

Effects of Negative Psychological Events on Quality of Life: Moderating Role of Social Integration among Patients with DementiaSyed Haider Ali Rizvi^a, Basharat Hussain^b, Muhammad Abbas^{c*}, Syed Mudassar Ali Raza^d, Amna Imtiaz^e

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Abstract

The current study aimed to explore the relationship between negative psychological events, quality of life and social integration of patients with dementia. Additionally, moderating effect of social integration between negative psychological events and quality of life was also assessed. This study use correlational research design. The sample was collected from different hospitals and the NGOs working for patients with Dementia from Rawalpindi and Islamabad. The Dementia Severity Rating Scale, Impact of Events Scale, WHOQOL-BREF and Social Integration Scale were used in the study. The results show that there is a significant ($p < .001$) moderating effect of social integration between negative psychological events and quality of life among patients with Dementia. The Regression coefficient, calculated hypothesis, direct and interaction effect of study variables are supporting the hypothesis of the study. The findings indicated that social integration exerted a moderating effect on the relationship between adverse psychological experiences and quality of life among individuals with dementia.

Keywords: Negative psychological events, Quality of life, social integration, Dementia.

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1. Introduction

Dementia is a progressive neurocognitive disorder characterized by a decline in memory, thinking, and other cognitive functions that significantly interfere with daily life functioning (Emmady et al., 2022). As the global population ages, dementia has emerged as a major public health concern, affecting millions of older adults worldwide (World Health Organization, 2021). Individuals living with dementia experience gradual impairments in memory, language, orientation, judgment, and attention, which worsen over time and limit independence in everyday activities (Cipriani et al., 2020; Arvanitakis & Bennett, 2019). These changes are frequently accompanied by emotional distress, social withdrawal and reduced overall well-being.

In addition to cognitive and functional decline, people with dementia are particularly vulnerable to negative psychological events, such as experiences of loss, confusion, fear and perceived failure in daily tasks (Cloak et al., 2024). These events can intensify emotional distress, increase symptoms of anxiety and depression and reduce psychological resilience. Over time, the cumulative impact of such experiences may exacerbate behavioral and psychological symptoms of dementia (BPSD), leading to poorer functional outcomes and diminished quality of life (Warren, 2022).

Quality of life (QoL) has therefore emerged as a central outcome in dementia care and research. QoL is a multidimensional construct encompassing physical health, psychological well-being, social relationships and environmental factors (Karşıdağ et al., 2024). Calman's (1984) model conceptualizes QoL as the gap between an individual's current experiences and future expectations, emphasizing its subjective and dynamic nature. Subsequent research highlights that QoL perceptions vary according to disease stage, cultural context and personal goals (Carr et al., 2013). Empirical evidence suggests that in early stages of dementia, neuropsychiatric symptoms and emotional well-being play a crucial role in perceived QoL, while in advanced stages, behavioral symptoms, pain and limited social engagement become stronger predictors of poorer QoL (Wu et al., 2024).

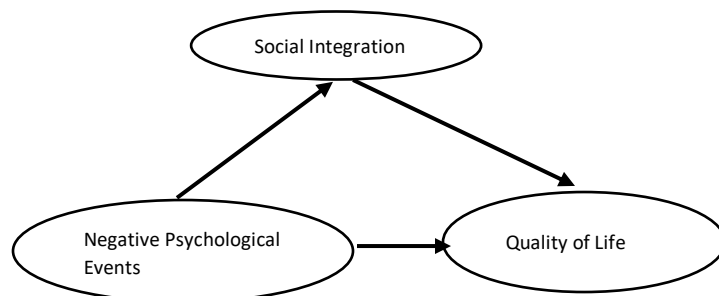
Within this context, social integration has been identified as a potentially protective factor that may buffer the negative effects of psychological stressors on QoL in individuals with dementia. Social integration encompassing social participation, emotional support and meaningful interpersonal relationships has been associated with better psychological well-being and reduced depressive and anxiety symptoms (Joshi et al., 2024; Choi et al., 2025). Socially integrated individuals may be better equipped to cope with negative psychological events, thereby maintaining higher levels of QoL despite disease-related challenges (Hussain and Khalily 2024; Hussain et al., 2025).

Despite growing evidence on the independent effects of psychological distress and social factors on QoL in dementia, limited research has examined the moderating role of social integration in the relationship between negative psychological events and quality of life. Addressing this gap, the present study investigates the effects of negative psychological events on QoL among patients with dementia and examines whether social integration moderates this relationship.

