

Confronting barriers to co-creation in aged care settings

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Abstract

Purpose – Co-creation is increasingly recognised as an approach to improving aged care services, yet its implementation continues to encounter substantial barriers. Drawing on Social Exchange Theory (SET), this study aims to investigate barriers that hinder co-creation in aged care settings and their impact on co-creation development.

Design/methodology/approach – Using a qualitative case study approach, data were collected from managers, employees, and clients across two Australian aged care organisations through interviews, focus groups, and observation and participation. Thematic analysis identified two interconnected sets of barriers to co-creation development, namely overt barriers (i.e. consisting resource limitations and structural inadequacy) and covert barriers (i.e. client insecurity, staff burnout, and relational distrust).

Findings – The study illuminates both the individual impact and the dynamic interplay between overt and covert barriers, thereby deepening the understanding of co-creation processes within aged care organisations. While overt barriers restrict the availability of resources, covert barriers undermine the relational foundation of exchange. By delineating how structural deficiencies and psychological dynamics disrupt reciprocal engagement, this study advances understanding of the barriers to co-creation development.

Practical implications – For practitioners in the aged care sector, the findings highlight the importance of integrated interventions that address relational and structural aspects simultaneously and maximise services to clients by attending to overt resource needs and covert relational dynamics to develop more interdependent and reciprocal relationships and more successful co-creation outcomes.

Originality/value – This study enriches Social Exchange Theory by proposing a dual-barrier framework with triadic exchange dynamics, offering a dynamic and empirically grounded explanation of how structural and psychological barriers jointly undermine co-creation in aged care.

Keywords Australia, Aged care organisations, Co-creation, Barriers, Needs of older people, Social exchange theory

Paper type Research article

1. Introduction

With global populations ageing rapidly, aged care systems around the world are facing increasing pressure to meet the complex and diverse needs of older adults (Wang *et al.*, 2020). The World Health Organization (2025) has estimated that by 2030, one in six people globally will be over 60. This demographic transformation is even more stark in Australia, with an estimated 21–23% of the population to be made up of older people by 2066 (Australian Institute of Health and Welfare, 2024). In this study, “older people” refers to individuals aged 65 years and above, following the definition of the Australian Institute of Health and Welfare



(2024). As demand for aged care services continues to grow, the sector faces mounting systemic challenges, notably limited funding, workforce shortages, and inconsistent service quality. Recent national reviews, including the [Royal Commission into Aged Care Quality and Safety \(2021\)](#), have highlighted systemic shortcomings in responsiveness, flexibility, and client voice. Subsequent reforms—such as the Aged Care Act 2024 and the Strengthened Quality Standards—now mandate person-centred and participatory care, making Australia a timely context for examining barriers to co-creation in aged care settings. Building on this policy shift, co-creation has emerged as a promising strategy for reform, encouraging clients to move beyond passive receipt of care to collaborate actively with staff in service design ([Patrício et al., 2020](#)).

Co-creation is a collaborative process in which organisations, employees, and clients work together to produce service value ([McColl-Kennedy et al., 2017](#)). Conceptualised as a multi-party exchange system, its stability hinges on the smooth flow and perceived fair distribution of resources ([Hyder et al., 2024](#)). However, drawing on social exchange theory (SET), this system fractures when actors perceive that their contributions are insufficiently recognised or reciprocated, leading to withdrawal, indifference, or resistance ([Cropanzano et al., 2005](#)). In the aged care setting, such relational imbalances can manifest as organisational unresponsiveness, emotional disengagement among staff, and diminishing client motivation to participate, undermining the development of co-creation.

While the existing literature has examined the potential benefits and pathways of co-creation, the mechanisms underlying its failure remain under-investigated. Accordingly, this study aims to examine the barriers that undermine co-creation in aged care settings through a triadic social exchange perspective. Specifically, existing studies present three primary gaps. First, some literature focuses on positive outcomes, such as client's satisfaction and empowerment ([McColl-Kennedy et al., 2017](#)). Second, others views failure through the outcome-centric lens of “value co-destruction”, offering limited insight into the processual barriers that disrupt collaboration ([Echeverri and Skålén, 2021](#)). Third, empirical studies tend to privilege the client perspective, giving relatively less attention to other key stakeholders such as employees and organisational management ([Vogus et al., 2020](#)), thereby overlooking the inherently triadic and interdependent nature of aged care service systems.

To address these gaps, this study draws on SET to examine the existing barriers that prevent the effective interactions among management, employees, and clients within aged care co-creation practices. In doing so, this study addresses the following research questions through a qualitative case study of two aged care providers in Australia: (1) What are the barriers to co-creation in aged care settings? (2) To what extent do those barriers affect co-creation development?

This study contributes to the literature and practice in three areas. First, it complements Social Exchange Theory (SET) by shifting the analytical focus from static barriers to a dynamic mechanism of exchange failure. Second, it extends the application of SET in aged care from a dyadic to a triadic ecosystem. Third, it provides actionable frameworks for practitioners to design more resilient, equitable, and sustainable participatory mechanisms.

The rest of this paper is organised as follows. [Section 2](#) reviews the key literature on SET and co-creation, laying the conceptual foundation for the study. [Section 3](#) describes the research design and methods. [Section 4](#) presents the main findings of the research, structured around the overt–covert barrier framework. [Section 5](#) discusses the theoretical contributions and practical implications. It also highlights the limitations of this study and offers suggestions for future research.

2. Literature review

This study begins by reviewing the relevant literature, using SET to understand how key stakeholders engage with one another throughout the co-creation process. It also sets the stage by outlining key concepts associated with co-creation in aged care settings, which provides the necessary background for the research that follows.

2.1 Social exchange theory

SET posits that social relationships rest fundamentally on the reciprocal exchange of resources (Homans, 1958; Emerson, 1987). While initial formulations emphasised tangible transactions, such as services or rewards, recent developments underscore the crucial role of intangible exchanges—trust, respect, emotional safety—in sustaining long-term relational engagement (Cropanzano *et al.*, 2017) making it particularly relevant in service settings where relational quality is central to outcomes.

Within service management, SET provides a lens to examine the interdependent triad of organisations, employees, and clients. For instance, organisations that reward employee contributions foster greater loyalty and trust (Ahmad *et al.*, 2023), empowered employees demonstrate proactive behaviours (Kalra *et al.*, 2024), and clients who perceive responsiveness build emotional attachment (Hyder *et al.*, 2024). These interactions form the basis of service co-creation, where value is jointly produced through collaboration and relational alignment across all actors (McColl-Kennedy *et al.*, 2012; Casidy *et al.*, 2020). In the context of aged care, value is co-created through this triadic linkage (Gill and White, 2008). Each leg of the triad constitutes a social exchange with interdependent expectations: the organisation supports the employees, the employees deliver care to the client, and the clients trust and engage with the organisation.

However, existing SET-based research predominantly maps the mechanisms of clients' satisfaction and commitment while overlooking the dynamics of exchange failure among the interdependent triad of organisations, employees, and clients. When their specific inputs, such as client feedback, staff effort, are ignored or undervalued, clients and employees may disengage or withdraw (Kalra *et al.*, 2024). Thus, it is critical to understand not just what builds exchange relationships, but also what erodes them. Understanding these erosive mechanisms is particularly vital in aged care, where high emotional intensity and dependency mean that negative relational cues can rapidly dismantle a client's willingness to participate (Kahana and Kahana, 2018; Pham *et al.*, 2021).

To address these theoretical gaps, we extend SET by introducing a dual-barrier framework of overt and covert barriers that is based on SET's foundational distinction between the exchange of economic/material resources and social/psychological resources (Blau, 1964; Cropanzano *et al.*, 2005). Our definitions explicitly leverage this core SET principle: overt barriers are defined as structural or visible obstacles within the service system that disrupt the natural flow of economic/material resources. These barriers are visible within the formal system and are often acknowledged by all actors. In contrast, covert barriers emerge within the domain of socio-emotional resource exchange, encompassing affective constructs such as trust, respect, emotional safety, and perceived fairness (Cropanzano *et al.*, 2017). These are less visible, often subjective, and may be unintentionally reinforced by the system. These two types of barriers align with SET's dual emphasis on the exchange of economic/material resources and social/psychological resources (Blau, 1964; Cropanzano *et al.*, 2005). Crucially, we argue that overt and covert barriers are analytically distinct yet dynamically interrelated rather than forming a simple dichotomy. Instead, structural deficits can gradually trigger psychological withdrawal, and psychological withdrawal can exacerbate structural inefficiencies.

This study extends SET in three meaningful ways. First, it operationalises the concept of psychological exchange failure by identifying covert barriers. Second, it applies a triadic lens to aged care, revealing how an imbalance in one relationship (e.g. management–employee) can negatively impact another (e.g. employee–client). Third, by focusing on overt and covert barriers, this research complements SET with a dynamic element of exchange degradation.

