Influence of Self-Esteem and Resilience on the Internalized Stigma and Quality of Life Among Patients with Schizophrenia

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Background: Internalized stigma negatively impacts the quality of life in individuals with schizophrenia, but psychological factors such as self-esteem and resilience may influence this relationship. Understanding how these factors interact can help develop more effective nursing interventions to improve patient outcomes. **Aim:** This study aimed to examine the influence of self-esteem and resilience on the internalized stigma and quality of life among patients with schizophrenia. **Method:** A descriptive correlational design was employed, using a purposive sample of 150 schizophrenia patients recruited from the psychiatric outpatient clinic at El Qaser Alaini Hospital. Data were collected using the Internalized Stigma of Mental Illness (ISMI) scale, Rosenberg Self-Esteem Scale (RSES), Connor-Davidson Resilience Scale, and Schizophrenia Quality of Life Scale. Statistical analysis was performed to assess this influence. **Results:** The findings indicated that both self-esteem and resilience independently influence the relationship between internalized stigma and quality of life. Higher levels of internalized stigma were associated with lower resilience and poorer quality of life, suggesting that stigma negatively affects psychological coping mechanisms and overall well-being. **Conclusion:** The study highlights the importance of addressing self-esteem and resilience in schizophrenia patients to mitigate the harmful effects of internalized stigma. Nursing interventions focusing on enhancing these psychological resources may lead to better quality of life and recovery outcomes. Future research should explore targeted programs that strengthen self-esteem and resilience in this population.

Keywords: Self-esteem, resilience, internalized stigma, schizophrenia, quality of life.

Introduction

Schizophrenia is a serious mental illness that affects how a person thinks, feels, and behaves. Worldwide, over 21 million people live with schizophrenia spectrum disorders **(WHO, 2019).** While treatment has traditionally focused on reducing symptoms like hallucinations and delusions, recent approaches also emphasize improving patients' daily functioning and quality of life. This shift recognizes recovery as more than just symptom control - it includes social connections, hope, identity, meaning, and empowerment **(Leamy et al., 2011).**

Stigma refers to negative attitudes and discrimination against people with mental illness. It often stems from misinformation and harmful stereotypes, such as the false belief that people with schizophrenia are dangerous or to blame for their condition **(Eksteen et al., 2017).** When individuals internalize these negative views, they may develop self-stigma - feeling ashamed, worthless, or hopeless about their future **(Boyd et al., 2014).** This can lead to social withdrawal, low self-esteem, and depression **(Corrigan & Rao, 2012).**

Resilience - the ability to adapt to challenges, plays a key role in recovery. Studies show that schizophrenia patients with higher resilience tend to function better socially **(Torgalsboen, 2010).** However, stigma can weaken resilience, making it harder for individuals to seek help or reintegrate into society **(Hsiao et al., 2018).** Similarly, self-esteem (a person's sense of self-worth) is often lower in people with schizophrenia **(Bemrose et al., 2021).** Stigma can create a vicious cycle: negative stereotypes reduce self-esteem, which then leads to greater isolation **(Zhang et al., 2014).** On the other hand, stronger self-esteem may help combat stigma and improve resilience **(Lysaker et al., 2012).**

Self-esteem and resilience play crucial roles in determining quality of life (QOL) for individuals with schizophrenia. Many patients struggle with feelings of incompetence and helplessness, particularly after repeated hospitalizations, social isolation, and experiences of stigma. These challenges often lead to diminished self-worth and poorer life satisfaction **(Wartelsteiner et al., 2016).** Research shows that resilience - the ability to adapt to daily challenges - significantly impacts functional abilities and overall QOL **(Rossi et al., 2014).** Importantly, improving QOL represents

more than just managing symptoms; it serves as a key measure of successful community integration and long-term recovery **(Hofer et al., 2018).**

The internalization of stigma creates particularly harmful effects. When negative stereotypes become automatic thought patterns, they significantly reduce subjective well-being and life satisfaction. Many individuals develop passive coping strategies in response to discrimination, which further limits their opportunities and negatively impacts QOL **(Holubova et al., 2018).** However, evidence suggests that self-esteem and resilience can buffer these effects by mediating the relationship between internalized stigma and QOL **(Kim & Jang, 2019).** This finding highlights the importance of therapeutic approaches that strengthen these psychological resources rather than focusing solely on reducing stigma.

