
Impact Of Resilience on The Quality of Life in Middle Aged Adults

¹Sadaf Sheeba, ² Dr. Sushmita Biswal Waraich

Amity Institute of Psychology And Allied Sciences, Amity University, Noida, Uttar Pradesh , 201313 , India

33.sadafsheeba@gmail.com

Abstract

This study examines the correlation between resilience and quality of life domains among middle-aged adults. Results reveal significant positive correlations between resilience and Psychological Health ($r = 0.409$, $p < 0.001$), Social Relationships ($r = 0.265$, $p < 0.05$), and Environment ($r = 0.325$, $p < 0.001$). Psychological Health encompasses mental well-being, including aspects such as emotional stability, self-esteem, and coping mechanisms. The study highlights how individuals with higher resilience scores tend to report better psychological health outcomes, indicating a protective effect against stressors and psychological distress. Similarly, Social Relationships encompass the quality of interactions with family, friends, and the broader community. The findings suggest that resilient individuals may experience greater social support, stronger social networks, and improved interpersonal relationships, contributing to overall well-being. Environment refers to the physical and social context in which individuals live, work, and engage in daily activities. Resilient middle-aged adults are more likely to perceive their environment as supportive, safe, and conducive to their well-being, leading to higher quality of life ratings in this domain. However, the study indicates a weak correlation between physical health and resilience among this demographic. These findings highlight the influential role of resilience in shaping individuals' perceptions of well-being across various aspects of their lives. Furthermore, the lack of substantial correlation with physical health underscores the complex impact of resilience on somatic well-being in middle-aged adults. This research sheds light on the nuanced relationship between resilience and quality of life, offering valuable insights into how resilience affects specific domains of well-being.

Keywords: Middle aged adults, Quality of life, Resilience

Introduction

Resilience, in the words of well-known psychologist Dr. Ann Masten, is a complicated interplay between a person's unique qualities, their surroundings, and outside resources rather than a set attribute. The author highlights the significance of comprehending resilience as a process of growth that occurs gradually and may be nurtured by means of several protective elements, including constructive relationships, adaptable coping mechanisms, and a purpose and meaning in life (Masten,2000). Resilience is the capacity to deal with and overcome life's challenges rather than just the absence of suffering or misfortune. According to research on resilience, those who possess higher degrees of resilience typically have better psychological outcomes, such as reduced levels of PTSD, anxiety, and depression.

Additionally, across the lifespan, resilience has been connected to a number of favorable outcomes, such as better physical health, success in school and the workplace, and strengthened social ties. Resilience is a critical factor in determining human thriving and resilience, as evidenced by the long-lasting effects of resilience on subjective well-being and overall life satisfaction.

Factors influencing Resilience

• **Biological factors:**

1. Genetics: The inheritance of particular genes that affect people's physiological reactions to stress is one way that genetics contributes to resilience. Resilience qualities have been associated with variations in the serotonin transporter gene and genes connected to the hypothalamic-pituitary-adrenal (HPA) axis, which controls the synthesis of stress hormones. The effect of genetic variants in the FKBP5 gene on stress resistance has been emphasized by research conducted by Dr. Kerry J. Ressler and colleagues at Harvard Medical School. They discovered that specific genetic variations impact resilience results when combined with early trauma, providing insight into the intricate relationship between genetics and environmental factors. (Kerry,2002).

2. Neurobiological mechanism: The Rockefeller University neurologist Dr. Bruce S. McEwen has studied the neurological foundations of resilience in great detail. As his research has demonstrated, long-term exposure to stress can affect the structure and function of the brain; yet, resilient people are more resistant to these changes (Bruce,2020). Resilience is greatly aided by brain plasticity, the brain's capacity to rearrange and adapt in response to events. This allows for the development of adaptive coping mechanisms and emotional control abilities.

3. Physical health: Resilience is mostly dependent on maintaining excellent physical health through consistent exercise, a well-balanced diet, and enough sleep. Strengthening the body lessens the damaging effects of stress on the body and strengthens physiological systems like the immunological and cardiovascular systems, which increases resilience. In a research conducted by Dr Stephen W. Cole a professor of medicines at UCLA demonstrated the

impact of physical health and resilience stating that positive lifestyle factors such as diet, exercise can help change the genetic expression associated with resilience.

