

## Psychological hardness for people with motor disabilities A field study in a sample of adults

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### Abstract:

The current study aims to determine the level of psychological resilience among individuals with physical disabilities and assess the level of differences based on the following variables: degree of disability and educational level. To investigate this topic, we adopted an appropriate descriptive approach that matches the nature of the subject. The study sample consisted of 50 adult individuals with physical disabilities in the state of Ouargla, Algeria.

**Keywords:** Psychological resilience, Physical disability.

### Introduction:

God Almighty created humans and distinguished them with His generosity from other creatures. He endowed them with all the elements of life and provided them with means of livelihood. He also bestowed upon them abilities and skills that ensure their happiness and harmony, as stated in the following divine verse: " And indeed We have honoured the Children of Adam, and We have carried them on land and sea, and have provided them with At-Taiyibat (lawful good things), and have preferred them above many of those whom We have created with a marked preference." (Quran 17:70).

However, we witness that contemporary societies, with their social and cultural changes, give rise to pressures in all aspects of life, exposing individuals to psychological crises and conflicts. This is because modern society is characterized by complex social relationships and numerous challenges. One of the main causes of these challenges is competition, inequality, and exploitation. Mental health care focuses on treating psychological disorders resulting from life pressures, especially among individuals with special needs. Most individuals with physical disabilities often face emotional and social maladjustment, as they develop negative self-perception. Physical disabilities affect the developmental aspects of the affected individuals. Psychological resilience is considered a complex construct within an individual's personality that protects them from the effects of various life pressures. It enables individuals to be more flexible, optimistic, and capable of overcoming their pressing problems, as well as protecting them from psychological and physical illnesses (Al-Abdali, 2012). Therefore, psychological resilience reflects an individual's ability to endure stress, maintain balance, and achieve psychological and social harmony.

### Problem Statement:

Motor disability is one of the topics that has received significant attention and interest in the fields of education and psychology. The focus on special education dates back to the second half of the previous century when it became evident that individuals with special needs, including motor disabilities, were unable to rely on themselves. However, in the beginning of the current century, organized services began to emerge in many advanced countries. These services aimed to provide care for these individuals, as the prevalence of disabilities increased during the World War, necessitating the urgent provision of suitable rehabilitation programs (Faisal Al-Zayyout).

A person with a motor disability is defined as an individual who has a defect that prevents the muscles, bones, or joints from functioning normally. This condition can be the result of an accident, illness, or

congenital factors (Issam Hamdi As-Safadi). Motor disability leaves psychological, social, and behavioral effects, manifested through indicators and signs such as negative self-concept, loss of self-control, financial and economic dependence, difficulty accepting the disability, and self-satisfaction (Abdul Rauf, 2008). Since an individual with a motor disability is a member of society, they experience a range of pressures and stresses inherent in human existence in various aspects of their life, whether they deal with them positively or negatively. Kobasa has pointed out that we inevitably face pressures in all social, occupational, and familial dimensions of life, and our response, resistance, and direction of these pressures vary from one individual to another.

Furthermore, it has been pointed out that we cannot avoid failure, frustration, or feelings of alienation, nor can we escape the demands of life. However, the way we deal with these pressures and confront them makes a difference among individuals. This is where the level of psychological resilience comes into play. Thina Mansour defines psychological resilience as the ability of a person to confront life events and effectively deal with them, avoiding psychological and social disorders (Thina Mansour). Adib Mohammed Al-Khaldi describes it as components that function as psychological variables that greatly alleviate the impact of stressful life events and crises, and its relationship with mental illness is inversely correlated (Adib Mohammed Al-Khaldi, 2009).

