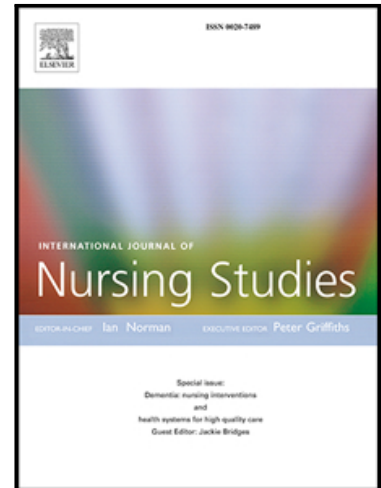


Journal Pre-proof

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Understanding the staff behaviours that promote quality for older people living in long term care facilities: a realist review

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Competing interests

[names removed for review process].

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Abstract

Background: Little is known about how the workforce influences quality in long term care facilities for older people. Staff numbers are important but do not fully explain this relationship.

Objectives: To develop theoretical explanations for the relationship between long-term care facility staffing and quality of care as experienced by residents.

Design: A realist evidence synthesis to understand staff behaviours that promote quality of care for older people living in long-term care facilities.

Setting: Long-term residential care facilities

Participants: Long-term care facility staff, residents, and relatives

Methods: The realist review, (i) was co-developed with stakeholders to determine initial programme theories, (ii) systematically searched the evidence to test and develop theoretical propositions, and (iii) validated and refined emergent theory with stakeholder groups.

Results: 66 research papers were included in the review. Three key findings explain the relationship between staffing and quality: (i) quality is influenced by staff behaviours; (ii) behaviours are contingent on relationships nurtured by long-term care facility environment and culture; and (iii) leadership has an important influence on how organisational resources (sufficient staff effectively deployed, with the knowledge, expertise and skills required to meet residents' needs) are used to generate and sustain quality-promoting relationships. Six theoretical propositions explain these findings.

Conclusion: Leaders (at all levels) through their role-modelling behaviours can use organisational resources to endorse and encourage relationships (at all levels) between staff, residents, co-workers and family (relationship centred care) that constitute learning opportunities for staff, and encourage quality as experienced by residents and families.

This review is registered with the Research Registry (unique identification number 1062).

What is already known about the topic?

- Quality is complex, contested and dynamic and can refer to both quality of life and quality of care.
- Whilst 'staffing influences quality' is well established, little is known about the relationship between the long-term care workforce and quality.
- 'More' staff does not necessarily equate to better 'quality': staff numbers do not fully explain this relationship.

What this paper adds

- A realist theory-based explanation of how staff behaviours promote quality of care as experienced by older people in long-term care facilities.
- Staff behaviours are contingent on reciprocal relationships with residents, family, and their colleagues.
- Leadership influences how organisational resources are used to promote the environments and cultures needed for quality-promoting relationships to flourish.

Keywords: long term care facilities, nursing homes, care homes, quality, staff behaviours, leadership, relationships, realist review.

INTRODUCTION

Long-term care facilities (care homes, nursing homes, residential homes) are an important, part of care for older people in many countries [1]. The quality of these facilities varies [2-4]. Conceptually, quality is complex, often contested, and dynamic, has overlapping physical, social, psychological and emotional dimensions and can refer to both quality of life and quality of care [2]. Quality of care contributes to an individual's quality of life, but is not the sole determinant [2].

Staff in long term care may be poorly paid, undervalued [5, 6], and work long hours. These same staff are a key influence on quality [7] and the largest operating cost for most facilities [8]. Balancing costs whilst proving quality care is a societal priority [9, 10]. Assuming 'more staff equates to better quality' is intuitively appealing. Research suggests a more nuanced, non-linear, relationship [3, 4].

Syntheses of quantitative research into relationships between staffing (numbers, mix of grades, use of temporary staff) and quality (using indicators such as incidence of falls, pressure ulcers and medication errors) suggest more long-term care facility staff (at any level) are associated with better outcomes and quality only on *some* measures [2-4]. Explanations are broad ranging and often atheoretical [3]. In this review we use theory to explain the relationship between staffing and quality, going beyond the numbers and mix of staff deployed [2-4], to examine *modifiable* staffing factors and their influence on an explicit version of quality. We recognise that quality is subjective and contested but can be operationalised and measured [11]. Accordingly, we have started from Donabedian's (13) axiom (and our stakeholder's consensus view) that staff primarily influence quality according to, "*how they make residents feel*".

