NUST JOURNAL OF SOCIAL SCIENCES HUMANITIES
Vol. 10 No. 2 (July-December 2024), pp. 103-119

Relationship Between Emotions and Resilience in the Face of Adversity: A Study on Older Adults in Pakistan

Kanza Chaudhary[1] and Zara Haroon[2]

[1& 2]Department of Psychology, Kinnaird College for Women.93 Jail Road Lahore, Pakistan
Email: kanzach2000@gmail.com, zara.haroon@kinnaird.edu.pk

Abstract

This study aims to investigate the relationship among adverse life events, positive and negative affect, and resilience in older adults. The research further identifies whether positive and/or negative affect serve as a mediator between negative life events and resilience. A sample of N=103 older adults was selected from Lahore, Pakistan through purposeful sampling. Given the unique cultural and socio-economic environment of Pakistan, understanding these relationships can provide insight into the mental well-being of older adults within this geographical region. Data collection measures included the Geriatric Adverse Life Events Scale (GALES), Positive and Negative Affect Schedule (PANAS), Brief Resilience Scale (BRS), and a demographic form. The study used a cross sectional research design. The results revealed significant correlation between resilience and negative life events, as well as positive and negative affect. However, the analysis revealed that affect did not significantly mediate the relationship between negative life events and resilience. Furthermore, gender differences emerged, with females reporting higher negative affect scores and males exhibiting greater resilience. This study emphasizes the importance of prioritizing older adults' mental well-being, especially given the prevalence of negative events in later life.

Keywords: *Mental well-being, gender differences, resilience, correlation, GALES*
Article history: Submitted: 22-10-2023, Accepted: 25-11-2024, Published: 30-12-2024

DOI: https://doi.org/10.51732/njssh.v10i2.219

Journal homepage: www.njssh.nust.edu.pk

1. INTRODUCTION

There has been a rapid increase in the world in the population of older adults above 60 years of age. According to WHO (2020), it is estimated to increase to 2.1 billion by 2050 from 1 billion in 2019 especially in the case of developing countries. This aging population is a major challenge for the developing as well as the developed countries. Many countries across the world have embraced individualistic values, a trend that Pakistan, once primarily collectivist, has also started adopting. Traditionally, Pakistani society emphasized collective values and strong family support for the elderly (Azeem & Naz, 2015), but urbanization and changing priorities among younger

generations have led to a shift in the societal attitudes that have weakened this support system (Cassum et al., 2020).

Older individuals face a myriad of stressors, including family bereavement, economic hardships, health issues, and cognitive decline. Negative life events (NLEs) encompass changes that transpire across various life domains, such as family or occupational settings. These events, often perceived negatively, can result in adverse consequences both psychologically and physically (Zhang et al., 1987). McGinnis (2018) notes that NLEs are the higher in individuals with low resilience, which frequently results in depression, loneliness, and anxiety (Dasti et al., 2019). Kaleem et al., (2018) reports the prevalence of moderate to severe depression to be 77% in a cross-sectional study carried out in Lahore. Erik Erikson's psychosocial developmental stages offer valuable insights into this phenomenon. His final stage emphasizes the importance of achieving ego integrity and avoiding despair in later life. Successful resolution of this crisis involves reflecting on one's life events, assimilating them, and finding acceptance while difficulties reconciling with past events can lead to regret and despair (Iqbal & Amin, 2018).

In managing negative life events, the concept of positive and negative affect becomes pivotal. Watson and Clark (1997) highlighted the role of emotions in how an individual perceives their well-being. Positive affect (PA) encompasses pleasant emotions like joy that contribute to positive life experiences and satisfaction in life, while on the other hand, negative affect (NA) encompasses undesirable emotions such as sadness linked to emotional disturbances and mental disorders. Schricker et al. (2023) reported that these daily negative life events were strongly related to a significant increase in the negative effect and the positive events resulted in strong increase in PA and positive thoughts. Maintaining a balance between these dimensions is vital for optimal well-being. Resilience emerges as a critical factor in this equation. Dasti et al. (2019) describes resilience as the ability to rebound from adversity. Montero-Marin et al. (2015) further noted that older adults who exhibit higher resilience tend to manage stressors better, maintain better mental health, and experience greater life satisfaction. According to Sheerin et al. (2018), high resilient individuals have decreased chances to develop disorders like Generalized Anxiety Disorder (GAD) or Major Depressive disorder (MDD). However, Sardella et al., (2022) observed older women to have lower resilience than in older men.