Therefore, psychological resilience is a constituent characteristic of an individual's personality in facing pressures and tensions, enabling them to avoid disturbances and believe that they are capable of overcoming and dealing with them positively. It involves maintaining factors such as optimism, hope, and self-confidence. A study conducted by Ismail Omar Diab focused on assessing the psychological resilience among individuals with motor disabilities, using a descriptive approach. The study sample consisted of 400 individuals with motor disabilities selected randomly. To test the study hypotheses, the Psychological Resilience Scale developed by Emad Makhmair in 2002 was employed. The study yielded the following results:

Individuals with disabilities are characterized by a high level of psychological resilience, particularly at the secondary level. It has been evident that there are statistically significant differences in the level of psychological resilience based on the type of disability (mild and moderate disabilities), as indicated by a study conducted by Gerson in 1998. The study aimed to explore the relationship between psychological resilience, coping skills, and stress among postgraduate students. The study sample consisted of 101 postgraduate students.

The study found that students who obtained high scores in psychological resilience utilized more effective and impactful coping skills compared to those with low resilience scores. Additionally, it was observed that stress was positively associated with the following coping skills: emotional discharge and cognitive avoidance. Furthermore, the study revealed that overall resilience, cognitive avoidance, and logical analysis were important predictors of stress. Moreover, a negative relationship between resilience and stress was identified, with students who scored high in resilience perceiving stressors to be lower compared to those with low resilience scores (Tanhid Adel Fadel, Al-Bir Qadar, 2011).

A study conducted by Fatima Ben Qatila, a local study in the city of Ouargla, aimed to investigate the psychological resilience among physically disabled adults. To test the study hypotheses, a questionnaire was administered to a sample of 60 disabled individuals in Ouargla. The study yielded the following results: The individuals in the sample exhibited a high level of psychological resilience. There were statistically significant differences in the sample's estimations of psychological resilience based on gender (male, female). Likewise, statistically significant differences were found in the sample's estimations of psychological resilience attributed to the educational level (below level, primary, intermediate, secondary, university).

Psychological resilience is considered one of the constituent traits of an individual's personality, playing a crucial role in improving psychological performance and developing a personality capable of coping with life pressures and external stimuli. Based on this premise, the current study raises the following questions: What is the level of psychological resilience among physically disabled individuals? Are there statistically significant differences in the level of psychological resilience based on educational level?

#### **Study Objectives:**

The current study aims to investigate the following:

1. The level of psychological resilience among physically disabled individuals in a sample of adults from the city of Ouargla, Algeria.
2. Determine the level of differences in psychological resilience attributed to the variable of educational level.

**Study Significance:**

The importance of the current study is evident in the following aspects:

1. Theoretical Significance: It addresses an important variable, which is psychological resilience. This variable is crucial as studying it helps achieve a balance between an individual's self and their external environment.
2. Focusing on a sample of individuals with special needs and bridging the gap between their lives and the lives of able-bodied individuals.

**Applicability Importance:** The study's results contribute to the development of counseling programs aimed at enhancing psychological resilience for individuals with special needs.

Furthermore, the current study's findings open avenues for researching psychological resilience across all age groups and domains, as well as strategies for overcoming life pressures.

**Procedural Definition of Study Variables:**

**Psychological Resilience:** It refers to the characteristic of effectively coping with pressures and achieving a balance between the individual's self and their external environment.

**Physically Disabled:** An individual who has a physical impairment that hinders them from performing specific functions. This disability can be a result of an accident, illness, or present since birth. It can be further classified as mild, moderate, or severe.

**Adult with Disabilities:** An individual who has an impairment in one of their organs and is in the age range starting from 18 years, which marks the legal age of adulthood, up to 25 or 26 years. This stage is characterized by mental maturity and cognitive development.

**The Theoretical Framework of the Study:**

**Psychological Resilience:**

According to Saeed Ahmed Al-Bahadi, psychological resilience is defined as an individual's perception and acceptance of variables or psychological pressures they encounter. It functions as a preventive measure against sensory and psychological consequences and contributes to modifying the circular relationship that begins with pressures and ends with psychological exhaustion as an advanced stage of stress (Saeed Ahmed Al-Bahadi, 2002).

