

# The Level of Test–Wiseness for the Students of Arts and Science Faculty at Sharourah and its Relationship with Some Variables

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## Abstract

This study aimed to identify the level of using Test–wiseness strategies for the students of arts and sciences Faculty at Sharourah and its relationship with some variables. a questionnaire was designed which consisted of (29) items measuring three domains of Test–wiseness strategies. It was applied on a sample which consisted of (299) students. Results of the study showed that all Test–wiseness strategies were highly used. The strategies used after answering become in the first rank; followed by strategies used before answering; and lastly the strategies used during answering, and no statistically significant differences were found in the degree to which students' using Test–wiseness strategies due to the influence of some variables: (gender, academic level, major).and differences were found due to the achievement level, the study recommended constructing similar studies using other classifications of TW strategies, and their relationship with some variables.

**Keywords:** Test-wiseness, Faculty of Arts and Sciences, Najran University.

## 1. Introduction

Achievement tests are considered to be the most important measurement tool used by the teacher in the evaluation of student achievement and have a significant role in the life of the learner, especially in the domain of decision-making at the individual level for the future of students(Odeh, 2005: 23).By increasing use of tests at the present time and in all domains, this led to make the scientists of measurement and Evaluation interested in determining factors that positively or negatively affect students' scores, which effect on measurement tool subjective and validity related to individuals that the test applied to them and the test itself and the conditions of the test which lead to getting variant scores (Odeh, 2005:388; Melhem, 2012:247). Many studies have been conducted in sixties and seventies of the last century, all of which confirmed the presence of other factors which have a prominent role in influencing test scores variation which is the Test – wiseness and it is considered an important source of variation in the scores and it is a factor that explains the differences between students that are in the same ability and level, it is independent of individual's knowledge of the subject of the test or the random error, which means that part of the true variance in student's scores are caused by Test – wiseness(Millman, Bishop & Ebel, 1965; Sltaker et al., 1970; Sarnaki, 1979; Dolly & Williams, 1986 ; Pearl & Denmis, 1988, Sandra, 1992).This means that Test – wiseness is one of the personal factors that affects individuals scores such as anxiety, fear and motivation and self-confidence but it is different from these factors (Morse, 1998).Throughout the school year, students made great efforts in the school material to get high marks in the tests but they got grades that do not fit the level of readiness which means that they got marks less than what expected from them compared to their effort, but on the opposite side some individuals prepared weakly and they got higher scores than those who prepared hardly and they are at the same level of ability. Scientists of measurement and evaluation interpreted that "those who have gotten high scores more than others who are of the same level and ability" that they have benefited from the test situation and they knew how to deal with it, because they have high level of Test – wiseness.(Dimond, 1976; Radadi, 2001;Anderson, 2001; Odeh, 2005; Sltaker et al., 1970).Even if students own effective and appropriate skills for studying and reminding what they studied, they still face some problems when taking the test because the test environment makes pressure and anxiety for students So, (Odeh, 2005; Qudah &Tartouri, 2007; Dodine, 2005;Chan, 2006). Suggested that the teachers must prepare students for tests and training by study organizing and giving them pre-image of the nature of each test and kind of questions and how to begin answering and how to deal with tests and questions and following the instructions and how to end the test, which helps to build trust in themselves and decrease anxiety and fear of tests and have positive attitudes towards it.

## 2.Review of Related Literatures:

### 2.1 Test – wiseness

The origins of this concept goes back to the year (1946) when scientist (Cronbach)pointed to TW importance for students getting higher scores than the estimated score for knowledgeable content that achieved, which means that there's a collection of cognitive abilities that the individual employs in the test regardless of the knowledge content of the studying material. And this concept developed by Thorndike (1951), he assured the importance of TW on psychometric characteristic of test and that it is an influential factor on the individuals variance scores (Nguyen, 2003), after that this concept has been limited, classified and went through many researches

such as (Allen, 1992; Rozonwski & Bassett, 1992; Rogers & Bateson, 1991). TW became widely known in psychometrics and educational domain and increased attention to its importance in raising the level of students in dealing with tests situations and getting possible highest score.

