

Relationship between Hardiness, Sense of Coherence and Posttraumatic Growth among Psychiatric Patients Caregivers

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ABSTRACT

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Background: Caregivers, face significant emotional and psychological challenges, making them crucial members of the mental health care system. Understanding their psychological processes as hardiness, sense of coherence, and post-traumatic growth are essential for improving support networks and overall wellbeing. **Aim:** To investigate the relationship between hardiness, sense of coherence, and post-traumatic growth among psychiatric patient's caregivers. **Subjects and Method:** The study involved 240 caregivers aged 18-65 providing six months of care for psychiatric patients, using three instruments: hardiness scale, sense of coherence scale, and post-traumatic growth inventory. **Results:** The study discovered that over half of caregivers for psychiatric patients had greater level of hardiness, three quarters of studied psychiatric patient's caregivers had lower degrees of sense of coherence and more than two thirds of them had higher level of post traumatic growth. **Conclusion:** There is a significant positive direct correlation between post traumatic growth and both hardiness and sense of coherence and between hardiness and sense of coherence. Also, there is a significant positive direct impact of both hardiness, and sense of coherence on post traumatic growth. **Recommendations:** Implement interventions to strengthen caregivers' hardiness and coherence, including resilience training, stress management workshops, and coping skills education. Establish accessible psychological support and educational resources for posttraumatic growth.

Keywords: Hardiness; Sense of Coherence; Posttraumatic Growth; Psychiatric Patient's Caregivers.

INTRODUCTION

Patient caretakers, often nursing staff, close friends, or relatives, are crucial members of the hospital care system. Mental diseases, such as schizophrenia and bipolar disorder, affect an individual's ability to function in their everyday life (Smith & Rachel, 2023). According to estimates from the World Health Organization (WHO), one in eight individuals globally suffers from a mental disease, with anxiety and depressive disorders accounting for a sizable portion of cases. The high frequency of serious mental diseases has significant ramifications for individuals and society at large, with the expenses of therapy, medicine, and hospitalization being catastrophic for those with serious mental diseases and their families (Firth et al., 2023; Rahmani, Roshangar, Gholizadeh & Asghari, 2022).

Caregivers face special difficulties and heavy emotional and psychological loads, which are increasingly recognized as vital elements of the mental health care system. Understanding the psychological processes that underlie caregiver growth and resilience is essential to maximize support networks and improve general wellbeing. Important factors influencing caregivers' psychological health and ability to bounce back from setbacks include hardiness, Sense of Coherence (SOC), and Post-Traumatic Growth (PTG) (Choi & Martire, 2023; Wang, Wang, & Zhu, 2022).

Hardiness is defined as control, engagement in life's activities, and a feeling of personal competence and community. It is influenced by both the individual and their surroundings, as their perspective and experience of hardship and threat are influenced by social and cultural conditions. Caregivers with higher levels of hardiness are more resilient and use adaptive coping mechanisms (Benight & Bandura, 2021; Masten, 2022; Smith & Gonzalez, 2023).

Sense of coherence emphasizes the concept of health and well-being and demonstrates how an individual's perspective on life and ability may influence how they respond to challenging circumstances. Higher SOC is associated with a higher quality of life and is a strong predictor of a caregiver's mental health, resilience, and growth. PTG theories encompass five different psychological domains: spiritual change, relationships with others, personal strength, life appreciation, and new

possibilities (Pérez & Álvarez, 2022; Toker et al., 2021; van der Meer, Kuiper, de Boer, & ten Klooster, 2023).

Many caregivers report improved resilience, personal growth, and a renewed feeling of purpose despite the hardships of caregiving. A strong SOC correlates with better psychological adjustment and lower caregiver burden. Experiences of PTG may serve as a source of hardiness, facilitating psychological adaptation to caregiving challenges (van der Meer et al., 2023).

