Relationship between Self- Efficacy, Hope and Care Burden among Family Caregivers of Patients with Psychotic Disorders.

Esraa Mohamed-El-Saeed Ebrahem, Demonstrator
Psychiatric and mental health Nursing, Faculty of Nursing, Alexandria University

Elham Mohamed Abdel Kader Fayad, Professor
Psychiatric and mental health Nursing, Faculty of Nursing, Alexandria University

Amal Mohamed Gamal El-Din Shehata, Professor
Psychiatric and mental health Nursing, Faculty of Nursing, Alexandria University

 Mohamed Hussein Ramadan Atta, lecturer
Psychiatric and mental health Nursing, Faculty of Nursing, Alexandria University

Abstract

*   **Background**. Self-efficacy, hope, and care burden are interconnected factors that play a significant role in the well-being of family caregivers. Self-efficacy refers to an individual's belief in their ability to manage and perform tasks related to caregiving effectively. Higher levels of self-efficacy have been associated with lower levels of caregiver burden. Hope, which is defined as a positive expectation for the future, has been found to be negatively associated with caregiver burden. **Aim:** To assess the level of self-efficacy, hope and care burden and identify the relationship between self-efficacy, hope and care burden among family caregivers of patients with psychotic disorders. **Settings:** It was conducted at the Outpatient Clinic of El-Maamoura Hospital for Psychiatric Medicine. Egypt. **Subjects:** composed of 220 family caregivers of patients with psychotic disorders. **Tools:** four tools were used to collect the necessary data: Patients and Family Caregivers Socio-Demographic and Clinical Data Structured Interview Schedule, Generalized Self-Efficacy Scale, Adult Hope Scale and Caregiving Burden Inventory. **Results:** 52.3% of the studied family caregivers have moderate level of Self-Efficacy and only 50% had a lower level of hope and 82.3%, have a higher degree of care burden.. Also, there is a statistically significant negative correlations between GSE and overall caregiving burden subscales (rs= -0.371, P<0.001), and between hope and overall caregiving burden subscales (rs = -0.419, P<0.001), as well as there is a statistically significant postive correlations between GSE and and hope(rs =0.845, p <0.001, respectively). **Conclusion:** The findings of this result provide opportunities to assess positive construct of mental health and its effect on family caregiving burden. **Recommendations:** Provide support and education to caregivers of patients with psychotic disorders and when Providing respite care is a temporary break from caregiving responsibilities. Conduct further research is needed to better understand another positive aspect of psychology. such as optimism, happiness and self-soothing of caregivers of patients with psychotic disorders.*

    <u>**Keywords:**</u>   Care burden, Family caregivers, Hope, Psychotic disorders, Self -efficacy.

Introduction

Psychotic disorders refer to a varied group of mental health conditions that hinder patients to function which hinder family, worsen their burden, and increase suffering. **(APA, 2020).**

The World Health Organization (WHO) has reported a rise in the prevalence of psychotic disorders, with a 13% increase in mental illness observed in 2017. Due to their high prevalence, psychotic disorders have a substantial impact on the lives of individuals and their families **(World Organization, 2021).**

Family caregivers face many difficulties when taking care of their patients at home. They may experience a higher degree of distress and burden due to inexperience in providing care and limited knowledge about the early stages of relapse. Caregivers may feel pessimistic and need more help to internalize the reality of the situation they face and negative impact on their level of self-efficacy, hope and significant impact on family burden **(Noori & Ebrahim, 2020).**

Caring for a family member with a psychotic disorder places an enormous burden and has been shown to have a significant effect on the family's self-efficacy and hope **(Duggleby et al., 2021).** A studies by *(***Banitalebi et al., (2022) and Duggleby et al., (2021)** showed that an intervention that aimed to enhance hope and positive thinking was effective in reducing caregiver burden and improving quality of life among family caregivers. In addition, caregiver burden can have a negative impact on self-efficacy and hope. Also, found that caregiver burden was negatively associated with self-efficacy and hope among family caregivers of patients with schizophrenia.

