The International Journal of Indian Psychology
ISSN 2348-5396 (Online) | ISSN: 2349-3429 (Print)
Volume 13, Issue 3, July- September, 2025
DIP: 18.01.224.20251303, DOI: 10.25215/1303.224
https://www.ijip.in

Case Study

Evaluating Psychological Interventions in Geriatric Populations: A Case Study Approach

Esha Gusain[1]*, Dr. Rita Kumar[2]

ABSTRACT

This paper presents a clinical internship experience at *VataVriksh Parent Care*, a specialized facility offering both residential and daycare services to older adults with cognitive impairments. The focus of the study is on two female clients, Mrs. B and Mrs. P, diagnosed with varying stages of dementia. Through comprehensive psychological assessments—including the MOCA, MMSE, ACE-III, and GDS-SF—and tailored intervention programs involving cognitive stimulation, behavioral strategies, orientation therapy, and physical exercises, the effectiveness of non-pharmacological interventions in dementia care was explored. While Mrs. B, a full-time resident, demonstrated severe cognitive decline and high dependency, Mrs. P, attending the daycare program, showed mild impairment with marked improvement during the course of intervention. The findings suggest that individualized care in a structured environment can enhance cognitive and emotional outcomes in older adults. This report also reflects on the broader implications of geriatric care in India, the evolving role of family support, and the necessity of multidisciplinary approaches in managing age-related cognitive disorders.

Keywords: *Dementia, Geriatric Care, Cognitive Interventions, Non-Pharmacological Therapy, VataVriksh Parent Care, Case Study*

Dementia is a progressive neurological disorder that leads to cognitive decline, affecting memory, executive functions, language, and the ability to perform daily activities (World Health Organization [WHO], 2021). With the aging population increasing, the need for effective dementia care has become more crucial. Cognitive impairment in dementia patients varies, ranging from mild cognitive dysfunction to severe impairment, influencing their quality of life and requiring specialized interventions (Alzheimer's Association, 2023).

VataVriksh Parent Care, a specialized parent (senior) care facility, provides structured daycare services for elderly individuals with cognitive and functional impairments. Their approach includes comprehensive assessments, individualized intervention plans, and regular monitoring to track cognitive and functional progress. The facility employs multidisciplinary

[1]Student, BA+MA Integrated Clinical Psychology (5th year), Amity Institute of Psychology and Allied Sciences, Amity University, Noida
[2]Professor and Guide, Amity Institute of Psychology and Allied Sciences, Amity University, Noida
*Corresponding Author

Received: May 15, 2025; Revision Received: August 21, 2025; Accepted: August 25, 2025

strategies, including neuropsychological assessments, physical therapy, and cognitive stimulation therapy, to enhance patients' quality of life.

This case study examines two elderly female patients, Mrs. P and Mrs. B, both of whom were diagnosed with varying degrees of dementia and received treatment at Vatavriksh Parent Care. While Mrs. P exhibited moderate cognitive impairment with signs of mild dementia, Mrs. B presented with more advanced dementia. Through structured interventions, both individuals experienced improvements in certain functional aspects. This study aims to analyze their cognitive and functional assessments, intervention strategies, and progress over time, highlighting the effectiveness of a multidisciplinary approach in dementia care.

Assessments Used

A battery of neuropsychological and functional assessments was administered to evaluate cognitive impairment, functional decline, emotional well-being, and risk factors associated with dementia. These assessments provided a baseline for tracking changes over time and formulating individualized care plans.

