

Psychometric Characteristics for the Achievement Motivation Scale on A Sample of Teachers of the Ministry of Education in the Directorate of Education of Northwest Badia

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Abstract: This study aimed to examine the psychometric characteristics of the achievement motivation scale on a sample of the teachers of the Jordanian Ministry of Education in the Directorate of Education of Northwest Badia. The study sample consisted of 216 male and female teachers, who were randomly selected from different schools of the directorate; the achievement motivation scale used in this study consisted of three dimensions: ambition, perseverance, and the existence of an objective to be sought for. The results of the study showed that the achievement motivation scale used in this study had a reasonable degree of validity and reliability. The validity indicators were available through calculating the correlation coefficient between the scale and the criterion and it amounted to 0.57 that is statistically significant; they were also available through calculating the correlation of items with the total degree that it was acceptable and it ranged from (0.29 – 0.57) proving the internal consistency of the scale. With regards to the reliability of the scale, it was achieved by applying the Cronbach-alpha equation that it amounted to (0.85). In light of the findings, the researcher recommends applying the scale to greater samples and samples taken from different sectors in the fields of work, adding other dimensions of the scale, and exploring their psychometric characteristics and comparing them with what was achieved in this study.

Keywords: (psychometric characteristics, achievement motivation scale, ambition, teachers).

INTRODUCTION

Achievement motivation is one of the motivations of the human being because of his constant quest for excellence despite the different levels of excellence that may satisfy different people that some believe in the need to challenge difficult tasks and access to excellence while others believe in little success. The achievement motivation is usually measured through certain tests, most famous of which is the Thematic Apperception Test (TAT) which requires that people respond to 30 images with different explanations; their answers were analyzed and the respondent's level of achievement is extracted; the achievement motivation can also be measured through the written materials (such as articles and books).

Achievement motivation means the desire to do a good work and succeed in it; such desire is characterized by ambition, enjoying competitive situations, independence in facing and solving problems and finally preferring difficult tasks [1].

Abd Al-Salam [2] also defines the achievement motivation as an acquired tendency that is reflected by the perseverance of the student in general, perseverance in the event of difficulty, desire or willingness to try and enjoy everything that is new and difficult.

Achievement motivation is unique and distinct from the general motivation, which refers to the internal case of the individual that pushes him to focus in a situation, actively heads towards it, and proceeds in it to achieve it. An example is the learner's motivation for getting the highest level of achievement, which is not only considered by the school alone but also by the house and some social institutions; the achievement motivation and achievement are closely correlated with the practices of socialization. The results of the studies indicated that children with high motivation for achievement had mothers who affirmed the importance of the child's independence at home; as for those with low achievement motivation, it was found that their mothers used not to encourage their independence [1].

Individuals differ in the degree of achievement motivation, just as they differ in their motivation to avoid failure; it is possible that two individuals can face the same task that one can perform it enthusiastically in order to succeed, and the other can perform it to escape the failure he draws to himself.

The impact of the achievement motivation is evident in the academic achievement; it has an evident impact on the communication processes to which people are exposed; people with high motivation spend most of their time thinking about the world around them and try to find solutions to the problems that are spreading in the world, unlike those with low knowledge motivation who do not care much about these things [3].

Due to the fact that the achievement motivation is influenced by socialization practices, it is expected to have differences between the members of different communities and cultures regarding their motivation for achievement; however, in our Arab societies, parents encourage their children to take the initiative and take care of the achievement from their childhood. Furthermore, the Arab societies link the increased achievement and the educational achievement on one hand and the improved social and economic status of the family on the other.

Achievement motivation has a significant impact on raising the level of performance and production of the individual in any field which leads to raising the productivity of the whole society and thus the advancement of the country in various economic, educational, academic, applied and other fields [4, 5].

However, recently, in our Arab societies, there is a decrease in the performance and achievement of teachers, especially those in the public sector. After studying the phenomenon, the reasons behind their low achievement goes to their low level of motivation and enthusiasm, which has affected their expectations of success in doing their job [6].