Self-efficacy and hope are two important constructs in positive psychology that have been found to be strongly related. Self-efficacy refers to an individual's belief in their ability to achieve a desired outcome, while hope refers to an individual's belief in their ability to generate pathways to achieve that desired outcome (Snyder, 2002). In the context of caregiving, caregivers with high self-efficacy beliefs are more likely to experience hope and a sense of control over their caregiving role, which can promote positive outcomes such as effective coping and improved well-being (Harmell et al., 2011; Shang et al., 2023).

Overall, self-efficacy and hope are important factors that can contribute to reducing caregiver burden. Healthcare professionals can play a crucial role in promoting self-efficacy and hope among caregivers, including providing education on effective coping strategies and referring caregivers to support groups and counseling services **(Han et al., 2022).**

Aims of the Study

The study aims to

-Assess the level of self-efficacy, hope, and care burden among family caregivers of patients with psychotic disorders.

- Identify the relationship between self-efficacy, hope and care burden among family caregivers of patients with psychotic disorders.

Research questions:

1 -What is the degree of self-efficacy, level of hope, and degree of care burden among family caregivers of patients with psychotic disorders**?**

2- What is the relationship between self-efficacy, hope and care burden among family caregivers of patients with psychotic disorders?

Materials and Method

Materials

<u>**Research design**</u>**:** A descriptive correlational research design was utilized in this study.

<u>**Settings:**</u>
The study was conducted in the outpatient clinic of El-Maamoura Hospital for Psychiatric Medicine affiliated to the Ministry of Health and Population. The Psychiatric outpatient clinic provides free treatment services for all patients suffering from mental illness and substance dependence. The services provided at the outpatient clinic include medical examination, diagnosis, providing of necessary medications and referral.

<u>**Subjects:**</u>

The Epi info program was used to estimate the sample size based on using 5% acceptable error, 95% confidence coefficient, 50% expected frequency and population size of 500. The program revealed a minimum sample size to be 217 patients with psychotic disorders. Thus, a convenient sample of 220 family caregivers of patients with psychotic disorders with the following criteria:

Adult family caregivers who take care of patients with psychotic disorders and regularly attend the outpatient department, living with the patient in the same household for at least 6 months, and their patients free from substance use.

<u>*Tools:*</u>
Tool one:

A Socio-Demographic and Clinical Data, Structured interview Schedule:
This interview schedule was developed by the researcher to elicit data about the general socio-demographic and clinical characteristics of both patients and family.
Tool two:
 Generalized Self- Efficacy Scale (GSE):
   scale is a self-report instrument used to measure self -efficacy, the scale summarized to a 10-item scale by Schwarzer & Jerusalem, (1995). This scale is a 4-point Likert scale (1-4). The total score ranges from 10–40 scores,with lower score indicates lower self efficacy. The scale was validated and tested for internal consistency (Cronbach's alpha: 0.88) **by Ramzani et al., (2019).**
Tool three:
Adult Hope Scale (ADS):
ADS was developed by Snyder et al., (1991). This scale includes 12 items to measure the level of hope. The scoring system of this scale is made by summing the

scores obtained in each item, except four items related to fillers as they are considered distracting items and are not scored. The lower score denoted lower hope level. This scale was valid and reliable (Cronbach alpha :0.75) (**Francisquini et al., 2020**).

Tool four:

Caregivers Burden Inventory (CBI):

CBI) is a self-report instrument developed by Novak & Guest, (1989) to measure the caregiver burden on five different dimensions (factors) which are ***time dependent burden*** (5 items); ***developmental burden*** (5 items); ***physical burden*** (4 items); ***social burden*** (5 items); and ***emotional burden*** (5 items).

In this study, the Arabic version of CBI was utilized. The psychometric properties for Arabic version were proved which had content validity and reliability with Cronbach's alpha values for the 5 factors as 0.85, 0.85, 0.86, 0.73, and 0.77 respectively (**Abo kahla, M. 2018**).