1. **Montreal Cognitive Assessment (MoCA)**: MoCA is a brief cognitive screening tool designed to detect mild cognitive impairment by assessing attention, memory, executive functions, language, visuospatial abilities, and orientation (Nasreddine et al., 2005). A score below 26 indicates cognitive impairment, with lower scores reflecting greater dysfunction.
2. **Mini-Mental State Examination (MMSE)**: MMSE is a widely used cognitive assessment tool that evaluates orientation, memory, attention, language, and visuospatial skills (Folstein, Folstein, & McHugh, 1975). It provides a quick measure of cognitive status, with scores below 24 suggesting cognitive decline.
3. **Addenbrooke's Cognitive Examination III (ACE-III)**: This test comprehensively assesses cognitive domains, including attention, memory, fluency, language, and visuospatial skills, and is often used to differentiate between types of dementia (Hsieh et al., 2013).
4. **Trail Making Test (TMT)**: TMT assesses processing speed, cognitive flexibility, and executive function. Part A measures visual-motor tracking, while Part B evaluates cognitive flexibility (Reitan, 1958). Longer completion times indicate deficits in executive functioning.
5. **Geriatric Depression Scale (GDS-Short Form):** The GDS is a self-report measure that assesses depressive symptoms in older adults. It is crucial in distinguishing between cognitive decline due to depression and dementia-related impairment (Yesavage et al., 1982).
6. **Functional Assessment Staging Tool (FAST Scale)**: FAST is used to assess the stages of dementia, providing insight into the functional decline of individuals by measuring their ability to perform daily tasks (Reisberg, 1988).
7. **Fall Risk Evaluation**: This assessment measures balance, gait stability, and environmental hazards to estimate the risk of falls, a common issue among dementia patients (Shumway-Cook et al., 1997).
8. **Pain Assessment**: Chronic pain, particularly in joints and muscles, is common in elderly individuals with dementia and can impact their quality of life. A structured pain assessment helps in determining pain levels and developing appropriate pain management strategies (Herr et al., 2006).
9. **Wandering Risk Assessment**: This tool assesses the likelihood of wandering, a common behavior in dementia patients that increases safety risks (Algase et al., 2001).

Interventions Implemented

The intervention strategies implemented at Vatavriksh Parent Care focused on cognitive stimulation, functional rehabilitation, mental health support, and physical therapy. These interventions aimed to slow cognitive decline, improve daily functioning, and enhance the overall well-being of the patients.

1. **Cognitive Stimulation Therapy (CST)**: CST involves structured cognitive exercises designed to enhance memory, attention, and problem-solving skills in individuals with dementia (Spector et al., 2003). Activities such as puzzles, word association games, and reminiscence therapy were incorporated.
2. **Physical Therapy and Mobility Training**: Given the high fall risk in dementia patients, tailored physical therapy sessions focused on improving balance, strength, and coordination (Telenius, Engedal, & Bergland, 2015).
3. **Medication Review and Management**: Regular review of medications was conducted to ensure that no pharmacological treatments contributed to cognitive decline or increased fall risk (Sink, Holden, & Yaffe, 2005).
4. **Behavioral and Psychological Interventions**: Strategies such as validation therapy, mindfulness, and structured routines were employed to reduce anxiety, agitation, and depressive symptoms (Feil, 2002).
5. **Family Counseling and Caregiver Support**: Dementia affects not only the patient but also their caregivers. Family members received counseling and education on managing dementia-related challenges (Brodaty & Donkin, 2009).
6. **Environmental Modifications**: Safety modifications, including non-slip flooring, clear signage, and secure outdoor spaces, were implemented to reduce wandering risks and fall hazards (Marquardt et al., 2011).

By employing these assessments and interventions, Vatavriksh Parent Care aimed to provide a holistic approach to dementia care. The following sections will present detailed case analyses of Mrs. P and Mrs. B, focusing on their cognitive profiles, functional limitations, and response to interventions.

METHODOLOGY

Setting and Participants

This study was conducted at Vatavriksh Parent Care, a specialized geriatric care facility that provides daycare and residential services for elderly individuals with cognitive and functional impairments. The two participants in this study, Mrs. P and Mrs. B, were selected based on their cognitive decline and need for structured care. Mrs. P, an 84-year-old female, was enrolled in the daycare program, while Mrs. B, an 82-year-old female, was a full-time resident requiring 24/7 assistance due to advanced dementia and mobility impairments.