• **Psychological factors:**

1. Cognitive flexibility: Dr. Martin E.P. Seligman, a notable positive psychology researcher, has emphasised the importance of cognitive flexibility in developing resilience. His research on acquired optimism and explanatory style illustrates how people's cognitive processes influence their resilience outcomes. Cognitive flexibility is the ability to adjust to changing situations, viewpoints, and obstacles. It allows people to reframe bad events, problem solve efficiently, and find meaning and purpose in adversity (Seligman,1956).

2. Regulation of emotions: Emotional regulation is the ability to detect, manage, and express emotions in positive ways. It promotes psychological well-being, reduces distress, and facilitates adaptive coping methods, all of which are important for resilience.Dr. James J. Gross, a Stanford University psychologist, has extensively researched emotional regulation and resilience. His research has revealed various emotion management mechanisms, such as cognitive reappraisal and expressive suppression, which alter people's stress resilience (James, 2003)

3. Self-Efficacy: Resilience is influenced by self-efficacy, according to prominent psychologist Dr. Albert Bandura, who is well known for his work on social cognitive theory. According to his studies, those who have strong self-efficacy are more resilient to adversities and show more drive and resiliency when pursuing difficult objectives (Bandra,1977). Self-efficacy is the belief that one can overcome obstacles, achieve goals, and exert influence over one's own life. Strong self-efficacy generates optimism, empowerment, and perseverance in the face of adversity, all of which contribute to resilience.

• **Social Factors:**

1. Social Support: Social support is defined as the help, care, and empathy provided by family, friends, and community members during times of need. It acts as a stress and adversity buffer, encouraging resilience by providing emotional support, practical aid, and a sense of community.Dr. Shelley E. Taylor, a social psychologist at the University of California, Los Angeles (UCLA), has published numerous studies on social support and resilience (Shelley,2011). Her work has highlighted the impact of supportive connections in promoting resilience and minimizing the adverse effects of stress on health and well-being.

2. Social relationships: Dr. John Gottman, a psychologist and researcher most known for his work on marital relationships, has underlined the importance of positive interpersonal dynamics in fostering resilience. His research on relationship happiness and stability emphasizes the importance of positive connections in helping people traverse life's problems successfully. Positive and loving relationships promote resilience by creating a safe and supportive atmosphere in which people may express themselves, seek assistance, and receive validation. Healthy relationships based on trust, empathy, and mutual respect help to build resilience by promoting emotional security and improving coping skills.

3. Social integration: Social integration is defined as one's level of participation in social events, group affiliations, and community engagement. Active participation in social networks and meaningful connections with others help to build resilience by allowing for social support, shared experiences, and collective coping mechanisms. Dr. Julianne Holt-Lunstad, a psychologist at Brigham Young University, has studied social integration and resilience across the lifespan. Her research has shown that social ties have a protective effect on health and well-being, emphasizing the importance of social integration in building resilience.

Importance of studying Resilience in middle aged adults

Middle age, now defined as 40 to 65 due to increased life expectancy, is seen as a period of reflection and transformation, not just a precursor to decline. Middle-aged individuals face stressors like job changes, family obligations, and health issues. Resilience is key to navigating these challenges, leading to greater life satisfaction and fulfillment. Research shows resilient middle-aged adults have better physical and mental health outcomes, lower rates of chronic diseases, and higher life expectancy. They also play crucial roles in the workforce, families, and communities, contributing positively to society. Resilience in middle age benefits future generations, as resilient parents can model adaptive coping mechanisms for their children. Understanding resilience in this demographic is vital for developing tailored interventions and policies aimed at promoting healthy aging and well-being, with resilience-focused therapy showing promise in improving mental health outcomes.

Quality of life

According to a psychological perspective, quality of life (QoL) is the subjective assessment of a person's general well-being and contentment with a range of areas of their life, such as their bodily and mental health, social interactions, surroundings, and sense of personal fulfillment. The usual age range of middle-aged persons is 40 to 65. They face certain possibilities and difficulties that impact their quality of life (Shin, 2018).