Together, these contributions extend the theoretical application of SET in service research and respond to recent calls for a deeper understanding of relational failure mechanisms in aged care ecosystems (Ahmad *et al.*, 2023).

2.2 Co-creation in aged care

Co-creation is defined as the active collaboration and innovative problem-solving among various stakeholders across all initiative phases—from problem identification to evaluation of changes (Messiha *et al.*, 2023). The concept was first introduced by Vargo and Lusch (2004), who argued that value is not created solely by companies but emerges through their interaction with clients. Building on this, scholars have emphasised the shift from viewing clients as passive recipients to recognising them as active participants shaping the service process (Payne *et al.*, 2008). In this view, value is not pre-produced but socially and experientially realised through interaction, relying on dialogue, transparency, and shared risk assessment (Prahalad and Ramaswamy, 2004). These elements reinforce the strategic nature of co-creation as a shift toward participatory value generation (McColl-Kennedy *et al.*, 2017). While co-creation research originated in commercial and marketing settings (Prahalad and Ramaswamy, 2000), it has gained traction in healthcare and aged care sectors where patient-centred care models emphasise shared decision-making and stakeholder collaboration (Osborne, 2018; Di Pietro *et al.*, 2024). Empirical applications of co-creation in healthcare and long-term care demonstrate its potential to drive both instrumental and transformative outcomes. Multi-stakeholder collaboration could enhance resource efficiency and patient compliance (Peng *et al.*, 2022; Vermehren *et al.*, 2023), while simultaneously fostering older adults' personal empowerment and self-awareness (Arola *et al.*, 2025).

Despite its promise, the existing literature remains heavily skewed toward the benefits of co-creation, leaving the mechanisms of its failure under theorised. Current research predominantly focuses on visible engagement activities and positive outcomes, often overlooking the systemic constraints that impede sustained collaboration (Di Pietro *et al.*, 2024). Furthermore, studies frequently adopt a dyadic focus—examining nurse–client or carer–provider interactions in isolation—thereby neglecting the broader triadic dynamics involving organisational management (Scheepers and Vollmann, 2024). This omission is critical given that vulnerable elderly people often face structural power asymmetries and dependency that limit their ability to participate meaningfully (Rahman *et al.*, 2024).

Seen through the lens of SET, co-creation thrives when interactions are built on reciprocity, trust, and fairness. When people perceive these qualities in their interactions, they are more willing to share resources and invest effort—both of which are critical to making co-creation work. Gill *et al.* (2011) emphasised the importance of high-quality interaction among network participants, while Fu *et al.* (2022) identified reciprocity norms and mutual dialogue as drivers of successful co-creation in senior care. These findings underscore the relational fragility of co-creation and the need for models that capture both its enabling and limiting conditions.

While emerging reviews have begun to catalogue barriers—such as recruitment difficulties and resource constraints (Terkelsen *et al.*, 2022)—these studies primarily catalogue obstacles rather than explaining the mechanisms of exchange failure. Similarly, although some studies identify relational obstacles like trust deficits (Gheduzzi *et al.*, 2021), they often lack a formal framework distinguishing between structural (overt) and psychological (covert) impediments. Consequently, the field lacks a holistic understanding of how these barriers interact to disrupt the reciprocal exchange essential for co-creation. To date, most research on co-creation has focused entirely on customers, placing clients at the centre of analysis while paying limited attention to the roles of employees and managers (Bangun *et al.*, 2023).

To address this gap, this study adopts a triadic perspective and draws on SET to differentiate between overt (structural, visible) and covert (psychological, less visible) barriers to co-creation. This distinction provides a more systematic framework for diagnosing co-creation challenges across organisational, employee and client relationships. By examining these barriers together, the study moves beyond client-centred accounts with a more holistic explanation regarding the difficulties of fully utilising co-creation in aged care organisations.

3. Research design and methods

3.1 Research design

This study adopted a qualitative case-study approach with authors' observation and participation, archival research, and interviews with managers, employees and clients. Case study design was chosen because it allows for an in-depth exploration of the complex and context-specific channels and barriers to co-creation in aged care settings (Yin, 2009). The study was conducted in Australia to align with its policy and demographic context. Australia's legislated commitment to person-centred care, coupled with its highly diverse ageing population (with 37% of older people born overseas), presents both structural and cultural complexities relevant to co-creation implementation. This context of Australia, with its mixed funding models, growing regulatory oversight, and culturally diverse ageing populations (OECD, 2023), reflects similar system characteristics across many OECD countries (e.g. New Zealand and Canada). As for this study, we selected two aged-care organisations located in Adelaide, South Australia, which provide government-subsidised services under the national aged care funding scheme. While clients contribute co-payments depending on their means-tested assessments, the government covers most service costs.

Organisation A is a large residential facility providing 24-h institutional care (accommodation, personal and clinical support) to predominantly Anglo-Australian residents within a structured, hierarchical system under the Aged Care Funding Model. Organisation B is a smaller, not-for-profit Home Care Package provider serving primarily older Chinese clients, delivering tailored in-home support and culturally specific community activities within a flat management structure. In both cases, services are largely government-funded, with means-tested co-payments from clients. Data were collected from two contrasting aged care organisations to enhance analytical robustness by reducing the likelihood that the identified barriers are specific to a single organisational setting.

3.2 Data generation

Data were collected between September 2023 and March 2025 through 15 site visits at each of the two aged care organisations. At each site, we conducted two project coordination meetings with managers, observed three customer representative meetings and five daily activity sessions, and carried out 17 semi-structured interviews (10 clients, 5 employees, and 2 managers, including one senior and one middle manager), yielding 34 interviews across both sites (see Appendix 1 for profiles). In addition, one focus group with 10 clients was conducted at each site. The recruitment process was guided by theoretical saturation within each stakeholder group and case. Through concurrent analysis of the 34 interviews, we observed that core themes related to co-creation barriers became recurrent and theoretically dense at both sites. Data collection concluded when further interviews yielded no substantively new insights, providing sufficient analytic grounding to inform cross-case analysis.

We combined semi-structured interviews and focus groups for complementary purposes. Individual interviews provided private, in-depth accounts that allowed clients to discuss sensitive issues—such as fear, insecurity or dissatisfaction—that may not surface in a group setting (Kvale, 2009). Complementing this, focus groups were utilised to explore how shared meanings were socially constructed through group interaction. While interviews revealed individual psychological states, focus groups enabled participants to build on each other's perspectives, challenge assumptions, and articulate collective preferences that do not emerge in one-to-one settings. Staff focus groups were intentionally omitted to prevent workplace hierarchies from silencing open critique.

Interview protocols were tailored to each stakeholder group: managers addressed strategic co-creation policies; employees focused on operational engagement challenges; and clients discussed their lived experiences and perceived barriers. To enhance triangulation, we conducted non-participant observations of interactional routines and analysed archival documents (e.g. institutional policies, government reports) to corroborate and contextualise the findings.

3.3 Data analysis

This study employed thematic analysis (Braun and Clarke, 2006) integrated with cross-case analysis (Gioia *et al.*, 2013) to identify overt and covert barriers. The analysis followed a three-stage recursive process, managed via MAXQDA (version 24).

At stage 1, the first author independently reviewed transcripts to generate first-order codes manually using Excel spreadsheets to develop a provisional coding framework. At stage 2, all transcripts were imported into MAXQDA (version 24) for systematic coding, category development, and cross-case analysis. At stage 3, we compared categories across participant groups to identify patterns and developed second-order themes by linking emerging categories with relevant literature (Pratt *et al.*, 2006). This process resulted in a final framework mapping the main barriers to co-creation in aged care settings.

To ensure the rigour and consistency of the coding, inter-rater reliability (IRR) was assessed. Two researchers independently coded 15% of the transcripts using the initial coding framework. Cohen's Kappa was calculated to evaluate consistency, yielding a coefficient of $\kappa = 0.82$, indicating substantial agreement (Landis and Koch, 1977). Coding discrepancies were discussed collaboratively and resolved through team meetings; where consensus could not be reached, a third senior researcher was consulted. Trustworthiness was strengthened using strategies for credibility, dependability, confirmability, and transferability (Lincoln and Guba, 1988). Credibility was enhanced through member checking and peer debriefing. Specifically, we conducted follow-up verbal feedback sessions with 10 participants (4 clients, employees, and 2 managers) to verify the preliminary themes and interpretations. Peer debriefing was conducted with two independent qualitative research experts through regular meetings during data analysis. Dependability and confirmability were established through transparent procedural documentation and iterative team consensus meetings to resolve interpretive discrepancies. Transferability was facilitated by detailed descriptions of organisational context and participant characteristics.

