

Vitality maintenance among older adults in residential care facilities: a qualitative study of the dual perspectives of older adults and multidisciplinary staff

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Abstract

Background: Vitality is a core domain of intrinsic capacity and healthy aging., yet how older adults living in residential care facilities perceive and maintain vitality remains underexplored. Evidence also rarely integrates resident and staff perspectives. This study aimed to explore how older adults and multidisciplinary staff perceive vitality in residential care facilities and identify the barriers, facilitators, and current practices related to maintaining residents' vitality.

Methods: A descriptive qualitative study was conducted between September 2025 and January 2026 in residential care facilities in Shanghai, China. Using purposive sampling, 30 older adults (stratified according to four vitality profiles identified in a prior latent profile analysis) and 30 staff members with diverse roles were recruited. Face-to-face interviews were conducted using semi-structured guides. The data were analyzed using thematic analysis.

Results: Twelve sub-themes emerged and were grouped into the following themes: (1) multidimensional perceptions of vitality—from "being able to do" to "being seen," with "micro-vitality" in residents with functional impairment; (2) multiple barriers spanning physical decline and fear of falling, shrinking social circles, psychological withdrawal, loss of perceived usefulness, and the disparity between "home" and "institution"; (3) facilitators summarized as "being noticed, having things to do, and having choices"—peer modeling, proactive invitation, simple and pleasurable activities, and preservation of autonomy and dignity; and (4) multidisciplinary vitality support—layered service delivery and compassionate communication coexisting with staffing shortages and a slow paradigm shift from "doing for" to "enabling."

Conclusions: Vitality in residential care is an integrated, person-centered construct. Support strategies should be stratified by vitality profile, prioritizing proactive invitation, collective participation, and autonomy to meet residents' needs for relatedness, competence, and autonomy, and should be grounded in adequate staffing and an enabling-care philosophy.

1. Background

Population aging is one of the most significant global social trends of the twenty-first century. The World Health Organization (WHO) defines healthy aging as the process of developing and maintaining the functional ability that enables well-being in older age, emphasizing the dynamic interaction between an individual's intrinsic capacity and environment [1, 2]. By the end of 2024, China's population aged 60 years and over had reached 310 million, accounting for 22.0% of the total population, and the country had 406,000 registered residential care facilities and settings with 7.993 million beds [3]. With the growing care needs of older adults with disability and cognitive impairment, institutional care has become a key component of China's older care system, and the WHO Decade of Healthy Ageing (2021–2030) explicitly extends its scope to all care settings [4]. However, residents of care facilities are typically older, with multimorbidity, functional limitations, high prevalence of frailty, and low levels of physical

activity [5]. Therefore, maintaining their vitality poses a serious challenge and constitutes an important topic for nursing research.

Vitality is a core construct in gerontological and nursing science. The early model of successful aging emphasized low risk of disease, high cognitive and physical function, and active engagement with life [6]. The WHO healthy ageing framework identifies vitality as a domain of intrinsic capacity, with its working definition centering on physiological underpinnings such as energy metabolism and neuromuscular function [7, 8]. Similarly, the Guideline for the Assessment and Maintenance of Intrinsic Capacity in Older Adults in China operationalizes the vitality domain primarily through nutrition-related physiological indicators [9]. In contrast, the psychological literature defines subjective vitality as one's experienced sense of energy and aliveness [10]. A recent state-of-the-science review concluded that no consensus exists on the definition of vitality in older adults, that measurement is fragmented, and that existing evidence severely lacks the perspectives of older adults themselves [11]. Thus, the meaning of vitality for older adults living in residential care facilities remains an open empirical question.

Previous research has suggested that the institutional environment itself may erode residents' vitality. Qualitative evidence indicates that institutional life compresses autonomy, weakens social networks, and interrupts long-held roles [12, 13]. Norwegian research on "thriving" in nursing homes has shown that residents' attitudes, meaningful activity, peer relationships, and opportunities to go out are core contributing aspects [14]. Moreover, the quality of interpersonal relationships profoundly shapes care experiences [15]. Regarding activity implementation, systematic reviews have shown that physical activity programs in older care homes face multiple barriers, including staffing shortages, resident fatigue and low motivation, and insufficient staff training [16]. A mixed-methods systematic review, informed by the social ecological model, has found that intrapersonal factors (poor health) were the most common barriers, whereas interpersonal factors (social support), the most common facilitators [5]. Research from staff perspectives has shown that activity programs in nursing homes are largely staff-directed and under-resourced, forcing staff to "go beyond" their formal duties to meet individual needs [17]; Dutch studies have also revealed that group activities can engage residents with dementia through mechanisms of "response facilitation" within social contexts [18]. Collectively, this evidence indicates that maintaining vitality in residential care is a systemic process shaped by the interaction among individual, interpersonal, and organizational factors.

