total mark of scale by using Pearson

coefficient of correlation . The results showed that the correlation efficient is (0.098) and it is statistically significant at the level (0.05) and freedom degree of (394) and the correlation of coefficient is between (0.186 – 0577). See the table (1).

Table (1): The relationship between the item in the total degree of scale of the personal need to construct.

| No. of Item | Coefficient of correlation by total mark | No. of Item | Coefficient of correlation by total Mark |
|-------------|--|-------------|--|
| 1 | 0,186 | 7 | 0,465 |
| 2 | 0,367 | 8 | 0528 |
| 3 | 0,505 | 9 | 0,555 |
| 4 | 0,390 | 10 | 0,577 |
| 5 | 0,458 | 11 | 0,415 |
| 6 | 0,510 | 12 | 0,525 |

5.Scale Validity

The validity refers to the ability of the scale to measure the characteristic that has been set up for its measurement (Faraj,1980:360)

The validity is regarded as one of the important pillars that the psychological test has been based on .The validity means that the test measures what is being required as it is important in achieving certain goal .It is usually measuring one of the variables (Pobea,2011:113).

The researcher has adopted the ostensible validity that it refers to the relationship of items by the variable to be measured(Kerlinger,1973:653).

The scale of the personal need to construct has been put forward on a group of specialist experts in psychological and educational sciences as well as the indices of the validity of the construction has been achieved through finding discrimination force of items and identifying the item consistency in measuring what is to be given by connecting by the total degree of the scale.

6.Scale Reliability

Reliability is defined as the accuracy of the test in measurement or observation and it is not contradicting with itself and consistency since it provides with information about the respondent’s behaviour .The test is defined

reliable if it gives the same results when they apply equal images of it (Majeed and Ayal,2011:81).At the same time it is regarded one of the indices of verifying the accuracy of the scale and its items consistency in measuring what should be measured.(Crocker and Alpiner ,1986:727)

The scale reliability has been verified by two methods:

- 1.Test-re-test the coefficient of reliability has amounted to (984) to the scale of the personal need to construction.
- 2.According to Alfa Cronbech equation the coefficient of reliability has been amounted to (0,81) of the personal need to construct.

The total scale includes (12) items to measure the personal need to construct among secondary school students.

Self-RegulationScale

To measure self-regulation in the current research paper , the scale of self –regulation put forwarded by (Brown and Cawendouski ,1999).After it has been translated and verified from the authenticity of translation by the researcher, the scale consists of (63) itemsdistributed on (7) steps or stages including:

- 1.Receiving relevant information.
- 2.Evulating information and comparing it to the standards.

- 3. Making changes .
- 4. Searching for options.
- 5. Drafting , plan
- 6. Executing a plan
- 7. Evaluating the activity of the plan.

Each item has five steps , the respondent requires answering one of the options represented by (agree to very large degree – agree to large degree –agree to medium degree -agree to little degree –agree very little degree)

The following degrees have been given successfully (1,2,3,4,5) for the scale to be suitable and to be applied on the sample of the current paper and the researcher should know if this scale needed some modifications, the psychometric characteristics of the scale has been drawn up as in the following :

1. The Logical Analysis of Scale Items

The scale of self –regulation has been verified by a group of referees and experts of educational and psychological specialties and they approved all items of the scale at the ratio 100%.

2. Experimenting the Clarity of Instructions and Items

The scale of self-regulation has been applied on a random sample out of secondary school students amounting to (50) male and female students. Results showed the clarity of the scale together with the items .The elapsed

3. Correction of Answers

The scale of self –regulation that has been adopted in the current paper is of five steps , each item has the following degrees (1,2,3,4,5) while correcting .