Psychiatric nurses are essential to research, providing valuable insights for understanding study findings within the larger context of psychiatric treatment and recruiting and engaging participants. They provide knowledge and support for those who care for mental patients, ultimately fostering their resilience and well-being through team-based care and research projects. To lessen caregiver stress, family psycho-education becomes essential (Kirkpatrick, & Bouch, 2022).

Research on the relationship between post-traumatic development, coherence, and toughness in caregivers of mental patients is crucial for improving their wellbeing. This research emphasizes the importance of psychological fortitude and development in caregivers, as it helps patients and caregivers adjust to providing care. Understanding these interrelationships is essential for developing effective interventions, particularly for caregivers of chronic illnesses and trauma survivors, to improve their experiences and overall well-being (Li, Liu, Wang, & Zhang, 2023).

THE AIM OF THE STUDY

This study aimed to investigate the relationship between hardiness, sense of coherence, and post-t

Objectives

1. Assess the levels of hardiness among psychiatric patient's caregivers.
2. Determine the degrees of sense of coherence among psychiatric patient's caregivers.
3. Identify the levels of post-traumatic growth among psychiatric patient's caregivers.
4. Find out the relation between the hardiness, sense of coherence, and

post-traumatic growth among psychiatric patient's caregivers.

SUBJECTS AND METHOD

Study Design:

The study was carried out using a descriptive correlational research design.

Study Setting:

The governorates of Port Said, El-Ismailia, and El-Suez are served by the 110-bed Port-Said Mental Health and Addiction Treatment Hospital.

Study Subjects:

A purposeful sample of caregivers of patients with psychiatric illnesses who visited patients in the involved in the patient's care, have been doing so for at least six months, and have no history of substance misuse.

Sample Size:

Calculated for patients using the following equation.

$$n = \left[\frac{Z_{\alpha/2} + Z_{\beta}}{\frac{1}{2} \log \frac{1+r}{1-r}} \right]^2 + 3$$

$Z_{\alpha/2} = 1.96$, $Z_{\beta} = 0.80$ (Dawson & Trapp, 2004).

r = correlation (-.41) (Xiu, Mc Gee & Maercker (2018).

- The sample size is 218
- After adding 10% dropout (21), the sample size will be 240
- $n = 240$ caregiver.

Tools for Data Collection

To achieve the objectives of this study, the tools following were utilized:

Tool I: Hardiness Scale:

Originally developed in English by Kobasa (1979), this scale was translated into Arabic by Mukhaimer (2002). The self-report scale is used to assess hardiness and is intended to gauge the three main aspects of hardiness: challenge, control, and commitment.

Tool Validity and Reliability:

The Hardiness Scale validity was examined by distributing the initial tool to five specialized experts to make sure it was appropriate, relevant, clear, and comprehensive. Cronbach's α s for the commitment, control, and challenge subscales were used to confirm the reliability of the Hardiness Scale, guaranteeing its appropriateness, relevance, and completeness (0.77, 0.71, 0.70, and 0.83) (Mukhaimer, 2002).

Scoring System:

The 15 items on the scale-15 are split into three subscales: Challenge (5 items), Commitment (5 items), and Control (5 items) (Bartone, Citation, 1995). A 4-point Likert scale (0 being not at all true, 1 being slightly true, 2 being pretty true, and 3 being totally true) is used to provide responses. Higher scores $\geq 60\%$ imply better toughness. Total scores range from 0 to 45.

Tool II: Sense of Coherence Scale:

The SOC-13, or sense of coherence questionnaire The self-rating scale, which measures sense of coherence, was designed by Antonovsky (1987) in English and translated into Arabic by Al-Yateem et al. (2020). SOC-13 comprises of three components (a) A cognitive component, labeled comprehensibility, representing the ability to understand and integrate internal and external experiences. (b) An instrumental component, labeled manageability, representing the ability to handle challenges and cope with stressful situations and (c) a motivational component, labeled meaningfulness, representing the ability to make sense of experiences and view them as worthy challenges.