The present study aims to examine the association between negative psychological events and quality of life among patients with dementia, as well as to investigate the moderating role of social integration in the relationship between negative psychological events and quality of life in this population. It is hypothesized that social integration moderates the relationship between negative psychological events and quality of life among patients with dementia, and that negative psychological events

are significantly associated with quality of life among patients with dementia

Figure 1: Theoretical Framework



2. Method

2.1 Research Design

A correlational research design was employed to examine the relationship between negative psychological events and quality of life, as well as the moderating role of social integration among individuals diagnosed with dementia. This design was considered appropriate as it allows for the examination of associations among variables without manipulating the study environment, which is particularly suitable for vulnerable clinical populations.

2.2 Sampling

The study was conducted in Islamabad and Rawalpindi, Pakistan. Participants were recruited from multiple settings, including outpatient psychiatric clinics, old-age homes, and community settings where individuals with dementia resided with their families. This approach ensured representation of individuals living in both institutionalized and family-based care environments. A total of 100 individuals (N = 100) with a formal diagnosis of dementia were recruited using purposive sampling. Purposive sampling was selected to ensure the inclusion of participants who met specific clinical criteria, particularly a confirmed diagnosis of dementia by a qualified psychiatrist.

2.2.1 Inclusion Criteria: Above 50 years old were included, the ones with a formal diagnosis of Dementia by Psychiatrist. Participants who were living in old homes or with their families.

2.2.2 Exclusion Criteria: The participants who were having consultations only at their residence. Participants with severe mental or physical illness comorbidities. The participants who acquired Dementia due to any neurological condition. The ones with insufficient knowledge of the Urdu language. Those with an inability to provide informed consent.

2.3 Instruments:

2.3.1 Dementia Severity Rating Scale: The DSRS 4 to 6 point likert rating 12 items scale was used in this study to assess severity from the mildest to the most severe stages in the major functional and cognitive domains affected in Dementia (Clark & Ewbank, 1996).

2.3.2 Impact of Events Scale: The IES 22-item Urdu version 5 points likert scale was used in this study; four subscales cognitive responses to the traumatic event, Avoidance, Intrusions & Hyper-arousal (Tareen et al., 2012).

2.3.3 WHOQOL-Brief: The WHOQOL-Brief 26 items 5 points likert rating scale Urdu version was used in the study (Khan et al., 2003).

Social Integration Scale (SIS): SIS 4-items, four-point likert rating scale Urdu version was used in this research. Response alternatives vary from

strongly disagree (1) to strongly agree (4), with higher scores reflecting greater social integration (Rizwan & Neelma, 2010).

2.4 Ethical Considerations

Ethical approval for the study was obtained from the Ethical Review Committee of the International Islamic University Islamabad. All participants, or their legally authorized caregivers where applicable, provided informed consent prior to participation. Participants were assured of the confidentiality and anonymity of their responses, and they were informed of their right to withdraw from the study at any time without any negative consequences. Special care was taken to ensure that participation didn't cause psychological distress, and referrals were provided when needed.

3. Results

Table 1
Demographic Characteristics of the people with Dementia (N = 100)

Variables	Categories	n	%
Gender	Male	69	69
	Female	31	31
Marital Status	Single/ Divorced/ Widowed	28	28
	Married	72	72
Age	51 to 60 years	7	7
	61 to 70 years	62	62
	71 and above years	31	31
Socioeconomic Status	Lower class	20	20
	Middle class	42	42
	Upper class	38	38
Residence	Institutionalized	79	79
	Non institutionalized	21	21

The majority of participants were male (69%), married were (72%) and age was between 61-70 (62%). Also, the majority of people were from middle class (42%), and 79% participants were institutionalized.

Table 2
Cronbach's Alpha Reliability and Psychometric Properties of the Study Measures (N=100)

Scales	No. of items	α	Minimum	Maximum	M	SD	Skewness	Kurtosis
DSRS	12	.95	18	57	40.37	12.30	-.63	-1.2
IES	22	.97	34	83	66.89	16.84	-.86	-1.10
WHOQOL-BREF	26	.83	44	117	79.68	16.82	-.12	-.35
SIS	4	.88	5	16	9.97	3.44	.57	-1.14

Note. DSRS= Dementia Severity Rating Scale, IES = Impact of Events Scale, WHOQOL-BREF= Quality of Life Scale, SIS= Social Integration Scale

The results of table 2 demonstrates that all instruments used for data collection have high alpha coefficient reliabilities. The reliability of Dementia Severity Rating Scale is .95, for Impact of Events Scale it is .97, for Quality-of-Life Scale it is .83 while for Social Integration Scale, it is .88. These values of alpha reliabilities indicate high to good reliabilities and the values of skewness and kurtosis lies in normal range showing normal distribution of the data.