2. THEORETICAL FRAMEWORK

When exploring the literature, the transactional model of stress and coping provides insight into how NLEs can lead to negative affectivity and subsequently impact resilience. Elderly individuals utilize coping mechanisms, like seeking social support, to handle NLEs. Positive and negative affect play a pivotal role, with a challenge-focused

approach leading to positive affect and problem-focused coping. This model underscores the complex interplay among NLEs, affect, and resilience (Lazarus & Folkman, 1986).

Additionally, the broaden-and-build theory suggests that positive emotions broaden cognitive processes, leading to resource-building behaviours and resilience development (Fredrickson, 1998). This study's conceptual framework thus integrates NLEs, affect, and resilience within the context of these psychological theories, ultimately contributing to our understanding of older adults' mental well-being.

2.1. Goal of the study

The primary goal of this research is to investigate into the growing vulnerability faced by older adults in Pakistan amidst shifting societal dynamics, making them increasingly susceptible to the adverse consequences of NLEs. This study aims to survey the emotional repercussions of these negative life events on older adults and investigate their capacity for resilience in the face of such challenges. Moreover, this research highlights the unique cultural context of Pakistan and the scarcity of research on this particular demographic, emphasizing the necessity of studying both positive and negative affect to understand if these factors, in anyway shape resilience in elderly individuals. Firstly, the objective of this study is to understand the relation between negative life events, affect, and resilience in elderly individuals. Specifically, the research seeks to determine whether positive and negative affect serve as a mediating variable in the relationship between negative life events and resilience. Additionally, the study aims to highlight the gender-based disparities in these aspects, thereby contributing valuable insights to the field of gerontology. The objectives and hypotheses of the study are given below.

Objectives

- To investigate the correlation between NLEs, affect and resilience in older adults.
- To study if affect mediates the relationship between NLEs and resilience among older adults.
- To examine gender differences between the experiences of NLEs, affect, and resilience in older males and older females.

Hypothesis

- There is a significant relationship between NLEs, affect and resilience among older adults.
- Affect is likely to mediate the relationship between NLEs and resilience among older adults.
- Older males experience more NLEs, affect and resilience than older females.

3. RESEARCH DESIGN

3.1. Sample and sampling strategy

The study used a cross-sectional research design. Data for this research was collected using a purposive sampling technique. An a priori power analysis was conducted using G*Power 3 (Faul et al., 2007) for linear multiple regression, assuming a large effect size (d = .35) and an alpha level of .05. Results indicated that a sample size of 77 participants was required to achieve a power of .95. To account for potential non-responses, the study initially recruited 150 participants, resulting in a final response rate of N = 103 older adults. The sample was drawn from Lahore city and included older individuals aged 60 years and above (male = 46, female = 57), with an average age of M = 67.73 years (SD = 7.22).

Specific inclusion and exclusion criteria were applied to ensure the sample's relevance to the study's focus on resilience and adverse life events. Participants were included based on their proficient understanding of the English language and a minimum residency in Pakistan for the past two decades to ensure a stable cultural and environmental context. Given the study's focus on negative life events (NLEs), participants were also required to have experienced at least one significant adverse event, such as the loss of a loved one, a major health decline, or changes in economic status, common in later life stages. The exclusion criteria aimed to reduce confounding effects and enhance data quality. Older adults experiencing severe psychological illnesses, such as schizophrenia, bipolar disorder, or severe depression, were excluded. Furthermore, individuals with cognitive impairments or neurological disorders that could hinder their ability to comprehend study instructions and procedures were not included in the study.

3.2. Instruments

Demographic questionnaire collected basic information on participants' age, gender, marital status, family size, living arrangement (nuclear, joint family, or old age home), and any severe physical or psychological illnesses. Geriatric Adverse Life Events Scale (GALES) measured negative life events (NLEs) over the past five years using a 26-item checklist. Participants marked "yes" for experienced events, with the final adversity score based on the number of "yes" responses (Devanand et al., 2002). Positive and Negative Affect Schedule (PANAS) assessed positive and negative affect with 20 items rated on a 5-point scale. Separate scores for positive affect (PA) and negative affect (NA) indicated overall emotional states (Watson & Clark, 1988). Brief Resilience Scale (BRS) evaluated resilience as the ability to bounce back from adversity using six items rated on a 5-point scale. Higher scores reflected greater resilience (Smith et al., 2008).