4. Findings

Guided by SET, the thematic analysis revealed two overarching barrier categories—overt and covert (see Table 1). Table 2 further consolidates the 20 inductively derived sub-barriers, mapping their alignment with SET and their impact across the triadic ecosystem. Importantly, our analysis shows that overt and covert barriers do not operate independently. Rather, they dynamically interact through mutually reinforcing patterns (as reported by participants), progressively undermining co-creation. Notably, human resource constraints, ineffective feedback mechanisms, employee burnout, and trust deficiency emerged as the most influential sub-barriers, representing key leverage points in the co-creation failure process. The following sections elaborate these dynamics.

4.1 Overt barriers

Overt barriers manifested in two forms: contextual constraints, driven by limited staffing, funding, and client capacity, and structural weaknesses in organisational processes.

4.1.1 Contextual barriers. Consistent with prior work positioning co-creation as resource intensive, participants across both organisations emphasised persistent shortages in time, funding, and personnel (Middel *et al.*, 2024). Managers frequently described the practical limits imposed by budget constraints—for example, the inability to accommodate personalised requests (“... say if they say that they would like to eat coconuts, we can't afford to provide coconuts to everyone,” M2). From a SET perspective, these deficits disrupt the basic material conditions required for reciprocal exchange; organisations may be willing to respond to clients but lack the resources to do so.

Staff consistently reported that high workloads and chronic understaffing crowded out the time required for co-creative dialogue. As S3 explained: “I need to host activities every day ...

Table 1. Key themes and barriers to co-creation

Barriers	Themes	Subthemes	Perspective	Quotes
Overt barriers	Contextual barriers	Financial constraints	Manager	Can't afford diverse meals (M1); don't have enough funding (M2)
		Human resource constraints	Staff	Not enough people in the team (S3)
		Client incompetence due to aging	Client	Feel embarrassed to be in the crowd due to health problems (C8)
	Structural Barriers	Lack of an effective feedback mechanism	Manager, Staff, Client	If clients stop giving feedback, we assume things are fine (M4). The feedback process is too formal, I don't want to trouble anyone (C10)
		Lack of role clarity	Staff	Work overlap and get confused (S9)
		Lack of an incentive system	Staff	Co-creation sounds like extra work for now(S8)
		Insufficient resource alignment	Client	I didn't know they could help deal with this (C4)
		Inconsistent management	Staff	We have bylaws but usually don't follow them; we just listen to the manager. (S10)
		Lack of training	Staff	I wish there could be some professional training (S4)
		Lack of recognition	Staff	Sometimes I feel my work is not recognised (S6)
		Lack of transparency	Client	They don't post much about what's new with the organisation; it's hard to keep updated (C15)
	Psychological Barriers	Clients' insecurity	Client	Makes me feel like a troublemaker as no one else talks (C6)
		Clients lack confidence	Client	My brain doesn't work like it used to. I wouldn't know what to suggest (C8)
		Clients' dependency	Manger, Client	I know our clients rely on us heavily. Sometimes they won't tell us what's wrong because they don't want to make things awkward (M3)
		Clients' lack of a sense of belonging	Client	I used to be able to go home on weekends, even just sit there, or water my plants, I am happy coz I am home. (C7)
		Employees emotional burnout	Staff	It's a demanding job, I am always giving, caring for all the clients, when I go home, I just feel exhausted, physically and emotionally(S6)
	Relational Barriers	Sense of futility	Client	I have been with them for 30 years, no change at all, I don't think they can change (C13)
		Deficiency of trust	Staff, Client	I don't understand their language, it's hard to build trust with them (S9)
		Low-quality co-creation experience	Client	I gave feedback before, but never heard anything back; I don't think they would take it seriously(C9)
		Inactive participation	Manager, Client	When no one shows up, it's hard to justify funding(M1). Sometimes there's really nothing else to do, and if staff keep asking, I'll just go sit there (C15)

Source(s): Authors own work

Table 2. Detailed overview of overt and covert barriers to Co-creation in aged care settings

Barrier	Description	Most affected triad	Impact	SET link	Implications
Overt (Contextual)					
Financial Constraints	Insufficient funding limits service delivery, staffing, materials, and program innovation	Org–Client Org–Staff	Reduces organisational capacity to reciprocate both staff and client needs; amplifies workload and weakens both structural and relational exchanges	Restricts the organisation’s ability to reciprocate staff and client contributions, violating expectations of material exchange	Requires targeted investment in staffing and service resources; if unaddressed, resource deficits will continue to limit meaningful co-creation opportunities
Human Resource Constraints	Chronic understaffing increases workload	Org–Staff Staff–Client	Reduces staff capacity to engage meaningfully	Insufficient staffing reduces the organisation’s capacity to offer balanced exchanges, undermining reciprocal obligations	Calls for workforce expansion and workload balancing; otherwise, chronic overload will erode staff engagement
Client incompetence due to aging	Physical/cognitive frailty reduce participation ability	Client–Staff	Limits contribution and interaction	Clients reduced functional capacity constrains their ability to participate in reciprocal exchanges, weakening collaborative balance	Requires tailored, ability-sensitive engagement methods; if ignored, clients with higher needs will remain excluded from co-creation processes
Overt (Structural)					
Lack of an effective feedback mechanism	Feedback processes require high effort and often receive slow or no responses, discouraging clients from raising concerns	Org–Client	Clients lose motivation to contribute	When feedback is ignored, clients perceive a breakdown of reciprocity and fairness in the exchange relationship	Needs simplified, low-effort feedback channels and timely responses; otherwise, long-term client silence will distort organisational understanding of real needs
Lack of role clarity	Ambiguity regarding staff responsibility	Org–Staff	Low efficiency and low initiative	Ambiguous roles weaken staff’s expectations of fair and predictable organisational exchange, reducing willingness to contribute	Requires clearer task boundaries and expectations; if unresolved, confusion will continue to lower initiative and weaken collaborative capacity

(continued)

Table 2. Continued

Barrier	Description	Most affected triad	Impact	SET link	Implications
Lack of an incentive system	Lack of rewards for staff who engage in co-creation efforts	Org–Staff	Low staff motivation	Absence of rewards signals a lack of organisational reciprocation	Calls for recognition or reward structures to motivate participation; without this, staff effort toward co-creation will remain minimal and unsustainable
Insufficient resource alignment	Clients unaware of available support	Org–Client	Expectation mismatch	Mismatched resources and client needs erode trust by signalling unfair or unresponsive organisational exchange	Requires transparent and efficient communication about available services; if neglected, expectations will remain mismatched, worsening client dissatisfaction over time
Inconsistent management	Rules applied inconsistently across organisation	Org–Staff Org–Client	Damages reliability and perceived fairness	Inconsistent rules and decisions violate fairness norms and destabilise reciprocal expectations	Needs consistent application of rules and decisions; otherwise, persistent fairness concerns will erode trust across the triad
Lack of training	Staff lack co-creation related knowledge	Org–Staff	Reduces creativity and effectiveness	weakening staff's expectations of reciprocal support and reducing their willingness to engage	Requires investment in capability-building programs; if ignored, co-creation will remain superficial and overly dependent on individual intuition
Lack of recognition	Staff feel unseen/undervalued	Org–Staff	Low emotional investment	Unrecognised effort signals socio-emotional under-reciprocation, reducing staff motivation to maintain the exchange	Calls for systematic acknowledgement of staff contributions; without it, emotional withdrawal will continue to reduce service quality
Lack of transparency	Decision-making processes are opaque to clients and staff	Org–Staff Org–Client	Creates distance and passive role	Withholding information undermines trust and perceived fairness	Requires clearer communication about decisions and processes; otherwise, staff and clients will disengage due to perceived exclusion

(continued)

Table 2. Continued

Barrier	Description	Most affected triad	Impact	SET link	Implications
Covert (Psychological) Clients' insecurity	Clients fear of being labelled a "troublemaker" or facing retaliation	Client-Staff	Self-silencing, withdrawal	Feelings of vulnerability increase perceived relational risk, reducing willingness to engage	Calls for creating low-pressure, psychologically safe interaction environments; if unmet, clients' long-term silence will suppress idea diversity
Clients lack confidence	Clients feel unqualified to contribute	Client-Staff	Low participation	Low self-efficacy diminishes perceived value of one's contributions, weakening expectations of meaningful reciprocity	Requires supportive facilitation to build clients' self-efficacy; if unaddressed, underrepresented voices will remain absent from co-creation
Clients' dependency	Fear of rocking the boat due to reliance on staff for basic care	Client-Staff	Blocks honest feedback	High dependence heightens relational risk aversion, discouraging honest reciprocal exchanges	Calls for structured, low-risk ways to express concerns
Clients' lack of a sense of belonging	Emotional detachment from environment	Client-Org	Low motivation to improve the environment; emotional detachment	Emotional detachment signals weak relational bonds, reducing clients' motivation to maintain reciprocal engagement	Calls for community-building and culturally relevant engagement strategies; if neglected, clients will continue to disengage and feel alienated
Employees emotional burnout	Emotional exhaustion	Staff-Org Staff-Client	Reduces empathy, patience, and creativity	Exhausted staff lack the socio-emotional resources required to sustain reciprocal exchanges with clients	Requires emotional support and workload management initiatives; otherwise, burnout will erode relational quality and reduce co-creation capacity