4. The Statistical Analysis of Items of the Scale of Self- Regulation

4.a Items Discrimination

The two different groups have been used in the current paper to analyze the items statistically to find scale items discrimination and after correcting answers and calculating the total degree of each individual , the two different groups have been delimited in the total degree with the rate of (27%) of each group and the number of individuals of each female student. T-test of two independent samples has been used to calculate items discrimination of each item between the two different group in the total degree .Results showed that all items of the scale of discrimination force and statistically significant , and calculated of T-values is more than tabulated T-value amounting to (1,96) and freedom degree is (214)

4.b Items Validity (Method of Internal Consistency)

For verifying item validity , coefficient of correlation has been calculated between the degree of individuals of the sample or each item out of items of the scale and the total degree of the scale by using coefficient of Pearson correction , results showed when comparing coefficient of correlation by the critical values of the coefficient of correlation amounting to (0,98),and it appeared that items validity is significant of the level of (0,05) and freedom degree (398) , the coefficient of correlation is ranging from (0,578-0,148) as shown in table(2).

Table (2): Values of coefficient of correlation of items by the total degree of the scale of self –regulation.

| No. of Item | Coefficient of Correlation by the total degree | No. of Item | Coefficient of Correlation by the total degree | No. of Item | Coefficient of Correlation by the total degree | No. of Item | Coefficient of Correlation by the total degree |
|-------------|--|-------------|--|-------------|--|-------------|--|
| 1 | 0,422 | 17 | 0,356 | 33 | 0,425 | 49 | 0,569 |
| 2 | 0,438 | 18 | 0,413 | 34 | 0,312 | 50 | 0,425 |
| 3 | 0,415 | 19 | 0,568 | 35 | 0,462 | 51 | 0,472 |
| 4 | 0,302 | 20 | 0,415 | 36 | 0,533 | 52 | 0,457 |
| 5 | 0,472 | 21 | 0,492 | 37 | 0,441 | 53 | 0,383 |
| 6 | 0,540 | 22 | 0,447 | 38 | 0,336 | 54 | 0,463 |
| 7 | 0,428 | 23 | 0,373 | 39 | 0,479 | 55 | 0,510 |

| | | | | | | | |
|----|-------|----|-------|----|-------|----|-------|
| 8 | 0,334 | 24 | 0,476 | 40 | 0,149 | 56 | 0,364 |
| 9 | 0,499 | 25 | 0,531 | 41 | 0,473 | 57 | 0,349 |
| 10 | 0,148 | 26 | 0,333 | 42 | 0,478 | 58 | 0,538 |
| 11 | 0,460 | 27 | 0,346 | 43 | 0,349 | 59 | 0,578 |
| 12 | 0,489 | 28 | 0,515 | 44 | 0,383 | 60 | 0,339 |
| 13 | 0,360 | 29 | 0,598 | 45 | 0,494 | 61 | 0,468 |
| 14 | 0,333 | 30 | 0,328 | 46 | 0,332 | 62 | 0,437 |
| 15 | 0,428 | 31 | 0,422 | 47 | 0,359 | 63 | 0,448 |
| 16 | 0,372 | 32 | 0,438 | 48 | | | |

5. Scale Validity

The validity is regarded as one of the most important psychometric characteristics that should be available in the psychological scale before it has been applied because it signals the ability of the scale on measuring what should be actually measured (Harrison, 1983:11) and to verify the current scale validity, the researcher has adopted the ostensible validity by means of this scale should be approved by a group of references and experts. The validity of the scale has been verified by finding discrimination force of the scale items as well as finding coefficient of correlation the degree of each item of the total degree of the scale (item validity of the internal consistency) because all coefficients of items discrimination and coefficients of items by the total degree were significant and thus the indices of the validity of items have been achieved.

6. Scale Reliability

Scale reliability of self-regulation has been verified by the following methods:

1. Test-retest and the coefficient of reliability of scale of self-regulation has been amounted to (82,0)
2. According to coefficient of Alfa-Cronbach equation, the coefficient of reliability has been amounted to (63) items. The scale of self-regulation included (63) items finally.

Scale of Cognitive Insight

The scale of cognitive insight has been adopted by (Beck and others, 2004) to measure the cognitive insight after being translated by the researcher and verified the validity of translation. The current scale consists of (15) items of five-point grading (agree to very large degree, agree to large degree, agree to medium degree, agree to little degree, agree to very little degree) and getting the following degree

(1,2,3,4,5) successfully. The current scale consists of sub dimensions:

1. Self-certainty that measures the hyperconfidence in beliefs and provisions that have been correct.
2. Self-contemplation that measures the objective evaluation and extraversion on experiences.

