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ORIGINAL ARTICLE:

SILVER LINING AS A PREDICTOR OF MENTAL HEALTH OUTCOMES AMONG CAREGIVERS OF PATIENTS WITH MENTAL DISORDERS

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ABSTRACT

OBJECTIVE

To understand the relationship and predictive role of silver lining on mental health outcomes among caregivers of patients with mental disorders.

STUDY DESIGN

Cross-sectional correlational research design.

PLACE & DURATION OF STUDY

The study was conducted in inpatient and outpatient settings of the psychiatric unit of Allied II Hospital, Faisalabad from August 2025 to September 2025.

SUBJECTS AND METHODS

200 caregivers of patients diagnosed with mental disorders were selected as sample. Inclusion criteria is defined as a member of family who is providing care to the patient for at least 6 months, aged 18 years and above, both male and female. Participants were enrolled through a purposive sampling technique. General Health Questionnaire-28 (GHQ-28) and silver lining scales (SLS) were utilized to measure the outcome variables. SPSS version 25 was used and ethical issues were addressed according to the IRB of the institute.

RESULTS

Significant negative correlation was found between silver lining and its sub-scales and mental health outcomes and its sub-scales. Multiple linear regression revealed that personal growth and familial bonding were significant negative predictors of poor mental health outcomes. But empathy emerged as a significant positive predictor. The final model accounted for 18% of the variance in mental health outcomes.

CONCLUSION

Silver lining in the caregiving experience, particularly through personal growth and familial bonding, can mitigate negative mental health outcomes among caregivers of individuals with mental disorders. This highlights the protective role of positive psychological resources.

KEYWORDS

Family caregivers, Mental health, Positive psychology, Personal growth, Psychological distress

INTRODUCTION

Caregiving is not a superficial event. It does not mean just looking after the patient for a specific time. It is a draining process that involves many aspects of care. This predisposes the caregiver towards a lot of mental health issues[1] and is stressful for family members[2]. It is a challenging task as quality of life deteriorates and symptoms of stress, depression, and anxiety exacerbate[3], and due to the scarcity of mental health professionals, family caregivers play a vital role in providing care and support for people with mental illness[2]. But clinicians hardly pay any attention to the needs of caregivers[4]. Care for people with mental disorders at home is carried out by informal caregivers who provide unpaid services as non-professional caregivers. They are mostly family members[5]. The family caregivers include marital partner, offspring, family members, friends, or relatives of the sick, disabled, or dependent individuals who are not financially supported for providing care[6].

Mental health refers to a state of psychological well-being that enables individuals to manage stressors, recognize their capabilities, learn and work efficiently, and make contributions to the community. In fact, it is more than the absence of mental illness and a crucial part of complete health[7].

The economic consequences of the public health issue are astonishing, with the global cost of mental disorders estimated at 2.5 trillion dollars in 2010, and a projected increase to 6 trillion dollars by 2030. These figures mention not only the great human suffering but also the broad universal challenge caused by psychiatric illness[8].

The Model for Sustainable Mental Health (SMH) is a comprehensive theoretical framework that integrates mental well-being and mental illness as essential and dynamic components of mental health outcomes. It emphasizes that mental health is not merely the absence of mental illness but also includes the presence of positive mental well-being, making both important outcomes to target in mental health care[9]. The sustainable mental health model integrates principles of positive psychology and mental well-being into mental health. This heuristic framework can guide both practitioners and researchers in developing, implementing, and evaluating a more balanced approach to treatment, which will address both symptoms and personal strengths[10].

In the framework of positive psychology, the idea of silver lining represents a deliberate shift in focus from merely treating illness and dysfunction to understanding and cultivating the factors that enable human flourishing[11]. Silver Lining denotes a positive impact or an optimistic view that can be discovered in unfavorable circumstances. It is seen as a symbol of optimism in difficult times. This concept encompasses substituting worry with a mindset of positivity, hope, and small gains[12]. A silver lining refers to the presence of a hopeful aspect in a difficult situation and is linked to improved coping, better mental health, and goal attainment[13]. Silver lining is the reinterpretation of negative experiences into a more positive way, a concept similar to positive cognitive reappraisal[14].

Caregiving studies frequently highlighted the burden and negative impacts on caregivers, but positive impacts received less attention[13]. Research literature on caregiving outcomes presents a dual narrative, revealing that immense psychological suffering can coexist with profound personal growth. Some individuals exhibit weakened functioning, including stress and depression, and others show notable resilience in response to stressful life events[15]. These contradictory findings remand a fresh inquiry into the matter and current study fills this gap in literature.