(continued)

Table 2. Continued

Barrier	Description	Most affected triad	Impact	SET link	Implications
Covert (Relational) Sense of futility	Clients believe “nothing will change”	Client- Org	Reduces motivation to participate	Long-term unmet expectations reduce clients’ belief in future reciprocity	Requires visible organisational responsiveness to restore belief in change; without it, clients will persistently opt out of co-creation processes
Deficiency of trust	Active suspicion of staff/management motives	Client- Staff Client- Org	Discourages honest feedback, ideas	Violated trust disrupts expectations of reliable exchange, increasing reluctance to participate	Calls for rebuilding relational reliability through consistent actions; if unresolved, mistrust will block all forms of meaningful participation
Low-quality co-creation experience	Past co-creation attempts were poorly managed or unpleasant	Client- Org	Reduces willingness to try again	Tokenistic past experiences reduce perceived returns from engagement, lowering motivation for future reciprocity	Requires redesigning engagement to ensure genuine influence; if ignored, co-creation risks becoming performative and losing credibility
Inactive participation	Clients attend but disengaged	Client- Staff Client- Org	Misleads management and reduces quality	Disengaged attendance provides distorted reciprocity signals, weakening alignment across actors	Requires proactive engagement approaches to re-activate involvement; otherwise, passive attendance will continue to mislead management decisions

Source(s): Authors own work

sometimes it is a bit overwhelming.” When staff are preoccupied with essential care duties, the extra time needed to negotiate and plan with clients evokes a sense of burden rather than opportunity. Beyond organisational constraints, contextual barriers also manifest at the client level as physical or cognitive frailty. As C8 noted, “I did surgery earlier . . . So, I just sit in the corner and watch.” In SET terms, these health limitations restrict the client’s ability to contribute resources (energy, attention) to the exchange, leading to involuntary exclusion.

It is worth noting that this structural deficit does not operate in isolation; the persistent pressure of understaffing serves as a primary driver for the emotional burnout (covert barrier) experienced by staff, a dynamic we explore fully in the “Analysis of Barrier Interplay” section.

4.1.2 Structural barriers. Structural barriers pertain to inadequacies in the system and structures within the organisations to facilitate co-creation, such as unclear roles, ineffective feedback mechanisms, insufficient training, and inconsistent management practices.

Ineffective feedback mechanisms emerged as the most pervasive structural impediment to reciprocal exchange. Clients frequently reported that their attempts to initiate exchange (e.g. providing feedback on food or activities) were met with organisational silence. As C6 explained: “I cannot consume jasmine rice because it contains too much sugar. I informed them about this but there was no reaction.” C14 mentioned, “I don’t know if there are people who have read what we have written.” This lack of responsiveness violates SET principle of reciprocity; when the organisation fails to “close the loop,” it signals that client inputs have no value. In addition, both clients and staff consistently reported top-down communication in their organisations, lacking genuine two-way communication channels. Rather than fostering reciprocal exchanges, the organisations’ feedback processes were perceived as one-directional notifications, leaving clients and staff with limited opportunities to voice concerns or contribute suggestions. For example, C16 noted, “we can only find out what activities will be held when we get here, nobody asks us what we want.” Beyond procedural inefficiency, this structural failure to close the feedback loop has profound relational consequences. Our data suggests that such unresponsiveness is often internalised by clients, actively fostering feelings of insecurity and a sense of futility regarding future participation—a dynamic that transforms a structural gap into a psychological barrier.

Co-creation is further impeded by operational weaknesses that erode the capacity for exchange. First, lack of role clarity creates significant inefficiency; staff reported that “sometimes there is overlap” and that vague boundaries are “really inefficient” (S9). Second, inconsistent management practices exacerbated this uncertainty, with clients observing that “different staff say different things” regarding processes. Third, a lack of training restricts employees’ ability to organise participatory activities, stimulate client engagement, or adapt interactions to client needs. Staff suggested that “it would be helpful if we could have some professional training” (S4). Without the structural provision of knowledge resources, staff lack the capability to organise meaningful engagement.

Finally, the lack of an incentive system causes staff to frame co-creation as a cost rather than a value-generating activity. In the absence of formal recognition, employees viewed co-creation as an “additional burden”. Several staff members expressed that while they recognised the long-term value, the immediate reality was that co-creation “sounds like extra work for now” (S8). From a SET perspective, this reflects a breakdown in the economic dimension of exchange; without adequate compensation or recognition, the perceived costs of engagement outweigh the benefits, leading to rational withdrawal.

These structural barriers reveal systemic weaknesses in organisational design and practice that restrict opportunities for mutual engagement. From a SET perspective, when roles are ambiguous, feedback loops are superficial, the expected benefits of engaging in co-creation become uncertain. Both clients and staff are less likely to invest in the exchange when they perceive a lack of organisational reciprocity—be it in the form of recognition, authority, or follow-through (Ahmad *et al.*, 2023). Ultimately, co-creation fails not due to lack of willingness, but due to insufficient structural support to enable meaningful reciprocal exchange.

While overt barriers were evident across both sites, their expression differed by organisational structure: the larger residential facility reflected more formalised procedural

and compliance pressures, whereas the smaller organisation showed more visible role ambiguity and managerial inconsistency.

4.2 Covert barriers

In contrast to overt barriers, covert barriers represent invisible deficiencies in the socio-emotional dimension of exchange. These barriers manifest as internal psychological states and relational dynamics that subtly erode the willingness and capacity of actors to participate in co-creation.

4.2.1 Psychological barriers. Clients' insecurity emerged as a primary inhibitor, characterised by a generalised sense of social vulnerability (Acharyya, 2012). Clients actively suppressed their views to avoid standing out, noting that "if I say something, maybe they think I'm making trouble" (C6). This vulnerability is heightened by the loss of external support; as one client explained, "I lost freedom . . . my family isn't around . . . so I just keep things to myself" (C8). We observed this guardedness in non-verbal behaviours, such as avoiding eye contact or sitting with tense posture. Crucially, this creates a recursive cycle: psychological self-silencing masks true service gaps, inadvertently reinforcing the structural inefficiencies that cause dissatisfaction.

Distinct from insecurity is clients' lack of confidence, which is rooted in self-perceived incapacity rather than relational fear. Clients frequently expressed internalised self-doubt, stating that "not many people from our generations have had adequate education" and thus finding it "difficult . . . to come up with good ideas" (C7 and C11). This lack of self-efficacy discourages participation, as clients perceive their own contributions as lacking sufficient value to warrant exchange quality.

Clients' dependency introduces a pragmatic barrier stemming from reliance on staff for essential care. Clients avoid critical feedback not due to a lack of confidence, but to protect the stability of the care relationships they depend on. Staff recognised this dynamic, noting that clients "won't tell us what's wrong because they don't want to make things awkward" (S4). From a SET perspective, the high relational cost of potential conflict outweighs the benefit of voicing needs, leading clients to prioritise relationship stability.

A lack of a sense of belonging manifests as emotional detachment from the organisational community. Clients described a profound disconnection, noting they "usually stay in my room" (C4 and C8) and reminiscing about when they "used to be able to go home . . . and be happy" (C7 and C10). During observation sessions, this barrier became visible through patterns of low engagement: clients would attend group activities physically but remain silent, disengaged, or positioned at the edge of the room. Some declined to participate altogether, preferring solitary routines; this lack of belonging was more pronounced among clients from culturally diverse backgrounds who faced language barriers. Without a sense of inclusion, the affective foundation required for reciprocal exchange remains unbuilt.

In addition to client-related psychological barriers, staff also revealed signs of emotional exhaustion and disengagement. Chronic pressure depletes the emotional resources required for reciprocal exchange. Employees described being "always giving" yet feeling "exhausted, physically and emotionally" (S6, S9, S13, and S17). Others noted that amidst urgent tasks, "it's hard to think about extra things" (S1 and S3). Burnout erodes the capacity for empathy and patience, severing the relational loop from the provider's side.

These barriers represent high relational costs rather than capability deficits. Clients withdraw to mitigate the perceived risks of damaging essential care relationships or exposing vulnerability. Simultaneously, staff burnout depletes the emotional capital required for reciprocity. Ultimately, when perceived emotional risks outweigh the rewards of engagement, the socio-emotional exchange collapses, leading to mutual disengagement.

