

## **"Frailty Syndrome and Its Correlation with Psychological Solitude in the Elderly: A Clinical Psychology Perspective"**

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### **Abstract:**

The current study aims to shed light on the association between Frailty Syndrome and the sense of psychological loneliness among elderly individuals residing in Dar Al-Rahma and Mohammed Boudiaf Hospital in Biskra, Algeria. The hypotheses of the study were as follows:

- We expect the level of Frailty Syndrome among the elderly individuals in the sample to be high.
- The elderly individuals in the study sample suffer from a high level of psychological loneliness.
- There are statistically significant differences in Frailty Syndrome among the study sample attributed to gender.
- There are statistically significant differences in Frailty Syndrome among the study sample attributed to age.
- There are statistically significant differences in psychological loneliness among the study sample attributed to gender.

There are statistically significant differences in psychological loneliness among the study sample attributed to age. In our study, we adopted the descriptive method as the appropriate approach, given the subject matter, and used the Frailty Syndrome Scale and the Psychological Loneliness Scale for this purpose. After verifying their psychometric properties on a random sample of 64 elderly individuals, the results were analyzed using the SPSS statistical analysis program. The findings revealed:

- The elderly individuals in the sample experience a moderate level of Frailty Syndrome.
- The elderly individuals in the sample experience a moderate level of psychological loneliness.
- There are no statistically significant differences in Frailty Syndrome attributed to age and then gender.
- There are statistically significant differences in psychological loneliness attributed to gender.
- There are no statistically significant differences in psychological loneliness attributed to age.

**Keywords:** Aging, Frailty Syndrome, Psychological Loneliness.

### **Introduction:**

Aging is considered the final stage in the developmental and evolutionary journey of humans. Some view it as a phase of overseeing the end, while others see it as the culmination of wisdom, depth of experience, practice, and sagacity in life. Yet, some perceive it negatively as a stage of organic and sensory decay and deterioration. (Khalil, A. 2000)

Aging is defined as a general physical and psychological state characterized by weakness and decline in the individual's abilities and various structures, resulting from physical and psychological changes that occur in later stages of life, where individuals begin to suffer from health weakness and a decline in physical abilities.

The psychological meaning of aging is what determines a society's response to the biological changes that occur in individuals. If a society builds itself on muscular strength and physical exertion, it is likely to isolate the elderly who have lost their muscular capabilities and thus dispense with them. Conversely, societies that consider humans as intellectual power and a collection of experiences and experiments are likely to respond entirely differently to aging.

Aging, like all previous stages of life, is susceptible to both strength and weakness, health, and disease. We refer not only to what affects the body but also to what may affect the psychological system, including the mind and emotions. This is because we interactively progress in our physical and psychological structures to a large or small extent. (Rokach, A. 1988)

There is a belief and misconception that the elderly represent a single age group, while in reality, aging extends over a period of time, encompassing multiple generations. Therefore, it does not represent homogeneity in the composition and structure of the elderly group, but rather includes variation and differences in the personality pattern of the elderly, their psychological history, and their interaction style with others, as well as differences in behavior. This diversity negates the difficulty in generalizing programs of a general nature in planning for the care of the elderly. Thus, it can be said that working with the elderly faces a fundamental problem in the lack of accurate data on the size of this population group because it is an age group that undergoes changes and transformations in its structure, composition, and characteristics and is the most vulnerable to diseases and the difficulty of adaptation and facing physical and mental troubles. (Turanovic, J. 2015)

This stage is crucial in the life of the elderly individual as it is not devoid of disturbances and problems that can become a weakness point for the latter. This was reflected in the study by Khalil (2000), which revealed differences between the elderly living with their families and those living in centers, with differences in the average physical weakness and emotional tension in favor of those with their families. The elderly person living with his family and children receives care and attention and feels with them security, belonging, and acceptance, contributing to his mental health and enabling him to adapt to the surrounding environment. As for those in centers, their distance from their families reflects on their health and emotional state, making them feel unaccepted and rejected, making them susceptible to severe psychological crises depending on the personality structure of the elderly person.

With technological advancements, the medical control of many diseases has developed, as well as the introduction of advanced preventive treatment methods, which has led to avoiding the issue of early aging. However, these technological changes have worked to change the traditional form of the family and dismantle the network of family ties among relatives who used to care for the elderly at the highest level. This has led to the emergence of what is known as the feeling of psychological loneliness, which is one of the dangerous social problems experienced by the elderly individual. This feeling is the starting point for many psychological disorders. (El Shennawy, S. 1988)

Psychological loneliness is a complex multidimensional problem that affects elderly individuals to varying degrees of severity and must be studied across diverse societies and cultures to determine its prevalence and provide effective treatments for it.