Nevertheless, important gaps remain. First, research on vitality has been dominated by quantitative measurement, and its conceptualization has insufficiently incorporated older adults' perspectives, particularly rich descriptions of the vitality experiences of residents with functional impairment [11]. Second, existing qualitative studies have typically adopted a single perspective, focusing either on residents [12, 13] or on staff [17], and few have integrated the two. Third, most evidence comes from Western, high-resource contexts, whereas Chinese residential care is characterized by distinct staffing patterns, care cultures, and family norms [19, 20], limiting the transferability of the findings. Fourth, although quantitative studies have identified heterogeneous vitality subgroups among older adults [21,

22], qualitative research has not used such subgroup frameworks to explore how residents with different vitality levels experience vitality; the "micro-vitality" of those with disability has rarely been articulated.

A prior work has surveyed more than 600 older adults in residential care facilities in Shanghai, identifying four vitality profiles through latent profile analysis: Profiles C1 (low physiological, psychological, and social vitality), C2 (low physiological vitality with acceptable psychological and social vitality), C3 (acceptable physiological vitality with low psychological and social vitality), and C4 (high vitality across all three domains). In addition, across the four groups, psychological vitality scored the lowest among the three dimensions. [23]. This prior quantitative work described residents' vitality; however, the reasons for its maintenance or loss, as well as appropriate strategies for sustaining it, can only be identified through in-depth exploration of residents' lived experiences.

Against this background, the present study explored the perceived meaning of vitality, its barriers and facilitators, and current support practices from the perspectives of older adults and multidisciplinary staff in residential care facilities. The specific research questions were (1) how do older adults perceive and understand vitality? (2) what barriers do they face in maintaining vitality within the facility? (3) what factors and practices facilitate vitality maintenance? and (4) what roles do multidisciplinary teams play in supporting vitality, and what challenges do they encounter?

2. Methods

2.1 Design

A descriptive qualitative design was adopted. Descriptive qualitative research aims to provide a straightforward, comprehensive description of a phenomenon that stays close to the data. It is appropriate when the research question is exploratory and participants' authentic experiences need to be represented [24]. The study was reported in accordance with the Consolidated Criteria for Reporting Qualitative Research (COREQ) [25].

2.2 Participants

Purposive sampling was used to recruit older adults and staff members from several residential care facilities in Shanghai, China, between September 2025 and January 2026. The sampling of older adults aimed to include the four vitality profiles identified in our prior latent profile analysis [23], thereby capturing the representation of the experiences of older residents at different vitality levels. Staff were recruited from management, medical, nursing, rehabilitation, direct-care, social work, and logistics areas to capture multidisciplinary perspectives.

Inclusion criteria for older adults were (a) aged 60 years or over; (b) residing in the facility for at least one month; (c) conscious and able to communicate verbally at a basic level; and (d) provision of informed consent and voluntary participation. Exclusion criteria were (a) severe cognitive impairment precluding communication; (b) critical illness; and (c) severe psychiatric disorders.

Inclusion criteria for staff were (a) at least one year of employment in the facility; (b) direct involvement in resident care, activity organization, or facility management; and (c) provision of informed consent and voluntary participation. Exclusion criteria were (a) interns or trainees on rotation and (b) staff on leave or secondment.

Thirty older adults (11 men and 19 women) participated (mean age 76.5 years, SD 5.3, range 66–86 years), with length of stay between 10 and 72 months. Their educational attainment ranged from none to a master's degree, and activities of daily living scores spanned 45 to 95, indicating partial dependence to full independence. According to the prior latent profile analysis [23], the sample comprised seven residents in Profile C1; eight, C2; eight, C3; and seven, C4. Major chronic conditions included hypertension, diabetes, coronary heart disease, sequelae of stroke, osteoporosis, arthritis and chronic obstructive pulmonary disease, with multimorbidity in some residents (Table 1).

Table 1
Characteristics of participating older adults (n = 30)

ID	Vitality profile	Age	Sex	Length of stay (months)	Education	Major chronic conditions	ADL score
P01	C1	81	F	48	Primary school	Hypertension, coronary heart disease	55
P02	C1	84	M	36	Junior high	Sequelae of stroke, diabetes	50
P03	C1	79	F	60	Illiterate	Hypertension, osteoporosis	60
P04	C1	86	F	24	Primary school	Early Alzheimer's disease, hypertension	50
P05	C1	77	M	72	Junior high	COPD(Chronic Obstructive Pulmonary Disease), coronary heart disease	55
P06	C1	83	F	18	Primary school	Diabetes, knee osteoarthritis	60
P07	C1	80	F	42	Illiterate	Hypertension, sequelae of cerebral infarction	45
P08	C2	76	F	30	Junior high	Hypertension	75
P09	C2	72	M	15	Associate degree	Diabetes	80
P10	C2	79	F	54	Primary school	Osteoporosis	70
P11	C2	74	M	42	Senior high	Coronary heart disease	75
P12	C2	81	F	21	Junior high	Hypertension, mild arthritis	70
P13	C2	70	F	12	Associate degree	None	85
P14	C2	78	M	48	Junior high	Diabetes	75
P15	C2	83	F	60	Primary school	Hypertension	65
P16	C3	80	M	36	Senior high	Hypertension, prostatic hyperplasia	80