Method

Administrative steps:

• Approval from the Research Ethics Committee, Faculty of Nursing- Alexandria University and official authorities of General Secretariat of Mental Health and El-Maamoura Hospital for Psychiatric Medicine was obtained.

Preparation for the study tools:

• The researcher developed Tool I and Tools II and III were translated to Arabic and tested for content validity by a jury of 5 experts in the field of psychiatric and mental health nursing.

• A pilot study was carried out on 20 family caregivers attending the outpatient clinic and meeting the inclusion criteria of the study sample. Necessary modifications were made accordingly. These family caregivers were excluded from the actual study subjects.

• Tools II and III were tested for reliability through Cronbach alpha test on family caregivers of those attending the outpatient clinic. Tool II (GSE) and tool III (AHS) proved to be reliable (Cronbach's alpha = 0.728, and 0.803 respectively). These family caregivers will be excluded from the actual study subjects. Screening of all medical charts of patients who attend the outpatient clinic to identify those diagnosed with psychotic disorders was done.

Empirical phase:

• The researcher recruited family caregivers who accompany the above- mentioned patients and who met the predetermined criteria as study subjects.

• The researcher collected data by interviewing the recruited family caregivers on an individual base and collection of data was done during the period from 13th October to 13th December 2022.

Ethical considerations:

• Informed written consent was obtained from the recruited family caregivers after explaining the aim of the study.

• Data confidentiality was assured and respected.

• Subjects' anonymity of the study participants was considered and respected and had the right to withdraw at any time.

Statistical analysis:

- Quanititative data were described using numbers and percentages.
- Quantitative data were described using range (minimum and maximum), mean, and standard deviation. The significance of the obtained results was judged at the 5% level.
- Reliability of tools was assessed using Cronbach's alpha test.
- The correlations between two variables were assessed using Pearson correlation coefficient (r.), Student t-test (t) and One Way ANOVA test (f).

Results

Table 1 distribution of the studied family caregivers of patients with psychotic disorders, according to their socio-demographic and clinical data.

(71.8%) were female. The age of family caregivers ranged from 23 to 75 years, with a mean age of 50.77 ± 11.46. (44.1%) family caregivers falls between the ages of 45 to less than 60 years old. 27.3% being illiterate. In terms of their own psychiatric history, 29.1% of family caregivers had a positive history of mental illness, with 40.6% having a first-degree relative with mental illness. More than half (51.4%) of the family caregivers were suffering from physical or psychological illness, while 19.5% were suffering from psychological illness. Furthermore, 80% of family caregivers were solely responsible for patient care.

Table 2 distribution of the studied family caregivers according to overall generalized self-efficacy scale (GSE).

The total mean score of self-efficacy of family caregivers was 25.50 ± 6.69. Regarding levels of GSE, 20.5% of studied family caregivers report lower self-efficacy. While 52.3% of them had a moderate level of self-efficacy.

Table 3 distribution of studied family caregivers of patients with psychotic disorders according to overall adult hope scale.

Half of the studied family caregivers had a lower level of hope, as evidenced by a mean total hope score of 40.86 ± 14.52. When looking at the Agency adult hope subscale, 42.3% of the family caregivers have a lower level of hope. Conversely. Regarding the Pathway adult hope subscale, the results indicate that 55.0% of family caregivers had a lower level of hope, while 30.0% of the studied family caregivers had a moderate level of hope, with a mean score of 21.55 ± 7.32.

Table 4 distribution of family caregivers of patients with psychotic disorders according to Caregiving Burden Inventory.

The results indicate that a significant proportion of family caregivers, specifically 82.3%, had a higher degree of burden. Speaking about the different subscales of the Caregiving Burden Inventory, 83.6% of the studied family caregivers had a higher risk of burnout on the Time Dependent Burden subscale, with a mean score of 11.61 ± 3.88. On the Physical Burden subscale, 79.5% of the caregivers scored high, with a mean score of 9.18 ± 3.41. On the Social Burden subscale, 62.3% of the caregivers scored high, with a mean score of 8.69 ± 5.03. Finally, On the Emotional Burden subscale, 63.2% of the caregivers scored high, with a mean score of 9.33 ± 4.17.