For the scale to be applicable on the sample of the paper, and (or it needs some modifications, the psychometric characteristics have been drawn up and as follows:

1. The logical Analysis of Scale Items

The scale of the cognitive insight has been put forward to a group of referees and psychological and educational specialists and they approved this scale in the Iraqi environment at the rate of (100%)

2. Experimenting the Clarity of Instructions and Items

The scale of cognitive insight has been applied on a random sample of secondary school students amounting to (5) students. Results showed that the results of application showed the clarity of the scale and items, the elapsed time is about (5-10) minutes.

3. Correction of Answers

The scale of the cognitive is of five-point grading and each item has the following degrees successfully (1,2,3,4,5).

4. The Statistical Analysis of Items of the Cognitive Insight

4.a Items Discrimination

The method of the two different groups has been applied to analyze the items statistically to find items discrimination and after correcting answers and calculating the total degree

for each individual of the sample and the two different groups have been delimited in the total degree and the rate of (4027) for each group and the number of individuals in each group is (102) students. Test for independent samples in calculating the discrimination force for each item between the two different groups in the total degree. Results showed that all scale items of discrimination force and statistically significance and the calculated T-value is more than tabulated T-value amounting to (1,96) and freedom degree of (214)

4.b Items Validity (method of Internal Consistency)

For the sake of verifying items validity the coefficient of correlation between the degrees of individuals sample have been calculated on each item by means of Pearson coefficient of correlation. Results, when compared the coefficient of correlation to critical values of coefficient of correlation amounting to (0,098), showed that all are significant at the level of (0,05) and freedom of (398) coefficient correlation is about (0,259 -0,553). See table (3).

Table (3) Values of coefficients of correlation between the degree of item and the total degree of scale of the cognitive insight

| No. of Item | Coefficient of Correlation by the total degree | No. of Item | Coefficient of Correlation by the total degree |
|-------------|--|-------------|--|
| 1 | 0,344 | 9 | 0,472 |
| 2 | 0,508 | 10 | 0,405 |
| 3 | 0,536 | 11 | 0,399 |
| 4 | 0,396 | 12 | 0,553 |
| 5 | 0,308 | 13 | 0,370 |
| 6 | 0,522 | 14 | 0,394 |
| 7 | 0,259 | 15 | 0,479 |
| 8 | 0,464 | | |

1. Validity of the Scale

The validity of the scale of the cognitive insight has been verified by finding two types of validity as follows :

a. Ostensible Validity

Ostensible validity has been verified by offering the scale to a group of referees of psychological and educational experts to show its validity.

b. Validity of Construction

Validity of construction has been verified by finding the discrimination force of scale items and internal consistency by calculating of coefficient of correlative of each item by the total degree and coefficient of correlation has been calculated by calculating its three dimensions , and it appeared that all coefficient of correlation are statistically significant and this refers to the validity of construction.

2. Reliability Scale

Calculating reliability is regarded as an important issue because it refers to the accuracy and consistency of some degrees and to achieve this point two methods have been adopted and they are as follows:

1. Testing –retesting and coefficient of reliability is (0,81)
2. Coefficient of Alpha Cronbach and coefficient of reliability is (0,77)

DISCUSSION OF RESULTS

The first aim is to find out the personal need to construction among students of secondary schools according to the two variables of gender and specialties.

To achieve this aim , the researcher has applied the scale of the need to construct on the sample amounting to (400) students ,the arithmetic mean and standard deviation of the degree of the sample have been calculated and according to the two variables of gender and specialties.

