

RESEARCH ARTICLE

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# THE LEVEL OF VOCATIONAL MATURITY AMONG TRAINEES IN VOCATIONAL TRAINING

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## Abstract

Professional maturity is one of the most important subjects in the present era, so this study seeks to know the level of professional maturity of vocational educators Mustafa bin Bolaid Sidi Lakhdar

The sample consisted of 100MMPs, then using a professional maturity scale "CRAES" was based on the descriptive curriculum. The results of the study found that the level of professional maturity of vocational training was low. It was found that there were no significant differences attributable to the sex variable. These results were then discussed from the theoretical framework of the study in addition to information obtained through the field as well as previous studies.

**Keywords:** professional maturity, vocational educators.

## ملخص الدراسة

يعتبر النضج المهني من أهم المواضيع في العصر الحالي، لذلك جاءت هذه الدراسة تسعى إلى معرفة مستوى النضج المهني لدى متريصي التكوين المهني مصطفى بن بولعيد بسيدي لخضر، فتكونت العينة من 100 متريص ومتريصة، ثم استخدام مقياس النضج المهني "كرايس" وتم الاعتماد على المنهج الوصفي، توصلت نتائج الدراسة إلى أن مستوى النضج المهني لدى متريصي التكوين المهني جاء منخفضاً وتم التوصل إلى عدم وجود فروق ذات دلالة إحصائية تعزى لمتغير الجنس، وقد تم بعد ذلك مناقشة هذه النتائج انطلاقاً من الإطار النظري للدراسة بالإضافة إلى ما تم استنتاجه من معلومات من خلال الميدان وكذلك من الدراسات السابقة.

الكلمات المفتاحية: النضج المهني، متريصي التكوين المهني.

RECIEVED: 22/05/2025

ACCEPTED: 22/08/2025

PUBLISHED: 19/09/2025

## Introduction:

In recent years, Algerian society has witnessed major changes and transformations in various economic, social, and political fields. These changes have had a significant impact and have led to considerable development within institutions, sectors, and organizational structures in the country. This has been particularly evident in the educational sector, which has increasingly emphasized guidance and counseling as psychological and pedagogical practices inseparable from the teaching and learning process.

Hence, the need for training and career guidance has become one of the most prominent topics in society, as it aims to help individuals develop and accept themselves, while acquiring the knowledge and skills necessary to make optimal career decisions for their future lives.

Many studies have shown that people often choose their professions based on personal desires, advice from friends or relatives, or even under the influence of parental pressure and family traditions. Since careers align with the level of ambition an individual sets for themselves, career choice has now become one of the most crucial issues individuals deal with, given its potential positive or negative impacts on their lives. A career may serve as a means of growth and development or as a source of personal destruction. Therefore, career choice requires several foundations, among which career maturity is considered one of the most influential factors in making sound choices for future professions.

## 1. Research Problem:

The lifestyle of most societies has changed due to various conditions, particularly social and economic transformations that have threatened individuals' living standards and their ability to achieve the social status through which they seek self-affirmation. In present-day Algeria, proving one's social position requires effort and perseverance. With the recent scarcity of job opportunities and the increase in unemployment rates, finding employment has become contingent upon demonstrating a certain level of skill or professional competence. Consequently, vocational training has become an inevitable necessity. The state has even introduced an unemployment allowance for job seekers, with training being a mandatory requirement.

This situation has left Algerian youth confused and uncertain about choosing careers that match their abilities and interests. Career choice requires multiple factors, the most important of which is career maturity. Career maturity is a vital process in an individual's life due to its significant impact on personal, social, and economic well-being. It enables individuals to advance in their professional lives and achieve career progression. Career maturity also fosters a positive work environment and greater job satisfaction, leading to higher productivity and income. Moreover, it enhances social and interpersonal relationships since individuals are engaged in work that suits them, boosting their self-confidence, decision-making abilities, morale, and adaptability with others.

This was highlighted in **Terzolet's** study, which emphasized the critical importance of career maturity in shaping academic, professional, and future projects, considering it a key psychological attribute in career development.

Career maturity can also influence students' academic performance. **Powell (2001)** confirmed this in his study, showing a relationship between career maturity and academic achievement: students with higher achievement levels demonstrated greater career maturity, and females tended to be more mature than males.

Additionally, career maturity can affect making appropriate career choices. **Meki Douajni (2020)**, in her study on the relationship between career maturity and career decision-making skills, found a statistically significant positive correlation between career maturity levels and decision-making skills. In other words, the higher the career maturity, the stronger the career decision-making skills.