4.2.2 Relational barriers. Relational barriers represent the erosion of the interpersonal trust and reciprocity required for sustainable exchange. Our analysis identifies four distinct mechanisms of relational disengagement.

Sense of futility reflects a learned disengagement where clients perceive organisational change as impossible. Clients expressed resignation, noting that despite long tenures, “nothing has changed” and they “don’t think they can improve . . . considering the current style”. From a SET perspective, this undermines expected future reciprocity; observing past stagnation, clients withdraw to conserve effort. Distinct from general pessimism is deficiency of trust—doubts regarding staff reliability or intentions. Trust acts as a risk-mitigation mechanism in exchange; its absence was highlighted by clients fearing retaliation. One client noted, “I am not sure if the manager told off the staff, and that staff took revenge . . . so I don’t trust them” (C11). Staff corroborated this, acknowledging that linguistic gaps make it “hard to build trust” with diverse residents (S3 and S9).

Low-quality co-creation experiences further reinforce disengagement by signalling that client inputs yield no return. Participants described past initiatives as tokenistic, stating that they “gave suggestions . . . but nothing came of it”. This frustration was visible in non-verbal refusals; C5 declared “it didn’t go well; I am not doing it again” before dismissively shaking her head. Finally, passive participation creates a cycle of distorted signalling. While attendance figures appeared high, interviews revealed that clients often joined only because “staff keep asking” and “there’s really nothing else to do” (C15). This creates a situation where management may misinterpret attendance as a sign of service success, reinforcing a cycle of offering activities that do not genuinely reflect client preferences.

These relational barriers signal erosion of the socio-emotional exchange conditions foundational to co-creation. When clients feel unheard, unsafe, or resigned to organisational inertia, the perceived relational benefits of participation decline. In SET terms, emotional and cognitive investments become too costly relative to expected returns.

Importantly, relational barriers accumulate over time and interact with overt structural constraints. For instance, chronic understaffing contributes to employee burnout, reducing staff capacity to build trust, which in turn deepens client disengagement. Such mutually reinforcing patterns highlight that restoring co-creation requires more than procedural adjustments; it demands sustained relational repair, stronger transparency, and cultural shifts that demonstrate consistent, reciprocal responsiveness.

Covert barriers also appeared across both settings, although their expression was shaped by client demographics and relational norms; in the culturally specific organisation, gratitude, dependency, and concern about disrupting relationships made silence and indirect expression more salient.

4.2.3 Analysis of barrier interplay. Given the cross-sectional nature of our qualitative data, the interplay relationships we describe represent patterned co-occurrence and participant-reported sequences rather than temporally established causal dynamics. We therefore refer to these as “theoretically informed interplay relationships” to signal their conceptual, rather than strictly causal, status. Our analysis moved beyond categorisation to identify the process by which overt and covert barriers interact. We identified three theoretically informed interplay relationships—Overt-to-Covert activation, Covert-to-Overt Reinforcement, and Cross-dyadic Spread—through which overt and covert barriers appear to mutually aggravate one another across the triadic system. Together, these interplay relationships reveal how structural and psychological breakdowns evolve as a dynamic, mutually reinforcing mechanism within aged care co-creation. To consolidate the identified overt and covert sub-barriers, [Table 2](#) provides an integrated overview linking each barrier to the most affected triad, its exchange implications, and its theoretical connection to SET.

The first interplay relationship concerns how overt structural constraints may activate or intensify covert psychological degradation. Two distinct pathways were evident across both case sites:

Persistent staffing and time shortages drained staff’s emotional capacity. Employees described being overwhelmed (e.g. S3: “I need to host activities every day . . . sometimes it is a bit overwhelming” (S3)) or emotionally exhausted (e.g. S6: “I am always giving . . . when I go home, I just feel exhausted, physically and emotionally”).

This illustrates a clear SET mechanism: failure in material resource exchange (adequate staffing) is associated with the erosion of socio-emotional resources (burnout), diminishing the capacity for relational engagement.

Structural unresponsiveness transforms procedural gaps into psychological barriers; clients noted that when feedback processes are “too formal” (C10) or when “no one ever followed up,” it fosters a sense that “my feelings don’t matter” (C4). This structural silence creates deep relational erosion, leading clients to conclude, “I don’t trust them anymore” (C11).

Second, these covert barriers appear to reinforce overt dysfunction by reducing staff discretionary effort and muting client voice. Emotionally exhausted staff reduce discretionary effort, explaining that they “didn’t have the headspace” to offer extra care because “you can’t pour from an empty cup” (S13 and S8). Similarly, clients who feel unheard disengage from formal mechanisms. C12 noted that after previous inaction, “now I just keep quiet,” while others described participation as “pointless” (C16) or “awkward” (C5). This creates a horizontal contagion of disconnection: staff burnout fuels client distrust, and client detachment deepens staff frustration. As S8 admitted, under these strained conditions, the prospect of co-creation simply “sounds like extra work for now”.

These findings substantiate a recursive feedback mechanism: covert barriers are not mere emotional by-products but active agents that intensify overt dysfunction. Covert barriers also interacted among themselves, as employees’ burnout fed clients’ distrust, while clients’ emotional detachment deepened staff frustration—a horizontal pattern of disconnection that intensified exchange imbalance across actors. As S7 claimed: “Things become easier when clients trust you, but when they don’t, everything feels harder. Especially when I’m already burnt out, and their distance makes me even more frustrated.”

Finally, these mutually aggravating barriers appear to spread across the triadic network by disrupting information and resource flows among management, employees, and clients. First, the analysis identifies a structural-relational spillover. Tensions between managerial demands and frontline reality shaped the conditions under which staff–client exchanges unfolded. Managers described struggling to balance “heavy paperwork” with the need to be personal (M2), while staff felt that the system “rewards compliance, not creativity” (S4). This systemic rigidity leads clients to perceive staff as “tired” and withdraw to avoid “bothering them” (C7). Second, the finding reveals a pattern of managerial misinterpretation. When clients withdrew or remained silent, management suggest that such silence could be interpreted as limited demand or satisfaction. As managers admitted, “when no one shows up, it’s hard to justify funding” (M1) and “if clients stop giving feedback, we assume things are fine” (M4). Third, the analysis points to systemic disruption of reciprocal exchange. These interacting barriers weakened the information and resource flows needed for co-creation. M2 characterised this as a “vicious cycle” where “silence becomes the signal we listen to, but silence is actually the problem”. This suggested that co-creation failure is not merely a localised friction between staff and clients. Instead, it broadens the disruption of exchange across the organisation–staff–client triad.

Taken together, these findings identify three recurring interplay relationships—overt-to-covert activation, covert-to-overt reinforcement, and cross-dyadic spread—through which structural and psychological barriers become mutually aggravating across the triadic exchange system. To consolidate these empirical patterns, we formulate three theoretically informed propositions that summarise the interplay relationships identified in the findings. Proposition 1: Overt-to-covert activation suggests that overt structural barriers that constrain material resources and organisational responsiveness are likely to activate or intensify covert psychological barriers, including staff burnout, client insecurity, and distrust. Proposition 2: Covert-to-overt reinforcement suggests that covert psychological and relational barriers are likely to reinforce overt dysfunction when staff withdrawal and muted client voice reduce feedback visibility, organisational learning, and service adjustment capacity. Proposition 3: Cross-dyadic spread suggests that imbalance within one dyadic relationship is likely to spill over into other dyadic relationships through actors’ interpretations of exchange failure. For

instance, organisation–staff imbalance may constrain staff–client engagement, while staff–client tensions may weaken clients’ trust and reciprocity toward the organisation.

Across both sites, the core interplay relationships were consistently observable, suggesting that the overt–covert framework captures exchange disruptions beyond a single organisational context. However, organisational scale, structural maturity, and culturally shaped norms of voice influenced which barriers became most salient and how they were expressed. These differences indicate that the framework is best understood as a shared exchange mechanism whose visibility and intensity are conditioned by organisational and cultural context.

5. Discussion and conclusion

This study identifies overt and covert barriers to co-creation in aged care settings, using SET as the theoretical lens. In this study, we address two research questions: (1) “What are the barriers to co-creation in aged care settings?”, and (2) “To what extent do these barriers affect co-creation development?”. The findings illuminate both the individual impact and the dynamic interplay between overt and covert barriers. These dynamics are synthesised in Figure 1.