### *2.2 Definition of Test – wiseness*

Gibb (1964) defined TW as an individual ability to answer correctly on multi – choice items containing external evidences to get high scores independently from knowledge with content subject (Radadi, 2001: 5), while Millman et al., (1965: 707) defined it as "the capability of the tested student to benefit from the characteristics and formats of the test in a test situation to get a high score. And it is independent of the examinee's of the knowledge content of the test questions", but Rogers and Bateson (1991: 160) defined it as "the a set of skills that exist among a group of students and that they use in answering questions that they do not know by using certain skills, such as guessing, to take advantage of test organizer mistakes by creating signs that leads to the correct answer". Oakland (1972:355) defined test-wiseness as "the ability to manifest test-taking skills which utilize the characteristics and format of a test and for test taking situation in order to get a score commensurate with the abilities being measured". William sand Dolly (1983 : 2) defined test-wiseness as the "ability of the test-taker to perform at better than chance level on a multiple choice test no matter what the content being tested"

### *2.3 Classification of Test-wiseness Components*

First: Classification (Nikto, 2001)) and (Millman et al., 1965) and (Sarnaki,1979) to:

(A)Time-using strategy: how to organize and distribute the time to answer the test questions in terms of a timetable to read and review ,(B )Error-avoidance strategy: through adherence to the instructions for questions and reading each question well and accurately and determine the required and determine the appropriate way to answer and to review the answer,(C)Guessing strategy: using guessing when there is no consequences for guessing and when there is only one degree for the substantive question ,(D) Deductive reasoning strategy: and by deleting the wrong alternatives and choosing the correct variant of the alternatives and take advantage of the information of other questions or another similar test alternatives,(E) Intent consideration and cue-using strategies(Recognizing and making use of any consistent idiosyncrasies of the test that distinguish the correct answer from incorrect options) . These Strategies that independent of the purpose of the test. Also strategies that depend on the purpose of the test, which includes: (A) Intent consideration strategy :which relies on explanation and answering the questions according to the views of the test designer or the goal of the test , (B)Cue-using strategy: where designer style properties in the formulation of the right alternative for the rest of the alternatives are recognized, such as:Correct alternative is longer or shorter than the rest of the term alternatives, Correct alternative is always put in the same place (always the same option),Puts the correct alternative in a logical sequence, Correct alternative words are familiar from the rest of the alternatives, Correct alternative words are familiar from the rest of the alternatives, Correct alternative term be grammatically or semantically consistent with the text of the question.

Second: Classification (Watter & Siebert, 1990; Wedden, 1991) and is the most comprehensive for the previous strategies and are the focus of current research:(A) Strategies used before answering the test as follows (read very well, develop a plan to answer, read the instructions very well, set a timetable to answer questions, configure the initial image to answer questions, put the lines under the key words in the questions, (B)Strategies used during answering the test as follows (answer questions according to the time plan, review each question after the completion of the answer, investing in the time left after completion of the questions, instant writing of all ideas contained in the mind of the individual, answering questions, even if some of them are not answered, (C)Strategies used after answering the test as follows (review each question and make sure it is written in the correct language, avoid changes at the end of time.

### *2.4 Factors are affecting in the Test–wiseness*

Sarnaki (1979). said a number of factors affecting in the level of Test–wiseness in individual, including:

- 1- Previous experience in dealing with the test situation that's help them in achieve a high marks
- 2- period of time in exposure of test situations ,when the period of time increasing leads to least of the level of Test–wiseness
- 3- Type of applied test affect in the acquisition of Test–wiseness skills
- 4- Questions opacity limit the individual's ability to use the Test–wiseness skills

### **3. Previous studies**

Jodie et al., (2000) performed a study on (1974) male and female students from the primary and medium stages aimed to recognize the skills of TW while they were performing the tests, a questionnaire called (standardized achievement tests) was applied to measure positive and negative skills, the results showed the presence of a statistically significant effect for the gender on the positive TW skills for the benefit of students in the

educational stages.

Radadi (2001) made a study which aimed to reveal the TW relationship with some variables such as: gender, achievement, and major, applied to a sample of (200) students in the course of learning and individual differences in the College of Education at King Abdul-Aziz University, Measure of TW that was applied contains six of TW strategy skills: time strategy and deal with the paper test and guessing and Intent consideration strategy and revision, The study results indicated that there is statistically significant differences between the percentages when the students used TW skills, and there is no statistically significant attributable to major (scientific, literary) for students in college and there are differences between the percentages for highest achievement students and lowest achievement students when using TW skills for highest achievement students.

Yousef study (2004) aimed to train students on guessing strategy and its impact on academic achievement applied on (429) male and female students from the Third Division, Faculty of Education. Minia University students were divided into experimental groups and the control group, the experimental received training on intelligent guesswork and the control group did not receive any training, the results showed that there is a statistically significant difference for experimental group on TW scale.

Scharnagl (2004) made a study aimed at identifying the impact of the test taking on achievement in reading material measured by the scale of diagnostic assessment of collective reading, applied on a sample 30 students from the third grade, those whose have low performance. Results showed that there are statistically significant differences between mean scores for the experimental group and control group in favor of experimental group, and strategies were effective to improve students' scores in Standardized test.