Assessments

A comprehensive assessment battery was administered to evaluate cognitive function, psychiatric symptoms, functional abilities, and risk factors. The following assessments were conducted:

1. Montreal Cognitive Assessment (MOCA; Nasreddine et al., 2005)
2. Mini-Mental State Examination (MMSE; Folstein, Folstein, & McHugh, 1975
3. Addenbrooke's Cognitive Examination III (ACE-III; Hsieh et al., 2013)
4. Trail Making Test (TMT; Reitan, 1958)
5. Geriatric Depression Scale – Short Form (GDS-SF; Yesavage & Sheikh, 1986)
6. Functional Assessment Staging Tool (FAST; Reisberg, 1988)
7. Fall Risk Evaluation (Tinetti, 1986)

8. Pain Assessment (Wong-Baker FACES Pain Scale; Wong & Baker, 1988)
9. Wandering Risk Assessment (Algase et al., 2007)

Based on the assessments, a structured intervention plan was implemented for both participants, focusing on cognitive rehabilitation, physical well-being, and emotional support. The interventions included:

Common Interventions for Both Participants:

- **Daily Orientation Therapy**: Reinforcing awareness of time, place, and person to reduce confusion and anxiety.
- **Memory Games and Puzzles**: Activities designed to enhance recall and cognitive processing.
- **Cognitive Stimulation Activities**: Structured tasks targeting problem-solving, verbal fluency, and attention.
- **Yoga and Physical Exercise**: Gentle movement-based therapy to promote flexibility, balance, and mental well-being.

Individualized Interventions:

- **Mrs. P:** Engaged in cognitive exercises at the daycare facility, benefitting from social interactions and structured therapy sessions aimed at maintaining cognitive abilities and delaying further decline.
- **Mrs. B:** Required a more intensive approach, including 24/7 assistance, wheelchair support, and structured daily routines. Behavioral strategies were employed to manage agitation, reduce wandering tendencies, and enhance her quality of life through sensory-based interventions.

All interventions were supervised by trained professionals, including clinical psychologists, occupational therapists, and caregivers, ensuring that each participant received individualized and evidence-based care. Regular assessments were conducted to monitor progress and adjust interventions accordingly.

Records of Learning and Supervision

During the internship at VataVriksh Parent Care, regular supervision and structured learning experiences played a crucial role in enhancing clinical competency.

- **Supervisory Guidance**: Throughout the internship, supervision was provided by experienced clinical psychologists **Dr. Subodh Kumar** and geriatric specialists **Dr. Ramesh Goyal**. Supervision sessions focused on refining assessment techniques, ethical considerations in elderly care, and tailoring interventions to each participant's needs. Feedback on assessment administration, intervention planning, and patient interactions was instrumental in shaping clinical decision-making.
- **Skill Development**: The internship provided hands-on experience in conducting neuropsychological assessments, formulating individualized care plans, and implementing structured cognitive interventions. Exposure to both daycare and residential care settings allowed for a deeper understanding of how dementia severity influences intervention strategies.
- **Challenges and Ethical Considerations:** One of the primary challenges faced was addressing the emotional distress and resistance exhibited by participants, especially in intervention adherence. Ethical considerations, such as informed consent and maintaining dignity in care, were prioritized. The importance of multidisciplinary

collaboration with caregivers, physiotherapists, and psychologists became evident in ensuring a holistic care approach.

- **Impact on Professional Growth**: The internship reinforced the significance of personalized interventions in dementia care. Exposure to real-world cases enhanced problem-solving skills, adaptability in intervention strategies, and the ability to communicate effectively with both patients and caregivers. This experience has contributed significantly to professional development and preparedness for future clinical practice.

CASE STUDY: MRS. B

Background Information

Mrs. B is an 82-year-old female who resides permanently at Vatavriksh Parent Care due to advanced dementia. She requires **24/7 assistance** and uses a **wheelchair** for mobility. Her condition is characterized by significant cognitive decline, agitation, and behavioral disturbances.

Assessment Findings

Mrs. B was assessed using a comprehensive battery, including the **MOCA, MMSE, ACE-III, GDS-SF, FAST, and Wandering Risk Assessment.** The results indicated:

- **Severe cognitive impairment** on MOCA and ACE-III scores.
- **Late-stage dementia** as per the FAST scale.
- **High risk for wandering** and behavioral agitation.
- **Limited verbal communication** and dependence in activities of daily living (ADLs).

Intervention Plan

Mrs. B's care plan focused on intensive cognitive and behavioral interventions. These included:

- **Daily orientation therapy** to maintain basic environmental awareness.
- **Structured routines** to reduce confusion and promote predictability.
- **Memory games and sensory activities**, adjusted to her cognitive level.
- **Yoga and light exercises**, adapted to her physical limitations, conducted with caregiver support.
- **Behavioral strategies** to manage agitation and improve mood. All interventions were administered in collaboration with clinical psychologists and trained caregivers.

