



Psychological Hardness Among Healthcare Workers in Qalqilya Governorate

الصلابة النفسية لدى العاملين في الرعاية الصحية في محافظة قلقيلية

BY

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ABSTRACT:

Background: The study on psychological hardness among healthcare workers in Qalqilya Governorate emphasizes the importance of the ability to withstand stress and challenges in the healthcare working environment. This study aims to measure the level of psychological hardness and the factors influencing it, with a focus on variables such as gender, marital status, and years of experience.

Methods: The study included 171 healthcare workers using the Psychological Hardness Scale (DRS-15-R). Statistical analyses were conducted to assess differences in psychological hardness among different demographic categories.

Results: The results showed that psychological hardness among healthcare workers ranges between medium and high, especially in terms of control. It was also found that females have higher levels of psychological hardness compared to males. Marital status and years of experience did not show a significant impact on the levels of psychological hardness, suggesting that other factors may play a more significant role.

Conclusions: The study highlights the importance of psychological hardness in the healthcare working environment, emphasizing the differences in hardness levels between genders. The findings suggest the need to explore other factors influencing psychological hardness and to develop support programs aimed at enhancing adaptability and hardness among healthcare workers.

Keywords: Psychological hardness, healthcare workers, stress management.

المستخلص:

الهدف: تُبرز الدراسة المتعلقة بالصلابة النفسية لدى العاملين في الرعاية الصحية بمحافظة قلقيلية أهمية القدرة على مواجهة الضغوط والتحديات في بيئة العمل الصحي. تهدف هذه الدراسة إلى قياس مستوى الصلابة النفسية والعوامل المؤثرة فيها، مع التركيز على متغيرات مثل الجنس، والحالة الاجتماعية، وسنوات الخبرة.

المنهج: شملت الدراسة ١٧١ عاملاً في الرعاية الصحية باستخدام مقياس الصلابة النفسية (DRS-15-R). أجريت التحليلات الإحصائية لتقييم الفروق في الصلابة النفسية بين الفئات الديموغرافية المختلفة.

النتائج: أظهرت النتائج أن الصلابة النفسية لدى العاملين في الرعاية الصحية تتراوح بين المتوسطة والعالية، خصوصاً في جانب السيطرة. كما وجد أن الإناث لديهم مستويات أعلى من الصلابة النفسية مقارنة بالذكور. لم تظهر الحالة الاجتماعية وسنوات الخبرة تأثيراً ملحوظاً على مستويات الصلابة النفسية، مما يشير إلى أن هناك عوامل أخرى قد تلعب دوراً أكثر أهمية.

الاستنتاجات: تُظهر الدراسة أهمية الصلابة النفسية في بيئة العمل الصحي، مع التأكيد على الفروق بين الجنسين في مستويات الصلابة. تشير النتائج إلى ضرورة استكشاف العوامل الأخرى المؤثرة في الصلابة النفسية وتطوير برامج دعم تستهدف تعزيز القدرة على التكيف والمرونة لدى العاملين في الرعاية الصحية.

الكلمات الدالة: الصلابة النفسية، العاملون في الرعاية الصحية، إدارة الضغوط.

Introduction:

With the rapid and various changes facing work environments, especially in the health sector, the need for methods that protect people from stress and help improve their mental health becomes very important. Here comes the role of psychological hardness, which is a person's ability to deal with challenges, as a foundation for these methods. The role of psychological hardness is central in enhancing wellbeing and reducing stress among healthcare workers, given the significant challenges faced by this sector. Based on the principles of positive psychology, studies emphasize the necessity of facing life stresses and enhancing quality of life (Dawodi, 2022). Healthcare workers are exposed to various pressures and daily challenges, making psychological hardness a necessary element

for adaptation and effective performance. Stress, with its negative implications such as anxiety, insomnia, and physical illnesses, may contribute to decreased productivity and negatively affect societal progress. Research shows that psychological hardness grows as a response to these challenges, enabling the individual to face them more efficiently, and highlights that stress can act as a stimulus for achievement and excellence (Abu Al Fotouh & Abdel Rahman, 2014).