Through reviewing the theoretical literature, it became evident that there is a dearth of research related to the achievement motivation among workers and employees in the public sector, especially teachers from the early 1980s to the present; most research on motivation focused on students from the academic perspective and researchers did not pay enough attention to the study of personality in the field of organizational and functional psychology, but they cared about fidelity to work as a variable in personality [7].

It is important to tackle some of the theories explaining the achievement motivation:

Murray theory

Murray was the first to present the concept of need for achievement where he identified a list of 28 needs of psychological origin, including the need for achievement; he stressed the importance of early childhood experiences and believes that the need for achievement is determined by the desire or inclination to do things quickly in a good way [8].

Value expectancy theory

It is based on the principle that success is followed by a sense of pride, and failure is followed by a sense of despair. Through this, Atkinson was able to formulate this theory, which indicated that the motivation is the individual's willingness to struggle to satisfy a certain goal [9].

Causal attribution theory of achievement motivation

This theory illustrates the impact of motives on the success and failure experiences, and the identification and prediction of behavior in the achievement fields. Weiner believes that the reasons used by the students in explaining his success or failure had three dimensions: controllability and stable theory; locus of control can be either internal or external; independence means that the students explained his success or failure depending on a temporary and changing factor, such as not making enough effort to succeed. However, if the student attributes his failure to luck, he attributes his failure to a stable factor. As for controllability, it means that the student was unable to control factors influencing the exam, such as impaired ability, or difficulty of the task [10].

Modern theory to study the motivation of academic achievement

The theory of directing objectives; this theory finds that the academic motivation is a hypothetical component that explains the emergence, direction and survival of a certain behaviour directed towards academic goals, including learning, man and social values, the avoidance of work and values done by the individual for his objectives as well as the attribution patterns he uses in explaining his reactions [11].

Self-determination theory

Both Deci and Ryan hypothesized the self-determination theory as a multi-dimensional perspective for motivation; it is a strong alternative for one-dimensional studies of motivation, where it assumes multiple patterns of reasons underlying the individual's behavior that can be arranged on self-determination; at the top end, there lies a motive that reflects the motivation image that reports the intrinsic self which includes doing behaviors out of pleasure and satisfaction. The second pattern of motives is the extrinsic which expresses the participation in a certain activity for reasons beyond. As for the third dimension of motivation, it is represented by the organization of

the individual of his personal behaviors, which are the most important dimension [12].

Since achievement motivation is one of the fundamental factors that contribute to the development of the human civilizations that it represented a direction of the individual's behavior and performance in life fields and due to the fact that it has an evident and direct impact on the achievements and progress of any country in various respects, especially in our Arab societies with modest potential, it is important that they perform it effectively and accept to accomplish it with creativity and dedication. To achieve this, they should raise their motivation towards work and achievement, which requires the identification of attributes enjoyed by those with a high achievement level and identifying its availability in the personality of the individual. Because of the lack of a scale for measuring the achievement motivation of teachers working in the public sector determined for the Jordanian environment, the current research is intended to measure this attribute through developing the scale of the achievement motivation among teachers working in the Jordanian Ministry of Education.

Previous Studies

Several studies have addressed the psychometric characteristics of the achievement motivation scale such as [13], who set a scale for measuring the achievement motivation among the male and female employees in clerical jobs; the study population consisted of (32) third graders in the Kingdom's schools that were distributed into two groups: experimental group, that consisted of (16) students and the control group, that consisted of (16) students. The results of the study showed statistically significant differences between the mean grades of the members of the experimental and control groups, where the members of the experimental group were subject to an enrichment program and the difference was in favor of them.