Note: C1, low physiological, psychological and social vitality; C2, low physiological vitality with acceptable psychological and social vitality; C3, acceptable physiological vitality with low psychological and social vitality; C4, high vitality across all three domains.;ADL, Activities of Daily Living; COPD, Chronic Obstructive Pulmonary Disease

ID	Vitality profile	Age	Sex	Length of stay (months)	Education	Major chronic conditions	ADL score
P17	C3	75	F	27	Associate degree	Hypothyroidism	85
P18	C3	82	M	54	Primary school	Coronary heart disease, hearing impairment	75
P19	C3	71	F	18	Bachelor	Mild anxiety	90
P20	C3	78	M	42	Junior high	Hypertension, gout	80
P21	C3	84	F	63	Primary school	Osteoporosis, mild depression	70
P22	C3	76	M	30	Senior high	None	85
P23	C3	73	F	24	Junior high	Arthritis	80
P24	C4	68	F	14	Bachelor	None	95
P25	C4	72	M	20	Associate degree	Hypertension (well controlled)	90
P26	C4	66	F	10	Senior high	None	95
P27	C4	75	M	28	Master	Mild arthritis	85
P28	C4	70	F	36	Associate degree	Diabetes (diet-controlled)	90
P29	C4	69	M	18	Bachelor	None	95
P30	C4	73	F	42	Technical secondary school	Hypertension	85
Note: C1, low physiological, psychological and social vitality; C2, low physiological vitality with acceptable psychological and social vitality; C3, acceptable physiological vitality with low psychological and social vitality; C4, high vitality across all three domains.;ADL, Activities of Daily Living; COPD, Chronic Obstructive Pulmonary Disease							

Thirty staff members (five men and 25 women; age 23–68 years) participated (mean age 43.3 years, SD 13.0, range 23–68 years), including four administrators (two directors, one deputy director, and one assistant director), six social workers (including two supervisors), three rehabilitation therapists, three physicians, one nurse, three nursing managers, six care aides, two customer-service staff, and two logistics staff. Professional titles ranged from junior (n = 8) through intermediate (n = 11) to senior (n = 6), with 1–46 years of service (Table 2). Sampling continued until information saturation—when no new important information emerged from the interviews [26].

Table 2
Characteristics of participating staff members (n = 30)

No.	Sex	Age	Department	Position	Professional title	Years of service
1	F	39	Administration	Assistant director	Intermediate	18
2	F	26	Administration	Social worker	Junior	1
3	F	48	Administration	Social work supervisor	Intermediate	26
4	F	37	Medical	Rehabilitation therapist	Intermediate	16
5	F	23	Medical	Rehabilitation therapist	Junior	1
6	F	25	Medical	Rehabilitation therapist	Junior	8
7	F	32	Medical	Nurse	Junior	10
8	M	31	Service	Customer service	Junior	9
9	F	52	Nursing	Care aide	Senior	30
10	M	68	Medical	Physician	Intermediate	46
11	M	28	Medical	Physician	Junior	4
12	F	48	Administration	Director	Senior	25
13	F	46	Social work	Social work supervisor	Senior	23
14	F	27	Social work	Social worker	Junior	2
15	M	49	Medical rehabilitation	Physician	Senior	26
16	F	47	Nursing	Head nurse (specialist care unit)	Senior	27
17	F	32	Nursing	Head nurse (specialist care unit)	Intermediate	10
18	F	43	Nursing	Head nurse	Intermediate	24
19	F	59	Nursing	Care aide	Senior	40
20	F	55	Nursing	Care aide	Intermediate	36
21	F	58	Administration	Social worker	Intermediate	28
22	F	58	Medical	Deputy director	Intermediate	30
23	M	62	Administration	Director	Intermediate	29
24	F	55	Nursing	Care aide	Intermediate	35
25	F	48	Administration	Deputy director	Intermediate	26

No.	Sex	Age	Department	Position	Professional title	Years of service
26	M	50	Nursing	Care aide	Junior	15
27	M	53	Nursing	Care aide	Junior	20
28	F	48	Social work	Social worker	Intermediate	25
29	F	26	Service	Customer service	Junior	4
30	F	25	Social work	Social worker	Junior	3

2.3 Data collection

Data were collected through semi-structured, in-depth interviews. Drawing on a prior quantitative study [23], the research team developed separate interview guides for older adults and staff through literature review and consultation with experts in geriatric nursing and facility management (Appendix A).