Psychological hardness, as an important personal pattern, is considered a fundamental defense against life challenges. Overcoming obstacles requires the development of multiple psychological characteristics such as self-efficacy and high self-esteem, and studies indicate that psychological hardness is not only about reducing the impacts of stressful events but also acts as a resource for resilience that protects against the harmful effects of stress (Abdel Razek, 2023). Additionally, the mechanisms that enable psychological hardness to alleviate stress, such as modifying an individual's perception of events and encouraging the adoption of healthy practices, underscore the importance of this concept as a buffer zone against stress (Mustafa, et al., 2019). The factors influencing the sustainability of psychological hardness point to the role played by genetics, environmental factors, life experiences, mental health issues, social support, coping strategies, age, and personality traits in shaping and enhancing this trait. This discussion reveals that psychological hardness is a complex concept influenced by a wide range of factors, emphasizing the importance of addressing it comprehensively in healthcare research to improve the overall wellbeing of workers (Abdel Razek, 2023). Stress, as an integral part of life, points to the importance of developing psychological characteristics such as self-efficacy and psychological flexibility

to overcome obstacles. Studies confirm that psychological hardness mitigates the effects of stress on mental and physical health, and provides multiple mechanisms contributing to this process (Abdel Razek, 2023). Hannashi, & Ibraheim (2020), Bin Saidan, & Melli (2017), and Kamal, & Bashir (2017) reinforce this discussion by emphasizing the ability of psychological flexibility to recognize and accept changes and stresses, as well as modifying an individual's perception of events to make them less traumatic and facilitate the adoption of active coping strategies. Al Ahmari (2018) identifies characteristics of psychological hardness such as commitment, control, and the willingness to embrace change, including an exceptional ability to withstand difficult circumstances and a tendency towards leadership and initiative. Al Hammoud (2015) and Al Hussein (2018) highlight the role of family upbringing in shaping psychological flexibility, explaining how warm and democratic parental relationships promote independence and adaptability, while excessive restrictions hinder these abilities. Factors influencing the sustainability of psychological hardness, from genetics to environment and life experiences, point to the importance of social support and effective coping strategies (Abdel Razek, 2023). Previous studies related to the topic of psychological hardness among healthcare workers have presented a variety of findings that highlight the importance of this trait in adapting to work pressures and improving wellbeing. For example, a study by Dawodi and Mustafa et al. (2022) found a significant increase in the level of psychological inflexibility among the studied sample, without statistically significant differences according to sex or age, but observed significant differences in psychological inflexibility based on the individual's hierarchical position, confirming the impact of job status on psychological hardness. On the other hand, a study by

Ismail (2020) indicated that the level of job satisfaction among special education teachers was low, while levels of psychological hardness and its dimensions were at a moderate level. This study revealed statistically significant differences in job satisfaction and psychological hardness based on years of experience, in addition to a moderate relationship between job satisfaction and psychological hardness as a whole, especially after controlling for challenge. A study by Bousaid, & Ben Issa (2020) drew attention to a high level of psychological hardness among doctors in the resuscitation department, affirming their superior ability to manage stress and maintain their wellbeing despite exposure to severe pressures. And a study by Kamal & Bashir (2017) emphasized that individuals with an assertive personality are characterized by dedication and commitment to improving society and the ability to exercise control over external circumstances, considering psychological hardness a useful element in enduring stress and psychological fatigue. These results reveal the crucial role of psychological hardness in the healthcare sector, emphasizing its impact on stress management and enhancing the overall wellbeing of workers. They also show how psychological hardness may be affected by multiple variables such as job status and years of experience, providing valuable insights for current research in comparing these results with the ongoing study. A study by Bin Saidan, & Melli (2017) found that employees in the Riyadh region enjoy a high level of psychological hardness and job satisfaction, with a weak relationship between them and a shared perception of these two elements regardless of educational qualifications. A study by Hammad & Helmy (2020) found a positive relationship between psychological hardness and life satisfaction after isolating the effect of irrational thoughts among healthcare workers in Jeddah,

pointing to its positive role in life satisfaction. Hamdouna (2022) found a medium level of anxiety about contracting the coronavirus and a high level of psychological hardness among workers, with a negative relationship between anxiety and psychological hardness, without gender differences in psychological hardness, but with differences based on the nature of the work. Finally, a study by Al-Tawil, & Al-Qudah (2017) found a high level of psychological hardness among the sample with no significant demographic differences, but with differences in depression, anxiety, and psychological stress based on profession, marital status, and educational qualification, and a negative correlation between psychological hardness and anxiety and depression.

Study Problem

The problem lies in investigating the levels of psychological hardness among healthcare workers and identifying the factors affecting it. Given the nature of work in the healthcare sector, which requires dealing with high stress and constantly changing situations, the impact on the mental health of the workers becomes a subject worth studying. Psychological hardness, a concept that refers to an individual's ability to adapt and be flexible in the face of difficulties, plays an important role in this context. However, the main question remains: What is the level of psychological hardness among healthcare workers in Qalqilya Governorate according to study variables such as gender, marital status, and years of experience?