From SET perspective, overt barriers constrain material exchange conditions (e.g. time, staffing, funding), limiting the initiation of reciprocity. In contrast, covert barriers erode socio-emotional resources such as trust and psychological safety, undermining perceptions of

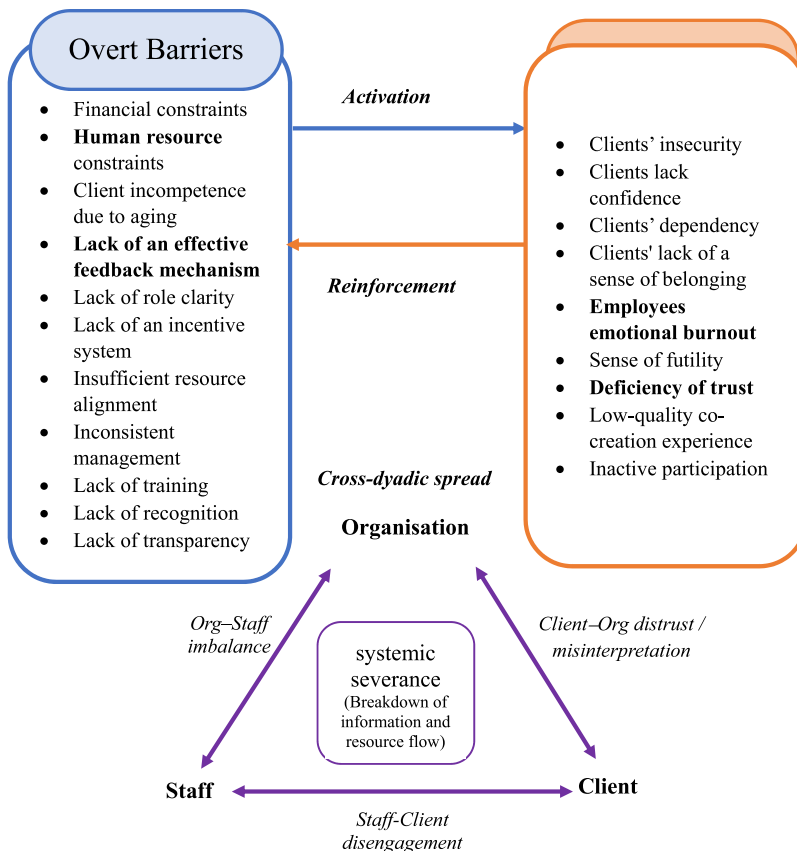


Figure 1. Co-creation barriers interplay. Source: Authors own work

mutuality and sustained engagement. While overt constraints may be addressed through structural adjustments, covert disruptions are more enduring, as relational repair requires long-term emotional investment beyond formal system change.

Our findings refine prior work by showing that overt and covert barriers operate not only as discrete categories but as mutually aggravating exchange disruptions. Whereas studies such as Gheduzzi *et al.* (2021) conceptualise barriers as discrete and largely dyadic forms of co-destruction, our findings challenge this assumption by demonstrating how overt structural deficits (e.g. staffing shortages) trigger covert psychological erosion (e.g. burnout, distrust), which subsequently reinforce overt inefficiencies. Additionally, recent reviews such as Johal *et al.* (2025) provide comprehensive mapping of structural, relational, and cultural barriers, yet treat these as analytically distinct categories. Our findings build on this work by showing that these categories do not operate in parallel but instead unfold and interdependently: structural constraints activate relational vulnerabilities, which then heighten structural breakdowns. This integrated mechanism addresses the gap which has been discussed in the early section of literature review, offering a more processual account of how barriers evolve to cumulatively undermine the reciprocal foundations of co-creation.

This study further suggests that overt and covert barriers are linked through the three theoretically informed relationships developed in the Findings: overt-to-covert activation, covert-to-overt reinforcement, and cross-dyadic spread. Overt constraints, such as limited staffing and weak feedback systems, were associated with reduced emotional capacity and lower perceived reciprocity, while covert responses, such as muted client voice and staff withdrawal, appeared to reduce organisational visibility and learning. Rather than treating barriers as isolated obstacles, this account positions co-creation failure as an accumulation of mutually aggravating exchange disruptions across the organisation–staff–client triad.

Furthermore, this study provides a triadic elaboration of SET by specifying how exchange disruptions may spread across interdependent actor relationships in aged care. This responds to the calls by Hyder *et al.* (2024) to examine multi-party exchange systems by showing that instability is not located solely within one relational pair. Instead, managerial interpretations, frontline pressures, and client responses interact in ways that may transfer exchange imbalance from one dyad to another. This clarifies why co-creation breakdown in aged care cannot be fully understood through a single staff–client or client–organisation relationship. By situating these insights within the aged care context, this study not only contributes to service management theory but also offers actionable implications for improving co-creation practices in complex, resource-constrained service ecosystems. The following sections elaborate on these theoretical contributions and practical implications in detail.

5.1 Implications for theoretical development

This study makes three key theoretical contributions by complementing the application of SET in the aged care service area. First, it develops the concept of psychological exchange failure, a dimension that has been conceptually discussed but insufficiently validated in prior research. While Cropanzano *et al.* (2017) highlighted the importance of psychological exchanges alongside economic and social dimensions, our study identifies covert barriers—such as client insecurity and staff emotional burnout—that disrupt relational continuity. These findings provide empirical grounding for understanding how affective disruptions, independent of material asymmetries, can inhibit perceived reciprocity and lead to failed co-creation in aged care settings.

Second, this study offers a processual elaboration of SET by specifying how exchange failure may emerge across triadic service relationships. Prior co-creation research has frequently adopted a dyadic focus, while our findings suggest that exchange breakdown in aged care cannot be fully understood within a single relational pair. Within this triadic framing, the organisational level refers to managerial decision-making and structural resource

allocation rather than the organisation as an abstract entity. While roles may partially overlap in flatter structures, the analytical differentiation remains meaningful, as managerial interpretations and resource decisions shape the conditions under which frontline exchanges unfold. Though SET frameworks have acknowledged the distinction between economic and socio-emotional exchanges, they have largely treated these as parallel dimensions. Our contribution lies in applying SET to clarify how material and socio-emotional exchanges may become mutually aggravating in resource-constrained service ecosystems. The propositions developed in the Findings specify three such relationships: overt-to-covert activation, covert-to-overt reinforcement, and cross-dyadic spread. Together, these relationships provide a processual account of how exchange disruption may accumulate across organisational, employee, and client positions. The cross-case differences further suggest that the overt-covert framework is not context-free; organisational scale, structural maturity, and culturally shaped norms of voice influence which barriers become most salient and how exchange disruption is expressed.

Taken together, these contributions demonstrate the value of applying SET to better understand both the formation and the failure of co-creation efforts. They highlight that relational and psychological dimensions are not peripheral to co-creation, but central determinants of its sustainability. Moreover, the dual-barrier and theoretically informed propositions proposed in this study may hold relevance for other human services involving vulnerable populations, such as disability support, refugee settlement, or mental health care.

The cross-case differences observed between the two organisations also inform the scope conditions of the overt-covert framework. The framework's mechanisms were observable across both sites, but their salience varied across organisational and cultural contexts. Structural overt barriers — such as formalised procedural inefficiencies and compliance pressures — were more pronounced in the larger residential facility (Organisation A), whereas culturally shaped covert barriers were more visible in the smaller, culturally specific organisation (Organisation B), where norms of deference, gratitude, and concern for relational harmony made client silence and indirect expression more salient. This suggests the framework is applicable across diverse aged care settings, but that the relative weight of overt versus covert barriers may shift with organisational scale, structural maturity, and client cultural background. Interventions may therefore require tailoring: in contexts with strong cultural norms of deference or high client dependency, covert barriers may demand more proactive detection strategies — such as family-mediated feedback channels or anonymous reporting mechanisms — rather than reliance on direct client voice.

5.2 Implications for policy and practices

This study offers implications for policymakers and aged care providers seeking to strengthen co-creation. Current reforms emphasise structural compliance but insufficiently address covert psychological barriers—such as insecurity and distrust—that undermine reciprocal engagement. Policy should therefore move beyond resource allocation to incorporate relational safeguards, including workforce well-being indicators and governance mechanisms that formalise client voice. Importantly, reforms require sustained funding and transitional support to avoid reinforcing compliance pressures that exacerbate staff burnout. For practitioners, sustainable co-creation demands integrated structural and relational interventions. Managers should institutionalise transparent feedback loops to operationalise reciprocity while simultaneously restoring socio-emotional resources through peer support and culturally responsive engagement practices. Implementation must remain context-sensitive: smaller providers may lack governance capacity, and culturally deferential cohorts may not utilise standard feedback channels. Ultimately, co-creation depends on relational stability, requiring active management of workforce continuity to sustain client trust and engagement.