Nursing interventions play a vital role in this process. Psychiatric nurses can help patients rebuild self-esteem through supportive relationships that encourage exploration of positive self-aspects and constructive responses to self-criticism. Techniques like cognitive restructuring, positive self-talk, and gradual social skills training prove particularly valuable **(O'Connor & Delaney, 2007).** Recovery-oriented care should be comprehensive, continuous, and tailored to individual needs and cultural backgrounds. Nurses facilitate this process by establishing therapeutic relationships based on understanding and cooperation - essential components of the recovery journey **(Norman & Ryrie, 2008).** By integrating these components, psychiatric nurses can effectively support patients in building resilience, improving self-esteem, and ultimately enhancing their quality of life and social integration.

Significance of the Study

Schizophrenia remains a significant mental health challenge in Egypt, affecting approximately 1.1% of the population, with an estimated 1 million individuals living with the disorder **(Safiri et al., 2024).** Globally, schizophrenia impacts around 21 million people (0.28% of the population) and is associated with severe health consequences, including a reduced life expectancy of 28.5 years compared to the general population **(WHO, 2019).** Patients with schizophrenia face a 2-3 times higher risk of premature death, highlighting the urgent need for effective interventions to improve their quality of life and long-term outcomes.

A major barrier to recovery is the pervasive stigma surrounding schizophrenia, which leads to discrimination, social exclusion, and internalized shame. Many patients struggle with self-stigma, negatively affecting their self-esteem, social relationships, and overall well-being **(Bozikas & Parlapani, 2021).** However, emerging research suggests that resilience - a modifiable psychological trait - can mitigate these effects and enhance recovery. By shifting focus from risk factors to protective factors, such as resilience and self-esteem, mental health interventions can promote better psychosocial functioning and community reintegration for individuals with schizophrenia.

Despite growing recognition of these connections, few studies have explored the relationship between internalized stigma, self-esteem, resilience, and quality of life in schizophrenia patients, particularly in Egypt. This study aims to fill this gap by examining how these factors interact, providing valuable insights for developing targeted psychosocial interventions. The findings will support the implementation of recovery-oriented programs that foster hope, self-worth, and resilience, ultimately improving treatment outcomes for individuals with schizophrenia.

Aim of the Study

This study had three primary objectives. First, it sought to assess the current levels of internalized stigma, self-esteem, resilience, and quality of life among patients with schizophrenia. Second, it aimed to explore the relationships between these four key psychological factors in the schizophrenia population. Third, and most importantly, the study investigated whether self-esteem and resilience influence the relationship between internalized stigma and quality of life.

Methods

Research Design

This study employed a descriptive correlational design to systematically examine relationships between key variables without establishing causal links. This approach allowed investigation of how changes in one variable

(e.g., internalized stigma) might relate to changes in others (e.g., quality of life, self-esteem, resilience). The design facilitated analysis of direction, strength, and magnitude of associations between these psychological factors **(Pawar, 2020).**

Participants and Setting

The research was conducted at the outpatient clinics of Al Qasr Al Aini Hospital, a government-affiliated psychiatric facility in Egypt providing free medical services. A purposive sample of 150 participants was recruited based on specific inclusion criteria: diagnosis of schizophrenia, age range of 20-55 years, both genders, and varying educational backgrounds. Patients with comorbid substance abuse disorders were excluded from participation. Data collection occurred over a two-month period from November to December 2020, with research activities conducted four days each week to ensure adequate participant recruitment.

Measures

This study employed four validated measurement tools to assess key psychological constructs in patients with schizophrenia. Following the collection of basic socio-demographic data - including age, gender, marital status, education level, and age at illness onset - participants completed standardized assessments to measure internalized stigma, self-esteem, resilience, and quality of life.

1- The Internalized Stigma of Mental Illness (ISMI) Scale -(Boyd, Adler, Otilingam & Peters, 2014) was used to evaluate participants' experiences of internalized stigma, measuring five dimensions: alienation, stereotype endorsement, perceived discrimination, social withdrawal, and stigma resistance. This 29-item scale demonstrated excellent reliability (Cronbach's $\alpha = 0.91$) and employed a 4-point Likert response format (1 = strongly disagree to 4 = strongly agree), with higher scores indicating greater internalized stigma.