Melhem [14] prepared a scale for measuring the achievement motivation which was applied on the female students of the University of Oman and it was conducted on (441) female students. The results indicated that the members of the sample had very reasonable psychometric characteristics; the researcher adopted the scale of behavior disorders and the achievement motivation scale. The results indicated that there were no differences on the behavior disorders scale that were attributed to both the variables of housing and social status as well as the interaction between the variables. There were also differences in the educational level variable in favor of the students of the first academic year, differences in the achievement motivation that were attributed to both the educational level and the academic achievement, no differences for the social status variable, and a statistically significant correlation between the variables of the behavior

disorders, educational achievement and achievement motivation.

Dudin [15] aimed to compare the differences between the impacts of the acceleration program, and those left by the enrichment programs for learning and education motivation among the male and female gifted students in the upper basic stage in Jordan. There were (180) male and female students among which 99 students skipped some grades in the previous years, and ninety one talented and outstanding students whose reliability were checked according to the internal consistency (Cronbach's alpha equation). The results showed differences in favor of talented students who skipped some classes in favor of the motivation for learning, achievement and self-esteem, no differences in the level of motivation for learning and self-esteem attributed to the variable of gender, and differences in the level of educational achievement in favor of females.

Finney [16] aimed to examine the values of validity and reliability of the Achievement Motivation Scale (AMS); the researcher applied the scale on a sample of 1406 students from the American universities, and extracted the comparative and discriminate validity. The study concluded that the scale is in need for further investigation and examination so it achieves the validity required before being adopted.

Guay *et al.*, [17] aimed to evaluate the academic motivation of primary school students in Canada. A scale of the academic motivation was prepared to be used with school students and it was applied to a sample of 426 students from the basic stage. The study showed that this scale consisted of nine internally consistent factors via the confirmatory factor analysis; the construct validity of the scale was verified through analyzing the correlations between the scale scores and the scores of each sub-scales.

Fairchild *et al.*, [18] carried out a study on the indicators of the validity of the academic motivation scale through using a sample of 1406 fresh students of the American undergraduate students aged 18 years old; the indicators on the validity of the scale was concluded through the scale's consistency with the Seven-factor model, the internal consistency coefficients of items representing each sub-scale were extracted, and the indicators on the discriminate and convergent validity were obtained by finding the correlation coefficients between the scores of the scale and the scores of the other scales of motivation.

Al-Omar [19] examined the relation of motivation towards career and some personal and functional variables with the use of a sample of (1237) males and (803) females among employees in various ministries, government bodies and private sector. The study revealed that the level of motivation for

achievement in general was medium in the three sectors that they exceed the females; this was attributed to the social role played by males in society. The results also indicated that employees in senior levels are more motivated than those in the lower ranks.

Khalifa [20] prepared a scale for achievement motivation and divided it to five dimensions (sense of responsibility – perseverance – planning for future – seeking excellence – and feeling the importance of time); the study was applied to a sample of 654 male and female students in the University of Cairo in its two branches: Bani Suef and Khartoum. The results indicated that there were no differences in the achievement motivation due to the variable of gender, and that there was a clear difference in favor of the Egyptians in terms of the total degree on the scale; the study also revealed that the total degree of this scale among the Egyptian students was higher than that among the Sudanese. As for the variable of achievement, there was no statistically significant difference in light of the different cultures.

Comment on Previous Studies

In light of the above, during developing the achievement motivation scale among the teachers of the Directorate of Education of the Northwest Badia in Mafraq, the researcher adopted the following:

- There are scarce studies related to the subject of current research at the Arab and global levels and there were inconsistency among the results related to the gender differences with regards to achievement motivation.
- The classical theory of psychological measurement was adopted in studying the psychometric characteristics of the achievement motivation scale including the validity and reliability in light of this theory.
- The psychometric psychological measurement was adopted in studying the psychometric characteristics of the scale since it reveals the distinguished performance in the achievement motivation and allows for comparing the degree of the individual with the degrees of the other members of his group.
- The self-report method was adopted in developing the scale due to the fact that the current study looks at personality as seen by the individual himself not as seen by others.
- Most studies have dealt with the achievement motivation and its relationship with the variables of learning and achievement; there is no researcher from our Arab world that dealt with the relation of the achievement motivation with other factors except very few ones who prepared a scale for measuring the achievement motivation for those transferring from study to career. The study presented a scale for measuring the achievement motivation among the teachers of the Jordanian

Ministry of education, where the Directorate of education of the Northwest Badia in Mafraq was chosen to be the study population along with other schools from which the study sample was extracted.