Tool Validity and Reliability:

The Arabic scale of SOC-13 showed validity and high internal consistency, with Cronbach's Alpha $\alpha = 0.91$. Validity was done by a panel of experts who decided that the scale is valid (Al-Yateem et al., 2020).

Scoring System:

Responses to each items of the scale are given using a 7-point Likert scale ranging from 1 ("very common") to 7 ("very rare or never"). Scores range from 13 to 91, with higher numeric values $\geq 60\%$ representing a higher degree of SOC.

Tool III: The Post-Traumatic Growth Inventory (PTGI):

Tedeschi and Calhoun (1996) designed this scale in English, then Al-Nasa'h, Asner-Self, Al Omari, Qashmer, and Alkhawaldeh (2023) translated it into Arabic. Five factors are included in the 21-item PTGI: personal strength (four items; 4, 10, 12, & 19), new possibilities (five items; 3, 7, 11, 14, & 17), improved relationships (seven items; 6, 8, 9, 15, 16, 20, 21), spiritual growth (two items; 5 & 18), and appreciation of life (three items; 1, 2, & 13). The PTGI is a tool used to measure the construct of "post-traumatic growth" or personal-positive growth following life-crisis experiences.

Tool Validity and Reliability:

With Cronbach's Alpha $\alpha = 0.87$ and test-retest reliability ($r = 0.71$), the Arabic scale of the PTGI demonstrated validity and strong internal consistency. The scale's validity was determined by a panel of experts (Al-Nasa'h et al., 2023).

Scoring system:

Agreement with each item indicates by using a six-point Likert scale (ranging from 0= I did not experience this change as a result of my crisis to 5=I experienced this change to a very great degree as a result of my crisis). Affective, cognitive, and behavioral changes can take place in each of the five domains. Scores vary from 0 to 105, with a higher score ($\geq 60\%$) denoting greater growth and a lower score denoting less.

It was prepared by the researcher in Arabic following a review of the literature and was revised by supervisors. It includes the personal characteristics of caregivers, such as age, sex, education levels, marital status, employment status, degree of relative, and income, in addition to the clinical and personal characteristics sheet.

Pilot Study:

A pilot study was conducted on 24 caregivers of psychiatric patients at Port Said Psychiatric Health Hospital and Addiction Treatment from December 1 to December 2024. The study aimed to estimate completion time, identify barriers to data collecting, and test the feasibility and usability of study methods. The caregivers for mental patients who participated in the pilot study were not included in the full research sample. The results showed that the tools were clear and applicable, and no changes were made.

Field Work**Administrative Design:**

The dean of Port Said University's Faculty of Nursing sent letters to the manager of Port Said Psychiatric Health Hospital and Addiction Treatment, requesting their cooperation and approval for the research, and permission was obtained from the General Secretariat of Mental Health and Addiction Treatment.

Ethical Considerations:

The study received approval from the Scientific Research Ethics Committee at Port Said University (NUR (7/8/2025)(52)), and all ethical issues were considered throughout the study. The General Secretariat of Mental Health and Addiction Treatment also approved the study. Participants were informed of the study's aim and data collection process, and their participation was voluntary. Data collected was processed in total confidentiality and used only for the study's purpose.

Statistical Analysis:

SPSS version 26 was used to analyze the data; numbers and percentages were used for qualitative data, and mean and standard deviation were used for quantitative data. A P value of less than 0.05 was considered statistically significant.

RESULTS

Less than three quarters (71.7%) of the caregivers of the psychiatric patients under study were female, according to Table 1, which also shows their personal characteristics. In terms of caregivers' ages, over one-third (35.0%) were in the 40–50 age range. In relation to marital status, it was found that, 57.9% of the studied caregivers were married with 61.2% living in urban area and 62.9% had University education while 60.0% of patient living with their mother while 15.8% living with their sister.