The guide for older adults covered (a) satisfaction with daily life and its reasons; (b) factors that help or hinder maintaining energy and a sense of aliveness; (c) facilitators of and barriers to a healthy lifestyle; (d) sources of pleasant mood; (e) experiences of low mood, with causes and resolution; (f) comparisons between the environment in the facility and home; (g) comparisons between interpersonal relationships; (h) unmet needs and desired help; and (i) suggestions for how the facility could better support their vitality.

The staff guide focused on (a) their perception of a "vital" older adult; (b) factors influencing residents' vitality; (c) their current work in maintaining residents' vitality; (d) difficulties encountered; and (e) potential improvements.

Interviews were conducted in quiet rooms within the facilities and lasted 30–60 minutes each. With participants' consent, interviews were audio-recorded, and non-verbal information was documented in field notes.

2.4 Data analysis

Audio recordings were transcribed verbatim within 24 hours of each interview and analyzed using thematic analysis [27], following these steps: (1) repeated reading of the transcripts to become familiar with the data; (2) open coding of vitality-related content; (3) grouping similar codes into sub-themes; (4) generating core themes; (5) defining and naming themes; and (6) producing the analytic report. Data were collected and analyzed concurrently until saturation. Two researchers coded the data independently and cross-checked the codes; discrepancies were resolved through discussion. The researchers kept reflexive journals to scrutinize the influence of their own standpoints on the analysis and to ensure interpretations remained faithful to the data [28].

2.5 Ethical considerations

The study was conducted in accordance with the Declaration of Helsinki and approved by the Ethics Committee of the School of Nursing, Fudan University (approval number: IRB#2025-07-2). Prior to the interviews, the purpose, methods, and confidentiality principles were explained, and written informed consent was obtained. Participants were anonymized through coded identifiers, and data were used solely for this study. When a participant showed evident emotional distress during an interview, the interview was paused and the participant was comforted; those expressing extreme negative emotions were offered psychological support and referral in accordance with the study's ethics protocol.

2.6 Rigor

Trustworthiness was safeguarded according to the criteria mentioned by Lincoln and Guba [29,30]. Credibility was supported by the first author's three-month fieldwork immersion in the facilities, triangulation across multiple roles and facilities, and member checking (i.e., sharing emerging findings with some participants for confirmation). Transferability was enhanced through thick description of the settings and participant characteristics. Dependability was ensured by a clear audit trail of analytic decisions and confirmability, by reflexive journals documenting researchers' biases and interpretive processes.

3. Results

Participant characteristics are presented in Tables 1 and 2.

In-depth analysis of the interviews with 30 older adults and 30 staff members yielded four themes and twelve sub-themes (Table 3).

[Table 1 here]

[Table 2 here]

Table 3
Themes and sub-themes

Theme	Sub-themes
1: multidimensional perceptions of vitality—from "being able to do" to "being seen"	1.1 The core of vitality is "still being able to do things myself." 1.2 "Having things to do and something to look forward to." 1.3 "Somebody still remembers me." 1.4 "Micro-vitality" in dependent-care unit.
2: multiple barriers to maintaining vitality	2.1 Physical decline and fear of falling. 2.2 Shrinking social circles and psychological withdrawal. 2.3 Loss of perceived usefulness. 2.4 Disparity between "home" and "institution."
3: facilitators of vitality maintenance—"being noticed, having things to do, having choices"	3.1 Social interaction and peer modeling. 3.2 Proactive invitation and accompaniment. 3.3 Simple, pleasurable activities matching residents' preferences. 3.4 Autonomy and dignity.
4: multidisciplinary perspectives on vitality support—practical wisdom and persistent dilemmas	4.1 Layered service delivery. 4.2 Compassionate communication. 4.3 Mechanisms and dilemmas of multidisciplinary collaboration. 4.4 The challenge of paradigm shift.

3.1 Theme 1: multidimensional perceptions of vitality—from "being able to do" to "being seen"

3.1.1 The core of vitality is "still being able to do things myself"

Most residents understood vitality in a plain, consistent way—to be able to move by oneself was to have vitality, and "doing it myself" was the central point.

"Vitality is being able to move by myself—I can eat and go to the toilet on my own; I don't have to call the aide for everything." (P08, 87, independent)

"I think being able to move means having vitality. Old Zhang next door used to walk in the corridor every day; now he lies in bed and cannot move. Would you say he still has vitality? No, it's gone." (P15, 82, semi-dependent)

Similarly, the staff regarded self-care ability as the foundation of vitality. One physician noted:

"Vitality—well, even though he is very old, he can basically take care of himself; he manages all his daily care." (D1, physician)

3.1.2 Vitality means "having things to do and something to look forward to"

Many residents linked vitality directly to having meaningful occupations.