SUBJECTS AND METHODS

Participants

A sample of 200 family caregivers of individuals diagnosed with mental disorders was selected from inpatient and outpatient settings of the psychiatric unit of Allied II Hospital, Faisalabad, Punjab, using a purposive sampling technique. Family caregivers included adults who are spouses, siblings, parents, children, or close relatives of the patients. Inclusion criteria was caregivers of patients suffering from five mental disorders, including depression, anxiety, conversion, schizophrenia, and bipolar disorder, for at least 6 months, aged 18 years and above, both male and female. They were caring for the formally diagnosed patient with a mental disorder by a qualified mental health professional, and were able to read and understand the language used in the questionnaires.

Exclusion Criteria was defined as caregivers with severe cognitive impairments, caregivers with acute psychiatric crises, caregivers diagnosed with any severe mental illness themselves, professional caregivers who were not family members or emotionally invested in caregiving, and caregivers of patients with neurodevelopmental disorders and drug abuse.

Instruments

Silver lining was measured by using the Urdu language Silver Lining Scale (SLS), validated for the Pakistani population. The SLS consists of a series of 37 questions that assess four domains of silver lining, including personal growth, familial bonding, empathy, and religiosity. Responses were recorded on a 5-

point Likert-type scale, with higher scores indicating a stronger silver lining. The SLS was found to have an excellent internal consistency (α=.93)[16].

Mental Health outcomes were examined using the Urdu version of the General Health Questionnaire-28 (GHQ-28)[17], validated for the Pakistani population. The GHQ includes a series of 28 questions measuring four subscales: somatic symptoms, anxiety and insomnia, social dysfunction, and severe depression. Responses were recorded on a 4-point Likert-type scale, with higher scores indicating greater psychological distress and maladjusted social functioning. The Urdu version holds good internal consistency (α = 0.82–0.93 across subscales).

Demographic sheet included the demographic information of the patient's diagnosis, caregiver's age, duration of caregiving, and relationship with the patient.

Procedure

Written Permission from the authors of the Silver Lining Scale (SLS) and General Health Questionnaire-28 (GHQ-28) was obtained. The study obtained ethical approval from the Institutional Review Board (IRB) of Faisalabad Medical University. Written Informed consent was taken from all participants before data collection. Data were collected through self-report questionnaires administered to participants. They were informed of their right to withdraw at any time without consequence. The confidentiality of their responses was maintained throughout the study. The data collection was conducted over two months from August 2025 to September 2025.

RESULTS

The study included 200 caregivers with an average age of 36.30 years (SD = 12.75) and an average caregiving duration of 3.33 years (SD = 4.09) of patients suffering from five major mental disorders: depression (26.5%), anxiety (14%), conversion (19.5%), Schizophrenia (22%), and Bipolar affective Disorder (18%). The majority of them were siblings (27%), followed by parents (24.5%), offspring (22%), spouse (13%), and others (13.5%).

Table 1

Descriptive statistics and demographic information of the participants (*N*=200)

Variables	*M(SD)*	*f (%)*
Duration of Caregiving	3.33 (4.09)	
Age of Caregiver	36.30 (12.75)	
Diagnosis of the Patient		
Depression		53 (26.5)
Anxiety		28 (14)
Conversion		39 (19.5)
Schizophrenia		44 (22)
Bipolar		36 (18)
Relationship with Patient		
Siblings		54 (27)
Parents		49 (24.5)
Offsprings		44 (22)
Spouse		26 (13)
Others		27 (13.5)

Note. M (Mean), *SD* (Standard Deviation), *f* (Frequency)

Table 2

Psychometric properties of the General Health Questionnaire 28 (GHQ-28) and Silver Lining Scale (N=200)

Scale	*K*	*M*	*SD*	Cronbach's *a*
General Health Questionnaire	28	21.78	11.85	.89
Somatic Symptoms	7	6.57	4.71	.86
Anxiety	7	6.18	4.14	.76
Social Dysfunction	7	6.05	2.56	.59
Depression	7	2.97	4.04	.88
Silver Lining Questionnaire	37	161.73	16.67	.91
Personal Growth	13	53.05	8.81	.87
Familial Bonding	8	34.21	5.93	.86
Empathy	10	47.60	3.63	.87
Religiosity	6	26.88	3.61	.81

Note. M (Mean), *SD* (Standard Deviation) & *a* (0-1), less than 0.5 is poor reliability, 0.5-0.75 is moderate reliability, 0.75-0.9 is good reliability, & greater than 0.9 is excellent reliability.