Shahat (2007) made a study aimed to find out the impact of training on TW skill at the level of (test anxiety and academic achievement), applied on 70 students male and female of third year at the Faculty of Education at University of Banha in the Arabic language section distributed in two groups: experimental (35) students and control (35) male and female students have been trained on wand then applied performance wisdom Test and anxiety test on sample individuals, and the results showed there is presence of statistically significant differences between the means of the experimental group and the control group for experimental group on performance wisdom measure after the applying training program, And It showed that there is presence of statistically significant differences between the means of the experimental group and the control group in favor of the control group on anxiety test scale, after applying training program, and there is statistically significant differences between the means of the experimental group and the control group in total scores for the second semester for experimental after applying training program.

Abu Hashim (2008) made a study aimed to examine the predictive structural model for study and memorization skills impact on TW skills (prepare for test, test time management, dealing with the question paper and answer sheet, review and answer sheet) on academic achievement according to the variables: gender, major, a questionnaire was applied to a sample of (345) male and female students from the high school, and the results showed that there were no statistically significant differences in studying skills and TW according to the variable gender and major (scientific, literary), and that the most TW skills used are dealing with the question paper and answer sheet, and the presence of positive effect of answer sheet revision skill on academic achievement, and presence of a positive effect of TW and study skills on academic achievement.

Hamadneh (2009) made a study aimed to identify the degree of using TW strategies among university students. It also aimed at identifying the influence of students' university level on their using TW strategies. It was applied on a sample consisted of (244) male and female from the Faculty of Educational Sciences at Al al-Bayt University and the results showed that all the strategies were highly used. The strategies used after answering become the first rank; followed by strategies used during answering; and lastly the strategies used before answering. The study also showed that there are no statistically significant differences in the degree in which students' used TW strategies due to the influence of the students' university level.

Al-Mutlaq (2009) made her study aimed at measuring the level of TW to the most featured students compared to ordinary ones from middle school (comparative study) in the Nineweh governorate on the sample of (200) male and female students, and the results have shown that featured students showed their high TW, whereas, ordinary students do not have the level of TW in general, and showed statistically significant differences in favor of featured students from the ordinary in every level of the male respondents and female, and showed statistically significant differences in favor of the students distinguished by featured male and female students, and showed differences for the benefit of ordinary female students to the ordinary male students.

Hammad (2010) made a study aimed at identifying the relationship between TW and the performance resulting from the achievement test that is built according to a model among students of the College of Education for Girls (literary sections) Umm Al-Qura University, a questionnaire was applied to the TW and achievement test on a sample of (211) female students from the College of Education for Girls (literary sections) and reached the following conclusions: There is no relation between the degrees of TW and the degrees of School achievement, significant differences are not found in the mean achievement performance depending on the level of TW and the level of its axes level (high, medium, low), significant differences do not exist in the

means of the total score for the TW and the four axes (error avoidance, guessing, construction properties) between disciplines (Arabic, English, and Islamic Studies), there are differences in the axis of time management among students of Arabic Language and studies for the benefit of the Arabic language, There are no differences in the mean total score for the TW and the four axes due to academic achievement level (high, medium ,low)

#### **4. Problem of the Study**

Individuals exposed to a large number of tests during the educational process both objective and articular, and have a role in important decision-making of individuals, most of the teachers found the differences between students in the school material is due to abilities differences , but it's easy to discover from the feedback of the tests that TW has a role in determining these differences and it refutes their Assumptions, and that some students complain of not getting high marks that fit their preparations and their best effort for the tests, and on the contrary, others show their satisfaction with the degree which they get compared to their effort and their willingness to test (Radadi, 2001;Dimond, 1976).And the study problem may come in terms of the following :  
First: Teacher's ignorance of the Wand the importance of having the student some certain skills to run the test attitude and it helps identifying the differences between the individuals and to the presumption of teachers that the only source of the difference in scores is their understanding of the course material and the effort in the course material by students.

Second: because of complaints from large number of students' to their teachers in that they have studied the scientific material and made great efforts in studying, but failed to get high marks, unlike some of the students who prepared the material less effort and received high marks, and the reason for this is that they did not know how to deal with test situation In other words, did not benefit from the TW strategies.

Third: the TW has a role in raising the achievement level of students and develop their abilities in how to deal with the test situation and take advantage of it and of its properties to get the highest possible mark (Radadi, 2001).Also, training students on how to deal with the test helps them to avoid deficiencies in their performance during the test. (Sarnacki, 1979; Stewart &Green, 1983).Therefore, this study was to identify the most important TW strategies used by students and the extent of exercising them in during the test situation.

#### **5. Research Questions**

This study attempts to answer the following questions:

- 1- What is the level of using TW strategies by students in Faculty of Arts & Sciences Sharourah?
- 2- Is there any significant differences in the level of using Test – wiseness strategies by students in Faculty of Arts & Sciences Sharourah attributed to the variables (gender, academic achievement level, academic level, major)?