"Every morning I take a walk downstairs, then, read the newspaper, and in the afternoon, I play cards with my old friends. I'm busy all day—busier than I was at home." (P03, 85, independent)

"Some people have nothing to do and just sit there staring blankly; they seem to age faster. I have things to do, so I don't feel old yet." (P11, 79, independent)

Residents with declining functional ability expressed a sense of loss at "wanting but no longer being able to":

"I used to dance, but my legs won't allow it now, so I stopped. Sometimes I listen to music in my room and hum along. Thinking of the old days, I feel a bit sad." (P17, 78, walker user)

3.1.3 Vitality means "somebody still remembers me"

"Being seen" and "being remembered" were important emotional dimensions of the residents' understanding of vitality.

"My daughter visits every week. When she comes, I'm especially happy—for those two days I feel my spirits are particularly good." (P14, 84, semi-dependent)

"What I fear most is being ignored. Sometimes when the aides are busy, they don't say a single word to me all day, and I feel the whole day has been wasted." (P22, 81, bedridden)

"There's a young care aide who is so nice—every time she passes by, she greets me: 'Hello, Grandma!' Just that one greeting makes me feel the day is all right." (P19, 83, mobile but rarely leaves room)

3.1.4 "Micro-vitality" among residents of the dependent-care unit

For residents with severely limited mobility, vitality took subtler forms—improved sleep and appetite, longer time spent sitting in a wheelchair, and willingness to chat and interact. A head nurse described:

"In the dependent-care unit, whether a resident has vitality mainly shows in their mental state and mood. Even if their ability to express themselves is limited, as long as their sleep improves, their appetite gets better, they are willing to chat and interact, they sit in the wheelchair for longer, or they join simple activities—these are all seen as signs of improved vitality. Unlike the traditional image of singing and dancing, we focus more on changes in residents' everyday spirit and energy." (H1, head nurse)

A care aide had a similar observation:

"Even if he can't do it, if you wheel him out every day and he just sits there, he's very happy—smiling." (C2, care aide)

3.2 Theme 2: multiple barriers to maintaining vitality—body, mind, environment, and relationships

3.2.1 Physical decline and fear of falling: "I want to move, but I can't"

Physical decline was the barrier that was most commonly acknowledged by both the residents and staff.

"I know I should walk more, but my legs have no strength—after a few steps I'm panting. I want to move, but I just can't..." (P26, 88, bedridden)

"I used to walk three laps around the square downstairs every day; now my knees are bad, and even one lap hurts..." (P12, 76, walker user)

Many residents identified fear of falling as a psychological barrier layered upon physical decline:

"It's not that I don't want to walk—I'm afraid of falling. One fall and it's all over. Old Wang next door never got up after his fall..." (P09, 80, semi-dependent)

One physician summarized the medical perspective:

"If you want them to move and join activities—well, the intention is there, but they lack the strength: they want to move and want to do things, but their physical condition just can't support it." (J1, physician)

3.2.2 Shrinking social circles and psychological withdrawal: "If nobody invites me, I won't go"

The absence of social companionship was an important reason for residents' reluctance to participate in activities.

"There are activities downstairs, but going alone is meaningless—I don't know anyone there. If someone called out to me, I would go." (P21, 82, independent but rarely goes out)

"The old friend I used to live with has moved to the nursing-care unit, and now I'm alone. We used to watch TV and eat together; now I don't even feel like watching." (P16, 79, independent)

Many residents expressed the hope that "someone would invite or accompany me":

"If someone came to invite me, I would go. I'd be too embarrassed to go by myself—everyone else is sitting there, and walking in alone feels awkward." (P20, 83, mobile)

3.2.3 Loss of perceived usefulness: "I feel useless now"

The loss of a sense of value was a deep-seated factor undermining psychological vitality.

"At home, when my son and daughter-in-law went to work, I could still cook for them and pick up my grandchild. Here, there's nothing for me to do, so I feel useless." (P18, 77, independent)

"I'm just a useless person now—eating and sleeping and needing others to look after me. There's not much meaning in living." (P25, 86, bedridden)

Some residents preserved a sense of value through "still being able to help others":

"Although I walk slowly, I can still fetch the newspaper for Old Zhou next door. When he says thank you, I feel my day hasn't been wasted." (P06, 84, independent)

3.2.4 Disparity between "home" and "institution": environmental and relational discontinuity

The residents commonly reported a marked gap between the institutional environment and home life.

"At home I could get up whenever I wanted; here you must get up at fixed times for meals. Like a schoolchild—everything is scheduled." (P13, 81, independent)

"The old friends I lived with before are all gone. I don't know the people here, and I don't know how to start a conversation with them." (P24, 83, semi-dependent)

The staff also observed the impact of environmental transition on vitality. One nurse noted:

"Moving from familiar surroundings to a strange environment—at first, psychologically, they cannot accept it... Collective life affects residents' personality, habits, and behavior." (N1, nurse)

3.3 Theme 3: facilitators of vitality maintenance—"being noticed, having things to do, having choices"

3.3.1 Social interaction and peer modeling: "the atmosphere picks up together"

Peer modeling was repeatedly confirmed as an effective facilitator of vitality.