3.3. Procedure

To conduct the present study, institutional approval was obtained, and permissions were secured from the authors of the scales used in the study. Given the cultural context of the participants, the Geriatric Adverse Life Events Scale (GALES) was reviewed for cultural relevance. Although no formal adaptation was performed, the scale was deemed appropriate for the study population based on its established use in similar contexts The decision not to adapt the scale was based on the fact that the core adverse life events captured by the GALES, such as loss of family, health issues, and retirement, are universally relevant to older adults, including those in Pakistan. However, future studies might consider validating or adapting instruments like GALES to ensure cultural nuances are better captured. The data was collected over a period of 4-5 weeks. Participants (N = 103) who met the inclusion criteria and had a good command of English completed the self-report questionnaires. These included the demographic questionnaire, GALES, PANAS, and BRS.

The data collection process involved both verbal and written instructions to ensure clarity in completing the questionnaires. The questionnaires were administered in a paper-and-pencil format, and participants were given time to answer at their own pace. Some participants required additional help in answering the questions to which the researcher asked some questions in person for participant's better comprehension. Data was collected across multiple locations in Lahore, including participants from various settings such as private residences, community centres, and elderly care homes, ensuring a broad representation of the older adult population. The data collection lasted approximately 20-30 minutes per participant. Participants in elderly care homes were given extra time and assistance if needed, to ensure full participation. No major difficulties were encountered in the process, but some participants required additional clarification on certain items, which was addressed by the researcher during the data collection phase.

Ethical considerations for the study were carefully followed. Informed consent was obtained from all participants prior to participation, with detailed explanations about the study's purpose, procedures, and potential risks. Participants were assured of their anonymity, the confidentiality of their data, and their right to withdraw at any time without consequence. Demographic data collection was handled with a strong emphasis on privacy and identity protection. Ethical guidelines were strictly adhered to throughout the research process, ensuring the integrity and safety of participants

4. STATISTICAL ANALYSIS

Statistical analysis for this study was conducted using the Statistical Package for Social Sciences (SPSS version 21). Descriptive statistics were first employed to analyse demographic data and assess the internal consistency of the scales used in the study. For inferential analysis, Spearman's Rho Correlation, Mann-Whitney U-test, and parallel

mediation analysis (Model 4 in PROCESS 4.2) were used to examine relationships, gender differences, and mediation effects, respectively, among the study variables.

The use of both parametric (e.g., Spearman's Rho Correlation) and non-parametric tests (e.g., Mann-Whitney U-test) requires justification. Given the sample size of 103 participants, normality assumptions were not fully met for all variables, particularly for negative life events (NLEs), which prompted the use of non-parametric tests. While non-parametric tests are less sensitive to violations of normality and skewed distributions, it is recognized that their use in combination with parametric tests could potentially weaken the robustness of the results. Therefore, for the current study, the decision to combine both parametric and non-parametric tests was guided by the need to ensure more accurate results for variables with differing distributional properties.

To account for extreme outliers in the NLEs variable, which were detected during the preliminary analysis, prior sum scores were used to reduce the impact of these extreme values (Devanand et al., 2002). This strategy was adopted to improve the robustness of the analysis, ensuring that the relationship between NLEs and resilience was not unduly influenced by outliers. Meanwhile, traditional means were used for positive affect (PA), negative affect (NA), and resilience to allow for a clear and interpretable analysis.

4.1. Results

The demographic information of the sample includes gender, family system, age, and marital status. The sample consists of 103 older adults from Lahore city. Table 1 shows that 44.7% were male respondents and 55.3% were female. Most of the participants i.e., 67% were married. Majority of the participants belonged to the joint family system followed by 43.7% living in a nuclear family system. Only 25.2% reported to be suffering from any form of severe physical illness.

Table 1: Socio-demographic Characteristics of Participants

Socio-demographic characteristic	*n*	%
Gender		
Female	57	55.3
Male	46	44.7
Marital status		

Single	3	2.9
Married	69	67
Divorced	4	3.9
Widowed	27	26.2
Family system		
Living Alone	0	0
Nuclear	45	43.7
Joint	52	50.5
Old Age Home	6	5.8
Severe Physical Illness [a]	26	25.2
Severe Psychological Illness [a]	0	0

Note. N = 103. Participants were on average 67.73 years old (SD = 7.22). Average number of children was 3.37 (SD = 1.90). Average number of family members was 8.11 (SD = 5.75)[a] Indicates the number and percentage of participants responding "yes" to this question.