#### **6. Objectives of the Study**

This study aims to:

- 1- To identify the level of using TW strategies for students in Faculty of Arts & Sciences in Sharourah.
- 2- To identify the effect of several variables (gender, academic achievement level,and academic level, major) on possession level of these strategies, and develop recommendations to take advantage of this study.

#### **7. Procedural Terminology and Definitions**

- The level of using TW strategies: is the total score received by the students in the scale prepared for this purpose in subject of study, consisting of three main domains. Five categories of scaling the tool were identified.
- Students of the Faculty of Arts & Sciences Sharourah: They are college students who are studying in various scientific and (literary majors in the academic year 1435/1436.
- Test – wiseness: are the skills possessed by college students and use them to answer questions during the tests that they do not know and help them to get high mark

#### **8. Limitations of the Study**

- This current study was limited to students of the Faculty of Arts & Sciences at Sharourah in Najran University and enrolled in bachelor's degree in scientific disciplines, (literary and at all levels of the academic year 2015/2016 program.
- The study was limited on subject TW of testing strategies as one of the topics related to the factors that affect the performance of students on tests.

#### **9. The importance of the study**

The importance of the study is as follows:

- 1- Shed light on the variable TW as a personal variable that affects the performance of individuals who are at the same level or ability in tests.

- 2- This study benefits persons responsible for the educational domain to identify the most important strategies of two take advantage of them in educating students during their performance of the test.
- 3- This study helps college students to identify strategies for use in experimental situations and contribute to their access to a high level of ability in dealing with the various testing levels.
- 4- This study is considered one of the unique studies applied at the level of university faculties.
- 5- This study is considered one of the unique studies in the Arab environment, which stimulates researcher on his study in an attempt to get to a theoretical frame about TW and its comparison to the Arab research reality.
- 6- Within the limits of science of researcher, few studies on this subject on the Saudi environment.

### 10. Methodology and Procedures of the Study

The two researchers used the descriptive analytical approach in which they include the theoretical literature related to the subject of the study and the previous studies according to TW strategies, and developed a tool of the study.

#### 10.1 The population of study

Consists of students from the College of Arts & Sciences Sharourah for the academic year 21014/2015, they are about (1982).

#### 10.2 The study sample

The study sample consists of (299) male and female students from the Faculty of Arts & Sciences Sharourah at Najran University and enrolled in bachelor's program in the following majors (literary, Scientific) at all academic levels. They were selected in a deliberate method through the selection of number of branches that learns educational preparation and where all students from all majors are engaged. Table (1) shows the distribution of the study population according to the independent variables.

Table 1. Frequencies and Percentiles according to study variables

Variables	Categories	Frequencies	Percent
Gender	Male	129	43.1
	Female	170	56.9
Major	Literary	124	41.5
	Scientific	175	58.5
academic achievement level	High	131	43.8
	Medium	109	36.5
	Low	59	19.7
academic level	First year	43	14.4
	Second year	85	28.4
	Third year	121	40.5
	Forth year	50	16.7
Total		299	100.0

#### 10.3 The study tool:

The two researcher developed a measure of TW based on the educational literature and previous studies on the subject and the nearby, and was back to the various categories of strategies TW, until the collection of information on the subject of the study, such as classification (Watter and Siebert, 1990; Wedden) referred to in Mohammed (2009), which is one of the classifications TW strategies and includes three elements: Strategies used before answering the test ,Strategies used during answering the test ,Strategies used after answering the test, which relied on the study, and it has been also referred to the rest of the categories, such as the classification of(Nikto, 2001)) and (Millman et al., 1965) and (Saranki,1979).It was also to benefited from studies on the subject, such as study of (Hamadneh, 2009) and study of (Mutlaq, 2009) and study of (Hammad, 2010), the final form scale consisted of (29) items distributed to the previous mentioned areas.

#### 10.4 The tool reliability

The reliability of the tool was verified by using two methods of calculation of reliability: Test-retest reliability and internal consistency reliability by using Cronbach's alpha equation. In Test-retest reliability, questionnaire was applied on two section studying a general preparation materials, this material is Educational Psychology one section for male and the other for female, because it includes students from several majors and includes the largest proportion of students enrolled 40 student in female section and 32 students in the male section. And re-applying the questionnaire On the same two section after a period of time (14) days, the retest reliability coefficient value is (.865), while the value of the stability of the internal consistency reached (.857), and these



values are considered to be acceptable for the purposes of conducting the study. As explained in the table below.  
 Table 2. Cronbach's alpha and test- retest reliability values for total degree of scale and domains

N	Domains	Cronbach's alpha	Test retest
1	strategies used before answering the test	.710	.743
2	Strategies used during answering the test	.793	.776
3	Strategies used after answering the test	.804	.813
	Total degree of scale	.857	0.865