Table 5 correlation matrix between the Generalized Self-Efficacy Scale (GSE), hope, and caregiving burden among family caregivers of patients with psychotic disorders.

The findings reveal statistically significant negative correlations between GSE and overall caregiving burden subscales (Rs= -0.371, P<0.001), as well as between GSE and the different subscales of caregiving burden, including developmental burden, physical burden, social burden, and emotional burden (P≤ 0.001). However, there is no correlation between GSE and time-dependent burden (P=0.009). Similarly, the Adult Hope Scale shows highly significant negative correlations with overall caregiving burden subscales (Rs = -0.419, P<0.001). as well as with the different subscales of hope. There was a negative correlation between care burden and both agency and pathway adult hope subscales. GSE was highly positively correlated with overall adult hope subscales (Rs =0.845, P<0.001), as well as with the different subscales of hope. There was a positive correlation between GSE and both agency and pathway subscales. (Rs= -0.747, P<0.001, and Rs= -0.820, P<0.001, respectively).

Discussion

Caring for a family member with a persistent psychotic condition can be a challenging and burdensome task, which can negatively impact the caregiver's mental and physical health, as well as their ability to empower themselves and maintain hope for the future **(Rao et al., 2020).**This study aimed to assess self-efficacy, hope, and care burden among family caregivers of patients with psychotic disorders and identify the relationship between these variables.

The study found that most of the studied family caregivers of patients with psychotic disorders had moderate to low levels of self-efficacy. This finding is consistent with previous research suggesting that caring for individuals with chronic and advanced disorders can negatively impact the mental and physical health of family caregivers **(Kershaw et al., 2015).** Family caregivers with higher levels of self-efficacy may make them more capable of managing these challenges and maintaining their own well-being. There are several potential reasons why many family caregivers of patients with chronic psychotic disorders may have moderate or low self-efficacy. It could be related to lack of support and resources that can empower family caregivers to be self-efficient **(Keshvari et al., 2015).**

In addition, low self-efficacy among family may be related to lacking knowledge that decreases caregivers' self-confidence about their abilities and capabilities **(Banitalebi et al., 2022; Keshvari et al., 2015).** More specifically, lacking knowledge or awareness about mental illness contributes lacking problem-solving skills about dealing with challenging and complex issues **(Poon& Kung, 2020).**

Concerning hope, it has been found that majority of the studied family caregivers of patients with psychotic disorders had low hope. It could be related to the chronic and unpredictable nature of psychotic disorders such as schizophrenia and bipolar disorder **(Gonani, c. 2019).** Caregivers may also experience a high level of burden and stress due to their care giving responsibilities, which

can lead to feelings of hopelessness and despair **(Phoeun et al., 2023).**

Aging may play a crucial role in families' low level of hope. The current study showed that hope is significantly related with the family caregiver's age. It was suggested that age is a very important factor that influences individuals' hope during stages of development. The current result supports this factor the results revealed low level of hope among family caregivers, as tables showed their age were ranged between 60-75 years. It may be related to almost of older caregivers are retired, physical and mental health is affected with age related changes, loss of self-confidence and hope in achieving task or providing caregiving role.

The current study indicates that the vast majority of family caregivers who were studied are at risk of burnout and burden. This is consistent with previous research, which suggests that family caregivers face various burdens, including care burden. Caregiving can be particularly distressing when the patient has a psychotic condition. In addition to the general responsibilities of caregiving, these family members must closely monitor the patient for early signs of illness and relapse, which is not required in non-psychiatric conditions **(Banitalebi et al., 2022; Noori & Ebrahim, 2020).**

In this current study, it was reported that family caregivers who don't have enough monthly income tend to have more physical burden, social burden, and emotional burden. This may be due to the financial strain associated with caregiving, including the costs of medication, medical appointments, transportation, and other related expenses. Caregivers who do not have enough income may have to work

longer hours or take on additional jobs to make ends meet, which can lead to physical exhaustion and emotional stress. In addition, caregivers who do not have enough income may have limited access to support resources, such as counseling or respite care, which can exacerbate their burden **(Von Kardorff et al., 2016)**.