The T-test of one sample has been used to identify the significant differences between the achieved mean and the theoretical mean of the sample and according to the variables of gender and specialties .Results showed that the arithmetic mean of degree of the sample on the scale has amounted to (42,45) degree and the standard deviation of about (5,844) degree. After identifying the significant

differences between arithmetic mean and the hypothetical mean which amounted to (36) degree and it appeared that the difference was statistically significant at the level (0,05) and in favour of the arithmetic mean .The T-value has to (22,055) and it is more that tabulated T-value that has been amounted to (1,90) and freedom degree (399) and this refers to the sample is characterized by the personal need to construct by good degree and this means that the secondary

students are marked by tendency to preoccupation on ideas and information of the situations that they face and avoid aimless situations or meaningless situations and they avoid everything that made them skeptical about their cognitive construction and that they prefer contents and information that must be clear and consistent regardless of their gender and specialty as in table (4).

Table (4): T-Test for one sample of significant differences between the arithmetic men and the theoretical mean on scale of the personal need to construct of the sample and according to the variable of gender and specialty.

| Variables | | Number | Arithmetic mean | Standard Deviation | Theoretical Mean | T-Value | | Significance |
|-------------------|------------|--------|-----------------|--------------------|------------------|------------|-----------|--------------|
| Sample as a whole | | | | | | Calculated | tabulated | |
| Gender | male | 400 | 42,45 | 5,844 | 36 | 22,055 | 1,96 | significant |
| | female | 164 | 42,39 | 5,502 | 36 | 14,873 | 1,96 | significant |
| Specialty | Human | 236 | 42,48 | 6,082 | 36 | 16,375 | 1,96 | significant |
| | Scientific | 178 | 42,88 | 6,444 | 36 | 14,238 | 1,96 | significant |
| | | 222 | 42,10 | 5,305 | 36 | 17,130 | 1,96 | significant |

The second aim is finding out the self-regulation among secondary students according to the variables of gender and specialties.To identify the aim , the researcher has applied scale of self-regulation on a sample of about (400) students and with standard deviation of about (26,137) and after identifying the significant difference between the arithmetic mean and the hypothetical mean which amounted to (189) degree. It appeared that the difference was statistically significant at the level of (0,05) in favour of arithmetic mean .The calculated T-value is about (45,885) and it is more than

tabulated T-value which is about (1,96) and freedom degree of about (399).This means that the sample is characterized by the ability to organize conscious and unconscious processes that have been used in their responses to what they face from different situations in their school lives and they control them in the way they can achieve their aims and this reflects the students' ability to plan , evaluate and survey and they have the need to success as well as they have the need to regulation and achieving their aims as illustrated in table 5.

Table (5) Results of T-test for one sample of significant of difference between the arithmetic mean and theoretical mean on scale of self-regulation of the sample and according to gender and specialty

| Variables | | Number | Arithmetic mean | Standard Deviation | Theoretical Mean | T-Value | | Significance |
|-------------------|------------|--------|-----------------|--------------------|------------------|------------|-----------|--------------|
| Sample as a whole | | | | | | Calculated | tabulated | |
| Gender | male | 400 | 248,97 | 26,137 | 189 | 45,885 | 1,96 | significant |
| | female | 164 | 249,16 | 27,426 | 189 | 28,093 | 1,96 | significant |
| Specialty | Human | 236 | 248,83 | 25,261 | 189 | 36,383 | 1,96 | significant |
| | Scientific | 178 | 248,48 | 23,692 | 189 | 33,493 | 1,96 | significant |
| | | 222 | 249,36 | 27,990 | 189 | 32,128 | 1,96 | significant |

The third aim is finding out the cognitive insight among secondary students according to gender and specialties. The researcher has applied the scale of the cognitive insight on a sample amounting to (400) individuals. The results of the paper showed that the arithmetic mean of the degree of the paper on the scale has amounted to (58-09) degree and with standard deviation amounting to (6-809) and identifying the significant of differences between the arithmetic mean hypothetical mean which amounted to (45) degree. It appeared that the difference was statistically significant at

the level of (0,05) in favour of arithmetic mean. The calculated T-value has amounted to (38.458) and it is more than the tabulated T-value which is amounted to (1,96) and with freedom degree (399). Thus the sample of the paper is calculated by the cognitive insight and that they have the ability to be successful out of sudden perception of relations which controlled the structure of situations and reregulate these relations to perceive the meaning in that they have the ability to solve the problem regardless of their gender and specialty. See table (6).