Table 2: The findings showed that, in relation to duration of care giving more than three quarters of them (77.5%) was more than 5 years, while 89.6% had no training and for 58.3% of them, the duration of patient disease was 1-5 years.

Table 3: Reveals that studied psychiatric patient's caregivers according to their total hardiness levels and their subscale. More than half of them had (59.2%) lesser commitment. While almost less than three quartets of them (74.2%) had greater level of control and 58.8% had greater level of challenge. More than half of psychiatric patient's caregivers (52.1%) had greater level of hardiness, while 47.9% had lesser level of hardiness.

Table 4; describes the distribution of the studied psychiatric patient's caregivers according to their total sense of coherence and their components levels. In relation to comprehensibility sense of coherence components found that the majority of studied psychiatric patient's caregivers (91.7%) had lower degrees and 83.3% had meaningfulness lower degrees also, while less than two thirds of them (60.4%) had higher degrees of manageability. Three quarters of studied psychiatric patient's caregivers (75.0%) had lower degrees of sense of coherence while one quarter only (25.0%) had high degrees of sense of coherence.

Table 5: Distribution of the studied psychiatric patient's caregivers according to total post-traumatic growth levels and their factors and reveals that most of psychiatric patient's caregivers had higher level in spiritual growth, followed personal strength then appreciation for life factors (77.5%, 73.8 % &73.3% respectively). Regarding total Post-traumatic growth inventory found that more than two thirds of them (68.3%) had higher level of post traumatic growth, while 31.7% had lower level of post traumatic growth.

There is a significant positive direct correlation between post traumatic growth and both hardiness and sense of coherence shows in table (6). Also there is a significant positive direct correlation between hardiness and sense of coherence.

Revealed that there is a significant positive direct effect of both hardiness and sense of coherence on post traumatic growth.

Table 1: Distribution of the studied psychiatric patient's caregivers according to their personal characteristics (n = 240).		
Personal characteristics	Psychiatric Patient's Caregivers	
	No.	%
Gender		
Male	68	28.3
female	172	71.7
Age/ years		
<20	8	3.3
20-<30	23	9.6
30-<40	42	17.5
40-<50	84	35.0
50-59	83	34.6
Marital status		
Married	139	57.9
Single	18	7.5
Divorced	39	16.2
Widow	44	18.3
Residence		
Rural	93	38.8
Urban	147	61.2
Educational levels		
Secondary school	66	27.5
University education	151	62.9
Post Graduate	23	9.5
Patients living with		
Mother	144	60.0
Father	25	10.4
Sister	38	15.8
Brother	17	7.1
Others	16	6.6

Table 2: Distribution of the studied psychiatric patients caregivers according to their psychiatric patients clinical characteristics (n = 240).		
Clinical characteristics	Psychiatric Patient's Caregivers	
	No.	%
Duration of care giving		
6 months-1 year	22	9.2
1-<3	27	11.2
3-<5	5	2.1
>5	186	77.5
Attend any training courses related to mental health care		
Yes	25	10.4
No	215	89.6
The caregiver have any physical illnesses		
Yes	47	19.6
No	193	80.4
Duration of the patient's mental illness/ years		
<1	12	5.0
1-5	140	58.3
>5	88	36.7
Patient Diagnosis		
Schizophrenia	98	40.7
Substance Abuse	22	9.2
Depression	28	11.7
Mania	5	2.1
Mental retardation	14	5.8
Autism spectrum disorder	19	7.9
Obsessive compulsive disorder	4	1.7
Hyper attention deficit disorder	50	20.9

Table 3: Distribution of the studied psychiatric patient's caregivers according to their total hardiness levels and their subscale (n = 240).		
Hardiness subscale	Levels	
	Greater hardiness	Lesser hardiness
	No.	%
Commitment	98	40.8
Control	178	74.2
Challenge	141	58.8
Total hardiness	125	52.1

Table 4: Distribution of the studied psychiatric patient's caregivers according to their total sense of coherence and their components degrees (n = 240).