Before turning to limitations, we reflect on a boundary condition of our findings. The absence of family members from our empirical sample invites reinterpretation of several core

findings related to covert barriers. Client silence and withdrawal, for instance, may not always indicate disengagement, futility, or individual reluctance; in some cases, older clients may delegate voice and negotiation to family members who act as informal advocates or intermediaries, making client-level silence an incomplete signal of dissatisfaction. Similarly, client dependency and reluctance to provide critical feedback — interpreted in our findings as fear of relational breakdown with staff — could also reflect the presence of alternative support networks that redirect rather than suppress client voice. Our findings capture client insecurity, dependency, and withdrawal primarily through the accounts of clients, staff, and managers. Future research that includes family members as exchange actors could clarify whether and how family involvement moderates or compensates for the covert barriers identified here — for example, by buffering client insecurity or amplifying client voice in ways that organisations might otherwise miss.

5.3 Research limitations and future directions

This study has several limitations. First, the sample was confined to two Australian aged care organisations, which may constrain contextual diversity and limit broader generalisability. Second, the reliance on qualitative methods restricts the ability to assess the magnitude and statistical relationships among influencing factors. Future research could extend this work by incorporating more geographically and culturally diverse aged care settings and by integrating quantitative approaches to test the relative influence of identified barriers. Further investigation of cultural dimensions—particularly how they intersect with socio-economic and individual characteristics—would deepen the understanding of co-creation dynamics.

A further limitation concerns the exclusion of family members from the empirical sample. In aged care settings, older clients' participation may also be shaped by wider relational support networks, including family members who help interpret needs, raise concerns, or negotiate service expectations. As family members were not included in the empirical sample, the findings capture client silence, dependency, and withdrawal mainly through the accounts of clients, staff, and managers. This means that some forms of client disengagement may reflect not only individual reluctance or organisational barriers, but also the presence, absence, or redirection of family support. Future research could therefore examine how family involvement modifies voice, trust, and reciprocity within aged care co-creation.

Taken together, these findings position co-creation in aged care organisations as a structurally conditioned and relationally embedded exchange process unfolding across the organisation–staff–client triad. Addressing both overt and covert exchange disruptions is therefore central to sustaining collaborative service systems in aged care settings.

Table A1. Overview of participants and estimated duration of interviews ($N = 34$)

No.	Role	Age	Gender	Approximate duration
M1	Manager	/	M	92 min
M2	Manager	/	M	71 min
M3	Manager	/	F	66 min
M4	Manager	/	F	75 min
S1	Staff	49	F	69 min
S2	Staff	29	F	72 min
S3	Staff	29	F	76 min
S4	Staff	31	F	79 min
S5	Staff	42	F	63 min
S6	Staff	29	F	61 min
S7	Staff	64	F	68 min
S8	Staff	59	F	64 min
S9	Staff	52	F	61 min
S10	Staff	58	M	62 min
C1	Client	74	F	75 min
C2	Client	74	F	78 min
C3	Client	80	F	77 min
C4	Client	74	F	86 min
C5	Client	77	M	88 min
C6	Client	76	M	67 min
C7	Client	80	F	84 min
C8	Client	80	F	78 min
C9	Client	78	F	82 min
C10	Client	78	F	89 min
C11	Client	89	M	86 min
C12	Client	97	M	83 min
C13	Client	95	F	79 min
C14	Client	76	M	73 min
C15	Client	88	M	77 min
C16	Client	73	M	68 min
C17	Client	93	F	79 min
C18	Client	85	M	89 min
C19	Client	96	M	78 min
C20	Client	74	F	81 min

Source(s): Authors own work

References

- Acharyya, A. (2012), "Depression, loneliness and insecurity feeling among the elderly female, living in old age homes of Agartala", *Indian Journal of Gerontology*, Vol. 26 No. 4, pp. 524-536, doi: [10.12691/ajnr-7-4-1](https://doi.org/10.12691/ajnr-7-4-1).
- Ahmad, R., Nawaz, M.R., Ishaq, M.I., Khan, M.M. and Ashraf, H.A. (2023), "Social exchange theory: systematic review and future directions", *Frontiers in Psychology*, Vol. 13, 1015921, doi: [10.3389/fpsyg.2022.1015921](https://doi.org/10.3389/fpsyg.2022.1015921).
- Arola, A., Sandlund, M., Domellöf, M.E., Taylor, M.E. and Toots, A. (2025), "In their own words: older persons' experiences of participating in co-creation", *Research Involvement and Engagement*, Vol. 11 No. 1, p. 56, doi: [10.1186/s40900-025-00725-z](https://doi.org/10.1186/s40900-025-00725-z).
- Australian Institute of Health and Welfare (2024), *Older Australians*, available at: <https://www.aihw.gov.au/reports/older-people/older-australians/contents/demographic-profile> (accessed 26 March 2025).

- Bangun, Y., Fatima, J.K. and Talukder, M. (2023), "Demystifying employee co-creation: optimism and pro-social behaviour as moderators", *Journal of Service Theory and Practice*, Vol. 33 No. 4, pp. 556-576, doi: [10.1108/jstp-08-2022-0165](https://doi.org/10.1108/jstp-08-2022-0165).
- Blau, P.M. (1964), "Justice in social exchange", *Sociological Inquiry*, Vol. 34 No. 2, pp. 193-206, doi: [10.1111/j.1475-682X.1964.tb00583.x](https://doi.org/10.1111/j.1475-682X.1964.tb00583.x).
- Braun, V. and Clarke, V. (2006), "Using thematic analysis in psychology", *Qualitative Research in Psychology*, Vol. 3 No. 2, pp. 77-101, doi: [10.1191/1478088706qp0630a](https://doi.org/10.1191/1478088706qp0630a).
- Casidy, R., Nyadzayo, M. and Mohan, M. (2020), "Service innovation and adoption in industrial markets: an SME perspective", *Industrial Marketing Management*, Vol. 89, pp. 157-170, doi: [10.1016/j.indmarman.2019.06.008](https://doi.org/10.1016/j.indmarman.2019.06.008).
- Cropanzano, R., Anthony, E.L., Daniels, S.R. and Hall, A.V. (2005), "Social exchange theory: an interdisciplinary review", *Journal of Management*, Vol. 31 No. 6, pp. 874-900, doi: [10.1177/01492063052796](https://doi.org/10.1177/01492063052796).
- Cropanzano, R., Anthony, E.L., Daniels, S.R. and Hall, A.V. (2017), "Social exchange theory: a critical review with theoretical remedies", *The Academy of Management Annals*, Vol. 11 No. 1, pp. 479-516, doi: [10.5465/annals.2015.0099](https://doi.org/10.5465/annals.2015.0099).
- Di Pietro, L., Ungaro, V., Renzi, M.F. and Edvardsson, B. (2024), "Exploring volunteers' role in healthcare service ecosystems: value co-creation, self-adjustment and re-humanisation", *Journal of Service Management*, Vol. 36 No. 2, pp. 184-216, doi: [10.1108/josm-02-2023-0081](https://doi.org/10.1108/josm-02-2023-0081).
- Echeverri, P. and Skålén, P. (2021), "Value co-destruction: review and conceptualization of interactive value formation", *Marketing Theory*, Vol. 21 No. 2, pp. 227-249, doi: [10.1177/1470593120983390](https://doi.org/10.1177/1470593120983390).
- Emerson, R.M. (1987), "Toward a theory of value in social exchange", in Cook, K.S. (Ed.), *Social Exchange Theory*, Sage, Newbury Park, CA, pp. 11-58.
- Fu, L., Pei, T., Yang, J. and Han, J. (2022), "How smart senior care can achieve value co-creation: evidence from China", *Frontiers in Public Health*, Vol. 10, 973439.
- Gheduzzi, E., Masella, C., Morelli, N. and Graffigna, G. (2021), "How to prevent and avoid barriers in co-production with family carers living in rural and remote area: an Italian case study", *Research Involvement and Engagement*, Vol. 7 No. 16, pp. 1-13, doi: [10.1186/s40900-021-00259-0](https://doi.org/10.1186/s40900-021-00259-0).
- Gill, L. and White, L. (2008), "The co-creation of public healthcare service quality: a triadic model", *Australian and New Zealand Marketing Academy Conference*, Promaco Conventions Pty, pp. 1-9.
- Gill, L., White, L. and Cameron, I.D. (2011), "Service co-creation in community-based aged healthcare", *Managing Service Quality: International Journal*, Vol. 21 No. 2, pp. 152-177, doi: [10.1108/09604521111113447](https://doi.org/10.1108/09604521111113447).
- Gioia, D.A., Corley, K.G. and Hamilton, A.L. (2013), "Seeking qualitative rigor in inductive research: notes on the Gioia methodology", *Organizational Research Methods*, Vol. 16 No. 1, pp. 15-31, doi: [10.1177/1094428112452151](https://doi.org/10.1177/1094428112452151).
- Homans, G.C. (1958), "Social behaviour as exchange", *American Journal of Sociology*, Vol. 63 No. 6, pp. 597-606, doi: [10.1086/222355](https://doi.org/10.1086/222355).
- Hyder, S., Malik, M.I., Hussain, S. and Saqib, A. (2024), "A social exchange theory perspective on efficacy, co-creation and successful new service development", *Journal of Organizational Effectiveness. People and Performance*, Vol. 12 No. 3, pp. 774-787, doi: [10.1108/JOEPP-07-2023-0306](https://doi.org/10.1108/JOEPP-07-2023-0306).
- Johal, J., Block, H., Dymmott, A., Dent, E., Exley, H. and George, S. (2025), "Barriers and enablers to primary care in Australian residential aged care homes: a scoping review", *Archives of Gerontology and Geriatrics*, Vol. 140, 106032, doi: [10.1016/j.archger.2025.106032](https://doi.org/10.1016/j.archger.2025.106032).
- Kahana, E. and Kahana, B. (2018), "Contextualizing successful aging: new directions in an age-old search", in Settersten, J.R. (Ed.), *Invitation to the Life Course*, Routledge, Thousand Oaks, CA, pp. 225-255.