Renowned psychologist Carol Ryff (1978) whose research on psychological well-being is well-known, claims that quality of life has several facets, such as self-acceptance, growth, positive relationships with others, environmental mastery, autonomy, and pleasant interactions with oneself. Middle-aged persons are likely to report a higher quality of life if they feel fulfilled in all four categories.

Quality of life is defined as people's subjective assessments of their living conditions and general level of pleasure with life, according to prominent psychologists in the field of subjective well-being (Richard E. Lucas and Ed Diener, 1978). Despite obstacles and changes, middle-aged persons who find satisfaction, meaning, and fulfillment in their lives are likely to report a higher quality of life.

Factors affecting quality of life in middle aged adults:

Physiological and Psychological health: The physical and mental health of middle-aged persons has a direct impact on their quality of life. People's health may alter as they become

older, sometimes due to the start of chronic illnesses or age-related disorders. Maintaining physical health through preventative healthcare, managing health issues, and leading a healthy lifestyle has a direct impact on quality of life.

Social relationships: In order to improve middle-aged persons' quality of life, social networks and support systems are vital. A sense of belonging, camaraderie, and emotional support are all provided by having strong relationships with family, friends, and neighbors. Having deep and meaningful social relationships increases life satisfaction overall, encourages social involvement, and lessens feelings of loneliness.

Financial stability and career: QoL in middle age is greatly influenced by career satisfaction and financial security (Smyer,2020). Plans for retirement, financial stability, and job progression are frequently given top priority by middle-aged persons. Greater work security, financial independence, and career path satisfaction all contribute to a higher quality of life. In contrast, life satisfaction and general well-being can be adversely affected by financial strain or discontent with one's job prospects.

Purpose and fulfillment: a Adults in their middle years look for chances for personal development, expression, and fulfillment. A sense of purpose and fulfillment can be fostered by taking part in worthwhile activities, pursuing interests, making goals, and giving back to the community. Adults in their middle years who place a high value on personal growth and find fulfilment in their activities report better quality of life (QoL).

Adjustability and Resilience: Throughout middle age, the capacity to adjust to life's obstacles and overcome misfortune is essential to preserving quality of life. The promotion of psychological well-being and improvement of overall quality of life is facilitated by the development of resilience, coping skills, and adaptive methods to manage life transitions, such as empty nest syndrome or caregiving duties.

Many aspects, such as resilience, professional satisfaction, personal fulfilment, social interactions, physical and mental health, and career satisfaction, affect middle-aged persons' quality of life (QoL). Middle-aged persons can feel more happiness and fulfilment in life by putting their well-being first, building healthy connections, engaging in meaningful activities, and learning coping mechanisms.

Importance of studying quality of life in middle aged adults

Studying the quality of life (QoL) in middle-aged adults is essential for informing public policy, promoting individual well-being, and enhancing societal health. Understanding the factors influencing QoL in this demographic informs strategies for improving health outcomes, promoting resilience, addressing mental health conditions, preparing for retirement, and designing effective interventions tailored to their unique needs. By prioritizing research on middle-aged adults' QoL, we can contribute to healthier, happier, and more resilient societies.

Effect of Resilience on quality of life in middle aged adults

Middle adulthood is marked by transitions and challenges such as job changes, family responsibilities, and health issues. Resilient middle-aged adults effectively manage these changes, leading to better quality of life. Research shows a strong correlation between resilience and mental and physical health, with resilient individuals reporting reduced stress, improved health, and greater well-being. Strong social support systems contribute to a better quality of life by providing companionship and emotional support. Resilient middle-aged adults are more likely to pursue meaningful goals and find fulfillment, leading to greater contentment and satisfaction. They also adapt more easily to changes in health and social roles, maintaining a positive outlook and seeking help when needed. Resilience plays a vital role in promoting well-being across the lifespan, as evidenced by extensive research by scholars like Ann S. Masten and Michael Rutter.