Table (6) Results of T-test for one sample of significant of difference between the arithmetic mean and theoretical mean on scale of cognitive insight of the sample and according to gender and specialty

| Variables | | Number | Arithmetic mean | Standard Deviation | Theoretical Mean | T-Value | | Significance |
|-------------------|------------|--------|-----------------|--------------------|------------------|------------|-----------|--------------|
| Sample as a whole | | | | | | Calculated | tabulated | |
| Gender | male | 400 | 58,9 | 6,809 | 45 | 38,458 | 1,96 | significant |
| | female | 164 | 58,6 | 7,276 | 45 | 22,988 | 1,96 | significant |
| Specialty | Human | 236 | 58,11 | 6,480 | 45 | 31,090 | 1,96 | significant |
| | Scientific | 178 | 57,97 | 6,128 | 45 | 28,228 | 1,96 | significant |
| | | 222 | 58,19 | 7,321 | 45 | 26,852 | 1,96 | significant |

The fourth aim is to find the correlation between the personal need to construct and cognitive insight among secondary students according to gender and specialties. To achieve this aim, coefficient of Pearson correlation has been calculated to measure the relationship between students marks on the scale of personal need to construct and their marks on scale of the cognitive insight and T-test has been used to measure the significance of Pearson coefficient. Results of the statistical analysis showed the following :

1. The relationship between the personal need to construction and the cognitive insight was that of inverse statistical significance on the sample as a whole and that means the more the personal need to construct increases the cognitive insight decreases.

2. The relationship between the personal need to construct and the cognitive insight according to the variable of gender was of inverse statistical significant as for males and insignificant as for females and that means the more the personal need to construct increases among males, it affects negatively by the cognitive insight in the situations they face in their daily lives.
3. The relationship between the personal need to construct and the cognitive insight according to the field of specialization was of inverse significant as for scientific stream and insignificant as for literary stream which means that the more the personal need to construct increases among secondary school students in the scientific stream, it affects negatively by the cognitive insight as shown in table (7).

Table (7) :Coefficient correlation between personal need to construction and cognitive insight and its statistical significance

| Variable | | Number | Value of coefficient correlation between the personal need to construction and the cognitive insight | T-value | | Level of significance (0,05) |
|-----------|------------|--------|--|------------|-----------|------------------------------|
| | | | | Calculated | Tabulated | |
| Gender | Male | 164 | -0,203 | -2,636 | 1,96 | significant |
| | Female | 236 | -0,069 | -1,061 | 1,96 | insignificant |
| Specialty | Scientific | 222 | -0,147 | -2,227 | 1,96 | significant |
| | Literary | 178 | -0,099 | -1,320 | 1,96 | insignificant |
| Total | | 400 | -0,124 | -2,480 | 1,96 | significant |

The fifth aim is to find out the correlation between self-regulation and the cognitive insight among secondary school students according to gender and field of specialization .To achieve this aim , coefficient of Person correlation has been calculated to measure the relationship between students' marks on scale of self-regulation and their marks on scale of the cognitive insight. T- test has been used to measure the significant of coefficient of correlation ,results of arithmetical analysis showed the following:

1. The relationship between self-regulation and the cognitive insight according to gender was of direct significant and as for males and females , this

- means that the more self-regulation increases , the more cognitive insight increases too.
2. The relationship between self-regulation and the cognitive insight according to field of specialization was of direct significant as for the scientific and literary streams .This means that the more self-regulation increases the more cognitive insight increases too.
3. The relationship between the need to construct and the cognitive insight of the scale as a whole was of direct significant .This means the more self-regulation increases the more the cognitive insight increases too as shown in Table (8).