Sense of Coherence Components	Degree	
	Higher	Lower
	No.	%
Comprehensibility	20	8.3
Manageability	145	60.4
Meaningfulness	40	16.7
Total sense of coherence	60	25.0

Table 5: Distribution of the studied psychiatric patient's caregivers according to total post-traumatic growth levels and their factors (n = 240).

Post-traumatic growth inventory factors	Levels			
	More growth		Less growth	
	No.	%	No.	%
Personal Strength	177	73.8	63	26.3
New Possibilities	162	67.5	78	32.5
Improved Relationships	165	68.8	75	31.3
Spiritual Growth	186	77.5	54	22.5
Appreciation for Life	176	73.3	64	26.7
Total Post-traumatic growth inventory	164	68.3	76	31.7

Table 6: Correlation between hardiness, sense of coherence, and post-traumatic growth.

Scores	Hardiness		Sense of coherence		Post Traumatic Growth	
	r	p	r	p	r	p
Hardiness	1					
Sense of coherence	0.31	0.00*	1			
Post Traumatic Growth	0.58	0.00*	0.47	0.00*	1	
*significant at p-value<0.05						

Table 7: Regression analysis for effect of hardiness and sense of coherence on post traumatic growth.

Predicators	Effect on Post Traumatic Growth			
	Regression coefficient	Standard error	t	p
Hardness	1.895	0.200	9.462	.000*
Sense of coherence	1.036	0.163	6.353	.000*
*significant at p-value<0.05				

DISCUSSION

Hardiness is conceptualized as a skill that equips individuals to effectively confront life's challenges. It encompasses three core components: control, which refers to the capacity to influence or manage various life circumstances; commitment, representing a willingness to engage actively with life's activities; and challenge, the ability to interpret change and new experiences as opportunities for personal development rather than threats (Ashoori, 2016). The current study's findings reveal a heterogeneous profile among caregivers, with most exhibiting high perceived control and a strong sense of challenge. However, a considerable proportion demonstrated lower levels of commitment.

Within the context of psychological hardiness, commitment pertains to an individual's degree of engagement and the sense of purpose derived from their activities. Given the chronic nature of psychiatric caregiving, one might expect higher levels of commitment due to the ongoing need for involvement and resilience. In caregiving, high commitment is typically associated with personal investment, emotional involvement, and a sense of purpose (Kim, Lee, & Han, 2023).

Unfortunately, more over half of the caregivers showed lesser levels of dedication, according to the study's findings. A lower level of commitment, despite years of caregiving, may point to emotional disengagement or caregiver burnout. Caregivers may continue their roles out of obligation rather than emotional connection. This detachment does not necessarily negate the presence of duty or familial loyalty but signals the need for emotional support and interventions that help caregivers reconnect with a sense of meaning in their roles. A longitudinal study involving 336 caregivers of patients supports this perspective, demonstrating that higher caregiver commitment defined as an intrinsic motivation to care was significantly associated with reduced caregiver burden. Furthermore, the quality of family relationships was found to moderate this association over time, suggesting that strong, supportive relationships can bolster caregiver commitment and mitigate stress (Sun & Francis, 2024).

Around three-quarters of caregivers reported high levels of control, which is crucial for effective daily tasks, crisis adaptation, and informed decision-making in

caregiving. This finding aligns with studies that highlight perceived control as a central element of psychological capital among caregivers (Wang, Lu, Wu, Li, & Li, 2024). Caregivers with higher self-efficacy and control are more likely to experience lower psychological distress, better emotional regulation, and improved health outcomes (Almutairi, Alotaibi, & Alenezi, 2023). Thus, strengthening perceived control through psych education and skills training remains a valuable approach in caregiver support programs.