From here, the following research questions arise:

- What is the level of career maturity among trainees at the Mustapha Ben Boulaid Vocational Training Center in Sidi Lakhdar, Aïn Defla Province?
- Are there statistically significant differences in the level of career maturity among vocational training trainees attributable to gender?

### 1.1 Hypotheses:

- The level of career maturity among trainees at the Mustapha Ben Boulaid Vocational Training Center in Sidi Lakhdar, Aïn Defla Province is high.
- There are statistically significant differences in the level of career maturity among trainees attributable to gender.

### 2.1 Objectives of the Study:

This study aims to:

- Identify the level of career maturity among male and female vocational training trainees.
- Examine differences in career maturity levels among trainees.

### 3.1 Study Terminology:

#### 3.1.1 Career Maturity:

- *Conceptually*: It refers to the extent to which individuals have developed vocational orientation towards career choice and their readiness to engage with their profession. It is also defined as the ability to make realistic career choices with self-awareness, knowledge of the profession, and the requirements for making appropriate career decisions (Al-Nawasrah, 2021, p.191).
- *Operationally*: It is the individual's readiness to choose a profession in line with their interests and abilities, measured by the score obtained on Crites' Career Maturity Scale, which includes the following dimensions:
  - Self-awareness
  - Knowledge of the world of work
  - Independence in career choice
  - Realism and flexibility in career choice
  - General orientation toward work

### 4.1 Significance of the Study:

The significance of this study lies in exploring the ability of vocational trainees, both male and female, to make appropriate decisions for a better future. It also seeks to assess their awareness of labor market requirements. Since career maturity has a substantial impact on employability, this study addresses the importance of evaluating the career maturity level of vocational training trainees.

### 5.1 Study Limits:

- *Objective:* The level of career maturity among vocational training trainees, based on a field study conducted at the Mustapha Ben Boulaid Vocational Training Center in Sidi Lakhdar.
- *Spatial:* Mustapha Ben Boulaid Vocational Training Center, Sidi Lakhdar, Aïn Defla Province.
- *Temporal:* The study was conducted from March 6, 2024, to March 11, 2024.

## The Conceptual Framework of the Study:

### 1. The Concept of Career Maturity:

Career maturity is a relatively modern concept derived from Super's career development theory. Its lack of clarity and varied definitions can be attributed to differences in the theoretical backgrounds of career counseling scholars, as well as its hypothetical nature, being inferred from observable behaviors and outcomes. Developmental theorists in career counseling are among the pioneers who provided clearer conceptualizations of career maturity (Moshri, 2013, p.422).

**Holland** defined career maturity as the extent to which individuals know themselves and possess accurate information about the world of work, occupations, and the labor market. He considered it as the extension of one's personality into the work world, followed by alignment with occupational patterns. One of the main determinants of career choice is comparing self-perception with perceptions of the occupation, which leads to sound career decisions (Zaouane & Khalaifiya, 2022, p.999).

**Super** argued that career maturity reflects an individual's readiness to deal with developmental career tasks appropriate to their age (Zaouane & Asaadi, 2021, p.321).

**Crites** defined it as behavior that reflects vocational attitudes, consisting of two main dimensions: cognitive knowledge and emotional-affective orientation (Al-Rashidi, 2017, p.13).

**Naidoo et al.** defined it as the individual's readiness to make realistic career decisions, seize opportunities, and face surrounding societal challenges.

**Levinson et al.** described it as the extent to which an individual acquires the necessary knowledge and skills to make realistic and intelligent career choices (Howeida, 2011, pp.667–668).

**Tiedeman**, a developmental theorist, argued that career maturity is evident in the broader principle of cognitive development, where individuals reach their peak in career decision-making. He emphasized two points:

- *Differentiation:* Evaluating oneself by aligning self-concepts with perceptions of the work world.
- *Integration:* Achieving self-realization through interaction and integration with the professional community, leading to satisfaction and fulfillment with one's professional activities (Badra, 2016, p.406).

**Talaat Lotfi (1993)** defined career maturity as an individual's preference for a particular type of work to achieve job satisfaction.

**Abdel Fattah Dweidar (1990)** described it as the process of assisting individuals in choosing careers suited to their abilities and interests, by understanding their personalities and capacities, selecting the appropriate type of study or profession, preparing for it, and ensuring advancement and promotion (Ibrahim Salim, 2013, p.88).