Table 2 shows the NLEs on the basis of their occurrence in the last 5 years (Hardy et al., 2002). Out of the 103 participants who responded, 1.0% of the respondents did not state the occurrence of any of the 26 types of adverse events during the preceding 5 years, 33% of them reported to have experienced 1-4 types of events, 42.7% reported 5-9 types of events and about 20.4% stated that they experienced more than 10 types of events in the past 5 years. Most frequently reported event was the death of non-first degree relative or close friend (N= 76), which was followed by illness of a close family member (N= 55). Marital separation/divorce was the least reported event by 3.9% respondents. Events like retirement or loss of employment were frequently reported by males while occurrence of a new major physical illness was reported more frequently by females.

Negative Life Events	Males (n= 46)		Females (n= 57)	
	n	%	*n*	%
Major financial difficulties	17	37	18	31.6
Retirement	20	43.5	7	12.3
Sudden Loss of Employment	10	21.7	6	10.5
New Major Physical Illness	11	23.9	30	52.6
Long-Standing Major Physical Illness	18	39.1	23	40.4
Difficulty in Getting Adequate Professional Services	8	17.4	9	15.8

Table 2: *Negative life events during the previous 5 years*

Major Physical Illness of a Close Family Member	23	50	32	56.1
Accident or Injury	7	15.2	11	19.3
Victim of Crime	6	13	8	14
Death of Spouse	4	8.7	6	10.5
Death of a Child	5	10.9	6	10.5
Death of a Parent	22	47.8	21	36.8
Death of a Brother or Sister	21	45.7	18	31.6
Death of Other Relative or Close Friend	34	73.9	42	73.7
Death of a Pet	7	15.2	9	15.8
Forced to Leave or Lose Home	4	8.7	6	10.5
Voluntarily Changed Place of Residence	17	37	22	38.6
Marital Separation or Divorce	1	2.2	3	5.3
Other Marital Difficulties	10	21.7	13	22.8
Major Family Problems/Conflicts other than with Spouse	15	32.6	22	38.6
Major Problems with Friends or Neighbours	11	23.9	8	14
Breakup-of a Long-Term Relationship other than Marriage	3	6.5	9	15.8
Separation from any other Close Friend or Relative	6	13	16	28.1
An Individual Moved out of your Household	7	15.2	14	24.6
An Individual Moved into your Household	9	19.6	14	24.6
Became a Caretaker for Relative or Friend	13	28.3	18	31.6

Note. N = 103. Females on average experienced 6.9 events (*SD* = 3.63). Males on average experienced 6.7 NLEs (*SD* = 4.24).

Table 3: *Psychometric Properties of Study Variables*

Scales	*M*	*SD*	Range	*Cronbach's a*
Number of Negative Events	6.80	3.89	0-26	.74
Positive Affect	30.53	7.19	10-50	.80
Negative Affect	23.49	8.18	10-50	.86
Resilience	18.37	5.08	6-30	.82

Table 3 shows the alpha coefficients, mean values, and standard deviations for the study variables. The results indicate good reliability estimates, indicating internal consistency across all scales.

Table 4 shows the Spearman Rho correlation among the variables tested in the study. The results identify that resilience is significantly, negatively and weakly related to negative life events. This implies that older adults who have encountered more negative events are less likely to be resilient. Moreover, resilience has a significant, positive and moderate relationship with positive affect stating that older adults with high resilience have high scores on positive affect. Resilience also has a significant, negative and moderate relationship with negative affect which depicts that higher negative affectivity is likely to result in older adults being less resilient.

Table 4: Correlations for Study Variables

Variable	1	2	3	4
1. NLEs	__			
2. PA	-0.15	__		
3. NA	0.05	-0.03	__	
4. Resilience	-0.26**	0.38***	-0.43***	__

Note: NLE= Negative Life Events, PA= Positive Affect, NA= Negative Affect.
*p <.05, **p < .01, ***p < .001

It was hypothesized that affect is likely to be a mediating variable between NLEs and resilience among older adults. The parallel mediation model analysis was done despite the insignificant relationship between the NLEs (IV) and the PA and NA (mediators) in order to check for estimate indirect effects in the absence of a significant IV-mediator relationship by bootstrapping methods (Hayes, 2013).