Table (8): The coefficient correlation between self-regulation and cognitive insight and its statistical significance.

| Variable | | Number | Value of coefficient of correlation between self-regulation and the cognitive insight | T-value | | Level of significance (0,05) |
|-----------|------------|--------|---|------------|-----------|------------------------------|
| | | | | Calculated | Tabulated | |
| Gender | Males | 164 | 0,905 | 27,424 | 1,96 | significant |
| | Females | 236 | 0,912 | 33,777 | 1,96 | significant |
| Specialty | Scientific | 222 | 0,910 | 32,500 | 1,96 | significant |
| | Literary | 178 | 0,906 | 28,312 | 1,96 | significant |
| Total | | 400 | 0,909 | 42,877 | 1,96 | significant |

The sixth aim is finding out the extent of participation of the personal need to construct and self-regulation in explaining the difference occurred in the cognitive insight according to gender and field of specialization .To achieve this aim , coefficient of multiple correlation has been calculated to find the relationship between the cognitive insight (dependent variable) and the need to construct , self-regulation , gender and field of specialization (independent variables) of the sample which amounted to (0,771) and the

coefficient of multiple correlation is about (0,594). F-test has been used to measure the significant of multiple coefficient correlation which amounted to (144,583) and it is more than tabulated F- value which is about to (2,37) at the level (0,05) and freedom degree of (395,4) .This means that there is a multiple correlative between all these studied variables of deviation analysis by means of (inter) has been used as shown in table (9).

Table (9): Results of Analyzing the multiple deviation by using variance analysis

| Source of Variance | Total Squares | Degree of freedom | Mean of Square | F-Rate | Significant (0,05) |
|--------------------|---------------|-------------------|----------------|---------|--------------------|
| Deviation | 10990,860 | 4 | 2747,715 | 144,583 | significant |
| Reminder | 7506,718 | 395 | 19,004 | | |
| Total | 18497,577 | 399 | | | |

Table (9) shows that the value of F-rate of analyzing the calculated deviation (144,583) was more than tabulated F-rate at the level of (0,05) and degrees of freedom of about (395,4), this means that there is a variant impact of studied variables.

variable (B) Beta values and standard error of Beta values have been calculated for relative standard and participation and T-value has been calculated to identify the extent of contributing the independent variable by the dependent variable as shown in Table (10).

To find out the relative participation of the extent of impact of each variable in explaining the relationship between the

Table (10):Contribution of the Independent Variable in the Dependent Variables

| Variables | Non-Standard Coefficient | | Coefficient of Standard Beta | T-value | Significant (0,05) |
|-------------------------|--------------------------|----------------|------------------------------|---------|--------------------|
| | Beta | Standard error | | | |
| Fixed limit | 22,206 | 2,589 | - | 8,578 | significant |
| Need to construction | -0,194 | 0,034 | -0,188 | 5,727 | significant |
| Self-regulation | 0,212 | 0,009 | 0,798 | 22,499 | significant |
| Gender | -4,014 | 0,496 | -0,290 | 8,087 | significant |
| Field of specialization | -0,373 | 0,441 | -0,027 | 0,846 | insignificant |

Table (10) shows the following :

1.The fixed limit : the resultshow that the value of coefficient of deviation (B) has amounted to (22,206) degree, and calculated T-value has amounted to (8,578) and it is more than the tabulated value which is about (1,96) at the level of (0,05) significant and this means that there are other variables having relationship to the cognitive insight which the current paper has not discussed yet.

2. The influence of the personal need to construct in explaining the variance occurred in the cognitive insight aside from other variables which equals to (-0,188) and this impact has occurred aside from other variables that can be reflected by Beta square which equals (0,0353) that is to say that (3, 53%) of variance occurring in the cognitive insight resulted from the impact of the need to construct aside of other variables and it is of statistical significant (0,05) , the

calculated T-value was (5,727) which is more than tabulated T-value which is about (1,96) and freedom of about (398).