Literature review

Chedraui et al.(2018) a multicenter study using the Menopause Rating Scale (MRS) to evaluate the quality of life (QoL) of middle-aged women in Latin America. A considerable proportion of the study's female participants, who had an average age of 49.1 years, were postmenopausal and had no formal schooling. The findings showed that there was a significant incidence of moderate to severe impairment in quality of life (QoL) in every country. Some of the characteristics that were linked to this impairment included postmenopausal status, mental drug use, and alternative menopausal therapy. In contrast, low likelihood of poor quality of life was linked to things including using hormone therapy and adopting healthy practices. The complicated interaction of multiple factors affecting middle-aged Latin American women's quality of life is highlighted by this study.

Marion et al. (2018) examine the influence of peer relationships throughout adolescence on life satisfaction in middle adulthood. Their findings highlight the lasting impact of peer interactions from youth to middle age, showing that peer rejection during adolescence predicts worse adult outcomes whereas friendship engagement mitigates these impacts.

Naseem and Munaf (2019) examine how aggression and resilience are related during the midlife stressor-filled era of middle adulthood. A study involving 200 participants was carried out in Karachi, Pakistan. The results indicate a noteworthy inverse relationship between aggression and resilience, suggesting that reduced levels of aggression are linked to increased resilience. These results offer valuable information to mental health practitioners in creating techniques that improve resilience and help middle-aged adults deal with hardship.

Muhannadi and Buheji (2024) emphasize the importance of qualities such as spiritual strength, respect, and familial ties in highlighting the Palestinian community's remarkable perseverance throughout the 2023 war in Gaza. Prior research has examined the ways in which religion, local support, and international solidarity help to foster resilience in Palestinians.

Peng et al. (2024) is investigated the connection between middle-aged and older chronic disease patients' self-esteem, quality of life, and fear of dying. According to their research, death anxiety and self-esteem have a negative correlation and a positive correlation, respectively, with life quality. The intricate interplay of psychological determinants in health outcomes is highlighted by the partial mediation of the connection between quality of life and self-esteem by death anxiety.

Rubio et al. (2024) investigate the effects of working circumstances on Spanish healthcare workers' Work-Related Quality of Life (WRQOL). By way of workplace engagement and burnout, their research shows a negative correlation between working conditions and WRQOL. It is determined that one major drawback is a lack of assistance. The results emphasize how critical it is to promote resilience among healthcare professionals and enhance working circumstances.

Veenhoven (2024) an overview provides an overview of the concept of quality of life (QOL), which encompasses various aspects of the "good life." The term is used to describe a range of life qualities, categorised along two main distinctions. Firstly, there is a difference between opportunities for a good life and the actual outcomes of life, a common distinction in public health research. Secondly, there is a division between external and inner qualities of life, where external factors pertain to the environment and inner factors to the individual.

Methodology

Aim

To study the impact of Resilience on Quality of life in Middle aged adults using Brief Resilience Scale and WHOQOL-Bref.

Objective

1. To study the relationship between Resilience and quality of life in middle aged adults.

Hypothesis

H1. There will be a positive correlation between specific domains of quality of life, like psychological health and social relationships and environment.

H2. There will be weak positive correlation between Resilience and domain related to physical health.

Sampling Method

A total of 122 responses were gathered from people between the ages of 40 and 65 for this study. There were both men and women in the participant sample; 43.2% of the sample identified as female and 56.8% as male. A more thorough examination of the relationship

between resilience and quality of life in this cohort was made possible by the demographic variety that guaranteed a thorough representation of middle-aged individuals.

Data Collection

The data collection process utilized Google Forms and included two distinct questionnaires: the Brief Resilience Scale and the WHOQOL-BREF. These questionnaires aimed to gather data on participants' resilience levels and multiple domains of quality of life. The repeated use of Google Forms facilitated efficient data gathering for comprehensive analysis.

Measures

WHOQOL-BREF

The WHOQOL-BREF questionnaire, a shortened version of the WHOQOL-100, was employed as a research instrument in this study. It assesses quality of life across four dimensions: physical health, psychological well-being, social relationships, and environment. With 26 questions covering a wide range of topics, this tool aims to gather detailed information about middle-aged adults' quality of life in various domains.