CASE STUDY: MRS. P

Background Information

Mrs. P is an 84-year-old woman enrolled in the **daycare program** at Vatavriksh Parent Care. She presented with **mild dementia** and early signs of cognitive decline but showed **significant improvement** during the intervention period.

Assessment Findings

Mrs. P was evaluated using tools such as the **MMSE, MOCA, ACE-III, GDS-SF, and TMT.** Her results showed:

- **Mild to moderate impairment** on ACE-III and MOCA.
- **Low depression scores**, suggesting preserved emotional functioning.
- **Normal motor skills**, and no current fall risk.

Intervention Plan

Mrs. P participated in a structured cognitive stimulation and wellness program, including:

- **Cognitive games and memory puzzles** tailored to maintain existing abilities.
- **Daily orientation sessions** to reinforce temporal and spatial awareness.
- **Yoga and group exercises** to maintain physical health.
- **Social interaction** through daycare activities, promoting engagement and reducing isolation.
- **Regular feedback sessions** with caregivers and professionals for individualized goal-setting.

Mrs. P showed **improved engagement, enhanced recall, and better emotional regulation**, highlighting the impact of non-pharmacological interventions in mild dementia care.

Table 1. Comparative Summary of Intervention and Progress: Case Studies of Mrs. P and Mrs. B

Domain	Mrs. P	Mrs. B
Age	84 years	82 years
Living Arrangement	Daycare Facility; returns home after daily sessions	Full-time Residential Care with 24/7 support
Diagnosis	Mild Dementia with functional independence	Moderate to Severe Dementia with cognitive and mobility impairments
Mobility	Walks independently	Wheelchair-bound
Cognitive Functioning	Mild cognitive decline; responsive to tasks and group sessions	Severe disorientation, memory loss, and reduced verbal output
Psychological Symptoms	Occasional forgetfulness, moments of confusion, low frustration	Agitation, withdrawal, minimal engagement, emotional dysregulation
Key Assessments Used	MOCA, MMSE, ACE-III, GDS-SF, TMT	MOCA, MMSE, ACE-III, FAST, Pain Scale, Fall & Wandering Risk Assessments
Common Interventions (by Intern)	Daily orientation, memory games, puzzles, cognitive activities, yoga sessions	Daily orientation, memory games, puzzles, cognitive activities, yoga sessions
Individualized Interventions	Structured social interaction; cognitive preservation focus	Behavioral strategies, sensory stimulation, structured routines, 24/7 care
Your Involvement	Facilitated cognitive sessions, engaged in therapeutic games, documented progress	Conducted MOCA, participated in sensory and memory-based therapy, monitored behavior
Progress Observed	Noticeable improvement in engagement, orientation, and mood	Minor but stable improvement in agitation and responsiveness with regular therapy
Care Focus	Cognitive enhancement, maintenance, and emotional upliftment	Comfort care, safety, emotional regulation, and behavior management

RESULTS

The findings from the assessments and interventions provided insights into the cognitive, functional, and psychological changes in both participants over the course of the study.

Cognitive and Functional Outcomes

- **Mrs. P:**
  - Initial assessments indicated mild dementia with moderate impairments in memory, executive function, and attention.
  - After structured interventions, her **MOCA and MMSE scores showed slight improvements**, particularly in recall and orientation.
  - Her **ACE-III assessment indicated better verbal fluency and attention span**, while her **TMT performance improved slightly**, demonstrating increased cognitive flexibility.
  - Functionally, she remained largely independent, with no significant decline in daily activities.
- **Mrs. B:**
  - Presented with **advanced dementia**, requiring **constant supervision and assistance**.
  - Cognitive assessments revealed severe deficits, with **minimal improvement post-intervention** due to the progressive nature of her condition.
  - Her **FAST staging remained at a severe level**, with continued difficulties in speech, recognition, and mobility.
  - The **Tinetti Fall Risk Assessment showed high susceptibility to falls**, necessitating continuous wheelchair support.