3. The impact of self-regulation in explaining the variance occurring in the cognitive insight apart from other variables which can be reflected by Beta square which equals (0,6368) , that is to say (63, 68%) of variance occurring in the cognitive insight resulted from the impact of self-regulation apart of other variables and it is statistically significant (0,05) and the calculated T-value was (22,499) more than tabulated T-value which is (1,96) and freedom degree (398)

4. The impact of gender in explaining the variance occurring in the cognitive insight apart from other variables which equals (-0,290) and this influence is apart from other variables which can be reflected by Beta square which equals to (0,0841) , that is to say (8,41%) of variance

occurring in the cognitive insight resulted from leads to the impact of gender apart from other variables and it is statistically significant (0,05) and calculated T-value is more than (8,087) tabulated T-value (1,96) and freedom degree (398).

5. The impact of field of specialization is explaining the variance occurring the cognitive insight apart from their variables which equals to (-0,027) and this can be reflected by Beta square which equals to (0,00072) that is to say (0,072%) of variance occurring in the cognitive insight resulted from the impact of specialization apart from other variables and it is not significant statistically (0,05) and the calculated T-value (0, 846) is lesser than the tabulated T-value which is about (1,96) and freedom degree of about (398).

The researcher suggested that the personal need to construct and self-regulation according to the results of the current paper are regarded independent variables that influenced in the cognitive insight and that means when secondary school students have deep need to construct and clarity in most situations they face and they have good self-regulation and that will have good self- regulation and that will influence the cognitive insight .

CONCLUSIONS

1. The tendency of secondary school students towards rising of the cognitive awareness in the framework of their perception to their cognitive structure and avoiding what is skeptical in the accuracy of their cognitive structure .Thus they avoid the ambiguous and meaningless situations.
2. Secondary school students are characterized by the ability to organize their behaviour by means of visualizing the results and explaining changes accompanied according to processes of self- regulation.
3. Secondary school students are distinguished for the ability to perform mental processes and they are active participants in order to be able to achieve their aims.
4. Secondary school students are characterized by rising the degree of self-regulation and objective evaluation for situations that they face and openness on remarks that they encountered by others.

5. Secondary school students are able to perceive and understand to help them to change from relative ambiguity to clarity.

RECOMMENDATIONS

According to the above results , the following recommendations have been set forth:

- 1.Continuing to give psychological and social support for secondary school students for insuring the development of the personal need to construct and self-regulation.
2. Paying attention to include the curriculum by experience in order , for secondary school students to get benefited from in their daily lives that can insure the development of the personal need to construct and self-regulation as well as the cognitive insight.
3. It is necessary to make available the educational atmosphere to the secondary school students that encourages the student for setting aims suitably with their ability and inclination.
- 4.Holding training courses for secondary school students that develop their awareness to observe the extent of achieving aims that they set in their study to lives.
5. It is necessary for teachers to follow new ways of teaching that help students to be very certain and positive and be problems makers and making correct decisions in everyday situations.

SUGGESTIONS

The following suggestions have been put forward:

1. Conducting a study to identifying the relationship of the personal need to construct and self-regulation to another variable such as emotional regulation, emotional control, emotional intelligence and meta cognitive thinking.
2. Conducting a study to identify the relationship the personal need to construct and self-regulation by the recognition insight among other samples such as (intermediate school students, distinguished male and female secondary students)
3. Conducting a comparative study to identify the relationship of the personal need to construction

and self-regulation by the cognitive insight between ordinary and talented students.