Importance of the Study

It stems from focusing on the psychological hardness of healthcare workers, a crucial indicator of their ability to face work stress and health crises. Understanding the levels of hardness and the factors affecting it is essential for creating support programs that enhance wellbeing and job performance.

This contributes to the development of effective strategies for building a work environment supportive of mental health, which benefits both the workers and the quality of healthcare provided.

Study Limits:

- Temporal Limits: The study begins at the start of the year 2024.
- Spatial Limits: The study is confined to Qalqilya Governorate.
- Human Limits: The study is limited to a group of healthcare workers.
- Procedural Determinants: Include the study tools and their validity and reliability, as well as the study sample and its characteristics and the statistical treatment used.

Methodology:

To achieve the study goals, the descriptive approach was used, due to its suitability for the nature and objectives of the study. It is known as the approach that studies a phenomenon, event, or current issue, through which information can be obtained to answer research questions without intervention. It aims to describe the phenomenon under study and analyze its data, and it is one of the forms of organized scientific analysis and interpretation to describe a phenomenon or problem, classify, analyze, and subject it to detailed studies through examination and analysis.

Population and Sample:

The study population consisted of a group of healthcare workers, and the study sample included (171) forms, selected by the convenience sampling method. Table (1) illustrates the distribution of the study sample individuals:

Table 1: Distribution of the Study Sample According to Study Variables

Variables	Frequency	Percent (%)	
Gender	Males	83	48.5
	Females	88	51.5
Marital Status	Single	73	42.7
	Married	87	50.9
	Divorced/Separated	11	6.4
Years of Experience	Less than 5 years	90	52.6
	5 – 10 years	49	28.7
	More than 10 years	32	18.7

The data shows the distribution of the study sample according to various variables such as gender, marital status, and years of experience. Regarding gender distribution, the sample was divided into 48.5% males (83) and 51.5% females (88), reflecting a relative balance between genders. As for marital status, 42.7% of the participants were single (73), while married individuals constituted 50.9% (87), and the divorced or separated were the least at 6.4% (11). Looking at years of experience, the majority (52.6% or 90) had less than 5 years of experience, followed by those with 5 to 10 years of experience at 28.7% (49), and finally, those with more than 10 years of experience constituted 18.7% (32), indicating a diversity in the participants' experiences in the sample.

Study Tool:

The Psychological Hardness Scale (DRS-15-R) was used after reviewing educational literature and previous studies related to the study topic, consisting of 15 items across three subscales, based on the Norwegian version of Bartone's scale (2012). Risan and others in 2022 found reliable levels of general

hardness and its components with suitable Cronbach's alpha values. A five-point Likert scale was used for recording responses in the study, allowing the classification of response levels into low (from 1 to <2.33), medium (from 2.34 to <3.67), and high (from 3.68 to 5).

Study Reliability:

The tool's reliability was verified by calculating the reliability coefficient for the total score of the study questions according to Cronbach's alpha formula, which was (0.78) for the total level of psychological hardness among healthcare workers, indicating acceptable reliability that meets the study's purposes.

Study Procedures:

The tool was applied to the study sample individuals through a distributed form. After completing the collection process of the returned questionnaires valid for statistical analysis, it was found that there were (171) forms.

Statistical Treatment:

The questionnaires were coded and assigned specific numbers in preparation for entering their data into a computer for appropriate statistical processing and data analysis according to the study questions. Mean averages, standard deviations, t-test, one-way ANOVA, and Cronbach's alpha equation were used in the statistical treatment using the SPSS statistical package.

Analysis of Study Results:

This section explains the methods used to analyze the data collected from 171 participants working in the healthcare sector in Qalqilya Governorate, with tables designed to clearly display demographic information.

Results Related to the First Question:

What is the level of psychological hardness among healthcare workers in Qalqilya Governorate?

To answer this question, mean averages and standard deviations were calculated for the responses of the study sample to the questionnaire areas that express the level of psychological hardness among healthcare workers in Qalqilya Governorate.