2- Self-esteem was assessed using the Rosenberg Self-Esteem Scale (RSES), a widely used 10-item measure of global self-worth. Participants rated statements such as "I feel that I have a number of good qualities" on a 4-point scale, with total scores ranging from 10 to 40 (higher scores reflecting better self-esteem). The scale showed strong internal consistency ($\alpha = 0.89$) in this study.

3- Resilience was measured via the Connor-Davidson Resilience Scale (CD-RISC), Connor & Davidson (2003) a 25-item tool assessing the ability to adapt to adversity. Items (e.g., "I tend to bounce back after illness or hardship") were rated on a 5-point scale (0 = not true at all to 4 = true nearly all the time), yielding total scores from 0 to 100. The scale's reliability was high ($\alpha = 0.87$).

4- Finally, the Schizophrenia Quality of Life Scale (SQLS-R4) Wilkinson et al. (2000)-evaluated psychosocial functioning and cognitive vitality through 33 items. Participants indicated how frequently they experienced various challenges (0 = never to 4 = always), with higher total scores (0–132) indicating better quality of life. The scale demonstrated excellent reliability ($\alpha = 0.95$).

All instruments were administered in Arabic following a rigorous translation and back-translation process verified by psychiatric experts. Individual interviews lasting 30 – 40 minutes, ensuring privacy and minimizing distractions.

Data Collection Procedures

The data collection process followed a systematic approach to ensure ethical participation of individuals with schizophrenia while maintaining scientific rigor. The investigator initiated recruitment by coordinating with healthcare providers at the study sites. During planed meetings, the researcher thoroughly explained the study objectives, methodology, and participant eligibility criteria to clinical staff then assisted in identifying potential participants who met the study requirements.

For each prospective participant, the researcher conducted comprehensive orientation sessions detailing the study's purpose, procedures, and safeguards for participant rights. Particular emphasis was placed on explaining policies regarding data anonymity, confidentiality protections, and the consent process. Given the vulnerable nature of the population legal representatives (typically parents or siblings) are involved in the consent process. The researcher provided informational to both participants and

their representatives to reinforce understanding of the study parameters.

Following oral approval from legal representatives, the researcher scheduled individual appointments with Participants to completed the assessment measures, with an average completion time of 30 minutes. Researcher clarify any ambiguous questions and ensure data security.

Throughout the data collection period, the researcher maintained protecting confidentiality through secure storage research data. This comprehensive approach balanced scientific objectives with ethical obligations to this vulnerable population.

Data analysis

Data analysis was conducted using SPSS version 25 statistical software. The analytical approach incorporated both descriptive statistics to characterize the sample and key variables, and inferential statistics to examine relationships between variables. Correlation analyses were particularly important for determining the strength and direction of associations between internalized stigma, self-esteem, resilience, and quality of life outcomes. Throughout the analysis, statistical significance was set at the conventional $p<0.05$ threshold.

Ethical considerations

Ethical considerations were prioritized throughout the research process. All participants and their family members received detailed information about the study purpose, procedures, and their rights as research participants. Confidentiality was maintained through anonymous data collection procedures, and participants were assured that their clinical care would not be affected by their decision to participate or decline participation. These comprehensive methodological approaches ensured the collection of valid and reliable data while protecting participant welfare.

Results

The study included 150 participants with schizophrenia, consisting of 94 males (62.7%) and 56 females (37.3%). Participants had an average age of 42.0 years. Regarding educational background, half of the participants (50.7 %, n=76) had completed technical school diplomas. The majority (83.3%, n=125) were unmarried at the time of the study. The average age at which participants first developed schizophrenia was 25 years, with nearly half (49.3%, n=) reporting that their symptoms began between ages 20-29, making this the most common age range for illness onset (Table 1).