Study Problem

Achievement motivation is one of the mature, creative and generous personality traits; a person cannot have a high level of performance without having high motivation; therefore, such category represents a large percentage in the Jordanian society who is entrusted with the responsibility of upbringing the generation of tomorrow. Accordingly, this study is limited to the teachers of the Ministry of education, the wealth of our country, whom we consider people full of motivation towards work and accomplishments; this would reflect on building our country and support the generation of tomorrow with the desire of giving to their country, Jordan. So, it was necessary to help teachers by increasing their motivation for achievement which will not be achieved without a special scale to measure their performance and transfer it to a concrete value that would facilitate the process of judgement and comparison objectively.

Hence, the problem of this research represented in the deficiency of the development of scales in the Jordanian environment in general and the development of scales related to measuring the achievement motivation among individuals in particular.

Furthermore, it became clear that no experts in this field prepared or developed a scale related to achievement motivation for the Jordanian environment; it is impossible to depend on scales that have been developed to other environments or communities due to different factors; the most important is the deficient achievement motivation scale among the employees in the public service, especially the teachers who represent the majority of employees in the public service. Furthermore, the researcher seeks to identify the reasons behind the low motivation whether it is associated with the learner, teacher or parents; if they are detected and identified, they can be controlled and their impacts can be reduced.

Study Questions

The study problem lies in searching for the psychometric characteristics of the achievement motivation scale on a sample of the teachers of the Directorate of Education of the Northwest Badia by answering the following questions:

- What are the indicators of the validity and criterion validity for the achievement motivation scale used in this study?
- What are the reliability indicators for the achievement motivation scale used in this study?

- What are the characteristics of the items of the achievement motivation scale used in this study?

Study Importance

achievement motivation plays an effective and dangerous role in improving the performance and production of the individual in the various fields and activities he faces, as asserted by [5] when he considered the level of the achievement motivation in any society as an outcome of the social practices to which children are exposed in this society; hence the importance of the achievement motivation that it is not only related to the individual and his educational achievement, but also to the society in which he lives.

Based on the importance of the achievement motivation and the role it plays in the lives of people, and due to the few studies tackling the development of a scale for achievement motivation among teachers in Jordan, the importance of this study appeared as presenting a development for the achievement motivation scale among the teachers of the Ministry of Education in the Jordanian Society.

Furthermore, the importance of the study is identified through reaching to the characteristics of teachers of high accomplishments and low motivation characteristics; this would contribute to and helps to know the reasons for the high or low productivity among teachers, so this study will be a cornerstone for those interested in conducting research related to the same topic on the one hand or institutions that are preparing training programs; this study would be useful to them in taking all avenues to stimulate and motivate their targets towards achievement and work.

STUDY OBJECTIVES

The study aimed to identify the psychometric characteristics of the achievement motivation scale on a sample of the teachers of the Ministry of Education in the Directorate of Education of Northwest Badia, validity and criterion validity for the performance motivation scale used in this study along with the reliability indicators of the achievement motivation scale used in this study and the characteristics of the achievement motivation scale items used in this study.

Study Limitations

This study was limited to the following:

- **Objective Limitations:** it tackled the psychometric characteristics of the achievement motivation scale on a sample of the teachers of the Ministry of

Education in the directorate of education of Northwest Badia.

- **Spatial Limitations:** This study was applied on the Directorate of Education of Northwest Badia due to the facilities provided by the Directorate of education in applying this study.
- **Human Limitations:** The study was applied to the male and female teachers of the basic stage in the directorate of education of Northwest Badia.
- **Temporal Limitations:** This study was applied in the first semester of the academic year 2016/2017.