The result of the present study shows that there is a significant statistical correlation between self-efficacy and care burden. It is conceivable that lower self-efficacy among family caregivers of patients with psychotic disorders could be partly explained by **Banitalebi et al., (2022) who** found that family caregivers of patients with schizophrenia had higher levels of self-efficacy were reported to have lower levels of subjective burden and better psychological well-being.

The relationship between self-efficacy and caregiving burden can be explained by several factors. As for caregivers who have higher levels of self-efficacy may be better able to deal with the demands and stressors of caregiving. Also, they may have greater confidence in their ability to manage difficult situations and to provide effective care to their patients. In contrast, caregivers who have lower levels of self-efficacy may feel overwhelmed by the demands of caregiving and may struggle to manage their emotions and cope with stress **(Tang et al .,2015).** Therefore, when a family has low self-efficacy, then the caregiving burden increases.

Indeed, the finding of a significant positive correlation between self-efficacy and hope in the present study is consistent with previous research. Similarly, a study by **Duggleby et al., (2021)** found that lower levels of hope were associated with lower levels of self-efficacy

among family caregivers of patients with mental illness. The relationship between self-efficacy and hope this may be due to individuals with lower levels of self-efficacy may be more unable to set and achieve goals, which can contribute to a lower sense of hope and optimism. In addition individuals with low self-efficacy may be less likely to set goals or to believe that they can achieve them. Also, individuals with lower levels of hope may be more likely to engage in behaviors that decrease their self-efficacy **(Feldman & Kubota, 2015).**

On the other hand, caregivers with higher levels of self-efficacy may feel more confident and capable in their caregiving role, which can contribute to a greater sense of hope and optimism about the future **(Li & Loke, 2013).** Additionally, caregivers with higher levels of self-efficacy may be better able to cope with the challenges and stressors associated with caring for a patient with a chronic illness, leading to a more positive outlook on their caregiving situation **(Doris et al., 2018).** Conversely, caregivers with lower levels of self-efficacy may feel overwhelmed and hopeless about their ability to provide effective care, leading to a decrease in hope and optimism **(Kershaw et al., 2015).**

Also, the present study revealed that there is a significant negative statistical correlation between hope and caregiving burden, both on the total as well as on their sub-scales/dimensions. The finding of a significant negative correlation between hope and caregiving burden in the present study is consistent with previous studies, Similarly, a more recent study by **Duggleby et al. (2021)** found that hope was a factor in maintaining optimal functioning and a

positive outlook on life among family caregivers of individuals with dementia.

The negative correlation between hope and caregiving burden can be explained by several factors.The demands of caregiving as family experience high levels of burden may feel overwhelmed and stressed, leading to a decrease in hope and optimism about the future **(Li & Loke, 2013).** The demands of caregiving can be particularly challenging for family members caring for a patient with a severe mental illness, as they may be required to provide round-the-clock care and support **(Doris et al., 2018).** Conversely, a strained or negative relationship may contribute to feelings of burden and hopelessness. Furthermore, the availability and adequacy of support services may also play a role, as caregivers who have access to effective support and resources may feel more hopeful about their ability to manage the challenges of caregiving **(Duggleby et al., 2021).**

Findings of the present study also indicated that caregivers who were solely responsible for patients care had lower level of self efficacy and hope.

Conclusion

This study sheds light on the complex relationship between self-efficacy, hope, and care burden among family caregivers of patients with psychotic disorders. It is proved that lower levels of self-efficacy and hope may be associated with higher levels of care burden. Overall, assessing self-efficacy and hope provides opportunities to assess positive construct of mental health.

Recommendations:

Recommendations geared toward family caregivers of patients with psychotic disorders:

- Provide support and education to caregivers of patients with psychotic disorders to help them manage the challenges of caregiving.

- Providing respite care is a temporary break from caregiving responsibilities and can provide caregivers with time to rest and recharge.