Psychological and Behavioral Changes

- **Mrs. P:**
  - Showed **a reduction in depressive symptoms**, as indicated by her **GDS-SF score improvement**.
  - Became **more engaged in social interactions** at the daycare facility, displaying increased participation in group activities.
  - Anxiety levels related to disorientation reduced due to consistent daily orientation therapy.
- **Mrs. B:**
  - Displayed **persistent behavioral symptoms**, including **agitation and wandering tendencies**.
  - Sensory-based interventions helped in **momentary reductions in distress and agitation**, but long-term effects were minimal.
  - The need for **24/7 caregiver assistance remained unchanged**, emphasizing the severity of her cognitive decline.

Overall Impact of Interventions

- Cognitive stimulation activities, such as **memory games and puzzles, contributed to maintaining cognitive function** in Mrs. P.
- Physical activities and exercise **helped both participants maintain some level of mobility and reduce rigidity**.
- While Mrs. P exhibited **measurable cognitive and emotional benefits**, Mrs. B's condition **remained relatively stable with supportive care** rather than noticeable improvement.

DISCUSSION

This case-based study highlights the differential impact of structured psychological and cognitive interventions on two elderly patients with varying severity levels of dementia—Mrs. P and Mrs. B. Despite both being diagnosed with dementia, their cognitive profiles, living arrangements, and responsiveness to interventions presented notable contrasts, offering insights into the complexity of geriatric psychological care.

Mrs. P, who attends the daycare facility, demonstrated improved cognitive engagement and reduced symptoms of disorientation over the course of the intervention. Her response supports findings from previous studies indicating that social interactions, routine stimulation, and community-based care environments significantly slow down cognitive decline in mild to moderate dementia (Chen et al., 2022; Olazarán et al., 2010). Daycare-based interventions have been associated with better psychological well-being due to their semi-independent model, which promotes both familiarity and autonomy (Phillipson et al., 2014).

In contrast, Mrs. B—who resides full-time at the facility and has more advanced dementia—exhibited slower cognitive progress and required intensive support. This aligns with literature suggesting that the stage of dementia significantly influences the efficacy of non-pharmacological interventions (Livingston et al., 2017). For individuals in later stages, maintaining emotional comfort, preventing behavioral disturbances, and promoting sensory stimulation often become primary goals over cognitive restoration (Alves et al., 2020).

Both participants benefitted from daily orientation therapy, cognitive activities, memory games, yoga, and physical exercise, emphasizing the importance of **multi-component interventions**. These approaches, especially cognitive stimulation therapy and structured routines, are evidenced to help maintain existing cognitive functions and delay further decline (Woods et al., 2012). However, the difference in outcomes also suggests that intervention effectiveness is moderated by baseline functioning, family involvement, and setting-specific dynamics (Clare & Woods, 2004).

Furthermore, Mrs. B's increased dependency and use of a wheelchair highlight the significance of physical mobility in treatment outcomes. Physical impairment is both a risk factor and consequence of cognitive decline (Montero-Odasso et al., 2019). Her case illustrates that **multidisciplinary care**, including physiotherapy and behavioral management, is crucial in managing severe dementia.

It Is also worth noting the Instit"tion'l context of the interventions—Vatavriksh Parent Care, known for its integrative geriatric services, provided a safe, structured, and empathetic environment that may have positively influenced treatment compliance and emotional stability. Such care facilities are increasingly relevant in India's aging demographic landscape, where traditional family-based caregiving is evolving (Patel & Prince, 2001).

While the present cases demonstrate the adaptability of interventions based on individual needs, the limited sample size restricts generalizability. Future studies could include larger, diverse samples to examine longitudinal effects and interaction with socio-cultural variables.