Over half of caregivers view their caregiving role as an opportunity for growth, despite stress, and often view it as a source of personal growth and hardiness. Despite the challenges, caregivers often find meaning, satisfaction, and achievement in their roles, fostering psychological well-being (Larkin, Henwood, & Milne, 2022). Those who view caregiving as a challenge and an opportunity for development tend to demonstrate higher resilience and adaptive coping skills (Cheng, 2022). During the COVID-19 pandemic, caregivers who viewed their experiences as growth opportunities reported increased resilience. Recognizing change as beneficial can promote positive adaptation and personal development (Li & Wang, 2022).

Overall hardiness, according to the findings, over half of the caregivers possessed a greater level of hardiness is moderately encouraging, suggesting that many caregivers have developed resilience mechanisms that allow them to cope effectively with the stresses of caregiving. The high levels of control and challenge appear to be compensating for the relatively low levels of commitment, resulting in a functional, if not fully engaged, and coping profile.

However, the fact that slightly less than half of the caregivers were categorized as having a lesser level of hardiness highlights a substantial group at risk for poor outcomes. Lower hardiness is consistently linked with higher caregiver burden, increased psychological distress, and reduced quality of life (Wang et al., 2024). This group may struggle more with emotional regulation, experience heightened anxiety, and perceive caregiving as overwhelming, especially when social and institutional support is limited.

Contemporary research highlights hardiness as a crucial protective factor for caregivers, enabling effective stress management and well-being despite demanding

circumstances. Even when caregiving is initially perceived as a duty, individuals exhibiting higher levels of hardiness are more likely to demonstrate resilience and adaptive coping strategies (Kwon, Lee, Kim, Park, & Kim, 2022; Rodríguez-Rey, Garrido-Hernansaiz, & Bueno-Guerra, 2023). Studies reveal a vulnerable subgroup of caregivers with lower hardiness risk for adverse health outcomes, emphasizing the need for tailored support interventions (Ali, Farooq, & Hussain, 2022; Roy & Devi, 2024; Wan & Luo, 2024).

Regarding caregivers' Sense of Coherence (SOC), in the context of caregiving, these components influence how caregivers interpret and respond to stress, and thus serve as protective factors against psychological distress and burnout. SOC is conceptualized as a global orientation that reflects an individual's capacity to perceive life as comprehensible, manageable, and meaningful (Antonovsky, 1987).

The study reveals significant psychological vulnerabilities in caregivers of psychiatric patients, particularly in comprehensibility and meaningfulness. The low sense of coherence indicates challenges in adapting cognitively, emotionally, and behaviorally to their role. This finding aligns with existing literature emphasizing the importance of knowledge and understanding in reducing caregiver distress. Albalawi, Alwetaid, Alsharif, and Al-Ansari (2024); Zisman-Ilani, Smith, and Pukrop (2017) underscore that insufficient understanding of psychiatric conditions is a core contributor to emotional burden and perceived helplessness. The previously reported figure of great majority of caregivers (more than three quarters) having no formal training further contextualizes this result, indicating that most are navigating their role with limited guidance. Research by Olsson, Persson, Hellgren and Nilsson (2023) further affirms that low comprehensibility is linked to impaired coping and increased psychological vulnerability.

Over three-quarters of caregivers reported low levels of meaningfulness, possibly due to emotional exhaustion, role overload, or perceived ineffectiveness in patient care. This result is consistent with previous findings on caregiver burnout, where loss of purpose and emotional detachment are central features (Ranney, Reblin & DuBay, 2024). The earlier observation of "lesser commitment" among caregivers supports this interpretation, suggesting that caregiving is often experienced as a duty

rather than a personally meaningful endeavor. While some studies document that caregivers may find meaning in their roles. The findings here point to a broader pattern of emotional disengagement (Smith & Lee, 2023).