Table 5: Indirect Effect of NLEs on Resilience through PA and NA

Criterion Variable	Predictor Variable			95% CI	
		β	*p*	*LL*	*UL*
Direct Effects					
Resilience	NLE	-.04*	.03	-.08	-.01
PA	NLE	-.04*	.05	-.07	-.00
Resilience	PA	.38***	.000	.19	.57
Indirect Effect					
Resilience	NLE through PA	-.01	---	-.03	.00
Direct Effects					
Resilience	NLE	-.04*	.03	-.08	-.01
NA	NLE	.004	.84	-.04	.05
Resilience	NA	-.44***	.000	-.60	-.27
Indirect Effect					
Resilience	NLE through NA	-.00	---	-.02	.02

Note: NLE= Negative Life Events, PA= Positive Affect, NA= Negative Affect, *LL*= Lower Limit, *UL*= Upper Limit, *CI*= Confidence Interval, Coding for NLE (No=0, Yes=1), *p <.05, **p < .01, ***p < .001

Table 5 shows parallel mediation analysis using SPSS PROCESS Macro 4.2 (Hayes, 2022) Model 4, conducted to investigate the mediation effects of PA and NA between NLEs and resilience. A bias-corrected nonparametric bootstrapping technique with 5,000 resamples was employed to estimate the direct, indirect, and total effects of NLEs on resilience in the study sample. The table shows that the direct effect of negative life events (independent variable) on resilience (dependent variable) is significant and negative. Moreover, the indirect effect of NLEs on resilience through PA as well as NA is not significant. So, positive and negative affect, therefore, did not significantly explain the relationship of NLEs and resilience.

Variable	Males (n = 46)	Females (n = 57)	Mann-Whitney	z	*p*
	Mean Ranks	Mean Ranks	*U*		
Negative Life Events	50.49	53.22	1241.5	-.463	.643
Positive affect	53.82	50.54	1227.5	-.555	.579
Negative affect	44.83	57.79	981.0	-2.191*	.028
Resilience	60.17	45.40	935.0	-2.499*	.012

Table 6: Nonparametric Mann Whitney U-test * p < .05

Table 6 indicates that there is a statistically significant difference among males and females in negative affect. The results revealed a greater level of negative affectivity in females as compared to males (U= 981.0, p = .028, two tailed). Moreover, the results revealed significant difference in resilience among males and females. The results revealed a greater level of resilience in males as compared to females (U= 935.0, p = .012, two tailed).

5. DISCUSSION

Negative life events (NLEs) are prevalent in individuals' lives, impacting various developmental stages, including old age (Sheerin et al., 2018). Older individuals are more likely to have experienced the deaths of family, friends, losses of work responsibilities or roles, changes in relationships, declining health and changes in economic positions (Azeem & Naz, 2015). These challenges can lead to mental health disturbances, prompting older adults to employ coping mechanisms (Dasti et al., 2019). Therefore, the present research aimed to investigate the relationship between NLE and resilience with the mediating effect of PA and NA, using the broaden-and-build theory as a conceptual framework.

The broaden-and-build theory (Fredrickson, 1998) posits that positive emotions expand individuals' thought-action repertoires, enabling them to build enduring personal resources over time. By broadening cognitive and behavioural capacities, positive emotions help individuals develop resilience, foster adaptability, and cultivate coping mechanisms that are crucial during times of adversity. In this study, the theory provides a lens for understanding how older adults might leverage positive affect as a pathway to resilience, even amidst challenging life circumstances. By examining PA and NA as mediators, this study integrates these psychological processes to explain how emotional responses to NLEs may influence resilience. Through this framework, we hope to shed light on the adaptive value of positive emotions and their potential for resource-building, specifically within the unique context of Pakistani older adults.

The study sample comprised 103 older adults from Lahore, Pakistan, reflecting the diversity of family systems in the country. Results revealed varying experiences of NLEs over the past five years, with some participants reporting multiple adverse events. The study examined negative life events experienced by older individuals over the past five years to capture a comprehensive range of significant events without introducing recall bias, providing insight into the average number of events and overall adversity faced by this population (Hardy et al., 2002). Notably, males often reported NLEs related to employment and retirement, while females had higher scores for physical illness, aligning with gender-specific stressors (Iftikhar et al., 2014; Carmel, 2019).