Given that this problem serves as the starting point for many problems experienced by the elderly individual, especially the feeling of self-unhappiness, pessimism, as well as the sense of helplessness resulting from social and emotional isolation and feeling undesirable by others, leading to feelings of misery, pessimism, oppression, and depression.

The study of loneliness was addressed by Rokach (1988), who views it as one of the important problems in the life of the individual, as it is a painful feeling resulting from a strong sense of helplessness, social and emotional isolation, and feeling unwanted by others, leading to feelings of misery, pessimism, oppression, and depression.

Moreover, the study by Turanovic et al. (2015) discussed the relationship between low self-esteem and psychological loneliness, and the importance of supportive family relationships in alleviating the severity of psychological loneliness.

Furthermore, many studies, such as those by El Shennawy and Khedr (1988), Ibrahim and An Nafi (1991), Atta (1993), and Wisman et al., have shown an increase in the level of psychological loneliness. Thus, psychological loneliness is considered an important and dangerous social phenomenon prevalent among elderly individuals, especially in old age.

In light of the aforementioned data, this study aims to reveal the correlation between Frailty Syndrome and the feeling of psychological loneliness among the elderly.

**Study Questions:**

1. To what extent do the elderly individuals in the study sample suffer from Frailty Syndrome syndrome?
2. What is the level of psychological loneliness experienced by individuals in the study sample?
3. Are there statistically significant differences in Frailty Syndrome syndrome among individuals in the study sample attributed to gender?
4. Are there statistically significant differences in Frailty Syndrome syndrome among individuals in the study sample attributed to age?
5. Are there statistically significant differences in psychological loneliness among individuals in the study sample attributed to gender?
6. Are there statistically significant differences in psychological loneliness among individuals in the study sample attributed to age?

**Study Hypotheses:**

1. We expect the level of Frailty Syndrome syndrome among the elderly individuals in the sample to be high.
2. The elderly individuals in the study sample suffer from a high level of psychological loneliness.
3. There are statistically significant differences in Frailty Syndrome syndrome among individuals in the study sample attributed to gender.
4. There are statistically significant differences in Frailty Syndrome syndrome among individuals in the study sample attributed to age.
5. There are statistically significant differences in psychological loneliness among individuals in the study sample attributed to gender.
6. There are statistically significant differences in psychological loneliness among individuals in the study sample attributed to age.

**Study Importance:**

1. The study is important as it addresses psychological loneliness and the extent to which the elderly perceive a psychological gap between themselves and others.
2. The significance of addressing Frailty Syndrome syndrome in the current study, considering the scarcity of studies discussing it in Arab universities in general, and in Algerian universities specifically.
3. It addresses the elderly population, which is often neglected in Arab studies.
4. This research may contribute to enriching the reader's knowledge about Frailty Syndrome syndrome and psychological loneliness among the elderly.

**Study Objectives:**

1. To identify the levels of psychological loneliness and Frailty Syndrome syndrome among the elderly.
2. To identify the significance of differences in Frailty Syndrome syndrome by gender and age.
3. To identify the significance of differences in psychological loneliness by gender and age.

**Methodology:**

The nature of the research problem determines the methodology adopted from various approaches. The descriptive approach was used in the current study to identify differences among individuals in the study sample regarding Frailty Syndrome syndrome and psychological loneliness according to age and gender.

**Study Instruments:**

Based on reviewing several foreign and Arabic studies and theoretical literature, scales for Frailty Syndrome syndrome and psychological loneliness were developed. The current study's scales included two questionnaires:

"ABCDEF Frailty Syndrome Syndrome Scale for the Elderly" by Freid (2016).  
"Psychological Loneliness Scale" by Russell and Catrona.  
The Five-Word Test by Dubois for assessing memory.

Frailty Syndrome Syndrome Scale: This scale, developed by Freid, consists of six dimensions:

Autonomy (A): Referring to self-reliance or independence in tasks like using the phone, transportation, and financial management.

BMI (Body Mass Index) - Nutritional status (B): Referring to weight loss associated with nutritional problems.

Comorbidity (C): Referring to common ailments contributing to Frailty Syndrome, such as heart problems, chronic respiratory diseases, chronic kidney diseases, diabetes, anxiety, and depression.

Drug intake (D): Referring to the number of medications taken by the elderly, exceeding ten prescribed by a doctor or pharmacist.

Balance (E): Referring to body balance, which becomes compromised in the elderly, leading to falls.