Table 3 represents the regression analysis examining the moderating role of social integration in the relationship between negative psychological events and quality of life among patients with dementia. Moderating analysis was conducted using Model 1 of the PROCESS macro for SPSS (Hayes, 2023). The results show that negative psychological events were significantly associated with quality of life ($p < 0.001$), such that higher levels of negative psychological events were related to lower quality of life. Social integration also showed a

significant main effect on quality of life ($p < .001$). Importantly, the interaction term between negative psychological events and social integration was statistically significant ($p < .001$), indicating a moderating effect.

This interaction suggests that the relationship between negative psychological events and quality of life varies depending on the level of social integration. Specifically, higher levels of social integration were associated with a weaker negative relationship between psychological events and quality of life.

Table 3
Moderating Effect of Social Integration on Negative Psychological Events and Quality of Life among Patients with Dementia (N= 100)

Antecedent	Model 1		
	Coeff.	SE	p
X (Negative Psychological Events)	.43	.25	.00
W (Social Integration)	.52	1.58	.00
X*W (Negative Psychological Events*Social Integration)	.02	.02	.00
Constant	44.36	16.72	.00
R ² = .36			
F (3, 96) = 17.74, p < .001			

4. Discussion

The present study examined the relationship between negative psychological events, quality of life (QoL), and social integration among patients with dementia. The findings revealed that negative psychological events were positively associated with QoL, while showing a negative association with social integration. Additionally, QoL and social integration were positively correlated. These results did not support the initial hypothesis proposing a negative relationship between negative psychological events and QoL; however, they offer important insights into the subjective nature of QoL among individuals living with dementia.

The observed positive association between negative psychological events and QoL may be understood through the lens of the disability paradox, which suggests that individuals with significant functional or health limitations may still report relatively high levels of perceived QoL (Carr & Higginson, 2011). Patients with similar clinical presentations often differ substantially in how they interpret their illness and evaluate their lives. This subjective appraisal may be shaped by adaptation, altered expectations, and recalibration of personal goals over time, particularly in chronic and progressive conditions such as dementia.

Previous research supports this interpretation, indicating that QoL in dementia is more strongly influenced by emotional and psychological experiences than by objective indicators of disease severity (Hoe et al., 2017). Mood has been identified as a major determinant of QoL across different stages of dementia, often outweighing cognitive impairment itself. Similarly, Brod et al. (1999) emphasized that subjective interpretations of health experiences play a central role in shaping perceived QoL. These findings align with the present results, suggesting that individuals may maintain or even report higher QoL despite exposure to negative psychological events, depending on their emotional adjustment and coping processes.

In contrast, negative psychological events were negatively associated with social integration, indicating that such experiences may disrupt interpersonal engagement and reduce participation in social networks.

Social integration, in turn, was positively related to QoL, highlighting its protective role. This finding is consistent with stress process theories, which posit that personal and social resources buffer the impact of stressors on well-being (Scott et al., 2015). As cognitive functioning declines, the ability to employ problem-focused coping strategies becomes increasingly compromised, making individuals more vulnerable to stress (Galiana et al., 2020; Wilson et al., 2015). Importantly, the moderation analysis demonstrated that social integration attenuates the relationship between negative psychological events and QoL. Higher levels of social integration weakened the association between psychological stressors and QoL, underscoring the role of social connections as a critical psychosocial resource in dementia care. This finding emphasizes the need for interventions that strengthen social participation and emotional support, particularly for individuals experiencing frequent psychological stressors.

Limitations and recommendations

Small participant's size. Future research can involve more such institutions. Response bias is a common problem on self-reported measures so the comprehensibility of the questionnaires at the end of the respondent can be assured as much as it can, especially when taking help from the caregiver to respond in place of the old patient. It was very hard to maintain the attention of some of the patients consistently for few minutes to fill out the questionnaires in one go so this distraction might have influenced the response rate as well as the reliability of the responses.

Implications

The results of the study are helpful in health education, information and increasing awareness of risks. Patients can be helped to adapt to their disability through changing their health expectations. The impact of the disability on their QoL may thus be reduced. It is therefore important to identify protective lifestyle behaviors that can help or postpone the clinical onset of dementia. The results highlight the importance of giving support to older adults who lack social connectedness.

Conclusion

The present study highlights the important role of social integration in shaping the relationship between negative psychological events and quality of life among patients with dementia. The findings indicate that while individuals with dementia may experience negative psychological events, the presence of stronger social integration can buffer their impact on perceived quality of life. This underscores social integration as a critical protective psychosocial resource in dementia care.