#### 10.5 The Tool validity:

the validity of the tool has been verified by using two types of validities which are: 1.Content validity for study tool through displaying it with its initial image for a group of arbitrators, and they have been asked to give their opinion and suggest their observations in terms of the language and the appropriate items of the content of the subject of the study, the proportion of agreement with accepted items was ranging from 80% to 100%, proposed observations has been considered to become (29) items in its final form . Ebel (1992 : p555) pointed out that a number of specialists estimate the level of items representation for attribute to be measured is considered a Favorite way to verify the content validity for the tool,2- Construct Validity: the two researchers calculated Construct Validity which focuses on the relationship between the test results and the theoretical concept which is to be measured by the test and measures the specific characteristic which cannot be observed directly (Odeh, 2010; Melhem,2012).In this regard, Allam (2000:223) noted to find an indication for the internal consistency of the test which is represented by the extraction of correlation coefficients (Pearson) between the total score for the performance of the sample members and the performance on the domains, it is a method of proving Construct Validity methods. As explained in the tables below.

Table 3. Correlation coefficient between the scale domains and total degree of scale

N	Domains	N.of items	R
1	strategies used before answering the test	7	.809**
2	Strategies used during answering the test	16	.844**
3	Strategies used after answering the test	6	.851**

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

Table 3. shows that there is statistically significant differences between domains and the total degree of scale.

Table 4 .Correlation coefficient between the scale items and total degree of scale

N	R2	N	R2	N	R2
1	.510**	11	.532**	21	.519**
2	.430**	12	.566**	22	.518*
3	.538**	13	.492**	23	.457**
4	.544**	14	.562**	24	.680**
5	.411**	15	.550**	25	.756**
6	.606**	16	.394*	26	.754**
7	.591**	17	.517**	27	.786**
8	.578**	18	.643**	28	.559**
9	.490*	19	.637**	29	.678**
10	.522**	20	.493**		

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

Table 4 .shows that there is statistically significant differences between items and the total degree of scale.

## 10. Findings

First, the results for the first question: What is the degree of using the students of the Faculty of Arts & Sciences in Sharourah test-wisness strategies? To answer this question, researchers used the means and standard deviations for the level of using the students of the Faculty of Arts & Sciences in Sharourah the strategies of test-wisness in paragraphs for each domain and the domain s and a tool of the study. As in the table (5) and table (6).

Table 5 .Means, standard deviations and grade for the level of using the students of the TW strategies as paragraphs of each domain.

N	Rank	Domains and paragraphs	Means	S.D	level of using
First domain : strategies used before start answering					
1	2	Read instructions carefully	4.103	1.083	high
2	1	Read questions carefully before answering	4.551	1.864	very high
3	5	Make a prior image for the answer before answering	3.819	1.128	high
4	7	Underline keywords in the questions	3.0751	1.342	Medium
5	3	Star with easy questions	3.912	1.210	high
6	6	Organize my time to answer questions according to its difficulty	3.818	2.631	high
7	4	Dedicate enough time to review questions	3.68	1.193	high
Second domain : strategies used during answering					
8	4	Write the first answer present in mind	3.973	1.074	high
9	1	Avoid wasting time on things outside the test	4.128	1.090	high
10	7	Avoid the deletion of answers	3.878	1.039	high
11	16	Attract corrector attention by underlining important phrases	3.129	1.472	Medium
12	2	Take care of ordering during the answering	4.088	3.172	high
13	14	Put a reference mark on non-answered question to avoid forgetting this question	3.451	1.347	high
14	15	Put a reference mark on doubted answers	3.358	1.406	Medium
15	11	Ask about ambiguous questions if possible	3.735	1.209	high
16	6	Guess a random answer in case of not having the correct one	3.911	1.096	high
17	5	Get use of some questions in answering other questions	3.945	.958	high
18	3	Leave enough space to answer questions	3.986	1.022	high
19	8	Try to answer unknown questions through my knowledge of the material	3.892	1.091	high
20	9	Review the answer immediately	3.792	1.171	high
21	12	Avoid writing details away from the question that can waste time	3.686	1.102	high
22	13	Avoid evasion in answering questions I don't know its answer	3.464	1.296	high
23	10	Consider teacher's attitudes in answering questions	3.776	1.102	high
Third domain : strategies used after finishing answering					
24	3	Use the remaining time to review answers	4.151	1.118	high
25	1	Make sure of answering all questions correctly	4.367	.922	very high
26	5	Review all syntax errors in the answers	4.030	1.193	high
27	4	Review the content of each answer to make sure of my understanding	4.107	1.121	high
28	6	Don't change the answer the remaining few minutes	3.916	1.083	high
29	2	Review all personal data before delivering the answer sheet	4.264	1.077	high