The study participants reported moderate levels of internalized stigma, with an average score of 65.75 out of a possible 116 (SD = 13.80). When examining the different aspects of stigma, participants scored highest on stereotype endorsement (mean = 16.40), indicating they often agreed with negative societal beliefs about mental illness. This was followed by feelings of alienation (mean = 13.25), social withdrawal (mean = 12.45), experiences of discrimination (mean = 11.75), and finally stigma resistance (mean = 11.90), which measures their ability to counteract stigma. Regarding other psychological measures, participants showed moderate levels of self-esteem with an average score of 29.85 (SD = 4.10) on a scale ranging from 10 to 40. Their resilience scores averaged 61.40 (SD = 17.50) on a 0-100 scale. Quality of life scores averaged 83.05 (SD = 22.90) on a scale that goes up to 132 (Table 2).

The analysis revealed significant relationships between the study variables. Internalized stigma showed strong negative correlations with self-esteem ($r = -0.72$, $p < 0.001$), resilience ($r = -0.62$, $p < 0.001$), and quality of life ($r = -0.59$, $p < 0.001$), indicating that higher levels of stigma were associated with lower self-worth, poorer coping abilities, and reduced life satisfaction. Conversely, quality of life demonstrated positive correlations with both self-esteem ($r = 0.70$, $p < 0.001$) and resilience ($r = 0.51$, $p < 0.001$), suggesting that individuals with higher self-esteem and better resilience tended to report better quality of life (Table 3).

The regression analysis revealed distinct mediating roles for self-esteem and resilience in the relationship between internalized stigma and quality of life. For self-esteem, the analysis demonstrated a full mediation effect: internalized stigma significantly reduced self-esteem ($\beta = -0.67$), which in turn strongly predicted quality of life ($\beta = 0.54$), accounting for 37.1% of the variance. This complete mediation (confirmed by Sobel test, $Z = -4.80$, $p < 0.001$) indicates that

stigma primarily damages quality of life by eroding self-worth. When self-esteem was considered, stigma's direct negative effect on quality of life became non-significant, suggesting interventions targeting self-esteem could effectively break this harmful pathway.

Resilience showed a different, partial mediation pattern. While internalized stigma reduced resilience (β = -0.57) and directly harmed quality of life (β = -0.54), resilience only partially offset this effect. When both factors were analyzed together, stigma's impact weakened but remained significant (β = -0.41), while resilience independently contributed to better quality of life (β = 0.23), explaining 25.3% of variance. The Sobel test confirmed this partial mediation (Z = -2.33, p = 0.020), indicating resilience provides important but incomplete protection against stigma's negative consequences (Figure 1).

Table (1): General Characteristics of the Participants (*N* = 150).

Variables	Mean ± SD or *n* (%)
Gender	
Men	94 (62.7)
Women	56 (37.3)
Age (yrs)	42.0 ± 10.4
20–29[a]	74 (49.3)
30–39[b]	37 (24.6)
40–49[c]	22 (14.6)
≥ 50[d]	17 (11.3)
Education	
Illiterate	16 (10.7)
Technical school diploma	76(50.7)
≥ College	58 (38.7)
Marital status	
No	125 (83.3)
Yes	25 (16.7)
Age of onset (yrs)	
< 20[a]	40 (26.7)
20–29[b]	73 (48.7)
≥ 30[c]	37 (24.6)

*Note.*SD = standard deviation; yrs = years.

Table (2): Levels of Internalized Stigma, Self-esteem, Resilience, and Quality of Life Among Participants ($N = 150$).

Variables	Categories	Range	Min	Max	Mean ± SD
Internalized stigma	Alienation	6–24	7	22	13.25 ± 3.15
	Stereotype endorsement	7–28	8	26	16.40 ± 3.85
	Discrimination experience	5–20	6	19	11.75 ± 2.65
	Social withdrawal	6–24	7	20	12.45 ± 2.95
	Stigma resistance	5–20	6	18	11.90 ± 2.35
	Total scores	29–116	34	100	65.75 ± 13.80
Self-esteem		10–40	18	40	29.85 ± 4.10
Resilience	Hardness	0–36	7	35	21.25 ± 6.10
	Persistence	0–32	3	31	20.85 ± 5.90
	Optimism	0–16	2	15	10.15 ± 2.90
	Support	0–8	2	8	5.10 ± 1.40
	Spiritual in nature	0–8	2	8	4.65 ± 1.55
	Total scores	0–100	21	95	61.40 ± 17.50
Quality of life	Psychosocial feelings QoL	0–80	5	78	50.30 ± 14.85
	Cognition/Vitality QoL	0–52	6	45	32.75 ± 8.90
	Total scores	0–132	19	128	83.05 ± 22.90

Table (3): Correlations among Internalized Stigma, Self-Esteem, Resilience, and Quality of Life ($N = 150$).