The study's hypothesis of significant correlation between NLE and resilience was accepted. The results showed that the higher the number of negative experiences faced, the lesser the resilience in older adults. Cumulative adversity (Wilson, 2020) characterized by a higher number of NLEs, was associated with lower resilience, is consistent the previous literature (Connor & Davidson, 2003). The psychosocial stress resulting from the NLEs also negatively correlate to resilience (Dasti et al., 2019). Chronic exposure to adversity that can deplete an individual's mental and emotional resources, impacting their resilience (McGinnis, 2018). However, contextual factors may also play a role in this complex relationship.

Surprisingly, the study did not establish a significant relationship between NLEs and affect, contrary to expectations and previous research (Schricker et al., 2023; Yang et al., 2020). Previous research indicates positive relationship of negative life events with psychological distress whereas negative relationship with psychological wellbeing and social support (Iqbal & Amin, 2018). One possible justification of this could be that in this unique population of Pakistani older adults, NLE may not always be related to the negative effect because this population might be making use of cognitive strategies like positive reappraisal to find a meaningful opportunity in those negative events. Additionally, the absence of a relationship between NLEs and positive affect may suggest variations in resilience and optimism levels among individuals in response to adversity (Infurna & Luthar, 2016). The study hypothesis regarding a relationship between the PA and NA and resilience was supported in light of the current literature (Goradel et al., 2016). Montero-Marin et al. (2015) stated that positive affect was associated with greater resilience, as individuals experiencing positive emotions tend to engage in effective coping behaviours. Conversely, higher negative affectivity was linked to lower resilience, often due to maladaptive coping strategies. It can worsen the adversity and ability to bounce back from difficult situations.

Furthermore, the study's hypotheses about PA and NA playing mediating roles in the relationship between NLEs and resilience were not supported. This outcome is partially in line with the previous literature which states that affect can be related to NLE and resilience, but they are unlikely to completely mediate this relationship (Infurna & Jayawickreme, 2019). The older adults in this study, having experienced a full life, may have developed effective coping mechanisms over time, reducing the impact of effect on resilience. The relationship that positive affect as well as the negative effect that has with resilience is likely to be not as strong as that in the younger populations studied in the previous literature because the latter population is still in the process of developing the mitigating strategies (Yeung & Fung, 2007). Furthermore, the cultural differences of the Pakistani collectivist culture could have influenced the findings of this study as more than half of the study sample belonged to the joint family system that can consist of a loving atmosphere and friendly relationships, highlighting the role of social support in this multifaceted area of resilience (Ahmed, 2011).

The study hypothesis regarding gender differences was partially accepted. The older males exhibited higher resilience, which could be attributed to their social interactions and adaptability (Yıldırım & Çelik Tanrıverdi, 2020). The study results indicated the high level of negative affect in the Pakistani older females which can be related to their social and cultural roles in comparison to men which is consistent with previous literature in Pakistan (Azeem & Naz, 2015). It may them more vulnerable to adversity as social and cultural factors might be placing greater stress on the women (Thomsen et al., 2005).

Strengths of this study lie in its novelty within the Pakistani context, contributing to indigenous literature. Moreover, by focusing exclusively on older adults, the study enhances the external validity of its findings for this demographic. The use of reliable and validated measures further bolsters the study's reliability, and strict adherence to ethical guidelines ensures the integrity of the research process.

6. CONCLUSION

The paper examined the relationship between negative life events (NLEs), positive affect (PA), negative affect (NA), and resilience among older adults, while studying the potential mediating influence of PA and NA. The findings of this study did not reveal PA and NA to have a mediating role on the NLE-resilience link, implying the existence of alternative influential factors in bolstering resilience when confronted with adverse life events. These outcomes shed light on the complexity of resilience in elderly individuals and underscore the need for future investigations to identify additional factors such as social support, spirituality and coping strategies. By broadening our comprehension of resilience in the context of Pakistani older adults, we can better address their unique needs and enhance their overall well-being.

The relatively small sample size of Pakistani older adults hampers the generalizability of findings. Lengthy English questionnaires may have induced hesitance among participants; future studies should consider using shorter, native-language questionnaires to enhance participant comfort and data accuracy. However, future studies may benefit from using only one type of analysis (parametric or nonparametric) based on the distribution of the data. Additionally, the cross-sectional design restricts causal inference, suggesting that longitudinal studies could provide a clearer view of how resilience and emotions evolve over time. Although the introduction highlighted the significance of the family system and its changing dynamics in Pakistani culture, this factor was not directly addressed in the study. Future research would benefit from exploring family dynamics as a contextual factor, given its relevance to resilience in older adults. If data is available, future studies could also investigate potential mediators such as social support and spirituality to gain a more comprehensive understanding of these relationships.