Table 5. shows that means ranged in the first domain "strategies used before start answering" between (3.075-4.551) i.e. between medium degree and a very high degree, and strategy (2) has got the highest rating which is read the questions carefully Before answering with a mean of (4.551) which is a very high degree, then comes strategy (1):"read the test instructions carefully, as the mean was (4.103), while the strategy the No. (4), which is "put the lines under the keywords in the questions" the lowest mean that reached (3.0751), which is a medium degree. In the second domain "strategies used during the answering", means ranged between (3.129-4.128)i.e., between medium degree and a high degree, and strategy (9) got the highest rating which is "avoid wasting time on things outside the test "with a mean of (4.128) which is a high degree, then comes the strategy number (12) "take care of ordering during the answering, as the mean reached (4.088), while strategy(11)"which attracted the attention of the corrector by underlining the important sentences in the answers of questions" the less mean reached (3.129), which is a medium degree. In the third domain (the strategies used after the completion of the answers), means ranged between (3.916-4.367) i.e., between high degree and very high degree. While, strategy number (25) "I make sure to answer all questions correctly "got the highest degree with a mean of (4.367), which is a very high degree. Followed by strategy number (29) "Review all personal data before delivering the answer sheet" which got a mean of (4.088), while strategy number (28) "do not change the answer in the remaining minutes" gotten least mean (3.916), which is in a high degree.

Table 6. Means, and standard deviations and grade for the level of using students of TW strategies in each domain and on the total degree of scale.

Number	Rank	Domains	Means	SD	level of using
1	2	strategies used before answering the test	3.85	.782	high
2	3	Strategies used during answering the test	3.75	.649	high
3	1	Strategies used after answering the test	4.13	.763	high
		Total degree of scale	3.91	.610	high

It can be seen from Table (6) that the means for domains ranging from (4.13 - 3.75) i.e., in a high degree for all strategies. The first rank was for the strategies used after the completion of the answer with a mean of (4.13), then the strategies used before you start answering at a mean of (3.85), then comes the strategies used during answering at a mean of (3.75).at the level of the total tool, the level of using of college students of the TW strategies was at a high degree and a mean of (3.91).

Second, the results related to the second question: Are there significant differences in the degree of using "the students of the Faculty of Arts & Sciences Sharourah" the strategies of test-wisness through the following variables (gender, level of achievement, academic level, and major). to answer this question means and

standard deviations for the response of the sample members were extracted subjects to the areas and the total degree of scale according to the study variables also, four - way ANOVA analysis account was executed to see the impact of variables on the tool as a whole, as contained in tables (7) and (8) and (9).

Table 7. Means and standard deviations for the response of sample members on the domains and the total degree of scale according to the study variables.

Variables	Categories	strategies used before answering the test		Strategies used during answering the test		Strategies used after answering the test		the total degree	
		M	Sd	M	Sd	M	Sd	M	Sd
Gender	Male	3.87	.872	3.70	.711	4.18	.885	3.99	.728
	Female	3.83	.708	3.88	.596	4.21	.648	3.95	.502
Major	Literary	3.89	.805	3.71	.632	4.26	.782	4.02	.635
	Scientific	3.93	.766	3.88	.660	4.15	.752	4.00	.593
academic achievement level	High	4.15	.766	4.01	.670	4.41	.613	4.19	.567
	Medium	3.66	.614	3.59	.525	4.01	.677	3.84	.489
	Low	3.51	.854	3.49	.605	3.75	.970	3.58	.639
academic level	First year	3.94	.692	3.89	.622	4.20	.682	4.01	.599
	Second year	3.77	1.009	3.66	.659	4.13	.833	3.85	.717
	Third year	3.84	.691	3.71	.570	4.05	.759	3.87	.542
	Fourth year	3.97	.609	3.92	.789	4.29	.706	4.04	.564

It Can be seen from Table (7) that there are differences in the sample responses on the TW on the three areas of strategies (strategies used before answering, the strategies used during answering, the strategies used after answering)) and on the total degree of scale, and to see semantics differences, analysis of variance was executed on the total degree of scale as in the following table (8).

Table 8. Analysis of variance on the effect of (gender, level of achievement, academic level, major) on the total degree of scale of the scale

Source	Sum of Squares	Df	Mean Square	F	Sig.
Gender	.204	1	.204	.663	.416
Major	.001	1	.001	.004	.947
Academic achievement	18.989	2	9.495	30.768	.000
academic level	1.310	3	.437	1.415	.239
Error	89.799	291	.309		
Total	4698.018	299			

It can be seen from table (8) that there are no statistically significant differences at the level of ( $\alpha=0.05$ ) between the means related to the total degree of scale due to the difference in (gender, major, academic level), the F value calculated for the responses of the sample on the total degree of scale of the previous variables respectively reached (0.663) and (0.004) and (1.415) and the level of significance, respectively: (0.416) and (0.947) and (0.239), and they are all greater than the level of (0.05). And there are statistically significant differences at the level of ( $\alpha=0.05$ ) between the means related to the scale due to the difference between the



level of achievement variable, the calculated value F for the responses of the sample on the total degree of scale for this variable reached (30.768). And to level of significance (.000) and is less than the level of (0.05) and for the detect the differences the researchers used the Scheffe Statistical method For post hoc comparison, as shown in the following table.