- Kalra, A., Lee, N.Y. and Dugan, R. (2024), "Exploring antecedents and outcomes of salesperson change agility: a social exchange theory perspective", *Journal of Marketing Theory and Practice*, Vol. 32 No. 3, pp. 290-310, doi: [10.1080/10696679.2023.2169940](https://doi.org/10.1080/10696679.2023.2169940).
- Kvale, S. (2009), *Interviews: Learning the Craft of Qualitative Research Interviewing*, Sage, Los Angeles.
- Landis, J.R. and Koch, G.G. (1977), "The measurement of observer agreement for categorical data", *Biometrics*, pp. 159-174.
- Lincoln, Y.S. and Guba, E.G. (1988), *Criteria for Assessing Naturalistic Inquiries as Reports*, American Educational Research Association, New Orleans, LA, April 1988, available at: <https://eric.ed.gov/?id=ed297007>
- McColl-Kennedy, J.R., Vargo, S.L., Dagger, T.S., Sweeney, J.C. and Kasteren, Y.v. (2012), "Health care customer value cocreation practice styles", *Journal of Service Research*, Vol. 15 No. 4, pp. 370-389, doi: [10.1177/1094670512442806](https://doi.org/10.1177/1094670512442806).
- McColl-Kennedy, J.R., Hogan, S.J., Witell, L. and Snyder, H. (2017), "Cocreative customer practices: effects of health care customer value cocreation practices on well-being", *Journal of Business Research*, Vol. 70, pp. 55-66, doi: [10.1016/j.jbusres.2016.07.006](https://doi.org/10.1016/j.jbusres.2016.07.006).
- Messiha, K., Chinapaw, M.J., Ket, H.C., An, Q., Anand-Kumar, V., Longworth, G.R., Chastin, S. and Altenburg, T.M. (2023), "Systematic review of contemporary theories used for co-creation, co-design and co-production in public health", *Journal of Public Health*, Vol. 45 No. 3, pp. 723-737, doi: [10.1093/pubmed/fdad046](https://doi.org/10.1093/pubmed/fdad046).
- Middel, C., Blake, M., Boelsen-Robinson, T., Mackenbach, J., Stuber, J., Vargas, C. and Forrester-Bowling, T. (2024), "Co-creation in public health research: an introduction to basic principles", *Public Health Research and Practice*, Vol. 34 No. 3, e3432419, doi: [10.17061/phrp3432419](https://doi.org/10.17061/phrp3432419).
- OECD (2023), *Health at a Glance 2023*, available at: https://www.oecd.org/content/dam/oecd/en/publications/reports/2023/11/health-at-a-glance-2023_e04f8239/7a7afb35-en.pdf (accessed: 5 November 2025).
- Osborne, S.P. (2018), "From public service-dominant logic to public service logic: are public service organizations capable of co-production and value co-creation?", *Public Management Review*, Vol. 20 No. 2, pp. 225-231, doi: [10.1080/14719037.2017.1350461](https://doi.org/10.1080/14719037.2017.1350461).
- Patrício, L., Sangiorgi, D., Mahr, D., Čaić, M., Kalantari, S. and Sundar, S. (2020), "Leveraging service design for healthcare transformation: toward people-centered, integrated, and technology-enabled healthcare systems", *Journal of Service Management*, Vol. 31 No. 5, pp. 889-909, doi: [10.1108/JOSM-11-2019-0332](https://doi.org/10.1108/JOSM-11-2019-0332).
- Payne, A.F., Storbacka, K. and Frow, P. (2008), "Managing the co-creation of value", *Journal of the Academy of Marketing Science*, Vol. 36 No. 1, pp. 83-96, doi: [10.1007/s11747-007-0070-0](https://doi.org/10.1007/s11747-007-0070-0).
- Peng, Y., Wu, T., Chen, Z. and Deng, Z. (2022), "Value cocreation in health care: systematic review", *Journal of Medical Internet Research*, Vol. 24 No. 3, e33061.
- Pham, T.-A.N., Sweeney, J.C. and Soutar, G.N. (2021), "Customer effort in mandatory and voluntary value cocreation: a study in a health care context", *Journal of Services Marketing*, Vol. 35 No. 3, pp. 381-397, doi: [10.1108/JSM-02-2020-0044](https://doi.org/10.1108/JSM-02-2020-0044).
- Prahalad, C.K. and Ramaswamy, V. (2000), "Co-opting customer competence", *Harvard Business Review*, Vol. 78 No. 1, pp. 79-90.
- Prahalad, C.K. and Ramaswamy, V. (2004), "Co-creation experiences: the next practice in value creation", *Journal of Interactive Marketing*, Vol. 18 No. 3, pp. 5-14, doi: [10.1002/dir.20015](https://doi.org/10.1002/dir.20015).
- Pratt, M.G., Rockmann, K.W. and Kaufmann, J.B. (2006), "Constructing professional identity: the role of work and identity learning cycles in the customization of identity among medical residents", *Academy of Management Journal*, Vol. 49 No. 2, pp. 235-262, doi: [10.5465/amj.2006.20786060](https://doi.org/10.5465/amj.2006.20786060).
- Rahman, M.H.A., Finsterwalder, J. and Kuppelwieser, V.G. (2024), "Ageing and wellbeing co-creation: systematic literature review and future avenues for Transformative Service Researchers", *Service Industries Journal*, pp. 1-30, doi: [10.1080/02642069.2024.2363934](https://doi.org/10.1080/02642069.2024.2363934).

- Royal Commission into Aged Care Quality and Safety (2021), *Final Report: Care, Dignity and Respect*, available at: <https://www.royalcommission.gov.au/aged-care> (accessed 28 March 2025).
- Scheepers, R.A. and Vollmann, M. (2024), "Nurses who co-create care with clients experience lower levels of burnout through the perception of fewer emotional demands: an observational study", *BMC Nursing*, Vol. 23 No. 1, p. 902, doi: [10.1186/s12912-024-02481-z](https://doi.org/10.1186/s12912-024-02481-z).
- Terkelsen, A.S., Wester, C.T., Gulis, G., Jespersen, J. and Andersen, P.T. (2022), "Co-creation and co-production of health promoting activities addressing older people—a scoping review", *International Journal of Environmental Research and Public Health*, Vol. 19 No. 20, 13043, doi: [10.3390/ijerph192013043](https://doi.org/10.3390/ijerph192013043).
- Vargo, S.L. and Lusch, R.F. (2004), "The four service marketing myths: remnants of a goods-based, manufacturing model", *Journal of Service Research*, Vol. 6 No. 4, pp. 324-335, doi: [10.1177/1094670503262946](https://doi.org/10.1177/1094670503262946).
- Vermehren, P.D., Burmeister-Lamp, K. and Heidenreich, S. (2023), "I am. Therefore, I will? Predicting customers' willingness to co-create using five-factor theory", *Journal of Service Management*, Vol. 34 No. 3, pp. 341-367.
- Vogus, T.J., Gallan, A., Rathert, C., El-Manstrly, D. and Strong, A. (2020), "Whose experience is it anyway? Toward a constructive engagement of tensions in patient-centered health care", *Journal of Service Management*, Vol. 31 No. 5, pp. 979-1013, doi: [10.1108/JOSM-04-2020-0095](https://doi.org/10.1108/JOSM-04-2020-0095).
- Wang, D., Everett, B., Brunero, S., Northall, T., Villarosa, A.R. and Salamonson, Y. (2020), "Perspectives of residents and staff regarding food choice in residential aged care: a qualitative study", *Journal of Clinical Nursing*, Vol. 29 Nos 3-4, pp. 626-637, doi: [10.1111/jocn.15115](https://doi.org/10.1111/jocn.15115).
- World Health Organization (2025), "Ageing and health", available at: <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health> (accessed 20 October 2025).
- Yin, R.K. (2009), *Case Study Research: Design and Methods*, Sage.

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