Cognitive functions (F): Referring to cognitive impairments like memory issues that begin to appear in the elderly.

### Psychological Loneliness Scale:

This scale, originally developed by Russell and Catrona in 1980, measures loneliness and was translated and adapted by Ibrahim Qushqush in the Arab environment. It consists of 17 items with three response options: Always, Sometimes, Never.

Five-Word Test by Dubois: This test measures immediate and delayed memory and is used to quickly assess memory capacities in individuals suspected of cognitive disorders such as Alzheimer's disease.

### Diagnostic Sample:

A score of 20 indicates normal memory.

A score of 19 suggests a slight possibility of cognitive impairment.

A score of 18 or below indicates the likelihood of impairment or cognitive disorder, requiring reassessment.

Primary Study Sample: The study sample consisted of 64 elderly individuals, selected randomly, given the human nature of the study field (elderly, both male and female). Distribution of Sample Individuals by Gender and Age: In our study, we relied on 64 elderly individuals distributed according to institution, gender, and age.

**Table 1 illustrates the distribution of the primary study sample individuals by institution and gender:**

Institution	Gender	Males	Females
Mohamed Boudiaf Hospital - Ouargla	28	19	
Dar Al-Rahma - Ouargla	10	7	
Total	38	26	

Table 2 illustrates the distribution of the sample by age variable:

### Presentation, Interpretation, and Discussion of Results:

#### Presentation, Interpretation, and Discussion of Hypothesis: Hypothesis 1:

"We expect the level of Frailty Syndrome syndrome among the elderly individuals in the study sample to be high."

**Table 3 shows the mean and standard deviation values for Frailty Syndrome syndrome:**

Variable	Number of Individuals	Maximum Value	Minimum Value	Mean	Standard Deviation
Frailty Syndrome Syndrome	64	21.00	7.00	15.12	3.06

From the results shown in the above table, we note that the mean value is 15.12, and the standard deviation is 3.06 for the study sample individuals on the Frailty Syndrome syndrome scale. It is worth reminding that the highest score that can be obtained in this scale is "30," and the lowest score is "0." Consequently, we conclude that the elderly individuals have a moderate level of Frailty Syndrome

syndrome. They experience a gradual decline in body organ functions with age, influenced by various factors such as nutrition, occupation, harsh environmental conditions, diseases, accidents, deep-seated psychological conditions, societal structure, and traditions.

Elderly individuals in this stage become weak beings unable to fulfill their duties fully. They experience feelings of distress and insomnia, especially morning wakefulness, weight loss, lack of energy and activity, inability to bear responsibility, reduced or increased mobility, occasional falls, reliance on assistance during walking, cognitive impairments, slow thinking with hesitation, difficulty in decision-making, feelings of guilt, hypochondriasis, and pessimistic view of future life. (Ibrahim, A.1991)

### **Presentation, Interpretation, and Discussion of Hypothesis: Hypothesis 2:**

"Elderly individuals in the study sample experience a high level of psychological loneliness."

**Table 4 illustrates the mean and standard deviation values for psychological loneliness:**

Variable	Number of Individuals	Maximum Value	Minimum Value	Mean	Standard Deviation
Psychological Loneliness	64	44.00	24.00	35.01	4.93

From the results shown in the above table, we note that the mean value is 35.01, and the standard deviation is 4.93 for the study sample individuals on the psychological loneliness scale. The highest score that can be obtained in this scale is "51," and the lowest score is "17." Consequently, we conclude that the elderly individuals have a moderate level of psychological loneliness.

This can be explained by the fact that elderly individuals feel lonely and isolated due to their smaller social networks, limited or somewhat shallow social relationships, which make them more inclined towards introversion and isolation. Additionally, their loss of social status contributes to their psychological loneliness. Psychological loneliness is influenced by two important factors: the individual's environment and personality. Psychological loneliness is a process of conflict between the components within the individual, namely, the Id, Ego, and Superego, leading to poor compatibility with oneself and with the social environment.