Table 9. Scheffe Test results on the total degree of scale according to the academic achievement level variable

Scheffe Post Hoc Test	academic achievement level variable	high	Medium	Low
	High		.4445*	.6098*
	medium	-.4445*-		.1654
	Low	-.6098-*	-.1654-	

It Can be seen from the table (9) that the mean difference between the mean responses of people with high and medium achievement was (0.4445 \*) which is statistically significant at the significance level ( $\alpha = 0.05$ ) for the benefit of people with high achievement, and that the mean difference between mean responses of sample members with high achievement and low achievement was (0.6098 \*), which is statistically significant at the level ( $\alpha = 0.05$ ) in favor of those with higher achievement.

## 11. Discussion

Discussing of the results relating to the first question: What is the level of using of students of the Faculty of Arts & Sciences in Sharourah for the strategies TW? It is Seen through the analysis of the results that the degree of using the students of the Faculty of Arts & Sciences in Sharourah for strategies of TW came highly on the total degree of scale, the two researchers relates the result to two things, first: that college students have a high degree of awareness in readiness for the tests in terms of the review and the development of a table for review and continuing studying to reduce the fear and test anxiety, and training similar to the test questions, while the second thing is that college students are given sufficient guidance by their teachers before starting the test, and this guidance is to illustrate the nature of each test and how to deal with it and comply with the instructions and develop time plan to answer questions, and taking care of their writing shape and writing the first answer notifies in his mind and review the answers before delivering the answer sheet, and they are also directed by observers and teachers during the test. This result agrees with the study of each of (Hamadneh, 2009) which indicated that the strategies came highly on all areas, and the study of (Radadi, 2001) which indicate an increase in the percentages of using the TW strategies.

According to the three domains, the first domain came in the first degree (the strategies used after the answering) which is related to the reviewing of the answers and the data, the researchers relates reason why the students are eager to review their answers carefully and use the time remaining to the fear not to forget one of the questions unanswered and thus to obtain the highest possible mark, and this result agreed with the study (Hamadneh, 2009) which indicated that the strategies used after the completion of the answer came in first rank with a high degree and study of (Radadi, 2001) which indicated that the most commonly used strategies in reviewing the answers of the students and disagreed with the study of (Abu Hashim, 2008), which indicated that less skills to be used with related to the reviewing the answers. And in the second rank came the first domain (strategies used before start answering) which is related to how to start the test and regulate the answering time, the researchers relates reason that students entering the tests and have the confidence and the feeling of the collection a high degree as result of encouragement and reinforcement they receive from their teachers before the test in order to raise the teaching process at the college that apply educational quality standards, especially with regard to the standards of learning and education that is related to increasing the educational level of students using all the ways and means and strategies, and this result has agreed with study of (Radadi, 2001), which indicated that the most commonly used strategies which related to reading the instructions and questions carefully. And disagreed with the study of (Hamadneh, 2009), which indicated that this strategy came in last rank and disagreed with the study of (Abu Hashim, 2008) which indicated that the least skill have been used which related to the time test management. the third rank came the second domain (strategies used during the answer), which is related to dealing with the question paper and answering test questions, the researchers relates the reasons of getting highly degree of using strategies that students really care about the advantage of the time factor and not to waste the time on other thing that can lead to failure, where the time will be limited and all students will try to follow and distribute it on questions in the light of the importance of the question and the class set for it, and leave some time for review, and not to leave the exam room before the specified time for the answering and that as students care about a factor of improving the writing during the test so that each student tries to show his answer sheet in the best shape possible through clear writing and the organization of the answering sheet in order to get the highest score as it affects the debugger psychology and makes him sympathizes with the student during debugging of answers, and this is referred by (Melhem, 2012) to the importance of the student writing in receiving a high degree and the impact on the psyche of the debugger during debugging, while the lowest used Strategies, the two researchers relates the reason to that there are some skills not mastered by students at the required level concerning the management of the test position in terms of dealing

with the questions and the answer sheet, especially they do not care by putting marks on the questions that doubt, so that they can refer to them after the transition to other questions thereby completing his answers, and do not refer to doubted questions that contains no marks, this result agreed with the study Radadi (2001), which indicated that more strategies used with regard to improving the writing and re-read the question more than once and agreed with the study of (Abu Hashim, 2008), which indicates that the most commonly used strategies is the skill to deal with the question paper and answer sheet in the first rank. Moreover, disagreed with the study of (Hamadneh, 2009), which indicated that this strategy came in the second rank.