Brooks (2000) defines psychological resilience as an individual's ability to effectively deal with psychological pressures, adapt to daily challenges and difficulties, handle frustration, errors, psychological shocks, and daily problems. It involves setting specific and realistic goals to solve problems and interact peacefully with others while respecting oneself (Abdul Rahman, Ben Abdul Juhani, 2011).

Based on the provided definitions, psychological resilience is the ability of individuals to cope with pressures as a form of immunity and protection against stressful events and their repercussions on mental and physical health. It gives individuals confidence and self-efficacy in facing life's pressures.

**The Importance of Psychological Resilience:**

Both Maddi and Kopasa believe that stressful events lead to a series of regressions that affect the consultation of the autonomic nervous system. Chronic stress subsequently leads to exhaustion and its accompanying physical illnesses and psychological disorders. This is where the role of psychological resilience comes in, as it modifies the circular process that begins with stress and ends with exhaustion. This is achieved through various methods, as resilience:

Firstly, it modifies the perception of events, making them appear less severe.

Secondly, it leads to active coping strategies or the transition from one state to another.

Thirdly, it indirectly influences coping style through its impact on social support.

Fourthly, it leads to changes in health practices, such as maintaining a healthy diet and engaging in physical exercise, which, of course, reduces the risk of physical illnesses (Hammadah and Abdul Latif, 2002).

**Dimensions of Psychological Resilience:**

Kopasa's study revealed that psychological resilience consists of three dimensions: commitment, control, and challenge.

**1. Commitment:** It is a type of contract in which individuals commit themselves to their own self, goals, values, and others around them. Commitment reflects a general sense of determination and purposeful intention. It is expressed through the individual's inclination to be stronger, more active, and positively engaged with their environment. This involvement helps them avoid isolation, negativity, lethargy, and laziness.

Folkman (1984) suggests that the inclination for engagement can be expressed as a response to counteract alienation because a lack of commitment manifests as a sense of estrangement (Jawad HJazi, Ataf Abu Ghali, 2010).

**2. Self-Control:** It refers to an individual's belief in their own reality, importance, and value. It encompasses their actions and can be advised through the value of life, which lies in an individual's loyalty to certain principles and values. It also involves their belief that their life has purpose and meaning, which they live for. (Farouk El-Sayed Osman, 2001)

**3. Responsibility:** It is a term that refers to people's sense of bearing responsibility towards others and events in their marital, familial, social, and professional lives. (Mufidah Mohammed Abdul Aziz, 2010).

2. Control: Kopasa and Pusety (1983) referred to control as an individual's belief that the changing situations and circumstances of life are expected to occur, predictable, and controllable. The term control signifies people's inclination to believe that they have the ability to influence the events they encounter in their lives and manage them effectively. It represents a sense of self-control. (Mufidah Mohammed Abdul Aziz, 2010).

Challenge: Kopasa and Pusety (1983) define challenge as an individual's belief that renewed changes in life events are natural and even necessary for personal growth, rather than a threat to their security, self-confidence, and psychological well-being. (Mohammed Zuhair Radi Alawi, 2012).

It is defined as the anticipation of positive change in current circumstances, despite all the obstacles and difficulties one may be facing in the present. However, their future expectations remain optimistic. (Latif Ghazi Maki).

It also refers to people's inclination to perceive the changes that occur in their lives as opportunities that can be utilized for growth and accepted as they are. (Mufidah Mohammed Abdul Aziz, 2010).

#### **Characteristics of High Psychological Resilience:**

Through her studies conducted in 1989, 1985, and 1979, Kopasa identified the following characteristics of individuals who possess high psychological resilience:

1. Ability to endure and resist: They have the capacity to withstand and resist adversity.
2. Achievement-oriented: They demonstrate better performance and accomplishments.
3. Empowerment and inclination towards leadership and control: They exhibit a sense of empowerment and tend to lean towards leadership roles and exerting control.
4. Proactiveness, activity, and better motivation: They are more proactive, active, and possess stronger motivation.