AIMS AND OBJECTIVES

To achieve our primary aim of developing theory explaining the relationship between long-term care facility staffing and quality by understanding the mechanisms by which staffing promotes or hinders quality we had three objectives:

1. identify how staffing is reported and theorised in relation to quality for long-term care facility residents;
2. develop evidence and theory-based explanations of *how* long-term care facility staffing promotes resident quality of care and quality of life, *why* and in *what circumstances*; and
3. evaluate the strengths and limitations of the evidence-base, highlighting future research needs.

Methods

We undertook a realist review (see Box 1 for our working definitions of key elements) to understand why interventions (staffing) works, for whom and in what circumstances [12, 13] in the complex social interventions and systems [12] of long-term care facilities [14]. RAMESES reporting standards guided our review processes [13].

INSERT BOX 1 HERE

Theory was developed in three stages using research literature and in consultation with stakeholders: (i) elicitation, (ii) development and testing, and (iii) refinement. Theory derived from research was reviewed with long-term care facility residents, relatives, staff, providers, commissioners, regulators and policy makers to sense check and improve explanation and analysis [15, 16]. See Figure 1 for review process and document flow.

Stage 1: Theory elicitation

Defining the scope of the review: concept mining and initial theory development

This stage provided the structure and framework for exploring and synthesising diverse research findings [17]. First, the most recent systematic review of the relationship between staffing and quality [3] was used to develop preliminary explanation by identifying key concepts and theories. Six 'If-Then' statements [18] derived from the review's included studies (4), were further mined to develop ideas and assumptions about how and why staffing influences quality (see Supplementary material: Appendix 1). We used these statements to articulate programme theories containing possible social rules, values, or sets of interrelationships [16] that might limit or trigger programme mechanisms and their linked outcomes.

In line with Pawson et al. [17], our programme theories were iteratively scrutinised and agreed with stakeholders to refine review scope. We had two stakeholder groups. The first was comprised of long-term care residents and relatives (n=5). The second group was comprised of long-term care facility managers (n=7). Our stakeholder groups each met three times during the review period (each meeting lasting 90-120 minutes). In the first meeting, residents and relatives directed us toward one area: the everyday human interactions that occur between staff and residents has a major influence on quality, or as our stakeholders expressed this, 'how staff made residents *feel*'. This focus was checked with the long-term care facility managers who agreed this an important focus. Staff behaviours were therefore identified as a key concept (or theory area) linked to quality of care experience.

We tested this by mapping staff behaviours against research-reported staffing model characteristics and quality outcomes [19-21]. This confirmed the working hypothesis. By way of illustration, in one qualitative study, behaviours such as 'getting to know the resident' and 'treating residents like their mum or dad', generated resident 'joy' and 'satisfaction' [22]. These behaviours became the focus for our review and theory development.

Identifying and organising key behaviours – COM-B

To frame our review and help isolate key behaviours and associated triggers, we used Michie et al.'s COM-B theory [23]. COM-B suggests behaviour results from three interacting components in people or teams:

1. Capabilities - the psychological or physical abilities of people to enact behaviours. The individual's psychological and physical capacity to engage in the activity concerned. It includes having the necessary knowledge and skills.
2. Opportunities - the physical or social environment that enables behaviours. Opportunity is defined as all the factors that lie outside the individual that make the behaviour possible or prompt it

3. Motivations - reflective and automatic mechanisms that activate or inhibit behaviour. Motivation is defined as all those brain processes that energize and direct behaviour, not just goals and conscious decision-making. It includes habitual processes, emotional responding, as well as analytical decision-making.

Figure 2 illustrates that opportunity and capability influence motivation; and the enacted behaviours that alter capability, motivation, and opportunity. For example, **opportunities** for care workers to do care differently may result in more pleasurable care delivery/work behaviours (**capability**), meaning **motivation** is likely increased and positive behaviours repeated.