"Singing together with everyone makes time pass quickly and puts me in a good mood." (P05, 82, independent)

"Doing things alone is no fun; doing them together gives you energy. When everyone laughs, I laugh along." (P10, 83, mobile)

Similarly, the staff observed the power of collective atmosphere. One head nurse noted:

"Some residents talk at cross purposes, but the interaction itself makes them happy. A retired teacher takes the initiative to lead singing with her roommates—off-key, but everyone enjoys it." (H1, head nurse)

A care aide agreed:

"When everyone does activities together, that atmosphere picks up... Those who are mentally clear can do it; even if they don't do it well, they still have the ability to use their hands. They may not do it well, but they participate—and participating makes them happy." (C1, care aide)

3.3.2 Proactive invitation and accompaniment: "pull me along—I can't step out on my own"

Being proactively invited was a pivotal determinant of participation.

"If someone comes to invite me, I'll go. I'd be too embarrassed to go by myself." (P20, 83, mobile)

"If the aide says, 'Grandma Zhang, there's singing today—are you coming?' I'll go. If nobody calls me, I won't." (P07, 78, independent)

3.3.3 Simple, pleasurable activities matching residents' preferences

The residents' preferred activities shared three characteristics: simple (undemanding), lively (full of people), and social (allowing interaction). The most popular activities included group singing and revolutionary songs ("sitting together singing makes time fly"), finger and clapping exercises ("no need to stand—done sitting down"), card and board games ("something to do and someone to talk to"), and watching television or films together ("watching together is lively").

Residents with dementia showed distinctive responses to old songs:

"He no longer recognizes his daughter or his wife, but as soon as we sing 'The East Is Red,' he can join in the second line." (C1, describing a resident with dementia)

The residents also voiced clear dissatisfaction with activities that were "too difficult" or "too childish":

"Some activities are too hard—I can't keep up, so I stopped going." (P21, 80, independent)

"Doing handicrafts [is] meant for children—paper folding and such—I find meaningless." (P04, 82, independent)

3.3.4 Autonomy and dignity: "let me still do some things myself"

The residents wished to be allowed and encouraged to "do it themselves," consistent with staff's perceived need to shift from "doing for" to "enabling function."

"I can feed myself, but the aide insists on feeding me. I say I'll do it myself, and she says, 'You're slow; let me do it.' But I want to eat by myself." (P23, 83, semi-dependent)

"I fold my own clothes. Even if they're not folded well, they're folded by me. Don't do everything for me." (P27, 80, semi-dependent)

3.4 Theme 4: multidisciplinary perspectives on vitality support—practical wisdom and persistent dilemmas

3.4.1 Layered service delivery: from the hall to the bedside

The rehabilitation therapists described a tiered service model:

"Some come to the hall on their own for training; [for] some, we go upstairs to bring down; and for some, we do rehabilitation at the bedside." (R2, rehabilitation therapist)

"Care aides will proactively wheel residents down, and we also go to the floors to pick them up." (R3, rehabilitation therapist)

Social workers promoted residents' social participation through activity organization:

"On the dementia floors, we bring the activity materials to the unit; on non-dementia floors, residents take part in activities in the communal areas." (S1, social work manager)

3.4.2 Compassionate communication: staff as providers of emotional support

Care aides played a key role as "providers of emotional value" in vitality maintenance.

"Residents are like children—you have to coax them. Speak softly and gently, never harshly." (C3, care aide)

"Chatting about the past gives them a sense of achievement—'what I used to do, what I accomplished.' Especially residents who used to be leaders or teachers; reminiscing makes them proud." (C4, care aide)

For residents with dementia experiencing delusions, care aides had developed the principle of "never contradicting—going along":

"Never say 'no, that didn't happen.' Say, 'All right, Auntie, I'll go check the surveillance camera for you in a bit.'" (C1, care aide)

3.4.3 Mechanisms and dilemmas of multidisciplinary collaboration

A medical director described the chronic disease management pathway:

"For hypertension and diabetes, we monitor daily. When an abnormality is found, the nurse makes an initial assessment, informs the physician, and the physician observes or adjusts medication; health education is then provided to the resident, the family, and the care aides." (M1, medical director)

However, staffing shortage was a pervasive dilemma. One physician admitted:

"One care aide has to look after so many residents that she can only complete basic daily care—there's no time to chat. When a resident wants to talk, all she can say is, 'Let's chat next time when I'm free—I have no time right now.'" (J1, physician)

A head nurse described an ideal:

"Every dependent resident would get five to ten minutes of dedicated companionship each day—but that would take enormous staffing." (H1, head nurse)