Table 2. Summary of Case Comparison: Mrs. P and Mrs. B

Domain	Mrs. P	Mrs. B
Age	84 years	82 years
Living Arrangement	Daycare Facility	Full-time Residential Care
Diagnosis	Mild Dementia	Moderate to Severe Dementia
Mobility	Independent	Wheelchair-bound
Cognitive Status	Mild decline; engaged well	Significant decline; poor memory and disorientation
Psychological Symptoms	Occasional confusion, low frustration	Agitation, withdrawal, impaired speech
Key Assessments Used	MOCA, MMSE, ACE-III, GDS-SF	MOCA, MMSE, ACE-III, FAST, Pain & Wandering Risk Assessment
Interventions	Daily orientation, memory games, puzzles, cognitive activities, yoga	Same as Mrs. P + 24/7 behavioral support and sensory stimulation
Response to Intervention	Noticeable improvement in recall and orientation	Minor improvement; reduced behavioral symptoms with consistency
Care Focus	Cognitive preservation and stimulation	Behavioral management, comfort, and emotional support

CONCLUSION

The present study highlights the impact of structured cognitive and behavioral interventions in managing dementia-related symptoms among elderly individuals. The cases of Mrs. P and Mrs. B illustrate how tailored approaches can significantly improve cognitive engagement, emotional well-being, and overall quality of life. While Mrs. P, with mild dementia, demonstrated notable improvements in daily functioning and cognitive abilities through daycare interventions, Mrs. B, with advanced dementia, required intensive, round-the-clock support to manage behavioral symptoms and maintain stability.

The findings underscore the necessity of early assessment and continuous intervention in dementia care. Cognitive stimulation, physical exercise, and personalized behavioral strategies play a crucial role in slowing cognitive decline and enhancing daily functioning. Furthermore, the structured support system at Vatavriksh Parent Care, involving multidisciplinary professionals, proved essential in addressing both cognitive and emotional challenges. Future research should explore the long-term effectiveness of such interventions across different dementia stages and settings, integrating advancements in technology and personalized care plans for optimal outcomes.

REFERENCES

Algase, D. L., Moore, D. H., Vandeweerd, C., & Gavin-Dreschnack, D. J. (2007). Mapping the maze of terms and definitions in dementia-related wandering: A review. *The Gerontologist, 47*(4), 460–466. https://doi.org/10.1093/geront/47.4.460

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). https://doi.org/10.1176/appi.books.9780890425596

Folstein, M. F., Folstein, S. E., & McHugh, P. R. (1975). "Mini-mental state." A practical method for grading the cognitive state of patients for the clinician. *Journal of Psychiatric Research, 12*(3), 189–198. https://doi.org/10.1016/0022-3956(75)90026-6

Hsieh, S., Schubert, S., Hoon, C., Mioshi, E., & Hodges, J. R. (2013). Validation of the Addenbrooke's Cognitive Examination III in frontotemporal dementia and Alzheimer's disease. *Dementia and Geriatric Cognitive Disorders, 36*(3–4), 242–250 . https://doi.org/10.1159/000351671

Nasreddine, Z. S., Phillips, N. A., Bédirian, V., Charbonneau, S., Whitehead, V., Collin, I., ... & Chertkow, H. (2005). The Montreal Cognitive Assessment, MoCA: A brief screening tool for mild cognitive impairment. *Journal of the American Geriatrics Society, 53*(4), 695–699. https://doi.org/10.1111/j.1532-5415.2005.53221.x

Reisberg, B. (1988). Functional assessment staging (FAST). *Psychopharmacology Bulletin, 24*(4), 653–659.

Reitan, R. M. (1958). Validity of the Trail Making Test as an indicator of organic brain damage. *Perceptual and Motor Skills, 8*(3), 271–276. https://doi.org/10.2466/pms.1958.8.3.271

Tinetti, M. E. (1986). Performance-oriented assessment of mobility problems in elderly patients. *Journal of the American Geriatrics Society, 34*(2), 119–126. https://doi.org/10.1111/j.1532-5415.1986.tb05480.x

Wong, D. L., & Baker, C. M. (1988). Pain in children: Comparison of assessment scales. *Pediatric Nursing, 14*(1), 9–17.

Yesavage, J. A., & Sheikh, J. I. (1986). Geriatric Depression Scale (GDS): Recent evidence and development of a shorter version. *Clinical Gerontologist, 5*(1–2), 165–173. https://doi.org/10.1300/J018v05n01_09

Acknowledgment

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interest

The author(s) declared no conflict of interest.

How to cite this article: Gusain, E. & Kumar, R. (2025). Evaluating Psychological Interventions in Geriatric Populations: A Case Study Approach. *International Journal of Indian Psychology*, *13*(3)*,* 2434-2443. DIP:18.01.224.20251303, DOI:10.25215/1303.224