INSERT FIGURE 2 HERE

Using COM-B [23] and bespoke data extraction forms we coded data from studies on staffing and quality as capabilities, opportunities, motivations or behaviours. Demi-regularities, or patterns, then provided the basis for context-mechanism-outcome configuration development [12]. By the end of stage 1, our review questions had evolved to become:

- What staff behaviours influence long-term care facility residents' experience of quality?
- What influences the behaviour of long-term care facility staff?
- What impact does the interaction between staff behaviours and context have on long-term care facility residents' experience of quality?

We sense checked our review questions in our second stakeholder meetings. Stakeholders from both groups highlighted the importance of the multi-layered relationships staff had with those they care for and work with and how these relationships influence staff behaviours and quality as experienced by residents.

Stage 2: Theory development and testing

Search, appraisal, extraction and synthesis of evidence

This stage involved systematically searching, appraising, extracting and narratively synthesising evidence to test and develop emergent programme theory from Stage 1 [17].

Search

With an information scientist, we designed an inclusive search strategy to maximise data for extraction [24] around three central concepts: long-term care facilities, staffing and quality (see Supplementary materials: Appendix 2 for subject headings, terms and synonyms). We searched Ovid Medline, PsychINFO, Cinahl, Web of Science, Cochrane Database of Systematic Reviews, Cochrane Central Register of Controlled Trials online databases from inception to November 2019 with search alerts scanned to April 2020. We asked experts from our wider multidisciplinary research network [25] and forward citation matched and scanned included papers' reference lists for relevant publications.

Selection and appraisal of documents

Search results were saved, managed and duplicates removed using EndNote. Titles and abstracts of the retrieved papers were screened for inclusion by the study team [names removed for review process].

Studies were included if they:

- addressed the relationship between staffing models and quality (*quality of life and/or quality of care*)
- took place in a long-term care facility context
- explicitly focused on quality or, implicitly, accounts of quality similar to our working model of quality based on, 'how staff make people feel'.
- addressed capabilities, opportunities, motivations and/or behaviours

Studies were excluded if they:

- did not focus on staffing AND quality
- were not research, i.e. unsystematic approach to inquiry
- were not conducted in long-term care facilities
- if they focused on healthcare professions employed by organisations other than the long term care facility - this work has already been done [26].

Study quality was assessed qualitatively according to:

- relevance – degree of contribution to theory building and/or testing; and
- rigor - whether the method used to generate the data was credible and trustworthy [13].

Studies were included if they rigorously contributed to the initial programme theory of Stage 1. Full text papers marked for inclusion were retrieved and read in full by [names removed for review process]. Any disagreements were resolved through discussion with members of the wider research team [names removed for review process] and with reference to the review framework and emergent programme theory [17].

Data extraction

Data on staff behaviours, behaviour triggers (capability, opportunity, motivation), and how they interacted in the long-term care setting were extracted. The data extraction table (see Supplementary materials: Appendix 3) was piloted by the wider research team [names removed for review process] prior to use. [Names removed for review process] double extracted data from over a third of the included papers (n=25; 38%). This was done in 3 stages: [names removed for review process] both extracting from 5 papers then discussing, followed by two further rounds (with 10 papers in each round) with discussion. Piloting and double extraction from a sample of papers were used to promote consistent and comprehensive data extraction. [Name removed for review process] extracted data for all included papers. Data from author explanations and discussions can help make explicit in what context, which mechanisms lead to which outcomes [27] and so were included.

Stage 3: Theory refinement

In this final stage, we refined context-mechanism-outcome configurations and examined supporting evidence in three 60-90 minute researcher-led discussions during Nov-December 2019 with our stakeholder groups which included: residents and relatives (group 1) and managers (group 2) of long-term care facilities, and our Study Steering Committee (SSC) members (including representatives from provider organisations, policy makers, regulators, methodologists, and members of the public). Stakeholders were invited to discuss and critically comment on the resonance, relevance, and gaps in our theories. Revision of context-mechanism-outcome configurations after each discussion led to the final set of refined context-mechanism-outcome configurations.