### 7. Previous Studies:

- **Lamia Saleh Al-Hawari (2023):** Aimed to explore emotional balance and its relationship to career maturity among first-year secondary students in Karak Governorate. The sample consisted of 800 students. Using Crites' Career Maturity Scale, the study found that both emotional balance and career maturity were average, with statistically significant gender differences favoring males.
- **Faisal Al-Nawasrah (2021):** Examined the level of career maturity among gifted and non-gifted students in Ajloun Governorate and its relationship with some variables and academic achievement. The sample included 290 secondary students. Results indicated average career maturity levels, with statistically significant differences favoring females.
- **Ahmed bin Mohammed Al-Rashidi (2017):** Investigated career maturity and its relation to career decision-making skills among tenth-grade students. The sample included 200 students. Using the career maturity scale, results showed a high level of career maturity, with no significant gender differences.
- **Meki Douajni Fatima Zahra (2020):** Studied the relationship between career maturity and career decision-making skills among first-year secondary students in Oran. The sample included 66 students. Results showed a significant positive correlation between career maturity and decision-making skills.
- **M'Barka Ben Mezouz (2019):** Assessed the level of career maturity among vocational training trainees in M'sila. The sample consisted of 60 trainees, and results showed high career maturity levels.
- **Tekke & Kurt (2015):** Investigated career maturity among Asian foreign students in Malaysian universities, with a sample of 229 students. Using Crites' adapted career maturity inventory, results indicated high levels of career maturity.
- **Hoorn (2013):** Explored career maturity among first-year commerce students at the University of Western Cape. The sample consisted of 303 students. Using the career maturity questionnaire, the study found no significant gender differences in career maturity levels (Al-Hawari, 2023, p.156).

## 8. Commentary on Previous Studies

### In terms of objectives:

The studies by (Faisal Al-Nawasrah, 2021; M'Barka Ben Mezouz, 2019; Tekke & Kurt, 2015; Hoorn, 2013) pursued the same objective as the present study, namely, identifying the level of career maturity among the sample. However, they differed from the study by (Lamia Saleh Al-Hawari, 2023), which aimed to determine the relationship between career maturity and emotional balance, as well as from the study by (Ahmed bin Mohammed Al-Rashidi, 2017), which examined the relationship between career maturity and career decision-making skills.

### In terms of methodology:

All previous studies agreed with the current study in adopting the descriptive method. However, the study by (Lamia Saleh Al-Hawari, 2023) differed as it used the analytical method, and the study by (Meki Douajni, 2020) differed by employing the comparative method.

### In terms of sample:

The study by (M'Barka Ben Mezouz, 2019) agreed with the present study in sample type, focusing on vocational training trainees. In contrast, the studies by (Lamia Saleh Al-Hawari, 2023; Faisal Al-Nawasrah, 2021; Al-Rashidi, 2017; Meki, 2020) used secondary school students as their samples, while the studies by (Tekke & Kurt, 2015; Hoorn, 2013) were based on university students.

### **In terms of instruments:**

All the above-mentioned studies agreed with the present one in using Crites' Career Maturity Inventory as their research tool.

### **In terms of results:**

Most studies sought to identify the level of career maturity. The studies by (Al-Hawari, 2023; Al-Nawasrah, 2021; Al-Rashidi, 2017) found that career maturity among secondary school students was average, except for (Al-Rashidi, 2017), who reported high levels of career maturity. Statistically significant differences were found in favor of females in (Al-Nawasrah, 2021), while (Al-Hawari, 2023) reported differences in favor of males. The study by (Tekke & Kurt, 2015) found high levels of career maturity, while (Hoorn, 2013) found no statistically significant gender differences. Both (Meki, 2020; M'Barka, 2019) reported high career maturity among their samples, along with a positive relationship between career maturity and career decision-making.

## **1. Methodological Foundations and Procedures of the Study**

### **1.1 Exploratory Study**

#### **1.1.1 Objectives of the Exploratory Study:**

- Reviewing educational literature to select study variables based on findings from previous research.
- Verifying the psychometric properties of the study instruments in terms of validity and reliability.

#### **1.1.2 Exploratory Sample:**

The exploratory sample consisted of 30 male and female trainees, selected using simple random sampling.