Over half of caregivers reported high levels of manageability, indicating sufficient resources and effective coping strategies despite emotional and cognitive challenges, indicating a positive outcome in the caregiver role. The imbalance between manageability and comprehensibility suggests a compartmentalized coping style, potentially leading to burnout if not addressed. Longer caregiving periods may also increase psychological, emotional, and physical burden. Mihan, Mousavi, Khodaie-Ardakani, and Alikhani (2024) emphasized that the duration of the disorder is a key predictor of caregiver stress and burnout. Similarly, Zhang, Wang, Cui, and Du (2024) reported that long-term caregiving in schizophrenia is associated with cumulative emotional fatigue and higher levels of subjective burden. These findings highlight the need for ongoing support systems tailored specifically for long-term caregivers, who often continue in their roles with minimal respite.

Caregivers with low SOC levels are more vulnerable to caregiver burden, emotional exhaustion, and mental health difficulties, according to a study by Hussien, Shahin, and Elkayal (2021), which found the highest percentage in comprehensibility. Also, this finding aligns with the study by Witkowska-Łuć (2018), which reported elevated levels of sense of coherence (SOC) among Polish patients with psychotic disorders. The study also found that higher comprehensibility was linked to a reduction in psychiatric symptoms particularly negative symptoms indicating progress toward recovery.

In the broader literature, low SOC especially in the domains of comprehensibility and manageability is strongly associated with heightened caregiver burden, depression, and anxiety (Olsson et al., 2023). Caregivers with low SOC often experience caregiving as unpredictable, unmanageable, and devoid of meaning, increasing their risk for emotional distress and mental health deterioration.

In relation to PTG among caregivers, the findings indicating that more than two-thirds of caregivers experience high levels of PTG, particularly in domains such as spiritual growth, personal strength, and appreciation for life are consistent with

emerging research in this area. This results may be demonstrated that caregiving, despite its inherent stressors; can serve as a catalyst for positive psychological change. These results align with Wan et al. (2023) conducted a meta-analysis examining the relationship between posttraumatic growth and resilience and found that caregivers who actively sought meaning in their caregiving experience reported significant increases in personal strength and spiritual development. Similarly, Wang, Gu, Qiu, Long, and Sun, (2025) observed that caregivers often develop a heightened appreciation for life, which contributes to improved mental well-being and resilience.

Conversely, some studies have reported variability in PTG levels among caregivers, highlighting that not all individuals experience such positive growth. Nguyen, Nguyen and Le (2020) found that caregivers with higher levels of stress and insufficient social support were less likely to report PTG, suggesting that individual differences and contextual factors influence the capacity for growth. This variability underscores the importance of considering individual coping resources, social support systems, and cultural factors when interpreting PTG outcomes.

Caregivers often engage in spiritual growth, utilizing existential or religious frameworks to navigate adversity and derive meaning from caregiving experiences, enhancing resilience, post-traumatic growth, coping abilities, and purpose (López, & García, 2021). This connection to a higher power or community provides comfort during challenging times. Additionally, caregivers experience enhanced personal strength, resilience, and self-efficacy as they face daily challenges. Increased awareness of vulnerability may prompt a reevaluation of values and priorities challenges (Park et al., 2022).

Positive changes in caregivers' sense of coherence, such as PTG, occurred despite previous deficits, suggesting that PTG may develop as a response to struggle, while SOC reflects current coping capacity. However, a minority reported low PTG, underscoring the need for targeted support. The findings reveal a significant and coherent pattern of psychological interplay among hardiness, sense of coherence, and post-traumatic growth in caregivers of psychiatric patients. Notably, PTG was positively correlated with both hardiness and SOC, and these two constructs were also positively associated with each other. Further, both hardiness (as a resilience-related

trait) and SOC were found to have a significant positive direct effect on PTG, underscoring their foundational role in facilitating growth through adversity. This is aligning with Simao Silva, and Leal (2022); Yildiz Karadaş, and Yalçın (2022), who stated that a strong sense of coherence is widely recognized as a crucial predictor of greater PTG in caregivers facing chronic stressors.