Procedural Definitions

- **Psychometric Characteristics:** the qualities that should be available in the psychological tests or scales including validity and reliability.
- **Achievement motivation:** the total degree that the student or respondent receives based on this scale.
- **Teacher:** the person who enters the classroom and teaches the MOE curricula to students at various study stages in the Directorate of education of Northwest Badia for the academic year 2016/2017.
- **Ambition:** the desire of the teachers of the directorate of education of Northwest Badia in achieving a certain thing.

STUDY METHODOLOGY

A comprehensive study of the male and female teachers and educators of the directorate of education of Northwest Badia was conducted to identify the psychometric characteristics of the achievement motivation scale from their point of view, where the descriptive and deductive analysis was used to measure the achievement motivation.

Study Population

The study population consists of all the male and female teachers of the Jordanian Ministry of Education working in the Directorate of Education of Northwest Badia for the academic year 2016/2017 amounting to 1872 teachers from various basic and secondary school stages.

Study Sample

There were 216 male and female teachers from various specializations in the study sample. According to this sample, the criteria of the study were extracted, and the validity and reliability of the scale used in this study were calculated according to the results of the standardization sample. Table-1 shows the distribution of the study sample according to the study variables.

Table-1: Distribution of the members of the study sample according to the study variables

Gender		specialization		Stage			total
Male 216	female	scientific	literary	basic	secondary	basic and secondary	
110	106	105	111	85	70	61	216

Study Tools

The study used the following two scales:

Chievement motivation scale for employees in the public service

This scale was originally developed by Dr. Yahya Al-Qbali [13] from King Saud University in Saudi Arabia to measure the achievement motivation in public service workers, as a tool to measure the impact of a training program experienced by the study sample; the validity and reliability of the scale was verified on the intended sample that the scale was individually applied; the theory of choice adopted a theoretical framework used by the achievement motivation scale since it is the most used one by researchers in preparing the psychological scales due to their easiness and consistency with the principle of individual differences.

This scale consists of (45) items divided in three dimensions of the achievement motivation: perseverance, objective to be achieved, and ambition through a five scale measurement. The items of this scale were revised according to the theoretical literature on achievement motivation and its dimensions and according to experts in educational psychology and as well as educational specialists; the initial status of the scale consisted of (30) items distributed to the previously mentioned dimensions in a way that suits the requirements and tasks of teachers working in the public service and their expectations.

Hence, the application of the scale requires (10 – 15) minutes; the validity of the scale entails that the examinee has understood the words "motivation" and "achievement", with regard to his status as a teacher in the Jordanian Ministry of education, giving him the chance to ask any question in this regard, and bringing the attention of respondents on the scale regarding the importance of answering all the items of the scale.

The scale included one kind of expressions whose high rating refers to high achievement motivation; the weights were (5, 4, 3, 2, 1) with the exception of item 7, whose high estimation refers to a low achievement motivation making the item weight reversed (1, 2, 3, 4, 5).

Accordingly, the level of the examinee on the scale ranged between 126 and 31; the higher the examinee degree, the higher his achievement motivation and vice versa.

Ambition scale

This scale was chosen to be applied in conjunction with the achievement motivation scale on all the members of the standardization sample of the study; it would be used as a tool for the study scale to extract the concurrent criterion validity through extracting the correlation coefficient among the results of the two scales. This scale measures, to a great and objective level, the level of ambition among adults that

it was chosen from Peter Shepard's book in personality analysis.

The scale consists of fifteen positive items with three scoring system to measure the ambition of individuals; the test items are corrected by calculating the number of the scale items which were answered by "yes"; the more yeses the higher the ambition.

Scale Reliability

In estimating the reliability coefficients for measuring the achievement motivation with its three dimensions, the internal consistency method through the Cronbach-alpha equation was adopted since it provides an evidence of the internal consistency of the scale.