## **3. Research Method:**

The research method provides a pathway to uncovering truth in various sciences through general rules that define procedures and steps for reaching results. It is the approach adopted by the researcher in investigating facts in any field of science or branch of knowledge (Barakat, 2019).

### **The Descriptive Method:**

The descriptive method is one of the most important approaches used in psychology, education, and social sciences. It focuses on collecting accurate, scientific information about a given phenomenon to understand and verify it more effectively. Beyond mere data collection and recording, it seeks to interpret data, identify relationships with other phenomena, determine causes, and attempt predictions (Boudawoud & Ataallah, 2009).

This is the method adopted in the current study due to its compatibility with the nature of the study variables.

4. Study Population:

The study population consists of 474 male and female trainees at the Mustapha Ben Boulaid Vocational Training Center in Sidi Lakhdar, Aïn Defla Province.

Main Sample:

The main sample consisted of 100 male and female trainees distributed across 11 specialties: aluminum and plastic carpentry, group cooking, IT operator, heavy vehicle mechanics and repair, secretarial work, accounting, pastry-making, hairdressing, tailoring, beekeeping, and cheese-making. They were selected using stratified sampling, based on the following formula:

$$\text{Sample} = (\text{Subgroup size} \div \text{Total population size}) \times \text{Sample size}.$$

Definition of Stratified Sampling:

Stratified random sampling is a method of selecting a research sample when the population can naturally be divided into distinct, non-overlapping subgroups (strata). Samples are drawn from each stratum separately and then combined to form the overall sample (Ahmed Abdel-Badea, 2022, p.55).

After obtaining the data collection tool—the Career Maturity Scale—we listed the specialties and wrote trainees’ names on slips of paper, followed by a lottery process for selection. The questionnaire was administered to 100 male and female trainees through stratified sampling.

Sample Characteristics

Table 01: Distribution of Sample by Gender

Gender	Number	Percentage
Male	70	70%
Female	30	30%
Total	100	100%

From the above table, we observe that there were 70 males (70%) and 30 females (30%).

Table 02: Distribution of Sample by Educational Level

Educational Level	Number	Percentage
Middle School	45	45%
Secondary School	43	43%
University	12	12%
Total	100	100%

From the table, we see that most participants had middle school (45%) or secondary school (43%) levels of education, while a small proportion (12%) had a university level.

5. Research Instruments:



**1. Personal Form:**

This included gender, specialty, and age.

**2. Career Maturity Scale:**

The scale consists of five dimensions aimed at measuring the level of career maturity among students:

- Self-awareness
- Knowledge of the world of work
- Independence in career choice
- Realism and flexibility in career choice
- General orientation toward work

The final version of the instrument comprised 57 items, distributed across the five dimensions as follows:

- Self-awareness: 16 items (1, 4, 9, 14, 19, 22, 27, 32, 35, 40, 42, 44, 47, 52, 54)
- Knowledge of the world of work: 13 items (2, 5, 10, 15, 20, 23, 28, 33, 36, 41, 45, 48, 53)
- Independence in career choice: 13 items (3, 6, 11, 16, 21, 24, 29, 34, 37, 43, 46, 49, 55)
- Realism and flexibility in career choice: 8 items (7, 12, 17, 25, 30, 38, 50, 56)
- General orientation toward work: 8 items (8, 13, 18, 26, 31, 39)

**2. Procedures for Administering the Study Instruments**

**Psychometric Properties (Reliability and Validity) of the Career Maturity Scale in the Present Study:**

**First: Reliability of the Scale Scores:**

The reliability of the scale was tested using Cronbach’s alpha ( $\alpha$ ).

**Table (): Cronbach’s Alpha Coefficient for the Career Maturity Scale**

Scale	Cronbach’s Alpha ( $\alpha$ )
Career Maturity	0.703

From the table above, it is clear that the Cronbach’s alpha coefficient for the Career Maturity Scale was 0.703. Based on this, and referring to the overall score of the scale, we can conclude that the reliability of the Career Maturity Scale is high, indicating that the instrument is consistent with a high degree of consistency, considering that the value obtained explains 70% of the true score of the study sample. This is a high percentage, which indicates that the scale scores are reliable and that we can depend on its results in this study.

**Second: Validity of the Scale Scores**

**1. Internal Consistency:**

The validity of the vocational maturity scale in the current study was verified using the internal consistency method, by calculating the correlation coefficients between the sub-dimensions of the scale and the total score of the scale, as follows:



**Table (...):** Values of correlation coefficients between the dimensions of the vocational maturity scale and the total score.