Table 2: Mean Averages and Standard Deviations for Responses on the Level of Psychological Hardness Among Healthcare Workers

Item Number	Items	Mean Response	Standard Deviation	Response Level
١	Most of my life, I do things that matter.	3.87	.87	high
٢	With hard work, I can achieve all my goals.	4.28	.79	high
٣	I don't like to make changes to my daily routine.	3.05	1.12	Medium
٤	Somehow, I feel that my life is meaningless.	3.53	1.31	Medium
٥	Change in routine is enjoyable for me.	3.86	1.19	high
٦	My life goes on based on my actions.	3.79	.98	high
٧	I really look forward to my daily activities.	3.82	.98	high
٨	I don't think I can do much to influence my future.	3.40	1.30	Medium
٩	I enjoy the challenge when I have to do more than one thing at the same time.	4.02	1.02	high
١٠	Life is enjoyable and exciting for me.	3.54	1.09	Medium
١١	It bothers me when my daily routine is changed and interrupted.	2.78	1.17	Medium
١٢	I decide how I will spend the rest of my life.	3.84	1.04	high
١٣	Life in general is boring for me.	3.09	1.23	
١٤	I like to have a daily schedule that doesn't change much.	2.92	1.14	Medium
١٥	My decisions play a big role in determining the course of events in my life.	3.88	1.00	high
Total score.		3.58	.54	Medium

The data shows evaluations of psychological hardness for 171 individuals divided into three categories: Commitment (average 3.57, standard deviation 0.68), Control (average 3.84, standard deviation 0.64), and Challenge (average 3.33, standard

deviation 0.69), in addition to a total average for psychological hardness of 3.58 and a standard deviation of 0.54.

Results Related to the Second Question:

What is the level of psychological hardness among healthcare workers by gender?

To answer this question, mean averages and standard deviations were calculated for the responses of the study sample on the questionnaire areas that express the level of psychological hardness among healthcare workers by gender.

Table 3: T-test Results for Psychological Hardness of Healthcare Workers by Gender.

Gender		N	M	SD	t	Sig.
commitment	males	83	3.48	.67	-1.63	.10
	Female	88	3.65	.68		
control	males	83	3.77	.66	-1.28	.20
	Female	88	3.90	.62		
challenge	males	83	3.23	.67	-1.72	.08
	Female	88	3.42	.70		
total	males	83	3.50	.52	-1.91	.05
	Female	88	3.66	.56		

Table 3 presents the T-test results for measuring psychological hardness among healthcare workers by gender. The results show that, for the commitment domain, females had a higher average (3.65) compared to males (3.48) with a statistical significance of .10. In the control category, the female average was also higher (3.90) versus males (3.77) with a statistical significance of .20. For challenge, females recorded a higher average (3.42) compared to males (3.23) with a statistical significance of .08. In the total score, females achieved a higher average (3.66) compared to males (3.50) with a statistical significance of .05, indicating significant differences between genders in overall psychological hardness.

Results Related to the Third Question:

What is the level of psychological hardness among healthcare workers by marital status?

To answer this question, mean averages and standard deviations were calculated for the responses of the study sample to the questionnaire areas that express the level of psychological hardness among healthcare workers by marital status.

Table 4: One-Way ANOVA Results for Psychological Hardness in Healthcare by Marital Status.

Marital Status		N	M	SD	F	Sig.
commitment	Single	73	3.47	.71	1.53	.21
	Married	87	3.65	.61		
	Divorced/Separated	11	3.65	.90		
control	Single	73	3.86	.62	.73	.48
	Married	87	3.80	.64		
	Divorced/Separated	11	4.03	.76		
challenge	Single	73	3.27	.75	.49	.61
	Married	87	3.37	.65		
	Divorced/Separated	11	3.36	.61		
total	Single	73	3.53	.57	.56	.56
	Married	87	3.61	.50		
	Divorced/Separated	11	3.68	.71		

Table 4 presents the One-Way ANOVA results for levels of psychological hardness in healthcare categorized by marital status. The data include three categories of marital status: single, married, and divorced/separated, presenting for each category the number of participants (N), the average (M), the standard deviation (SD), the F value for variance analysis, and statistical significance (Sig.) across three domains of psychological

hardness: commitment, control, and challenge, in addition to the total score for psychological hardness.

In the commitment domain, both married and divorced/separated participants recorded similar averages (3.65), which are higher than the average for singles (3.47), with a statistical significance of .21, indicating no significant differences between marital statuses. In the control domain, divorced/separated individuals showed the highest average (4.03) compared to singles (3.86) and married (3.80), but with a statistical significance of .48, indicating no significant differences. In the challenge domain, the differences in averages between marital statuses were minimal, with a statistical significance of .61, indicating no significant differences.

The total score for psychological hardness shows an ascending order from single (3.53) to married (3.61) to divorced/separated (3.68), but with a statistical significance of .56, reflecting no significant differences between marital statuses in general.

Results Related to the Fourth Question:

What is the level of psychological hardness among healthcare workers by years of experience?

To answer this question, mean averages and standard deviations were calculated for the responses of the study sample on the questionnaire areas that express the level of psychological hardness among healthcare workers by years of experience.