Brief Resilience Scale

Developed by Smith et al. (2008), the Brief Resilience Scale (BRS) comprises of six items that measure an individual's capacity to recover from hardship. The items are rated on a Likert scale from 1 to 5 and contain both positively and negatively worded items. The mean of all the items is computed to determine resilience levels, and reverse coding is used to negatively worded items.

Procedure

The participants were required to submit a consent form before the data collection. World health organisation quality of life scale (WHOQOL) and Brief Resilience Scale (BRS) were then employed. Questionnaires were distributed in the message box along with several volunteer opportunities in order to connect with people of the age range 40 to 65 from different backgrounds. A proper information regarding the research goal was added, including the study, explanation, confidentiality, concerns, and the contact of researchers. The data on middle-aged adults' resilience and quality of life dimensions were summarized using descriptive statistics. To provide an understanding of the central tendency and variability of the data, the mean scores and standard deviations were computed. The degree of variability within each domain is indicated by the standard deviations for each domain, which give information about the scores' distribution around the mean.

Statistical Analysis

The data on middle-aged adults' resilience and quality of life dimensions were summarized using descriptive statistics. To provide an understanding of the central tendency and variability of the data, the mean scores and standard deviations were computed. The sample's

average level of resilience was determined to be 3.31 by the calculation of the mean resilience score. The resilience ratings appear to vary moderately, as indicated by the 0.67 standard deviation. Comparably, the quality of life domains showed a range of mean values, with Physical Health ($M = 69.54$) having the lowest score and Social Relationships ($M = 79.47$) having the highest. The degree of variability within each domain is indicated by the standard deviations for each domain, which give information about the scores' distribution around the mean.

Pearson's Correlation Analysis

Pearson's correlation coefficients were computed to assess the relationship between resilience and quality of life domains. The correlation analysis revealed significant positive correlations between resilience and Psychological Health ($r = 0.409$, $p < 0.001$), Social Relationships ($r = 0.265$, $p < 0.05$), and Environment ($r = 0.325$, $p < 0.001$). These findings suggest that higher levels of resilience are associated with better psychological well-being, social relationships, and environmental perceptions among middle-aged adults. However, no significant correlation was observed between resilience and Physical Health ($r = 0.092$, $p > 0.05$), indicating that resilience may not strongly influence physical health outcomes in this population.

Result

The study aimed to explore the relationship between quality of life and resilience in middle-aged individuals. Unadjusted resilience and quality of life scores across four dimensions were examined, followed by calculation of raw score averages. Pearson correlation coefficients were used to assess the correlations between resilience and each quality of life domain. Standard deviations were computed to measure variability within the data sets..

Table 1 displays average resilience ratings across all quality of life domains, with an average resilience score of 3.31 on a scale of 1 to 5. Participants reported higher average scores for psychological health ($M = 74.79$), social interactions ($M = 79.47$), and environment ($M = 73.98$), indicating positive perceptions in these areas. However, the average score for physical health ($M = 69.54$) was slightly lower compared to other dimensions, suggesting some room for improvement. These findings reflect participants' assessed levels of resilience and quality of life.

Table 1

Descriptive statistics for variable

Variables	Mean
Resilience	3.31

Physical health	69.54
Psychological health	74.79
Social relationships	79.47
Environment	73.98

Variable	Resilience	Physical health	Psychological health	Social relationships	Environment	interpretation
Resilience	1	1	1	1	1	Moderate positive
Physical health	0.092*	——	——	——	——	Weak Positive

Table 2 displays correlations between resilience and quality of life dimensions. Resilience has a moderate positive correlation with psychological health ($r = 0.409$, $p < 0.001$) and social interactions ($r = 0.265$, $p < 0.001$), suggesting better well-being for more resilient individuals. Moderate positive correlations were also found with environment ($r = 0.325$, $p > 0.05$) and physical health ($r = 0.092$, $p > 0.05$). These findings underscore the complex relationship between resilience and overall well-being.