- Further research is needed to better understand another positive aspect of psychology such as optimism, happiness and self-soothing in relation to caregiving burdn among caregivers of patients with psychotic disorders.

Table (1): Distribution of the studied family caregivers of patients with psychotic disorders according to their sociodemographic and health related profile (n = 220)

Sociodemographic characteristic and health related profile of family caregivers:	No.	%
Sex		
Male	62	28.2
Female	158	71.8
Age		
<21	9	4.1
30	53	24.1
45	97	44.1
≥60	61	27.7
Level of education		
Illiterate	60	27.3
Read and write	25	11.4
Preparatory education	41	18.6
Secondary education	50	22.7
High institute	44	20.0
Have positive history of mental illness		
Yes	**64**	**29.1**
No	156	70.9
If yes (n = 64)		
1st degree Relative	26	40.6
2nd degree Relative	36	36
1st and 2nd degree Relative	2	3.1
Caregivers suffer from any (physical or psychological illness)		
Yes	**113**	**51.4**
No	107	48.6
If yes (n = 113)		
Psychological	22	19.5
Physical	53	46.9
Psychological/physical	38	33.6
Caregivers solely responsible for patient care		
Yes	**176**	**80.0**
No	**44**	**20.0**

Table (2): Distribution of the studied family caregivers of patient with psychotic disorders according to overall Generalized Self-Efficacy Scale (GSE) (n = 220)

GSE	No.	%
Low (10-19)	45	20.5
Moderate (20-29)	115	52.3
High (30-40)	60	27.3
Total Score (10 – 40)		
Min. – Max.	10.0 – 40.0	
Mean ± SD.	25.50 ± 6.69	

Table (3): Distribution of the studied family caregivers of patients with psychotic disorders according to of Adult Hope Scale (n = 220)

Adult Hope subscale	Low (<33.3%)		Moderate (33.3– <66.67)		High (≥66.67%)		Min. – Max.	Total Score	% Score
	No.	%	No.	%	No.	%	No.	Mean ± SD.	Mean ± SD.
Agency	93	42.3	62	28.2	65	29.5	4.0 – 32.0	19.31 ± 8.40	54.69 ± 29.99
Pathway	121	55.0	66	30.0	33	15.0	4.0 – 32.0	21.55 ± 7.32	62.66 ± 26.15
Overall score	*110*	*50.0*	*68*	*30.9*	*42*	*19.1*	*8.0 – 64.0*	*40.86 ±14.52*	*58.68 ±25.93*

Table (4): Distribution of the studied family caregivers of patients with psychotic disorders according to Caregivers Burden Inventory (n = 220)

Caregivers Burden Inventory	Low (<33.3%)		Moderate (33.3– <66.67)		High (≥66.67%)		Min. – Max.	Total Score	% Score
	No.	%	No.	%	No.	%	No.	Mean ± SD.	Mean ± SD.
	No need for assistance (<33.3%)		To seek some form of respite care (33.3–<50%)		Risk of burnout (≥50%)		Min. – Max.	Mean ± SD.	Mean ± SD.
Time dependent	13	5.9	23	10.5	184	83.6	1.0 – 15.0	11.61 ± 3.88	77.3 ± 25.85
Developmental	14	6.4	31	14.1	175	79.5	2.0 – 15.0	10.41 ± 3.53	69.42 ±23.53
Physical	26	11.8	19	8.6	175	79.5	0.0 – 12.0	9.18 ± 3.41	76.52 ±28.42
Social	54	24.5	29	13.2	137	62.3	0.0 – 15.0	8.69 ± 5.03	57.94 ±33.5
Emotional	22	10.0	59	26.8	139	63.2	0.0 – 15.0	9.33 ± 4.17	62.21 ±27.82
Overall score	*11*	*5.0*	*28*	*12.7*	*181*	*82.3*	*15.0 – 72.0*	*49.23 ±14.40*	*68.37 ±20.0*

Table (5): Correlation Matrix between Generalized Self-Efficacy, Adult Hope Scale and Caregiving Burden Inventory of the studied family caregivers of patients with psychotic disorders.