It is a psychological defense mechanism that works to maintain personality from the threat arising from the social environment, expressed in the form of isolation or withdrawal. This study aligns with Bekhet's study (2012), which affirmed that elderly individuals experience a moderate level of psychological loneliness, with 40% of them experiencing feelings of loneliness and isolation. It is doubtful that any social influence from the elderly's environment, whether from family, the general social environment, or specific social relationships, will reflect its results on both psychological and physical health. Changes in family structure and life situations among the elderly, such as retirement, leaving children's homes, loss of life partners or close friends, and health status, all contribute to making the elderly more susceptible to psychological loneliness. (Chen, Y. R., 2017)

### **Presentation, Interpretation, and Discussion of Hypothesis Three:**

Hypothesis: Stating that there are statistically significant differences between the study sample individuals in Frailty Syndrome susceptibility attributed to the gender variable:

**Table (5) illustrates the differences between the study sample individuals in Frailty Syndrome susceptibility based on gender:**

Gender	Number of Individuals	Mean	Standard Deviation	t-value	Degree of Freedom	Significance Level
Male	38	15.28	3.05	0.51	62	Non-significant
Female	26	14.88	3.12			

From the results shown in the table above, which indicates the t-test to determine whether there are statistically significant differences between the study sample individuals in Frailty Syndrome

susceptibility by gender, the mean value for males was 15.28, while it was 14.88 for females. The standard deviation value for males was 3.05, compared to 3.12 for females. The t-value was 0.51 under a degree of freedom of 62, indicating nonsignificance.

Through the results of this hypothesis shown in table (5), it is evident that there are no statistically significant differences. This can be interpreted by the fact that the life conditions experienced by both genders concealed or eliminated the element of difference in Frailty Syndrome susceptibility. Frailty Syndrome determinants addressed gender, in addition to the physiological decline that alters adaptation mechanisms and mutual communication.

Reaching the same age stage, where the elderly become unable to meet their requirements individually, as the elderly stage is a late stage of life cycles, paralleling the childhood stage in difficulty, weakness, and dependency. It's a critical stage where the elderly experience severe crises represented by the decline in the structure and functions of the nervous system, physical strength, mental power, and psychological disturbances. Moreover, financial constraints and other economic problems affect the elderly's ability to live a sufficiently satisfying life, more than they were capable of in earlier stages. (Williams, L., & Brown, K. 2017)

The elderly suffer from significant idle time they cannot invest, especially when suitable places for their leisure time are lacking. The unsuitability of TV and radio programs, where many of them spend their time watching TV or listening to the radio, are negative activities that do not encourage movement. Despite gender differences, they are educated on many factors, most notably social upbringing, as the elderly in this stage seek the best, especially as they bear family responsibilities and expenses.

**Presentation, Interpretation, and Discussion of Hypothesis Four:**

Hypothesis: Stating that there are statistically significant differences between the study sample individuals in Frailty Syndrome susceptibility attributed to the age variable:

**Table (6) illustrates the differences between the study sample individuals in Frailty Syndrome susceptibility based on age:**

Age	Number of Individuals	Mean	Standard Deviation	t-value	Degree of Freedom	Significance Level
55-76 years	56	15.32	3.06	1.36	62	Non-significant
77-97 years	8	13.75	2.91			

From the results shown in the table above, which indicates the t-test to determine whether there are statistically significant differences between the study sample individuals in Frailty Syndrome susceptibility by age, the mean value for individuals aged 55 to 76 was 15.32, with a standard deviation of 3.06, while for individuals aged 77 to 97, the mean value was 13.75, with a standard deviation of 2.91. The t-value was 1.36 under a degree of freedom of 62, indicating nonsignificance.

Through the results of this hypothesis shown in table (6), it is evident that there are no statistically significant differences. This can be interpreted by the fact that age is not a primary determinant of Frailty Syndrome. The elderly may be susceptible to Frailty Syndrome before reaching the senile stage, where the latter becomes only an assisting factor in the deterioration of adaptation mechanisms. Additionally, psychosomatic diseases are considered a risk factor threatening the lives of many elderly people. The elderly's failure to maintain their relationships with their social environments is due to neglect, not old age. Some factors, such as loss of value and status, affect the elderly's ability to live a more fulfilling and secure life to a greater extent than they affect them.

This factor of old age is attributed to the fact that the elderly have surrendered to the inevitability of death, hence they see their role in life as over, waiting only for death. This feeling intensifies among a segment of the elderly who had families. Physiological changes in the elderly at this stage lead to an inability to interact with internal and external bodily changes, such as delayed disease healing and delayed restoration of the body's natural balance, in addition to changes in the digestive system from the mouth to the stomach and changes in the urinary system. Muscle strength changes occur, where muscles

atrophy at this stage due to aging and lose their flexibility due to physiological changes, affecting motor aspects that reflect the elderly's inability to walk and their fingers tremble, affecting their skills in the end. Sensory and cognitive changes occur with age, weakening the ability, in addition to changes in voice and its weakening. (Martinez, A., 2018)

#### **Presentation, Interpretation, and Discussion of Hypothesis Five:**

Hypothesis: Stating that there are statistically significant differences between the study sample individuals in psychological unity attributed to the gender variable for the elderly:

**Table (7) illustrates the differences between the study sample individuals in psychological unity based on gender:**

Gender	Number of Individuals	Mean	Standard Deviation	t-value	Degree of Freedom	Significance Level
Male	38	33.89	4.78	2.26	62	Significant
Female	26	36.65	4.76			

From the results shown in the table above, which indicates the t-test to determine whether there are statistically significant differences between the study sample individuals in psychological unity by gender, the mean value for males was 33.89, with a standard deviation of 4.78, while for females, the mean value was 36.65, with a standard deviation of 4.76. The t-value was 2.26 under a degree of freedom of 62, indicating significance.