Social work capacity was similarly strained:

"It would be best to have a dedicated 'caring listener' to chat with them; at present the social work department has no dedicated time slots for companionship." (J1, physician)

3.4.4 The challenge of paradigm shift: from "doing for" to "enabling function"

The shift from "replacement of function" to "activation of function" was a deep-seated challenge. One social work manager observed:

"Rather than having staff elicit residents' remaining function, it feels easier to just do things for them. Shifting this mindset is very difficult." (S1, social work manager)

Families held similar assumptions:

"Some families think residents come here to enjoy services; they don't understand why residents should do things themselves." (S1, social work manager)

4. Discussion

4.1 The multidimensional meaning of vitality: from function-oriented to "micro-vitality"

This study found that older adults' understanding of vitality shifted from a functional orientation toward an existential one—vitality was not only about "being able to do" but also "having things to do," "being noticed," and "feeling useful." In the dependent-care unit, vitality was redefined as "smiling while sitting among others" or "sleeping and eating better"—a phenomenon the researchers term as "micro-vitality." This finding contrasts with the WHO working definition of vitality capacity, which centers on energy metabolism and neuromuscular function [8]. For residents with functional limitations, the center of gravity of vitality shifted from physiological reserve toward a sense of presence and connection in everyday life, echoing the emphasis of subjective vitality theory on energy and aliveness [10]. A recent review has noted that existing conceptualizations and measurements of vitality lack older adults' perspectives [11]. Drawing on residents' own language, this study depicted a layered landscape of vitality—"able to do—having something to look forward to—being seen—micro-vitality"—providing qualitative grounding for a concept framework closer to older adults' experience. It also implies that support strategies must be stratified: independent-living units should emphasize activity variety and sense of achievement, whereas dependent-care units should start from "micro-care," maintaining residents' sense of presence through simple repetitive activities, old songs, and collective atmosphere. This resonates with the findings of McAuliffe et al. [17], who observed that activity staff's core goal is "making people happy and meeting their needs" rather than simply pursuing participation rates; for residents with disability, vitality may consist of improved mental state and mood rather than recovery of physical capacity.

4.2 The systemic nature of barriers: interwoven intrapersonal, interpersonal, and organizational levels

Residents' vitality maintenance faced barriers at three levels—intrapersonal, interpersonal and organizational. This is consistent with the multi-level interactive mechanisms revealed by Baidya et al.'s [5] social ecological review and with the basic propositions of social ecological theory [34]. Poor physical condition was the primary barrier at the intrapersonal level; absent social companionship and loss of perceived usefulness, interpersonal; and institutionalized routines and understaffing, organizational.

Particularly noteworthy was the phenomenon of the "lowest psychological vitality"—residents commonly felt "nobody talks to me," "I'm useless," and "nobody invites me," which converges with our prior quantitative finding that psychological vitality scored the lowest among the three dimensions [23]. Similarly, one physician in this study observed that "At the current stage, psychological problems may outweigh physical health problems" (J1). Previous qualitative research has documented residents' restricted autonomy, shrinking sociability, and the experience of being "managed" in institutional care

[12, 13]. These findings suggest that vitality support in residential care should extend beyond physical maintenance to include interpersonal and psychological interventions.

4.3 The keys to facilitation: proactive invitation, peer modeling, and choice

Three key facilitators emerged: proactive invitation ("if someone calls me, I'll go"), peer modeling ("doing it together gives you energy"), and choice ("let me choose myself"). These correspond to the basic psychological needs of relatedness (being invited and needed), competence (keeping up when doing things together) and autonomy, respectively, posited by self-determination theory [31]. Longitudinal studies in Dutch nursing homes have confirmed that satisfaction of autonomy, relatedness, and competence predicts residents' well-being [32, 33]. Furthermore, Hammink et al. [18] showed that social interaction in group contexts is a key mechanism engaging residents with dementia. The findings of the present study support this theoretical pathway from a Chinese institutional context. Intervention design should attend not only to "what activities are offered" but also to "how they are offered"—a personal invitation is more effective than a posted notice, collective formats are preferred over individual ones, and granting choice stimulates participation more than uniform scheduling does.

4.4 Practical wisdom and real-world dilemmas of multidisciplinary collaboration

Staff interviews revealed rich practical wisdom—rehabilitation therapists' layered services, social workers' activity organization, and care aides' communication skills ("never contradicting—going along" and "reminiscing for a sense of achievement") and chronic disease monitoring within multidisciplinary routines. Collectively, these practices point to a core proposition: vitality maintenance is a systematic project integrating medicine, rehabilitation, social work, and nursing. McAuliffe et al. [17] found that despite resource constraints, Australian activity staff still "went beyond" their formal duties to provide individualized support; in this study, practices such as care aides "wheeling residents out every day," and a physician acting as a "walking placebo" reflected similar organizational commitment. However, "going beyond" may also imply unsustainability—understaffing was the core dilemma across all roles: care aides had no time to chat, social workers could not schedule companionship, and rehabilitation staffing was limited, leaving ideals such as "five to ten minutes of dedicated daily companionship" difficult to realize. Therefore, future vitality support programs must treat staffing configuration as a precondition.