Table 2

Psychological health	0.409**	—	—	—	—	Moderate Positive
Social relationships	0.27*	—	—	—	—	Moderate Positive
Environment	0.33*	—	—	—	—	Moderate Positive

Correlation between Resilience and Quality Of The Life Domains

Note. * $p < .05$., ** $p < .01$. Correlation above represents Pearson's correlation coefficients

Table 3

Standard deviation of resilience and quality of life domains

Variable	Standard Deviation
Resilience	0.67
Physical health	15.10
Psychological health	5.59
Social relationships	17.45
Environment	17.07

This table presents the standard deviations of resilience and each quality of life domain (D1, D2, D3, D4).

Table 3 shows standard deviation numbers indicating variability within each variable. Higher standard deviations, such as for Environment and Social Relationships, suggest wider score ranges around the mean. Lower standard deviations, like those for Physical and Psychological Health, indicate less variation. These results offer insights into response variability and dispersion across quality of life dimensions in middle-aged individuals.

Discussion

The study aimed to examine the correlation between resilience and quality of life, gauge the degree of resilience, and appraise several aspects of quality of life within this demographic.

The results of this study advance our knowledge of how middle-aged persons' quality of life and resilience interact. Accepting the first hypothesis (H1), the study showed that resilience and particular quality of life dimensions, like psychological well-being and social interactions, had moderately favorable correlations. Both findings underscore the significance of resilience in fostering favorable outcomes in both domains by indicating that those with higher resilience tend to report better psychological well-being and more fulfilling social interactions. Hence the hypothesis 1 (H1) has been accepted.

The results showed that there was weak relationship between the domain of physical health and resilience. This implies that other characteristics that have not yet been investigated may mediate the association between resilience and middle-aged persons' physical health outcomes. To examine the possible mechanisms that underlie this association, more investigation is required. Hence approving the hypothesis 2 (H2).

The study evaluated middle-aged persons' resilience levels as well as many quality of life categories. According to descriptive statistics, there was diversity in the resilience across many quality of life areas, indicating a moderate level. In order to improve resilience and general well-being in this population, specific interventions are required, since these findings demonstrate the intricacy of resilience as a multidimensional construct.

The results of this research offer significant understandings into the connection between middle-aged persons' quality of life and resilience. In order to improve overall well-being in this population, they stress the significance of addressing certain dimensions of quality of life, such as psychological health and social interactions, in resilience-building interventions. It is necessary to conduct more study to identify other variables affecting the resilience-quality of life link and to create focused intervention plans.

Limitations

The study focused on the relationship between resilience and quality of life in middle-aged individuals, facing challenges in data collection and interpretation due to limited accessible data. Customized data gathering techniques were necessary, but recruitment difficulties persisted. Self-report measures were used, which may overlook nuances and be affected by biases like social desirability. Additionally, the cross-sectional design limits establishing causal links between resilience and quality of life, highlighting the need for longitudinal research to better understand their temporal dynamics.

Conclusion

In the present research study, the Brief Resilience Scale and WHOQOL-Bref were utilized to explore the relationship between resilience and quality of life among middle-aged individuals. The findings revealed a somewhat positive association between resilience and specific aspects of quality of life, particularly psychological well-being, interpersonal connections, and environmental factors, while the domain related to physical health did not show any strong association. These results highlight the importance of targeting specific quality of life domains in interventions aimed at enhancing resilience, especially considering middle age as a period of significant life transitions. Psychological well-being encompasses mental health, and coping mechanisms, indicating that resilient individuals may experience lower levels of stress and greater overall satisfaction with life. Interpersonal connections reflect the quality of relationships with family, friends, and community, suggesting that resilience may facilitate stronger social support networks and enhanced social functioning. Environmental factors pertain to the physical and social context in which individuals live, work, and engage in daily activities, implying that resilience may contribute to a greater sense of safety, security, and satisfaction with one's surroundings. Drawing on additional

knowledge, it's crucial to recognize resilience as a dynamic trait that can be cultivated through various strategies such as mindfulness practices and social support networks. Designing focused intervention strategies that effectively bolster resilience and elevate overall well-being in this population is imperative, integrating evidence-based practices such as resilience training programs and stress management techniques. Ultimately, expanding on this study through additional research and targeted intervention development holds promise for enhancing resilience and promoting well-being.

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