Discuss the results for the second question: Are there significant differences in the level of using of students of the Faculty of Arts & Sciences in Sharourah strategies for the TW in light of the following variables (gender, level of achievement, academic level, and major)? The results indicated that there is no statistically significant differences at the level ( $\alpha = 0.05$ ) between means regarding the total degree of scale due to the difference in gender, major and academic level, the researchers refers the result to that using college students the skills of TW is not affected by the gender or major and that all students male and female in all scientific sections and literary have high capability in dealing with the experimental positions and take advantage of the features and formats of the test to get the highest possible degrees and the reason can explain that students are exposed to the same guidelines and notes before each test in how to deal with the test especially by teachers with the existence of quality and academic accreditation in college, this determined teachers to encourage students and prepare them before the test to give their best, also, students went through a tremendous along of experience in dealing with the tests through the various grades, also, that intense competition between male Students and female students to get high cumulative rates, and thus strengthen their chance to get a scholarship and a job, and here this procedure was similar among all students, regardless of the type or area of study. This result may have agreed with Abu Hashim study (2007), which indicated that there are no differences in gender and major in the TW skills and this result agreed with Radadi study (2001), which indicated that there are no differences in major in the TW skills and agreed with study of Hamadneh (2009), which indicated that there are no differences in the academic level, and disagreed with the results of each of Mutlaq study (2009), which indicated the existence of differences in the gender variable and disagreed with Jude et al.study (2000), which showed the existence of differences in TW skills between males and females of both primary and intermediate stage in favor of males skills, as well as Zain Radadi study (2001) on the students of the university showed the presence of an effect of gender on the TW skills. The result shows that the existence of statistically significant differences at the level ( $0.05 = \alpha$ ) between the means for total degree of scale due to the difference in the achievement level variable, (Scheffe post hoc) comparisons analysis showed the existence of differences between levels in favor of higher achievement, the two researchers relates of this natural result is to that students with the highest achievement are more capable of dealing with the experimental situation they are the most prepared for the test and the most organized for the time during the answering of questions and are used to the way to answer questions and to take advantage of some of the indicators in questions to answer other questions and the most capable of writing information correctly to the debugger in an orderly and logical and tidy manner, more than low and medium achievement students. This is referred to Roger & Patterson (1991) that Test-wiseness developing for the students through experience and maturation and least the differences through progress in studying stages and his experience in dealing with the test situation. The result agreed with Radadi study (2001), which indicated the existence of differences in achievement variable in the favor of high achievement students and agreed with al-Mutlaq study (2009), which indicated the existence of differences in achievement variable in favor of outstanding students, and agreed with Scharnagl study (2004), which indicated the presence of a positive effect for the skills of TW on the sample after the application of training program for the TW, and disagreed with Hammad study (2010), which indicated that there are no differences in achievement variable.

## 12. Conclusion

Test-wiseness means is a set of skills that exist among a group of students and they use in answering questions that they do not know by using certain skills, such as guessing, to take advantage of test organizer mistakes by creating signs that leads to the correct answer. Its importance for students getting higher scores than the estimated score for knowledgeable content that achieved, which means that there's a collection of cognitive abilities that the individual employs in the test regardless of the knowledge content of the studying material, and it is considered an important source of variation in the scores and also it is a factor that explains the differences between students which are in the same ability and level. The results showed that all Test-wiseness strategies were highly used by students, and the differences were found due to the achievement level, this interpreted that the students whose have a high achievement they benefited from the test situation and they knew how to deal with it.

## 13. Recommendations

In the light of the outcome of the present research results, the following recommendations can be presented:

- Implementation of training courses for faculty members at colleges Najran University in general, and the Faculty of Science and Arts especially in Sharourah about how to train their students on the skills of TW to take advantage of them in test situations
- Those who are in charge of designing and preparing course description in the teaching process in the university must take into consideration the TW skills with the need to provide a set of guidelines at the end of each section on how to remember the section and the steps that must be followed when testing it
- The establishment of a special unit which is part of measurement and evaluation unit on the level of Najran, which has the tasks of training students on TW skills they need, and work to guide them and develop their skills and experiences in various academic domains.
- Designing brochures to students as guidance of how they readiness and deal with the tests situations.
- To propose a number of studies and researches to complement this domain, these studies and researches will be using other classifications according to the variables in this study (Gender and major and the level of achievement and academic level at other universities, and to make comparisons between them, and research on the effectiveness of the training programs for TW skills in reducing the level of test anxiety among university students.

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