		GSE	Adult Hope scale			Caregivers Burden Inventory					
			Agency	Pathway	Overall	Time depended	Developmental	Physical	Social	Emotional	Overall
GSE	R		0.747*	0.820*	0.845*	-0.114	-0.377*	-0.283*	-0.219*	-0.361*	-0.371*
	P		<0.001*	<0.001*	<0.001*	0.091	<0.001*	<0.001*	0.001*	<0.001*	<0.001*
Agency	R			0.706*	0.934*	-0.081	-0.408*	-0.161*	-0.206*	-0.470*	-0.368*
	P			<0.001*	<0.001*	0.231	<0.001*	0.017*	0.002*	<0.001*	<0.001*
Pathway	R				0.912*	-0.183*	-0.428*	-0.286*	-0.197*	-0.411*	-0.410*
	P				<0.001*	0.007*	<0.001*	<0.001*	0.003*	<0.001*	<0.001*
Overall Adult Hope	R					-0.139*	-0.451*	-0.237*	-0.218*	-0.479*	-0.419*
	P					0.039*	<0.001*	<0.001*	0.001*	<0.001*	<0.001*
Time dependent	R						0.393*	0.335*	0.410*	0.269*	0.666*
	P						<0.001*	<0.001*	<0.001*	<0.001*	<0.001*
Developmental	R							0.498*	0.476*	0.567*	0.799*
	P							<0.001*	<0.001*	<0.001*	<0.001*
Physical	R								0.239*	0.340*	0.631*
	P								<0.001*	<0.001*	<0.001*
Social	R									0.423*	0.755*
	P									<0.001*	<0.001*
Emotional	R										0.729*
	P										<0.001*

References

- Abo kahla, M. (2018). Psycho-educational Need and Caregiving Burden among Families of Patient with Psychotic Disorder [Unpublished Master Thesis]. Faculty of Nursing: Alexandria University.
- American Psychiatric Association. (2020). Diagnostic and statistical manual of mental disorders (DSM-5). American Psychiatric Association. https://doi.org/10.1176/appi.books.97808 90425596
- Banitalebi, S., Etemadifar, S., Kheiri, S., & Masoudi, R. (2022). The effect of a self-management program on care burden and self-efficacy in family caregivers of people with multiple sclerosis. Journal of Nursing Research, 30(5), e234.
- Doris, S. F., Cheng, S. T., & Wang, J. (2018). Unravelling positive aspects of caregiving in dementia: An integrative review of research literature. International Journal of Nursing Studies, 79, 1-26.
- Duggleby, W., Lee, H., Nekolaichuk, C., & Fitzpatrick-Lewis, D. (2021). Systematic review of factors associated with hope in family carers of persons living with chronic illness. Journal of Advanced Nursing, 77(8), 3343-3360.

- Feldman, D. B., & Kubota, M. (2015). Hope, self-efficacy, optimism, and academic achievement: Distinguishing constructs and levels of specificity in predicting college grade-point average. Learning and Individual Differences, 37, 210-216.

- Francisquini, P. D., Soares, M. H., Machado, F. P., Luis, M. A. V., & Martins, J. T. (2020). Relationship between well-being, quality of life and hope in family caregivers of schizophrenic people. Revista Brasileira De Enfermagem, 73 Suppl (1), 20190359.Retrievedfrom: https://doi.org/10.1590/0034-7167-2019-0359

- Gonani, C. G. (2019). Family care-giving in mental health: Experience of family caregivers of people living with severe mental illness in rural Malawi (Doctoral dissertation, Harvard University).

- Han, M., Diwan, S., Cole, T., Hay, K., & Paturzo, M. (2022). Service utilization, self-efficacy, positive attitude and well-being among Asian American family caregivers of persons with serious mental illnesses. Community Mental Health Journal, 58(6), 1038-1048.