Scale Validity

The face validity was provided by the arbitration process, where the opinions and suggestions of the trustees in relation to the suitability of the items, their consistency with the dimension, clarity and language. To investigate the criterion validity, the ambition scale was applied as an external tool in conjunction with the achievement measurement scale and the Pearson correlation coefficient was extracted among the results of the study sample in the two scales. As for the validity of the construct validity, it was proved through many indicators including the value of the internal consistency reliability coefficient Cronbach – Alpha. The correlation coefficients between each item of the scale and the total degree on the scale were also extracted as an evidence of the internal consistency among the items of the scale; the correlation coefficients among the scores of each item of the achievement motivation and the total score on the scale were also calculated to show the internal consistency between the dimensions of the scale and the scale as a whole.

Study Procedures

- Setting a scale to measure the achievement motivation among teachers in the directorate of education of Northwest Badia.
- The validity and reliability of the scale on the sample was validated that it prepared to be applied in an individual way.
- The scale consisted of (45) items distributed into three dimensions of achievement: perseverance, objective to be achieved, and ambition of five scoring system.
- The scale was presented to experts in educational psychology and educational specialists that the initial form of the scale consisted of (26) items distributed to three dimensions.
- The approval of applying the scale was obtained from the directorate of education of Northwest Badia.
- The scale was distributed to the target group, which consisted of teachers of the directorate of education

of Northwest Badia for the year 2011/2012. The statistical analyses were carried out to conclude the results.

STUDY RESULTS

This chapter illustrates the results in light of the questions of the study that aimed to identify the psychometric characteristics of the achievement motivation scale through answering the following questions:

First: results related to answering the first question

To answer the first question of the study, which states "what are the indicators of validity and

criterion validity for the achievement motivation scale prepared in this study? ", the ambition scale was applied as an external too in conjunction with the achievement motivation scale. Pearson correlation coefficient was calculated between the results of the performance of the study sample on both scales. After conducting the statistical analysis, the researcher concluded that the correlation between the achievement motivation scale and the ambition scale was 0.57, which was statistically significant; this proves the correlation between the motivation scale and the ambition scale. Table-2 shows the results of the criterion validity.

Table-2: Correlation coefficient between the total scale and the criterion scale

Scale	correlation coefficient	statistical significance
achievement Motivation as a whole	0.57	0.0

One of the indicators of the construct validity of the scale is the reliability coefficient value (internal consistency) of the scale as a whole, which amounted to 0.86 by a high degree; it indicates a high consistency among the items of the scale in addition to calculating the reliability coefficients for each dimension of the scale (perseverance, objective, and ambition). The reliability coefficient of each dimension was (0.72, 0.73 and 0.75), which were high and they indicated the consistency of the scale dimensions.

The Pearson correlation coefficient was calculated between each dimension of the scale and the scale as a whole; the results indicated a high correlation between the dimensions and the total scale which indicated a high internal consistency, through which a reasonable validity of the scale is obtained. Table-3 shows the correlation coefficients between the dimensions of the scale and the scale as a whole.

Table-3: Correlation coefficients between the scale fields and the scale as a whole

Field	Correlation coefficient	statistical significance
perseverance	0.80	0.00
objective	0.85	0.00
Ambition	0.85	0.00

Due to the fact that this study is considered the first and only study that investigated the psychometric characteristics of the scale used in this study, the researcher compared the findings of this study with the findings the original researcher reached to in his study. The results of this study were consistent with [13] that the scale was true and valid and that it measures the objective intended which is the achievement scale; the scale was investigated with the help of trustees and the extraction of the criterion scale through the use of the ambition scale; ambition was related to the achievement motivation which indicated that the correlation coefficient between the two scales was statistically significant which indicated a criterion validity. On the other hand, the correlation coefficient between the items of the scale and the scale as a whole was extracted as an

indication of the internal consistency, which meant a qualitative addition for the validity of the scale used for the purposes of the study.