Table 3

Correlation between General Health Questionnaire and Silver Linings Scale (N=200)

Variables	1	2	3	4	5	6	7	8	9	10
1. GHQ	-									
2. SS	.85***	-								
3. A	.83***	.63***	-							
4. SD	.50***	.33***	.24***	-						
5. D	.75***	.47***	.53***	.19**	-					
6. SL	-.36***	-.23***	-.25***	-.30***	-.32***	-				
7. PG	-.38***	-.26***	-.28***	-.32***	-.31***	.85***	-			
8. FB	-.30***	-.25***	-.22**	-.09	-.31***	.69***	.37***	-		
9. E	-.09	.00	-.06	-.18**	-.10	.72***	.47***	.37***	-	
10. R	-.12	-.021	-.48	-.22***	-.13	.65***	.40***	.29***	.55***	-

Note. **p*<0.05, ***p*<0.01 & ****p*<0.001, GHQ stands for General Health Questionnaire, and its subscales SS, A, SD, and D stand for Somatic symptoms, anxiety, social dysfunction, and depression, respectively. SL stands for silver lining, and its subscales, PG, FB, E, and R stand for Personal growth, familial bonding, empathy, and religiosity.

Table 2 showed the alpha reliability of the scales and subscales. The correlation between the General Health Questionnaire/sub-scales and the Silver Lining Scale/sub-scales is depicted in table 3. GHQ is significantly positively correlated with its subscales, including Somatic Symptoms, Anxiety, Social Dysfunction, and Depression. GHQ is significantly negatively correlated with Silver Lining and its sub-scales, Personal Growth and Familial Bonding.

Somatic Symptoms are significantly positively correlated with Anxiety, Social Dysfunction, and Depression. Somatic Symptoms are significantly negatively correlated with Silver Lining, Personal Growth, and Familial Bonding. Anxiety is significantly positively correlated with Social Dysfunction and Depression. Anxiety is significantly negatively correlated with Silver Lining, Personal Growth, and Familial Bonding.

Social dysfunction is significantly positively correlated with Depression. Social Dysfunction is significantly negatively correlated with Silver Lining, Personal Growth, Empathy, and Religiosity. Depression is significantly negatively correlated with Silver Lining, Personal Growth, and Familial Bonding. Silver Lining is significantly positively correlated with Personal Growth, Familial Bonding, Empathy, and Religiosity. Personal Growth is significantly positively correlated with Familial Bonding, Empathy, and Religiosity. Familial Bonding is significantly positively correlated with Empathy and Religiosity. Empathy is significantly positively correlated with Religiosity.

Table 4

Multiple Linear Regression Analysis showing Silver Lining as Predictors of Mental Health Outcomes (N=200)

Variables	*B*	*SE*	*β*	*t*	R^2	ΔR^2
Step 1						
Personal Growth	-.23	.04	-.38***	-5.80	.14	.14
Step 2						
Personal Growth	-.19	.04	-.30***	-4.42	.17	.16
Familial Bonding	-.11	.04	-.19**	-2.78		
Step 3						
Personal Growth	-.23	.04	-.37***	-5.01	.19	.18
Familial Bonding	-.13	.04	-.23***	-3.27		
Empathy	.20	.09	.17*	2.28		

Note. *$p < 0.05$, **$p < 0.01$ & ***$p < 0.001$

Table 4 showed Multiple Linear Regression indicating Silver Lining of Caregivers as predictors of Mental health outcomes among caregivers of patients with mental disorders. The first step indicated Personal Growth accounted for 14% variance, significantly contributed to the lower mental health outcomes. Familial Bonding and Empathy were excluded in this step. The second step indicated that Personal Growth and Familial Bonding were contributing 16% variance, significantly predicting lower levels of mental health outcomes. The empathy was excluded as they did not appear to contribute in this step. The third step indicated Personal Growth, Familial Bonding, and Empathy contributed 18% variance significantly predicting mental health outcomes.

DISCUSSION

The Present study found the relationship between silver lining and mental health outcomes, and explored how silver lining predicts mental health outcomes among caregivers of patients with mental disorders. The data were normally distributed, and alpha coefficients of scales and subscales fall between moderate to excellent reliability which ensures that the data were internally consistent and reliable.