Additionally, Hammadah and Abdul Latif add that individuals who exhibit psychological resilience are:

- Committed individuals who focus on fulfilling their work responsibilities rather than feeling powerless.
- Individuals who perceive change as a normal challenge rather than a threat.
- Individuals who view stressful life events as opportunities for decision-making and growth. (Hammadah and Abdul Latif, 2002).

#### **Characteristics of Low Psychological Resilience:**

- Low self-esteem assessment.
- Inability to tolerate and endure hardships.
- Lack of flexibility in decision-making.
- Quick anger, intense sadness, tendency towards depression and sorrow.
- Inability to handle responsibility.
- Lack of self-control.

#### **Motor Impairment:**

Definition of Motor Impairment: Motor impairment refers to the conditions of individuals who experience some form of dysfunction in their motor abilities or motor activity, which affects their cognitive, social, and emotional development, necessitating the need for special education. (Rossat, 1998).

### **Psychological Characteristics of Individuals with Motor Impairment:**

Psychological characteristics vary among children with motor impairments depending on the type of impairment. However, there are common psychological traits among them, and these traits are influenced by the opinions and judgments of others towards the disabled person. The quality of others' treatment and perception of the disabled individual, as well as their perception of their disability, can increase anxiety, stress, and personality disorders. These characteristics can be categorized or divided into:

1. Withdrawal and shyness.
2. Self-isolation.
3. Depression and sadness.
4. Dissatisfaction with oneself.
5. Feelings of helplessness, dependence, and anxiety. (Ghanem Ahmed Sabri and Ghanem Mohammed Sabri, 2016).

### **Behavioral Characteristics of Individuals with Motor Impairment:**

Behavioral characteristics vary among children with motor impairments depending on the type of impairment. However, there are common behavioral traits among them. Rashed Musa (1994, p. 23) stated that individuals with acquired physical disabilities have low self-esteem, feelings of unhappiness, decreased self-sufficiency, increased anxiety, and hypochondria compared to individuals with congenital motor disabilities.

Furthermore, Varni and Setoguchi (1996) found through their clinical observations in 1991 of children who experienced limb amputations due to illness or accidents that they suffered from depression and anxiety, leading to a decrease in their self-esteem (Fatima Mangoush, 2000).

Faruq Al-Rusan also mentions that the personal characteristics of individuals with motor impairments vary depending on the nature and severity of the motor disability. Feelings of anxiety, fear, aggression, and introversion may be distinctive features of the behavior of children with motor disorders. This means that the behavioral characteristics of individuals with motor impairments are influenced by the opinions and judgments of others towards the disabled person, as well as how they treat and perceive the disabled individual and their understanding of their disability. Therefore, the more the person's perception of themselves diverges from the opinions and judgments of others, the more they experience anxiety, stress, and personality disorders (Faruq Al-Rusan, 1996).

### **Basic Study Procedures:**

The adopted methodology: The researcher's reliance on a methodology for the study is an essential step in order to achieve the study's objectives and address its hypotheses accurately, systematically, and in a manner suitable for the nature of the study. Therefore, since the current study aims to explore the level of psychological resilience among individuals with motor impairments, we have chosen to adopt the exploratory descriptive methodology as it is most suitable for this study.

Study sample: The study sample consists of 50 individuals with motor impairments, and the necessary steps have been confirmed.

Study instrument: The Psychological Resilience Scale: This scale consists of 48 items, with the following dimensions:

1. Commitment, measured by 16 items.
2. Control, measured by 16 items.
3. Challenge, measured by 16 items.

The alternatives are as follows: "No" receives a score of 1, "Rarely" receives a score of 2, "Average" receives a score of 3, and "Frequently" receives a score of 4. Therefore, the theoretical score for each participant ranges from 1 to 192. A higher score indicates higher psychological resilience.

Presentation and analysis of study questions' results: Here, the results of the study questions will be presented and analyzed.

The first question states: "What is the level of psychological resilience among individuals with motor impairments?"

To verify this question, the mean and standard deviation of the scores obtained by the sample participants in response to the Psychological Resilience Scale were calculated. It should be noted that the theoretical average score for the scale is 120. The results are presented in the following table:

The table shows the statistical indicators of the scores of the sample members on the psychological hardness scale .