By demonstrating the moderating role of social integration, this study contributes to a more nuanced understanding of quality of life in dementia, emphasizing that psychosocial and social-contextual factors are as important as clinical symptoms. These findings support the development of non-pharmacological, socially oriented interventions aimed at enhancing social participation, emotional support, and meaningful interpersonal connections for individuals living with dementia. Strengthening social integration may therefore play a key role in improving well-being and sustaining quality of life despite the challenges associated with dementia.

References

Arvanitakis, Z., & Bennett, D. A. (2019). What Is Dementia? *JAMA*, 322(17), 1728. <https://doi.org/10.1001/jama.2019.11653>

Brod, M., Stewart, A. L., Sands, L., & Walton, P. (1999). Conceptualization and measurement of quality of life in dementia: the dementia quality of life instrument (DQoL). *The Gerontologist*, 39(1), 25–35. <https://doi.org/10.1093/geront/39.1.25>

Calman, K. C. (1984). Quality of life in cancer patients – a hypothesis. *J Med Ethics*, 10,124-7

Caplan, G. (1981). Mastery of stress: Psychosocial aspects. *American Journal of Psychiatry*, 138, 413–420. <https://doi.org/10.1136/jme.10.3.124>

Carr, A. J., & Higginson, I. J. (2011). Measuring quality of life: Are quality of life measures patient centered? *Br Med J*, 322, 1357-60. <https://doi.org/10.1136/bmj.322.7298.1357>

Carr, A. J., Gibson, B., & Robinson, P. G. (2013). Measuring quality of life: Is quality of life determined by expectations or experience? *Br Med J*, 322, 1240-3. <https://doi.org/10.1136/bmj.322.7296.1240>

Choi, N. G., Marti, C. N., Zhou, Y., & Kunik, M. E. (2025). Social participation and psychological well-being among older adults with dementia. *Dementia*, 14713012251375273. <https://doi.org/10.1177/14713012251375273>

Cipriani, G., Danti, S., Picchi, L., Nuti, A., & Fiorino, M. D. (2020). Daily functioning and dementia. *Dementia & neuropsychologia*, 14(2), 93-102. <https://doi.org/10.1590/1980-57642020dn14-020001>

Cipriani, G., Danti, S., Picchi, L., Nuti, A., & Fiorino, M. D. (2020). Daily functioning and dementia. *Dementia & neuropsychologia*, 14(2), 93-102. <https://doi.org/10.1590/1980-57642020dn14-020001>

Clark, C. M., & Ewbank, D. C. (1996). Performance of the dementia severity rating scale: a caregiver questionnaire for rating severity in Alzheimer disease. *Alzheimer Disease & Associated Disorders*, 10(1), 31-39.

Cloak, N., Schoo, C., & Al Khalili, Y. (2024). Behavioral and Psychological Symptoms in Dementia. In StatPearls. StatPearls Publishing.

de Sandes-Guimarães, L. V., Dos Santos, P. C., Alves, C. P. G. P., Cervato, C. J., Silva, A. P. A., & Leão, E. R. (2023). The effect of volunteer-led activities on the quality of life of volunteers, residents, and employees of a long-term care institution: a cohort study. *BMC geriatrics*, 23(1), 151. <https://doi.org/10.1186/s12877-023-03898-y>

Emmady, P. D., Schoo, C., & Tadi, P. (2022). Major Neurocognitive Disorder (Dementia). In StatPearls. StatPearls Publishing.

Frissen, L., Aarts, S., Rosteijs, K., de Boer, B., Gabrio, A., & Verbeek, H. (2025). The influence of social interactions on mood in residents with dementia in green care farms: An observational study using ecological momentary assessments. *International Psychogeriatrics*, 100091. <https://doi.org/10.1016/j.inpsy.2025.100091>

Galiana, L., Tomás, J. M., Fernández, I., & Oliver, A. (2020). Predicting Well-Being Among the Elderly: The Role of Coping Strategies. *Frontiers in psychology*, 11, 616. <https://doi.org/10.3389/fpsyg.2020.00616>

Gebhard, D., Lang, L., Maier, M. J., & Dichter, M. N. (2024). Social interaction of people living with dementia in residential long-term care: an ecological momentary assessment study. *BMC health services research*, 24(1), 1640. <https://doi.org/10.1186/s12913-024-12056-y>

Hoe, J., Katona, C., & Orrell, M. (2017). Quality of life in dementia: care recipient and caregiver perceptions of quality of life in dementia: The LASER-AD study. *International Journal of Geriatric Psychiatry*, 22, 1031–1036. <https://doi.org/10.1002/gps.1786>