According to the results, mental health outcomes were negatively associated with silver lining in the caregiving experience. Although caregivers feel drained and burdened to some extent by caregiving duties, they also experience positive outcomes of caregiving consistent with the positive psychology perspective of psychological growth that it will make positive changes in them or for them in the long run[18]. High Silver lining was associated with fewer somatic symptoms, anxiety, social dysfunction, and depression. It means that caregivers who were able to interpret positive aspects like growth, meaning-

making, or learning a broader perspective from their challenging times tend to experience fewer psychological difficulties[11,12].

Personal Growth was negatively associated with all negative mental health outcomes. It means that caregiver who perceive themselves as emotionally or psychologically grown through their caregiving experiences are likely to cope better with stress and regulate negative emotions, leading to reduced symptoms of depression, anxiety, insomnia, somatic complaints, and better social functioning. These findings are consistent with prior research highlighting the buffering role of personal growth and positive reappraisal in caregiver well-being[18].

Familial Bonding was negatively associated with anxiety, depression, and somatic symptoms. This indicates that feeling closer to one's family and having strong familial support can reduce distress. Families in collectivistic contexts play a central role in caregiving and offer emotional, instrumental, and moral support that can mitigate the burden of care[19]. However, research also suggests that excessive family involvement can sometimes generate conflict, especially when caregiving demands are unequally distributed among members[18,20]. Therefore, the quality of familial relationships, rather than their mere presence, determines their protective value.

Empathy and Religiosity were negatively correlated with social dysfunction. Empathy makes caregivers understand others and express their feelings effectively, thus improving social Interactions and communication[20]. Similarly, Religion guides us to follow certain positive aspects of dealing with others, thus improving social interactions[21].

Linear multiple regression revealed that Personal growth, familial bonding, and empathy significantly predicted negative mental health outcomes among caregivers of patients with mental disorders. In the first step, personal growth negatively predicted poor mental health outcomes, with 14% of the variance. This indicates that caregivers who are self-aware, motivated, resilient, and have emotional strength are less likely to have psychological distress, and the results are aligned with previous studies[22].

In the second step, personal growth and familial bonding negatively predicted lower mental health outcomes, with 16% of the variance. The familial bonding depicts shared values, affiliation, and close interaction with family members. The familial bonding works as a protective factor for caregivers' psychological well-being. The results are similar to previous studies[17,19].

In the third step, Personal growth and familial bonding remained a negative predictor. However, empathy emerged as a positive predictor of mental health outcomes. Empathy is usually considered a good quality, which makes us connect and understand people, but when a person feels, cares, and understands others excessively, it can make a person emotionally sensitive, which can lead to compassion fatigue[13]. This means that to a certain extent, empathy can improve relationships, but too much empathy can cause emotional stress.

LIMITATIONS

A cross-sectional research design was used which restricts the causal inferences regarding the directionality of the relationship between silver lining and mental health outcomes. Reliance on self-report questionnaires may have introduced response bias, such as social desirability or under-reporting of negative mental health outcomes or over-reporting of silver lining. The sample was limited to caregivers in Pakistan and drawn through non-probability sampling, which may limit the generalizability of findings to other cultures or socioeconomic contexts.

CONCLUSION

Overall, the present study shed light on the complex yet deeply meaningful experience of caregiving for individuals with mental disorders. While caregiving often contributes to negative mental health outcomes, the findings of this research indicated that caregivers also experience a silver lining

which mitigated negative mental health outcomes. The concept of the silver lining captures this dual reality where pain and growth, burden and purpose, coexist. These results reaffirm the applicability of positive psychology and culturally embedded positive meaning-making frameworks in collectivistic cultures like Pakistan.

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None

CONFLICT OF INTEREST STATEMENT

None

DISCLOSURE

This research is part of a thesis for BS Clinical Psychology submitted to Faisalabad Medical University, Faisalabad.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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1.	Muhammad Haseeb Shafiq	Faisalabad Medical University	Conceptualisation, study design, data collection, data analysis, and drafting of the manuscript.
2.	Hira Ahmad	Faisalabad Medical University	Supervision, methodological guidance, critical review, and proofreading of the manuscript
3.	Imtiaz Ahmad Dogar	Faisalabad Medical University	Conceptual guidance, administrative support and final review of the manuscript