Table 5: One-Way ANOVA Results for Psychological Hardness in Healthcare by Years of Experience.

Years of Experience		N	M	SD	F	Sig.
commitment	Less than 5 years	90	3.49	.72	1.60	.20
	١٠ - ٥ years	49	3.64	.65		
	More than 10 years	32	3.71	.54		
control	Less than 5 years	90	3.85	.60	.06	.94
	١٠ - ٥ years	49	3.83	.68		

	More than 10 years	32	3.81	.70		
challenge	Less than 5 years	90	3.37	.75	.88	.41
	5 – 10 years	49	3.22	.72		
	More than 10 years	32	3.38	.42		
total	Less than 5 years	90	3.57	.58	.17	.84
	5 – 10 years	49	3.56	.57		
	More than 10 years	32	3.63	.40		

Table 5 displays the One-Way ANOVA results for the level of psychological hardness among healthcare workers, categorized by years of experience. In the commitment domain, the averages of psychological hardness increase with years of experience, from 3.49 for those with less than 5 years to 3.71 for those with more than 10 years, with a statistical significance of .20, indicating no significant differences between the categories. In the control domain, the differences between categories were very slight and not statistically significant (.94), meaning there is no meaningful difference between the categories in this domain. In the challenge domain, despite variances in averages, the statistical significance (.41) indicates no significant differences. The total score for psychological hardness also shows no significant differences between the categories based on years of experience (.84), noting a slight increase in the total average for psychological hardness with more years of experience.

Discussion:

The results of the current study indicate that the healthcare workers included in the study exhibit moderate to high levels of psychological hardness, with the highest ratings in the aspect of control. The standard deviation in all categories is moderate, indicating variance in participants' responses but without significant disparity. The lowest-rated category is challenge, which may suggest that readiness to face challenges represents the weakest aspect of psychological hardness in the studied group. The results related to the gender variable show

that females in healthcare possess higher levels of psychological hardness compared to males, especially in aspects of control and overall hardness, with significant differences. These differences may reflect cultural, social, or biological impacts influencing each gender's experience and expression of psychological hardness. The statistical significance confirms the presence of substantial differences, necessitating an understanding of the underlying reasons behind these differences to develop support programs that consider the needs of each gender. These results align with Hamdouna's study (2022).

The results clarify that the marital status of healthcare workers does not significantly affect the level of psychological hardness. Despite some differences in averages among single, married, and divorced/separated individuals in the domains of commitment, control, and challenge, these differences were not statistically significant enough to indicate substantial disparities between these categories. Notably, divorced/separated individuals recorded the highest average in the domain of control, which could reflect their development of higher levels of psychological hardness in this aspect as a coping mechanism with major life changes. However, due to insufficient statistical significance, it is challenging to assert a true impact of marital status on psychological hardness based on this data alone. Other factors besides marital status might play a more significant role in determining levels of psychological hardness, such as the nature of work, social support, or personal characteristics. Identifying the factors that effectively contribute to psychological hardness can help develop more targeted psychological support and training programs for healthcare workers. These results are consistent with the study by Al-Tawil, & Al-Qudah (2017).

The study's findings, according to the years of experience of healthcare workers, show that it does not significantly impact the level of psychological hardness, despite a slight increase in hardness averages with more experience. This suggests that other factors like social support and training might have a more significant influence on determining psychological hardness than mere professional experience. The lack of significant differences in control and challenge suggests that psychological hardness might be a relatively stable trait among workers, developing early in their career and not significantly affected by time. The slight increase in the total average of psychological hardness with more years of experience, despite its statistical insignificance, may reflect a positive effect of experience but not enough to cover the impact of other individual and environmental factors. These results emphasize the need to understand psychological hardness as a result of complex interactions between multiple factors, rather than relying on a single factor like years of experience. For instance, Dawodi and Mustafa's study (2022) found that job status affects psychological hardness, supporting the idea that factors like years of experience can influence how individuals cope with stress. On the other hand, Ismail's study (2020) pointed to a relationship between job satisfaction and psychological hardness, hinting that job satisfaction may contribute to enhancing psychological hardness, regardless of years of experience.

Conclusions:

The findings underscore the importance of psychological hardness in healthcare settings, highlighting gender as a significant factor in hardness levels. Despite the lack of significant impact from marital status and years of experience, the study suggests a need for further exploration into other influencing factors. The insights garnered from this research can

inform the development of targeted support and training programs aimed at fostering psychological hardness among healthcare workers, ultimately contributing to improved well-being and job performance.

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