Through the results of this hypothesis shown in table (7), it is evident that there are statistically significant differences. This can be interpreted by the fact that menopause affects a woman's psychology in the old age stage, as the cessation of menstruation may cause a noticeable or imperceptible impact in the form of sagging, obesity, constipation, stress, wilting, nervousness, headache, and insomnia, in addition to the physiological structure of women playing a role in showing psychological unity.

The weak personality of women is attributed to the weakness of their psychological system and the strong predisposition to psychological illnesses, making them unable to bear frustrations and psychological pressures they face in life, which dominate and lead them to feel shattered and desperate, especially when subjected to abandonment or neglect by their children, with whom they had strong relationships. The elderly woman is subjected to emotional deprivation and disruption of her family relationships, especially her relationship with her children, and her constant feelings of sadness and despair make her experience internal psychological suffering and loss of her status and role as a mother after she raised and cared for them. This makes her feel psychological unity more than men, whose work generally revolves around living expenses. Its importance lies in the burdens it faces and bears hardships that exceed some of the burdens of men. Past disorders or experiences negatively affect her life when she reaches old age. Our study agreed with Rockach's study (1988) that women's sense of psychological unity can be attributed to disturbed relationships with their spouses and inability to self-realize. (Davis, S. M., & Johnson, R. 2016)

#### **Presentation, Interpretation, and Discussion of Hypothesis Six: Hypothesis 6:**

Stating that there are statistically significant differences between the study sample individuals in psychological unity attributed to the age variable for the elderly:

**Table (8) illustrates the differences between the study sample individuals in psychological unity based on age:**

Age	Number of Individuals	Mean	Standard Deviation	t-value	Degree of Freedom	Significance Level
55-76 years	56	37.35	4.83	1.55	62	Non-significant
77-97 years	8	32.50	5.23			

From the results shown in the table above, which indicates the t-test to determine whether there are statistically significant differences between the study sample individuals in psychological unity by age,

the mean value for individuals aged 55 to 76 was 37.35, with a standard deviation of 4.83, while for individuals aged 77 to 97, the mean value was 32.50, with a standard deviation of 5.23. The t-value was 1.55 under a degree of freedom of 62, indicating nonsignificance.

Through the results of this hypothesis shown in table (8), it is evident that there are no statistically significant differences. This can be interpreted by the fact that elderly individuals may experience psychological unity, which is a painful personal experience that leaves negative effects on their personalities and affects their relationships with others and their sense of belonging. This feeling of marginalization and the presence of a gap or void between them and their surroundings can be attributed to the same conditions experienced by the elderly in the aging stage, characterized by physical and mental deterioration, lack of social relationships, and isolation from society. Additionally, elderly individuals face many difficulties and increasing problems due to their inability to communicate with others and general physical weakness. They may also experience significant loss in social relationships and lose many activities, interests, and functions they enjoyed in their youth.

The loss of a partner during old age increases the burden of life for the elderly, leading to feelings of psychological unity and a strong tendency towards withdrawal and isolation from others. This is manifested in a decrease in self-esteem, dissatisfaction with life, feelings of rejection, and contempt, which represent a deep psychological crisis threatening the internal security and stability of the elderly. Previous research by Fareeda Al-Musharraf (1988) depicted a clear picture of the characteristics of individuals experiencing psychological unity, including emotional instability, sadness, discomfort, general distress, excessive personality, low self-esteem, depression, social anxiety, and a high degree of shyness. (Brown, S. G., & Jones, M. T. 2019)

Our current study aligns with Shahin's study (2013) in finding no differences in the age variable regarding the feeling of psychological unity among the elderly and with the study by Abir Bekhet et al. (2012) which found that 40% of the elderly experience psychological unity manifested by feelings of emptiness, isolation, and withdrawal. However, our findings contrast with Ibrahim's study (2010), which found differences attributed to the age variable for psychological unity, suggesting that individuals over the age of seventy have a higher tendency to feel psychological unity.

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