REFERENCES

Ageing. (2020, February 5). World Health Organization. https://www.who.int/health-topics/ageing#tab=tab_1

Ahmed, K. (2011). Older adult's social support and its effect on their everyday self-maintenance activities: Findings from the household survey of urban Lahore, Pakistan. A Research Journal of South Asian Studies, 26(1), 37-52.

Alvi, A. S., Tarar, M. G., Ahmed, R. I., & Kelly, T. (2021). Coping strategies among Pakistani elderly: coping in everyday life and in stressful conditions. Palarch's Journal of Archaeology of Egypt/Egyptology, 18(4), 737-749.

Azeem, F., & Naz, M. A. (2015). Resilience, death anxiety, and depression among institutionalized and noninstitutionalized elderly. Pakistan Journal of Psychological Research, 30(1), 111-130. https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=5f4d2e70597e24ee492289542b7f560c6f569541

Carmel, S. (2019). Health and well-being in late life: Gender differences worldwide. Frontiers in Medicine, 6. https://doi.org/10.3389/fmed.2019.00218

Cassum, L. A., Cash, K., Qidwai, W., & Vertejee, S. (2020). Exploring the experiences of the older adults who are brought to live in shelter homes in Karachi, Pakistan: A qualitative study. BMC Geriatrics, 20(1). https://doi.org/10.1186/s12877-019-1376-8

Connor, K. M., & Davidson, J. R. (2003). Development of a new resilience scale: The Connor-Davidson resilience scale (CD-RISC). Depression and Anxiety, 18(2), 76-82. https://doi.org/10.1002/da.10113

Dasti, R., Naeem, H., & Amjad, F. (2019). Psychosocial stress, resilience and depression in older adults. Pakistan Journal of Professional Psychology: Research and Practice, 10(2), 47-66. http://pu.edu.pk/images/journal/clinicalpsychology/PDF/4_v10_2_19.pdf

Faul, F., Erdfelder, E., Lang, A., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. Behavior Research Methods, 39(2), 175-191. https://doi.org/10.3758/bf03193146

Fredrickson, B. L. (1998). What good are positive emotions? Review of General Psychology, 2(3), 300-319. https://doi.org/10.1037/1089-2680.2.3.300

Goradel, J. A., Mowlaie, M., & Pouresmali, A. (2016). The role of emotional intelligence, and positive and negative affect on the resilience of primiparous women. Journal of Fundamentals of Mental Health, 18(5), 243-8. http://jfmh.mums.ac.ir

Hamama, L., & Hamama-Raz, Y. (2019). Meaning in life, self-control, positive and negative affect: Exploring gender differences among adolescents. Youth & Society, 53(5), 699-722. https://doi.org/10.1177/0044118x19883736

Hardy, S. E., Concato, J., & Gill, T. M. (2002). Stressful life events among community-living older persons. Journal of General Internal Medicine, 17(11), 841-847. https://doi.org/10.1046/j.1525-1497.2002.20105.x

Hayat, S. Z., Khan, S., & Sadia, R. (2016). Resilience, wisdom and life satisfaction in elderly living with families and in old age homes. Pakistan Journal of Psychological Research, 312, 475-494.

Hayes, A. F. (2022). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach (3rd ed.). Guilford Publications.

Iftikhar, M., Mohyuddin, A., & Chaudhry, H. R. (2014). Psychological and physiological issues of retired life in Pakistan. Indian Journal of Health and Wellbeing, 5(3), 362-367. http://www.iahrw.com/index.php/home/journal_detail/19#list

Infurna, F. J., & Jayawickreme, E. (2019). Fixing the growth illusion: New directions for research in resilience and posttraumatic growth. Current Directions in Psychological Science, 28(2), 152-158. https://doi.org/10.1177/0963721419827017

Infurna, F. J., & Luthar, S. S. (2016). Resilience to major life stressors is not as common as thought. Perspectives on Psychological Science, 11(2), 175-194. https://doi.org/10.1177/1745691615621271

Iqbal, K., & Amin, R. (2018). Negative life events and mental health among old age people: Moderating role of social support. Pakistan Journal of Psychological Research, 33(2), 401-412. https://www.pjprnip.edu.pk/index.php/pjpr/article/view/559