The study supports the idea that hardiness and SOC, which are psychological orientations that promote constructive coping and positive reappraisal, help individuals manage and meaningfully handle caregiving stressors, thereby fostering growth and promoting the cognitive processing and emotional adaptation necessary for positive coping. (Kwon et al., 2022; Rodríguez-Rey et al., 2023).

The study reveals that caregivers with stronger SOC characteristics, particularly manageability, are more likely to report higher PTG, which aligns with the hardiness enhancing nature of hardiness and SOC, despite limited comprehensibility and meaningfulness.

CONCLUSION

Based on the results of this study, it can be concluded that there is a significant positive direct correlation between post traumatic growth and both hardiness and sense of coherence. Also, there is a significant positive direct effect of both hardiness and sense of coherence on post- traumatic growth.

RECOMMENDATIONS

In light of the results of this study, the following recommendations were suggested:

- Develop and implement interventions focused on strengthening caregivers' hardiness and sense of coherence. These may include resilience training programs, stress management workshops, and coping skills education.
- Establish accessible psychological support and counseling services tailored to caregivers to facilitate posttraumatic growth and improve their mental well-being.

- Provide educational resources to increase caregivers' understanding of mental health conditions, caregiving challenges, and the importance of maintaining a strong sense of coherence.

Further Studies

Design culturally sensitive and individualized programs that consider the unique backgrounds and needs of caregivers to maximize their psychological hardiness and growth.

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العلاقة بين الصلابة والشعور بالتماسك والنمو بعد الصدمة لدى مقدمي الرعاية للمرضى النفسيين

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الخلاصة

يواجه مقدمي الرعاية تحديات عاطفية ونفسية كبيرة، مما يجعلهم أعضاء أساسيين في نظام رعاية الصحة النفسية. يُعد فهم عملياتهم النفسية أمرًا ضروريًا لتحسين شبكات الدعم والرفاهية العامة. تشمل العوامل المؤثرة على مرونة مقدمي الرعاية: القدرة على التحمل، والشعور بالتماسك، والنمو بعد الصدمة. يلعب ممرضى الطب النفسي دورًا حيويًا في الأبحاث والتدخلات. الهدف: دراسة العلاقة بين القدرة على التحمل، والشعور بالتماسك، والنمو بعد الصدمة لدى مقدمي الرعاية للمرضى النفسيين. الأدوات و الطريقة: شملت الدراسة 240 مقدم رعاية تتراوح أعمارهم بين 18 و 65 عامًا، قدموا رعاية لمدة ستة أشهر للمرضى النفسيين، باستخدام ثلاث أدوات: مقياس القدرة على التحمل، ومقياس الشعور بالتماسك، ومقياس النمو بعد الصدمة. النتائج: وجدت الدراسة أن أكثر من نصف مقدمي الرعاية للمرضى النفسيين لديهم مستوى أعلى من الصلابة، وأن ثلاثة أرباع مقدمي الرعاية للمرضى النفسيين المدروسين لديهم درجات أقل من الشعور بالتماسك، وأن أكثر من ثلثهم لديهم مستوى أعلى من النمو بعد الصدمة. الاستنتاج: هناك علاقة طردية إيجابية كبيرة بين النمو بعد الصدمة وكل من الصلابة والشعور بالتماسك وبين الصلابة والشعور بالتماسك. كما يوجد تأثير مباشر إيجابي كبير لكل من المرونة والشعور بالتماسك على النمو بعد الصدمة. التوصيات: تنفيذ التدخلات لتعزيز مرونة و تماسك مقدمي الرعاية، بما في ذلك التدريب على المرونة، وورش عمل إدارة الإجهاد، وتعليم مهارات التأقلم. إنشاء دعم نفسي وموارد تعليمية متاحة للنمو بعد الصدمة.

الكلمات المرشدة: الصلابة؛ الشعور بالتماسك؛ النمو بعد الصدمة؛ مقدمو الرعاية للمرضى النفسيين.