Second: Results Related to Answering the Second Question

To answer the second question which stated, "what are the reliability indicators for the achievement motivation scale prepared in this study? ", the researcher estimated the reliability of the scale as a whole and for each dimension through using the internal consistency, which was represented by the Cronbach-alpha reliability coefficient. Table-4 shows the reliability coefficients for the scale as a whole and for each dimension.

Table-4: Results of Applying Cronbach Alpha on all the fields of the motivation scale and the scale as a whole

Field	number of items	reliability coefficient
perseverance	9	0.72
objective	9	0.73
Ambition	8	0.75
Scale as a whole	26	0.86

The results of the statistical analysis showed that the overall reliability coefficient was high (0.86) which indicates a high consistency of the scale items; the results of the statistical analysis showed a high internal consistency among the scale dimensions which was revealed by a good reliability coefficient for each dimension of the scale; the least reliability coefficient for the dimensions was the perseverance which amounted to 0.72 followed by the "objective" whose reliability was 0.73; however, the highest reliability coefficient was the "ambition" which amounted to 0.75. It is evident that the reliability coefficients of the dimensions were close which proves the internal

consistency of the scale and the consistency among the dimension items.

Third: Results Related to Answering the Third Question

To answer the third question of the study, which stated, "What are the characteristics of the items of the achievement motivation scale prepared in this study?", the discrimination indicators of the items were calculated through using the Point-Biserial correlation coefficient between each item of the scale and the scale as a whole. Table-5 shows the results of the discrimination indexes of items.

Table-5: Discrimination indexes of the Scale Items

Item number	item	discrimination indexes	Item number	item	discrimination indexes
1	I am keen to accomplish what I am required to do.	0.48	14	I put plans to fulfill my thoughts I am convinced of	0.37
2	If I am charged with doing a task, I try to do it as fast as possible	0.51	15	I plan well before accomplishing tasks	0.44
3	I prefer working with very difficult tasks	0.38	16	I trust my expertise for achieving my objectives	0.43
4	I am characterized with excellent willpower and patience	0.40	17	I try to achieve my own goals without the help of others	0.29
5	I can do more than one task at a time	0.33	118	I try so hard to fulfill my ambitions	0.52
6	I am committed to the tasks entrusted to me fully	0.40	19	I get frustrated when I get low grades	0.21
7	I prefer working with easy tasks	0.31	20	My goal is to be an important person in society	0.53
8	I perform the tasks on schedule	0.44	21	I seek to be a leader in group activities	0.55
9	I am keen to accomplish the required task continuously and without interruption	0.45	22	I try to be distinct from others in everything	0.54
10	I do my homework without being reminded of it.	0.41	23	I participate in activities that require special abilities	0.47
11	I have high confidence in my abilities to achieve excellence	0.45	24	I try to make a target for my life which I work to achieve	0.57
12	I am filled with happiness when I achieve a certain goal	0.40	25	I enjoy reading the biographies of scholars and taking them as a role model	0.38
13	I endure the difficulties in order to achieve what I desire	0.49	26	I believe in the old saying "Conquering is an inexhaustible treasure"	0.29

Table-5 shows that the discrimination indexes ranged from 0.29 to 0.55 indicating that the scale items had a reasonable discrimination among the members of the sample on which the scale was applied; we notice that the lowest discrimination index was 0.29 for item 26, which stated "I believe in the old saying "conquering is an inexhaustible treasure" and the highest discrimination index was 0.55 for item 21 of the scale, which states that "I seek to be a leader in group

activities". This item revealed the differences among individuals in terms of the dimension of ambition. As for the rest of the items of the scale, their discrimination indexes ranged (0.3 – 0.5) which is considered reasonable among the psychological scales. Now it became evident how the scale items had a reasonable and acceptable discrimination indicating that the scale had a reasonable amount of internal consistency. By extracting the discrimination indexes for the scale

items, knowing that the researcher did not extract the characteristics of the items of his scale, the study was a good addition in helping researchers willing to study the psychometric characteristics of the scale through facilitating the process of comparing their results with the results of the two researchers.