4.5 Implications for stratified vitality support programs

The prior latent profile analysis [23] and the present interviews indicate that residents are not a homogeneous group; therefore, vitality support requires differentiation. Residents with high vitality (Profile C4) prioritize diverse activities and self-realization arenas, such as interest clubs and volunteer roles. For Profile C2 (acceptable psychological-social vitality but limited physical capacity), tiered rehabilitation services should target delaying functional decline. For Profile C3 (adequate physical capacity but low psychological-social vitality), proactive invitation, peer pairing, and family involvement

are key entry points. Finally, for Profile C1 (globally low vitality), the focus should be on maintaining "micro-vitality" through sensory stimulation, old songs, and companionship-based interaction. This "assess–stratify–match" approach aligns with the WHO's intrinsic-capacity-based integrated care vision [1, 7, 8] and with the Chinese guideline on assessing and maintaining intrinsic capacity across care settings [9], and it offers a framework for developing and testing nursing interventions.

4.6 Limitations

This study has several limitations. First, all facilities were located in Shanghai; therefore, their staffing patterns and management models carry regional characteristics. Consequently, transferability to other regions should be considered cautiously. Second, owing to the inclusion criteria, older adults with severe cognitive impairment could not be interviewed directly, and data on "micro-vitality" in the dependent-care unit were partly derived from staff observations rather than residents' own accounts. Third, as the interviews included evaluations of facility services, social desirability bias may have led participants to under-report negative experiences. Fourth, the researchers' three-month fieldwork fostered familiarity with some participants, which facilitated depth but may have introduced bias; reflexive journaling and dual independent coding were used to mitigate this. Finally, family members' perspectives were not included, leaving the influence of the family system on residents' vitality for future research. Future studies could build on the thematic framework developed here to design and test stratified, profile-based vitality support interventions.

5. Conclusions

Through semi-structured interviews of 30 older adults and 30 multidisciplinary staff members, this study revealed the multidimensional meaning of vitality in older adults in residential care facilities, as well as its barriers and facilitators. Residents understood vitality at three levels—"being able to do," "having things to do," and "being seen," with "micro-vitality" evident in the dependent-care unit. Vitality maintenance was impeded by physical decline, psychological withdrawal, loss of perceived usefulness, and environmental and relational discrepancies between home and institution. Proactive invitation, peer modeling, and choice emerged as key facilitators. Multidisciplinary collaboration had generated abundant practice wisdom, while understaffing remained a universal constraint. These findings provide an empirical basis for constructing profile-stratified vitality support programs in residential care facilities.

The findings suggest that (1) facilities should establish "proactive invitation" mechanisms, embedding one-to-one invitations into the daily workflows of care aides and social workers, with particular attention to residents who feel embarrassed to join; (2) activity design should follow the principles of "simple, lively, and social," with simple repetitive activities, old songs, and collective atmosphere, maintaining "micro-vitality" in dependent-care units; (3) an "enabling function" care philosophy should be promoted through staff training and family communication, shifting from "doing for" residents toward maximizing what residents do for themselves; (4) vitality assessment should be incorporated into care planning, with stratified support according to vitality profiles; and (5) management should reserve staffing time for

relational care so that "a few dedicated minutes each day" becomes a feasible standard rather than an aspiration.

Abbreviations

WHO

the World Health Organization

ADL

Activities of Daily Living

COPD

Chronic Obstructive Pulmonary Disease

Declarations

Ethics approval and consent to participate

The study was performed in accordance with the Declaration of Helsinki and approved by the Ethics Committee of the School of Nursing, Fudan University (approval number: IRB#2025-07-2). Written informed consent was obtained from all participants prior to data collection.

Consent for publication

Written informed consent for the publication of anonymised interview quotations and related details was obtained from all participants. No identifying images or personal details of participants are reported in this manuscript.

Clinical trial number

Not applicable.

Availability of data and materials

The datasets generated and analysed during the current study are not publicly available due to privacy and ethical requirements, but are available from the corresponding author on reasonable request.

Competing interests

The authors declare that they have no competing interests.

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Authors' contributions

YW, YuS, JW, YiS and YG made substantial contributions to the study. YW: Conceptualization, Methodology, Investigation, Data curation, Formal analysis, Writing - original draft. YuS: Investigation, Data curation, Formal analysis. JW: Supervision, Project administration, Funding acquisition, Writing - review & editing. YiS and YG: Conceptualization, Supervision. All authors read and approved the final manuscript.

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