Theoretical average	Standard deviation	Arithmetic mean	Top grade	Lowest score	Sample Number
120	19.74	157.56	183	91	50

From the table above, we can observe that the scores of the sample participants ranged from a minimum of 91 to a maximum of 183. The mean score was calculated to be 157.56, with a standard deviation of 19.74.

To complete the calculations, a one-sample t-test was conducted on a sample in order to compare the theoretical mean with the calculated mean of the participants' responses on the Psychological Resilience Scale. The results are as follows:

The table presents the results of a t-test conducted on a single sample to examine the significance of the differences between the theoretical mean and the calculated mean of the participants' responses on the Psychological Resilience Scale.

Level	P-value	(v) Calculated	Degree of freedom	Standard deviation	Arithmetic mean	Theoretical average	Sample	Variable
High	0.00	13.45	49	19.74	157.56	120	50	Psychological hardness

Based on the above table, we observe that the calculated mean of the participants' responses on the Psychological Resilience Scale is 157.56, with a standard deviation of 19.74, which is higher than the theoretical mean of 120. The calculated t-value is 13.45, and the statistical significance levels indicate that there is a statistically significant difference at the significance level. Therefore, the higher the calculated mean is compared to the theoretical mean, the higher the level of psychological resilience. The value of t indicates that the differences between the means are significant.

Based on the results, it is evident that the level of psychological resilience among the study sample was high. This can be interpreted as individuals with psychological resilience having a positive outlook on life, being optimistic, active, and hopeful. In our current study, individuals with motor impairments demonstrated a clear increase in psychological resilience, which suggests their determination, resilience, self-assertion, and compensatory efforts.

Most researchers have attributed great importance to external factors in the formation, development, and enhancement of this characteristic throughout different stages of life, starting from the family environment to peers. Erikson (1983) emphasized the crucial role played by parents in shaping this trait, as they satisfy the child's basic needs and provide love, affection, and a sense of warmth. This helps the child feel secure, develop self-worth, self-confidence, and trust in oneself and others in subsequent stages of development (Makhaymar, 1996).

**Presentation, Analysis, Interpretation, and Discussion of the Question Results:**

The question inquires: "Are there differences in psychological resilience among individuals with motor impairments based on the variable of educational level?"

**Table No. (08) shows the significance of the differences in psychological hardness according to the educational level variable.**

value Sig	value F	Average squares	Degree of freedom	Sum of squares	Contrast source	Variable
0.61	0.60	241.60	3	724.80	Between groups	

		399.46	46	18375.51	Inside groups	<b>Psychological hardness</b>
			49	19100.32	Total	

Based on the provided table, it is evident that the sum of squares is calculated as (724.80), with a mean square of (241.60) at a degree of freedom of (3) between groups. Within groups, the sum of squares is calculated as (18,375.51), with a mean square of (399.46) at a degree of freedom of (46). Thus, the total sum for the sum of squares is (19,100.32) at a degree of freedom of (49), resulting in an F-value of (0.60), which is statistically non-significant. This indicates that there are no differences in psychological resilience among the study sample based on the variable of educational level.

The results of this question demonstrate that there are no differences in psychological resilience among individuals with motor impairments, regardless of their educational level. This suggests that individuals with motor impairments possess a high level of psychological resilience, irrespective of their educational achievements. They strive to overcome obstacles, solve problems, and prove their capabilities and potential through pursuing higher education and securing advanced degrees.

Individuals with motor impairments, regardless of their educational level, demonstrate resilience by surpassing challenges and working towards their goals. They aim to dispel any notion of helplessness and show that they are no different from others. They possess the ability to persevere, grow, progress, and take responsibility for themselves and others. Their engagement in society and interaction with peers of the same age, educational level, or gender contribute to their confidence and self-affirmation. These findings align with previous studies, such as the study conducted by Makhaymar (1998), which examined similar variables.

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