RESULTS DISCUSSION

First: discussion of the results related to the first question "what are the indicators of validity and criterion validity for the achievement motivation scale prepared in this study?" The results indicated that the correlation between the achievement motivation scale and the ambition scale was 0.57 and it was statistically significant; this indicated a high correlation between the dimensions and the total scale suggesting that there is a high internal consistency, which leads to a reasonable construct validity for the scale. The scale's validity is attributed to the strong correlation between the scale and the purpose of using it, which is the achievement motivation scale among the members of the study sample as well as the close correlation between the scale's items and the motivation components that there were no items that refer to measuring attributes other than the achievement motivation. Furthermore, the used scale was able to differentiate between the two sides of the measured attribute that it distinguished between the people with high, low and medium motivation; scores were not convergent but they were distributed equally showing the individual differences among the members of the study sample. This means that the sample represented the original population that either scores were convergent or discriminate, they would lead to low scale validity.

Second: discussion of the results related to the second question, namely, "what are the indicators of reliability of the achievement motivation scale prepared in this study?" there was a high consistency among the items of the scale items. The results also showed a high internal consistency among the dimensions of the scale one by one which are revealed by a good reliability coefficient for each dimension of the scale.

When comparing the findings on the reliability of the scale reached by the researcher with the ones reached by the original researcher, there was a consistency in light of the reliability and dimensions of the scale; the total reliability coefficient of the scale when the researcher applied it was 0.86, which was similar to the value reached by the two researchers at time of application. This indicates the high reliability of the scale, which is attributed to several reasons including the fact that the sample on which the scale was applied was representative to the original population targeted in the study, similar circumstances of application in the first attempts by the original researcher and the current attempt, the items of the scale

are representative of the behavioral population related to the achievement motivation and all its associated behaviors, and the variance in the degrees of the members of the sample; the higher the variance and differences in performance, the higher the scale's reliability. Also, the study attributed the high reliability of the scale to the length of the scale used and its number of items that the more the items, the higher the reliability because this means more coverage of the content of the measured attribute, and the fact that the length of the test leads to reducing the errors in measurement caused by coincidence or impact of external conditions, thus obtaining more accurate estimates of this attribute among individuals. The study also suggests the reason for the high reliability of the scale to the fact that the performance of the individuals on the scale was closer to the real or actual performance in which measurement errors caused by coincidence or external factors are less.

Third: discussion of the findings of the third question: " What are the characteristics of the items of the achievement motivation prepared in this study?" "the researcher attributed the high discrimination indexes of the scale items to the high correlation between each item of the scale and the scale as a whole, which indicates the consistency of the scale and the consistency of its construct on the one hand, and that the scale items are representative to the behavioral population in terms of the attribute of achievement motivation on the other hand. Another reason for the high discrimination indexes for the scale items is that they were able to detect differences in performances among the sample members as a result of their linguistic accuracy, clarity, and disclosure of the three components or dimensions of achievement in this scale. Through extracting the discrimination indexes for the scale items, knowing that the original researcher did not extract the characteristics of the items of his scale, this study was an addition that helps researchers willing to study the characteristics of the psychometric scale, making it easier for them to compare their results with the results of the researcher.

RECOMMENDATIONS

In light of the results achieved in this study, which aimed at studying the psychometric characteristics of the achievement motivation on a sample of teachers of the Ministry of Education in the Directorate of the Northwest Badia in Mafraq, the study recommends the following:

- Applying the scale on other communities of teachers working in the Jordanian Ministry of Education and workers in other educational sectors to measure their achievement motivation.
- Studying the psychometric characteristics of the scale in light of its application to different samples in terms of geographical region, educational achievement, age, and nature of school (public,

private, UNERWA, Syrian refugees' schools) to verify the validity and reliability of the scale revealed by this study.

- Expanding the dimensions of the scale so that they include other areas of the achievement motivation by reviewing the theoretical literature of the dimensions of the achievement motivation, formulating items suiting the dimensions, and verifying validity and reliability in the dimensions.

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