Hussain, B., & Khalily, M. T. (2024). Enhancing community resilience: An integrated home-based psychological intervention for individuals living with physical disabilities. *Journal of Professional & Applied Psychology*, 5(1), 24–33. DOI: <https://doi.org/10.52053/jpap.v5i1.256>

Hussain, B., Khalily, M. T., Waqas, A., Rahman, A., Angelakis, I., Nisar, A., ... Akhtar, T. (2025). Acceptability and efficacy of the culturally adapted Problem Management Plus intervention for people with disability in Pakistan: A pilot cluster randomized controlled trial. *Frontiers in Psychiatry*, 15, 1413809. <https://doi.org/10.3389/fpsy.2024.1413809>

Joshi, P., Hendrie, K., Jester, D. J., Dasarathy, D., Lavretsky, H., Ku, B. S., Leutwyler, H., Torous, J., Jeste, D. V., & Tampi, R. R. (2024). Social connections as determinants of cognitive health and as targets for social interventions in persons with or at risk of Alzheimer's disease and related disorders: a scoping review. *International psychogeriatrics*, 36(2), 92–118. <https://doi.org/10.1017/S1041610223000923>

Karşıdağ, S., Firat, Y. E., Eren, F., Kabay, S. C., & Terzi, M. (2024). Assessment of quality of life in neurological diseases. *Turkish Journal of Neurology*, 30(1), 001-009. DOI: 10.4274/tnd.2023.56649

Khan, M. N., Akhter, M. S., Ayub, M., Alam, S., & Laghari, N. U. (2003). Translation and validation of quality-of-life scale, the brief version. *Journal of the College of Physicians and Surgeons-Pakistan: JCPSP*, 13(2), 98–100. <https://doi.org/02.2003/jcpsp.98100>

Lawton, M. (2019). A multidimensional view of quality of life in frail elders. In: Birren J, Lubben J, Rowe J, et al., editors. *The Concept and Measurement of Quality of Life in the Frail Elderly*. Academic Press;

- San Diego: pp. 3–27. <https://doi.org/10.1016/B978-0-12-101275-5.50005-3>
- Rizwan, M. & Neelma S. (2010). Urdu Translation and Psychometric Properties of Social Provision Scale. *Journal of Educational and Psychological Consultation. The International Journal of Educational and Psychological Assessment*, 4, 33–47.
- Scott, S. B., Graham-Engeland, J. E., Engeland, C. G., Smyth, J. M., Almeida, D. M., Katz, M. J., Lipton, R. B., Mogle, J. A., Munoz, E., Ram, N., & Sliwinski, M. J. (2015). The Effects of Stress on Cognitive Aging, Physiology and Emotion (ESCAPE) Project. *BMC psychiatry*, 15, 146. <https://doi.org/10.1186/s12888-015-0497-7>
- Tareen, M. S., McDowell, C., Naqvi, K., Bashir, A., Keenan, P., ur Rehman, A., & Farrell, D. P. (2012). Evaluation of an Urdu version of the impact of event scale-revised. *International Psychiatry*, 9(1), 20–22.
- Warren, A. (2022). Behavioral and psychological symptoms of dementia as a means of communication: considerations for reducing stigma and promoting person-centered care. *Frontiers in psychology*, 13, 875246. <https://doi.org/10.3389/fpsyg.2022.875246>
- Welch, V., Ghogomu, E. T., Barbeau, V. I., Dowling, S., Doyle, R., Beveridge, E., Boulton, E., Desai, P., Huang, J., Elmetekawy, N., Hussain, T., Wadhvani, A., Boutin, S., Haitas, N., Kneale, D., Salzwedel, D. M., Simard, R., Hébert, P., & Mikton, C. (2023). Digital interventions to reduce social isolation and loneliness in older adults: An evidence and gap map. *Campbell systematic reviews*, 19(4), e1369. <https://doi.org/10.1002/cl2.1369>
- Wilson, R. S., Boyle, P. A., James, B. D., Leurgans, S. E., Buchman, A. S., & Bennett, D. A. (2015). Negative social interactions and risk of mild cognitive impairment in old age. *Neuropsychology*, 29(4), 561–570. <https://doi.org/10.1037/neu0000154>
- World Health Organization. "Global status report on the public health response to dementia." (2021).
- Wu, J., Tam, K. I., Wang, H., & Zhu, M. (2024). Quality of life and associated characteristics in long-term care residents with advanced dementia in Macao: a cross-sectional study. *BMC geriatrics*, 24(1), 969. <https://doi.org/10.1186/s12877-024-05466-4>