Dimensions of the Vocational Maturity Scale	Correlation Coefficient
Self-Knowledge	,860**
Knowledge of the Work World	,605**
Independence in Career Choice	,724**
Realism and Flexibility in Career Choice	,591**
Attitude Toward Work	,480**
<b>Total Score</b>	<b>**</b>

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

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

It is observed from Table (...) that the scale's dimensions were consistent with the total score, being significant at the 0.01 level. The correlation coefficients ranged between (0.48 and 0.86). From these results, we can conclude that the dimensions are consistent with the total score of the vocational maturity scale among the study sample. Thus, the scale scores are valid, and we can rely on its results in this study. These findings also support and confirm the results obtained regarding reliability.

### 1.1.1 Presentation and Analysis of Study Results

#### 1-1. Presentation and Analysis of the First Hypothesis:

The first hypothesis states that: *The level of vocational maturity is high among vocational trainees at the Mustafa Ben Boulaid Vocational Training Center in Sidi Lakhdar, Aïn Defla Province.*

**Table (13):** Results of the one-sample T-test to determine the significance of the difference between the hypothetical mean and the actual mean of vocational trainees at the Mustafa Ben Boulaid Vocational Training Center in Sidi Lakhdar, Aïn Defla.

Sample	Hypothetical Mean	Actual Mean	Standard Deviation	Calculated T	Tabular T	df	Sig.
100	171	156.5800	18.17990	-7.932	2.364	99	0.01

From the table, it is observed that the actual mean of the responses of the study sample to the items of the vocational maturity scale was 156.5800 with a standard deviation of 18.17990. Compared with the hypothetical mean of 171, the actual mean is lower. After testing its significance with the one-sample T-test, the calculated T-value was -7.932, which is lower than the tabular T-value of 2.364 at the 0.01 significance level, with 99 degrees of freedom. This indicates that the level of vocational maturity among vocational trainees at the Mustafa Ben Boulaid Vocational Training Center in Sidi Lakhdar, Aïn Defla, is low.

## 1-2. Presentation and Analysis of the Second Hypothesis:

The second hypothesis states that: *There are statistically significant differences in vocational maturity among vocational trainees at the Mustafa Ben Boulaid Vocational Training Center in Sidi Lakhdar, Aïn Defla, attributable to the gender variable.*

**Table (...):** Results of the independent samples T-test comparing the mean scores of male and female vocational trainees at the Mustafa Ben Boulaid Vocational Training Center in Sidi Lakhdar, Aïn Defla, on the vocational maturity scale.

Vocational Maturity Scale	Gender	Sample Size	Mean	Std. Deviation	Calculated T	df	p-value	Sig.
Total Score	Female	30	158.1667	17.51469	-0.569	98	3.174	n.s.
	Male	70	155.9000	18.53945				

From the table, it appears that the number of females was 30 trainees, with a mean score of 158.1667 on the vocational maturity scale and a standard deviation of 17.51469. The number of males was 70 trainees, with a mean score of 155.9000 and a standard deviation of 18.53945, which is close to that of the females. The calculated T-value for two independent samples was -0.569 with 98 degrees of freedom, which is statistically non-significant.

Based on this, we cannot conclude that there are gender-based differences in the vocational maturity of trainees at the Mustafa Ben Boulaid Vocational Training Center in Sidi Lakhdar, Aïn Defla.

### 1.1.2 1-2. Interpretation and Discussion of the Study Hypotheses

#### 1-2-1. Discussion of the First Hypothesis:

The first hypothesis stated that the vocational maturity level of trainees at the Mustafa Ben Boulaid Vocational Training Center in Sidi Lakhdar is low. This contradicts the study of *Mebarka Ben Mezouz (2019)*, which found that vocational trainees had a high level of vocational maturity. It also differs from the study of *Lamiaa Saleh Al-Hawari (2023)*, which found that the vocational maturity level of students was moderate.

The decline in vocational maturity among the trainees in this study may be attributed to other factors identified in the theoretical framework, such as family factors (e.g., parental imposition of decisions and career paths reflecting parents' desires without discussion). Another factor may be low academic achievement, which pushes individuals out of formal education and obliges them to join vocational training to improve their level.

Based on real-world observation and questions posed to the trainees, the decline in vocational maturity appears to be linked to the necessity of vocational training as a condition for maintaining unemployment benefits. For some, joining vocational training was merely a way to improve their level, rather than stemming from genuine interest.