Variables	Internalized stigma	Self-esteem	Resilience	Quality of life
	r (*p*)	r (*p*)	r (*p*)	r (*p*)
Internalized stigma	-	–		
Self-esteem	–.68 (<.001)	-		
Resilience	–.60 (<.001)	.72 (<.001)	-	
Quality of life	–.55 (<.001)	.68 (<.001)	.54 (<.001)	

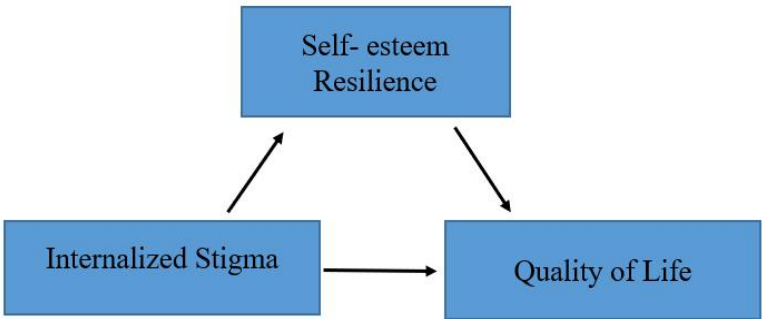

Figure (1): Effects of self-esteem and resilience on the relationship between internalized stigma and quality of life

Discussion

The present study yielded several important findings regarding schizophrenia onset patterns, internalized stigma, and psychological mediators of quality of life. Our results showed that about half of participants experienced disease onset between 20-29 years of age, which closely matches the findings of **Ran et al. (2015)** who established that schizophrenia typically manifests in late adolescence or early adulthood with gradual symptom development. This critical developmental period often leads to frequent relapses and hospital readmissions that significantly impact both patients and their families, creating substantial challenges for long-term disease management.

Regarding age distribution, approximately two-third of our sample fell within the 20-39 year range. This finding aligns with the epidemiological statistics reported by **Kim& Jang (2019),** who demonstrated that schizophrenia affects about 7 per 1000 persons in the 15-35 year age group, with a lifetime morbid risk of 7.2 per 1000 population at the median level. These consistent patterns across studies highlight the disproportionate burden of schizophrenia on young adults during their most productive years.

A key contribution of our research is the novel demonstration that both self-esteem and resilience serve as individual mediators in the relationship between internalized stigma and quality of life for schizophrenia patients. Notably, our participants showed lower mean internalized stigma scores compared to results from studies of hospitalized patients **(Lee & Park, 2017),** suggesting that hospitalization experiences may exacerbate internalized stigma. Among the stigma subscales, stereotype endorsement showed the highest mean score while stigma resistance scored lowest, replicating the pattern found by **Karakas et al. (2016).** This finding takes on added significance in light of **Yeong et al. (2017)** work showing that increased negative stereotype endorsement strongly correlates with negative symptoms and may further intensify social withdrawal behaviors.

The quality of life measurements in our outpatient sample yielded mean scores higher than the median value, consistent with previous outpatient studies using the same assessment instrument **(Crowe et al., 2016).** Our analysis revealed that better quality of life correlated strongly with three key factors: lower internalized stigma, higher self-esteem, and greater resilience. The strongest association emerged with self-esteem, followed by internalized stigma and then resilience. These results corroborate **Wartelsteiner et al. (2016)** findings about self-esteem's crucial role in determining quality of life for schizophrenia patients.