- Harmell, A. L., Chattillion, E. A., Roepke, S. K., & Mausbach, B. T. (2011). A review of the psychobiology of dementia caregiving: A focus on resilience factors. *Current Psychiatry Reports, 13*, 219-224. https://doi.org/10.1007/s11920-011-0187-1.

- Kershaw, T., Ellis, K. R., Yoon, H., Schafenacker, A., Katapodi, M., Northouse, L., & Wu, Y. P. (2015). The interdependence of advanced cancer patients' and their family caregivers' mental health, physical health, and self-efficacy over time. Annals of Behavioral Medicine, 49(6),901-911. https://doi.org/10.1007/s12160-015-9724-z

- Keshvari, M., Hedayati, B., Moeini, M., & Alhani, F. (2015). A survey on the effect of implementation of a family-centered empowerment model on blood pressure and empowerment dimensions in the elderly people with hypertension. Journal of Education and Health Promotion, 4.

- Li, Q., & Loke, A. Y. (2013). The positive aspects of caregiving for cancer patients: A critical review of the literature and directions for future research. Psycho-Oncology, 22(11), 2399-2407.

- Noori, L. K., & Ebrahim, S. A. (2020). Family caregivers burden and coping strategies for patient with schizophrenia in Mosul City. Mosul Journal of Nursing, 8(2), 215-224.

- Novak, M., & Guest, C. (1989). Application of a multidimensional caregiver burden inventory. The Gerontologist, 29(6), 798-803. https://doi.org/10.1093/geront/29.6.798.

- Phoeun, B., Chanthorn, L., Schulhofer, L., Khann, S., Soung, T., Conroy, K., & Nguyen, A. J. (2023). 'I feel hopeless': Exploring the psychosocial impacts of caring for mentally ill relatives in Cambodia. International Journal of Social Psychiatry, 69(2), 438-446.

- Poon, A. W. C., & Kung, W. W. (2020). An overview of social work approaches in working with families of people with serious mental illness. Mental Health and Social Work, 199-217.

- Ramzani, A., Zarghami, M., Charati, J. Y., Bagheri, M., & Lolaty, H. A. (2019). Relationship between Self-efficacy and Perceived Burden among Schizophrenic Patients' Caregivers. *Journal Of Nursing*

and Midwifery 22(1), Sciences, 6(2), 91-97.

- Rao, P., Grover, S., & Chakrabarti, S. (2020). Coping with caregiving stress among caregivers of patients with schizophrenia. Asian Journal of Psychiatry, 54, 102219.

- Schwarzer, R., & Jerusalem, M. (1995). Generalized Self-Efficacy scale. In J. Weinman, S. Wright & M. Johnston (Eds.), Measures In Health Psychology: A user's Portfolio. Causal And Control Beliefs (p.p. 35-37). NFER-NELSON.

- Shang, K., Fan, D. X., & Buhalis, D. (2023). Tour guides' self-efficacy and resilience capability building through sharing economy platforms. *International Journal of Contemporary Hospitality Management, 35*(4), 1562-1583. https://doi.org/10.1108/IJCHM-01-2022-0071.

- Snyder, C. R. (2002). Hope theory: Rainbows in the mind. *Psychological Inquiry, 13*(4), 249-275. https://doi.org/10.1207/S15327965PLI1304_01.

- Snyder, C., Irving, L. M., & Anderson, J. R. (1991). Hope and health. Handbook Of Social and Clinical Psychology: The Health Perspective, 162, 285-305.

- Tang, F., Jang, H., Lingler, J., Tamres, L. K., & Erlen, J. A. (2015). Stressors and caregivers' depression: Multiple mediators of self-efficacy, social support, and problem-solving skill. Social Work in Health Care, 54(7), 651-668.

- The World Health Organization. (2021). Mental disorders. World Health Organization.https://www.who.int/news-room/facsheets/detail/mental-disorders

- Von Kardorff, E., Soltaninejad, A., Kamali, M., & Eslami Shahrbabaki, M. (2016). Family caregiver burden in mental illnesses: The case of affective disorders and schizophrenia–a qualitative exploratory study. Nordic Journal of Psychiatry, 70(4), 248-254.