#### 1-2-2. Discussion of the Second Hypothesis:

The second hypothesis stated that there are statistically significant gender-based differences in vocational maturity among trainees at the Mustafa Ben Boulaid Vocational Training Center in Sidi Lakhdar, Aïn Defla. However, the statistical analysis revealed no significant differences. This finding is consistent with *Ahmed bin Mohammed Al-Rashdi (2017)*, which indicated no statistically significant differences in vocational maturity between males and females. It is also in line with *Hoorn (2013)*, which similarly reported no significant gender differences in vocational maturity.

These findings also align with the results of the first hypothesis, as both genders share the same context of compulsory vocational training. Thus, their perceptions converge on viewing training primarily as a means to improve living standards and preserve unemployment benefits.

### 1.1.3 General Conclusion

This study investigated the level of vocational maturity among trainees at the Mustafa Ben Boulaid Vocational Training and Apprenticeship Center. Based on both theoretical and field findings, the study arrived at the following conclusions:

- The level of vocational maturity among the trainees was low.
- There were no statistically significant differences in vocational maturity attributable to gender (male/female).

The study also showed that vocational maturity enables individuals to acquire characteristics, skills, and abilities that allow them to adapt to their environment, benefit from it, search for and analyze relevant information, face problems, and take responsibility for their decisions.

### 1.1.4 Conclusion

Vocational maturity is a crucial factor that positively reflects on individuals. Therefore, this study aimed to reveal the level of vocational maturity among trainees at the Mustafa Ben Boulaid Vocational Training Center in Sidi Lakhdar, Aïn Defla.

The study addressed the issue from two main perspectives:

- **Theoretical:** It covered the theoretical framework, including definitions, factors, components, and theories explaining vocational maturity. It also presented the research problem, hypotheses, and significance.
- **Field:** It included methodological procedures, identification of the study population, psychometric properties, statistical methods, and results.

### Main findings:

- The level of vocational maturity among the trainees was low.
- No significant differences were found by gender.

### 1.1.5 Recommendations

- Introduce vocational maturity and decision-making skills into curricula across all educational levels, adapted to each stage.
- Provide career guidance services as part of the school system, for instance by integrating career education into the curriculum.

- Utilize mass media (TV, radio) to raise awareness of vocational maturity and highlight the importance of different academic and vocational specializations.
- Improve the social status of certain professions so that trainees' choices are not negatively influenced by societal perceptions.

#### 1.1.6 References:

- Al-Rashdi, A. B. M. (2017). *Vocational maturity and its relationship to career decision-making skills among tenth-grade students* (Master's thesis). Nizwa University, Oman.
- Badra, H. (2016). *Self-esteem and its relationship to vocational maturity*. *Journal of Human and Social Sciences*, 26.
- Zaghwan, A., & Khlaifia, N. (2022). *Theories explaining vocational maturity*. *Al-Riwaq Journal of Social and Human Studies*, 2(1).
- Zaghwan, A., & Asaadi, F. (2021). *Vocational maturity and its relationship to career decision-making skills among third-year secondary school students*. *Journal of Psychological and Educational Sciences*, 7(4).
- Hanfi, M. H. (2011). *Vocational maturity and its impact on the quality of career decision-making for choosing a future profession*. *Egyptian Journal of Psychological Studies*, 21(73).
- Salim, A. I. (2013). *Occupational psychology*. Dar Al-Zahraa for Publishing and Distribution.
- Meshri, S., & Lacheheb, A. (2013). *Vocational maturity and its relationship to coping strategies used in dealing with occupational stress*. In *Proceedings of the Second International Conference on the Phenomenon of Suffering at Work: Between Psychological and Sociological Approaches*. University of El Oued, Algeria.
- Abdel-Badee, A., & Abdullah, A. (2022). *Statistical samples in experimental research*. *International Journal of Designs and Applied Research*, 1(1).
- Al-Nawasrah, F. (2021). *The reality of vocational maturity among gifted and regular students in Ajloun Governorate and its relationship to some variables and academic achievement*. *Arab American University Journal of Research*, 7(2), 186–216.
- Barakat, Z. A. (2019). *Research design and its statistical methods*. Al-Warraq Publishing and Distribution, Amman.
- Boudaoud, A. Y., & Atallah, A. (2009). *Guide to scientific research for students of physical education and sports*. University Publications Office (OPU), Algeria.