Kaleem, S., Bashir, M. S., & Noor, R. (2018). Prevalence of depression among senior citizens of Lahore, Pakistan. Rawal Medical Journal, 43(3), 413-416. https://www.researchgate.net/profile/Noor-2/publication/328105034_Prevalence_of_depression_among_senior_citizen_of_Lahore_Pakistan/links/5d8211ae92851ceb7911acd2/Prevalence-of-depression-among-senior-citizen-of-Lahore-Pakistan.pdf

Kara, A., & Gok, A. (2020). Positive and negative affect during a pandemic: Mediating role of emotional regulation strategies. Journal of Pedagogical Research, 4(4), 484-497. https://doi.org/10.33902/jpr.2020064452

Lazarus, R., & Folkman, S. (1986). Stress, appraisal and copings. Behavioural and Cognitive Psychotherapy, 14(4), 345-345. https://doi.org/10.1017/s0141347300015019

McGinnis, D. (2018). Resilience, life events, and well-being during midlife: Examining resilience subgroups. Journal of Adult Development, 25(3), 198-221. https://doi.org/10.1007/s10804-018-9288-y

Montero-Marin, J., Tops, M., Manzanera, R., Piva Demarzo, M. M., Álvarez de Mon, M., & García-Campayo, J. (2015). Mindfulness, resilience, and burnout subtypes in primary care physicians: The possible mediating role of positive and negative affect. Frontiers in Psychology, 6. https://doi.org/10.3389/fpsyg.2015.01895

Sardella, A., Lenzo, V., Basile, G., Musetti, A., Franceschini, C., & Quattropani, M. C. (2022). Gender and psychosocial differences in psychological resilience among a community of older adults during the COVID-19 pandemic. *Journal of Personalized Medicine*, *12*(9), 1414. https://doi.org/10.3390/jpm12091414

Schricker, I. F., Nayman, S., Reinhard, I., & Kuehner, C. (2023). Reciprocal prospective effects of momentary cognitions and affect in daily life and mood reactivity toward daily events in remitted recurrent depression. Behavior Therapy, 54(2), 274-289. https://doi.org/10.1016/j.beth.2022.09.001

Sheerin, C. M., Lind, M. J., Brown, E. A., Gardner, C. O., Kendler, K. S., & Amstadter, A. B. (2018). The impact of resilience and subsequent stressful life events on MDD and GAD. Depression and Anxiety, 35(2), 140-147. https://doi.org/10.1002/da.22700

Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. International Journal of Behavioral Medicine, 15(3), 194-200. https://doi.org/10.1080/10705500802222972

Thomsen, D. K., Mehlsen, M. Y., Viidik, A., Sommerlund, B., & Zachariae, R. (2005). Age and gender differences in negative affect—Is there a role for emotion regulation? Personality and Individual Differences, 38(8), 1935-1946. https://doi.org/10.1016/j.paid.2004.12.001

Watson, D., & Clark, L. A. (1997). Measurement and mismeasurement of mood: Recurrent and emergent issues. Journal of Personality Assessment, 68(2), 267-296. https://doi.org/10.1207/s15327752jpa6802_4

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. Journal of Personality and Social Psychology, 54(6), 1063-1070. https://doi.org/10.1037/0022-3514.54.6.1063

Wilson, C. A. (2020). When life gives you lemons: The development and validation of the resilience scale for older adults [Doctoral dissertation]. https://ir.lib.uwo.ca/cgi/viewcontent.cgi?article=9639&context=etd

Yang, Y., Liu, Y., Jiang, Z., Mo, J., Wang, C., Yang, Y., Jia, X., & Lin, L. (2020). Negative affect and life satisfaction mediate the association between negative life events and suicidal ideation in college students. Psychology, Health & Medicine, 26(6), 692-700. https://doi.org/10.1080/13548506.2020.1861637

Yeung, D. Y., & Fung, H. H. (2007). Age differences in coping and emotional responses toward SARS: A longitudinal study of Hong Kong Chinese. Aging

Yıldırım, M., & Çelik Tanrıverdi, F. (2020). Social support, resilience and subjective well-being in college students. Journal of Positive School Psychology, 5(2), 127-135. https://doi.org/10.47602/jpsp.v5i2.229

Zhang, M., Fan, B., Cai, G., Chi, Y., Wu, W., & Jin, H. (1987). Life event scale: Normal results. Chinese Journal of Neurological and Psychiatric Diseases, 13(2), 70-73.

Conflict of interest

The authors affirm that there are no conflicts of interest.

Funding

This research did not receive financial support from any public, commercial, or nonprofit funding agency.