The observed relationships between these variables paint a compelling picture: internalized stigma negatively impacts self-esteem **(Lee & Park, 2017),** while experiences of discrimination lead to passive coping strategies that reduce resilience and ultimately diminish quality of life **(Crowe et al., 2016).** Our findings also support **Palmer et al. (2014)** conclusion that improving self-esteem enhances mental health and well-being, and that resilient individuals experience greater happiness. These consistent results across multiple studies strongly suggest that comprehensive intervention strategies should simultaneously address stigma reduction while actively building self-esteem and resilience to maximize quality of life improvements for people living with schizophrenia. The cumulative evidence indicates that such multidimensional approaches may offer the most promising path forward for enhancing psychosocial outcomes in this vulnerable population.

The study's analysis revealed crucial differences in how self-esteem and resilience operate in the stigma-quality of life relationship. Self-esteem demonstrated a full mediating effect, indicating that internalized stigma primarily impacts quality of life through its damaging effects on self-worth. This finding aligns with **Mashiach et al. (2013)** research showing the sequential relationship where stigma erodes self-esteem, which then diminishes quality of life. The profound impact of self-esteem is further supported by **Abiri et al. (2016),** who identified low self-esteem as a core psychological mechanism linking stigma to poor social and health outcomes. Notably, our results confirm that self-esteem outweighs symptom severity and sociodemographic

factors in predicting quality of life **(Holubova, 2018),** underscoring its critical role in community adaptation and recovery processes.

Resilience showed a more complex partial mediation pattern, where internalized stigma affected quality of life both directly and indirectly through resilience. This dual pathway corroborates **Crowe et al. (2016)** findings about stigma's direct impact on life satisfaction and its secondary effects through reduced resilience. The adaptive capacity of resilience - enabling flexible problem-solving and long-term coping with adversity - appears to provide some protection against stigma's harms, though not complete mitigation. This distinction between the two mediators has important clinical implications: while resilience-building helps buffer stigma's impact, self-esteem enhancement may be more crucial for fundamentally interrupting the stigma-to-quality of life pathway.

The study's findings suggest that cognitive-behavioral approaches targeting self-perceptions **(Morrison et al., 2016)** could effectively break the vicious cycle where stigma-induced negative self-views lead to social withdrawal. Such interventions align with **Corrigan and Rao's (2012)** observation that social stigma doesn't inevitably become internalized when individuals maintain strong self-worth. Our results gain particular relevance in Egypt's current mental health landscape, where recent policy reforms emphasize normalizing life for mentally ill individuals. By demonstrating the protective roles of self-esteem and resilience, this study provides empirical support for psychosocial interventions that complement these policy changes, offering practical strategies to improve quality of life amid persistent social stigma.

Conclusion

This study revealed that self-esteem and resilience significantly influence how internalized stigma affects quality of life in individuals with schizophrenia. The findings indicate that internalized stigma primarily impacts quality of life by reducing self-esteem, while resilience serves as a partial protective factor. These results suggest that clinical interventions should prioritize strengthening self-esteem and building resilience, as these approaches may be more effective for improving quality of life than direct attempts to reduce internalized stigma. For optimal outcomes in community-based care, mental health professionals should implement targeted strategies that enhance patients' self-worth and adaptive coping skills, thereby mitigating the negative consequences of stigma on daily functioning and well-being.

Recommendations

Based on the study findings, the following recommendations are proposed to enhance quality of life for individuals with schizophrenia:

1. Self-Esteem Enhancement Programs – Targeted interventions to improve self-esteem should be prioritized, as they are particularly effective in counteracting the negative effects of internalized stigma and enhancing overall well-being.
2. Resilience-Building Interventions – Mental health professionals should develop and evaluate programs that strengthen resilience, helping patients cope with stigma and adversity more effectively.
3. Cognitive Restructuring Techniques - Patients should receive support in challenging negative self-perceptions and stigma-related beliefs through cognitive-behavioral strategies, promoting healthier self-evaluations.
4. Societal Stigma Reduction Efforts – Public awareness campaigns and anti-stigma initiatives are essential to reduce discrimination not only against individuals with schizophrenia but also their caregivers.
5. Comprehensive Psychosocial Interventions - Integrated programs combining psychoeducation, cognitive-behavioral therapy, goal-setting, and social skills training should be implemented to bolster self-esteem and treatment engagement.
6. Longitudinal Research on Resilience – Future studies should explore resilience as a dynamic factor across different stages of schizophrenia to identify key influences and intervention points.

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