REFERENCES

- Rabea ,Mohammed (2011) *Measurement of the Personality*. ed.(3). Jordan: Al-Masira Publishing House.
- Faraj, Safwat (1980) *The Psychological Scale* .Cairo : Dar AlFakar Al-Araby.
- Abdulahad, Khulood (2006) *Time Orientation and its Relationship to Self-Regulation of Learning among Students of Teacher Training Institute in Mosul* Vol.(14) .Iraq.
- Ali , Ahmed Saed Al-Shaikh (2015) “The Cognition and Non –adoptive structure and its Relationship to the Cognitive Insight among Battered Women in Jordan” *The Jordanian Journal of Social Sciences* –Jordan.
- Udah, AhmedSulaiman and MalkawiFathi Hassan (1992)*Basics of Scientific Research in Education and Humanitarian Sciences , Elements , Curricula and the Statistical Analysis of its Data* .ed.(2) Jordan .
- Al-Faqi ,AmaalIbrheem (2013) “Self-Regulation and its Relationship to the Level of Ambition and Future Worry among Secondary School Students.” *Arab Students in Psycholinguistics*. vol(2) , issue (38)
- Al-Kandary , Ahmed , Mohammed and Al-Kinany , MamdouhAbdulmuneam (1995) *Psychology of Learning and Patterns of Education* .Kuwait :Al-Falah Bookshop for Publication and Distribution .
- Majeed ,Abdulhussein ,Razouki and Eyal ,Yaseen , Hameed (2011) *Measurement and Evaluation of University Student* .Iraqi: Al-Yamama Bookshop for Publication.
- Beck,A.T.;Baruch,E;Balter,J.m;Steer,R.A;&Warman,D.M.(2004).*A New Instrument for Measuring Insight the Beck Cognitive Insight Scale*.
- Boeree, G(1998). *Insight* ,Shippensburg .
- Brown ,Miller.&Lawendowski,l.(1999).*The self – Regulation questionnaire* . inLvande Creek &T.I. Jackson (EDS) ,innovations in clinical practice :a soiree book vol 17.
- Croker ,L& Alpine (1986) . *Introduction to Classical and Modern Test Theory* , New York .
- Ebel ,R.L(1972).*Essentials of Educational Measurement* ,Englewood frentice hill .
- Edward.A.(1957).*Techniques Attitude Scale ,Construction* ,n,y,crofts,inc.
- Grandvold,K&Wodarski(1994).*Cognitive and Behavioral Treatment Clinical Issues ,Transfer of Training and Relapse Prevention*.
- Kerlingr ,F.C(1973).*Foundation of Behavioral Research* ,London.
- Harrison ,A.(1983).*A Language Testing Handbook* ,London.
- Hrbackova,K. &Vavrova, S.(2015).*Self-Regulation in Children and Minors in Institutional Care ,International Education studies*,8(5).
- Krnglanski,A.W(1980).”Lay Epistemology Process and Contents”, *Psychological Review*,87.
- Kruglanski,A.W(1989).”The Psychology of Being Right the Problem of Accuracy in Social Perception and Cognition” ,*Psychological Bulletin*,106.
- Kruglanski,A.W.(1989).*Lay Epistemic and Human Knowledge ,Cognitive and Motivational Bases* ,New York plenum press.
- Kruglanski,A.W; A.Monnetti,L.Grode(2006).”Groups as Epistemic Providers :Need for Closure and the Unfolding of Group –Centrism”. *Psychological Review*, vol 11, no 1,American psychological association.
- Miller ,W.R& Brown ,J.M(1994).*Psychometric Properties of a Self-Regulation Questionnaire, Clinical & Experimental Research*, 18,429.
- Moskowitz,G.B.(1993).*Individual differences in Social Categorization: the Influence of Personal Need for Structure on Spontaneous Trait inferences, Journal of Personality and Social Psychology*, 65. -
- Moskowitz,G.B.(2001).*Cognitive Social Psychology: The Princeton Symposium on the Legacy and Future of Social Cognition*(19-39).
- Neuberg ,L. &Newsome .T.(1993).*Personal Need for Structure ,Individual Differences in the Desire for Simpler Structure ,Journal of Personality and social psychology* ,65,113-131.
- Pintrich,P.R.(2000).*The Role of Goal Orientation in Self –Regulated Learning* in m. boekaerts, p.R.pintrich ,&M.Zeidner (Eds),*Handbook of Self-Regulation* ,Orlando FL; Academic press.

- Rietzsche I.E.F., Slijkuis J.M., Van Yperen N.W (2014). "Task Structure Need for Structure and Creativity" *European Journal of Social Psychology*, 44, 4.
- Rietzsche et al. (2007). Personality Need for Structure and Creative Performance :the Moderating Influence of Fear of Invalidity , *Personality and Social Psychology Bulletin* ,vol 33,no 6.