RESULTS

Sixty-six studies were included: interview and/or focus groups (n=25), cross-sectional design (n=15), literature reviews containing new/additional studies (n=7), case studies (n=7), ethnographies (n=5), non-ethnographic interview and observational studies (n=2), mixed methods (n=2), an action research study (n=1), a randomised controlled trial (n=1) and a pre-post intervention study (n=1). Most studies were from North America (n=31) or UK/Europe (n=24), followed by Australia/New Zealand (n=9), Lebanon (n=1) and China (n=1).

Our six context-mechanism-outcome configurations are reported below and summarised in Table 1.

INSERT TABLE 1 HERE

Context-mechanism-outcome configuration 1: Philosophies of care that promote staff-resident relationships

*A clear, managerially endorsed, philosophy putting residents at the centre (**context**), enables work to be structured so that a core number of consistent staff have regular and ongoing contact with a group of residents and relatives, providing opportunities to spend time understanding and responding to their preferences and values (**mechanism – resource**). This promotes meaningful reciprocal relationships between staff and residents (**mechanism – response**), leading to development of empathy amongst staff and more individual needs and preferences of residents being met (**outcome**).*

Philosophies of care promoting relationships between staff and residents promote staff behaviours that foster individualised resident care [28-34]. Philosophies should include an explicit care-focused mission statement [28, 31, 35], clearly articulated and enacted through the everyday behaviours of managers/supervisors [28, 29, 31, 32, 36] - leadership elements that make up the context for this context-mechanism-outcome configuration.

Philosophies should go beyond assisting residents with physical tasks, and address residents' social and emotional needs through relationships [32, 33]. To be effective, work needs to be organised around such philosophies [33, 34, 36]. For example, a core number of staff who are a 'good fit' with the philosophy of the care environment, who engage consistently with the same group of residents and with sufficient resources will better meet residents' needs and preferences [37-42].

Whilst hard to articulate, staff who are a 'good fit' with the philosophy of the care environment, were those that actively valued older people [22, 33, 43-50]: displaying or willing to learn empathy, compassion and kindness [22, 33, 42, 44, 45, 51-56] and enacting these attributes through behaviours; performing duties beyond the bare minimum specified in contracts, helping others [22, 33, 44, 45] and working well with co-workers [42]. This articulation of 'good fit' (with the philosophy of the care environment) is used in other context-mechanism-outcome configurations. Sufficient staff subscribing and enacting the philosophy meant it was reinforced, sustained and relationships developed [42, 43, 48].

Cross sectional [2] and longitudinal studies [3, 4] were inconsistent and contradictory, but revealed no critical number of staff. Numbers varied from 5-15 residents per staff member [39-41, 57]. Relative criteria were more useful: *sufficient* staff for timely care, such as avoiding residents crying out for help with no care workers around to notice [29], and *consistent* staff with regular contact with a group of residents and families [58]. Small groups of linked residents and staff promoted familiarity, communication and a familial environment for cultivating relationships [39, 41, 59] with more time for residents, families [58] and co-workers [41, 59, 60].

Managerial behaviours encouraged relationship building [28, 29, 35]: clearly communicating role expectations and responsibilities [29, 35, 42, 61, 62]; reinforcing individual staff contribution to collective care [33, 35, 52]; physically helping out with resident needs and supporting staff [28, 35, 63-65]; actively listening to staff, resident and families' concerns [28, 30, 35]; and openly discussing challenges faced [28, 30, 32, 36, 63-66].

Staff that feel supported, valued and with [managerial] 'permission' to prioritise residents' needs adapt and adopt behaviours that foster expression of residents' preferences whilst providing care [33, 36, 46] and experimentation of novel ways of engaging residents [42, 67, 68]. A relationships-focus enables greater appropriateness in behaviours *given* resident preferences [22, 28, 33, 44, 68-70]. Strategies employed included associating residents' stories to their own experiences, stimulating empathy and taking more responsibility for putting 'learning' (about individual residents) into practice [22, 45, 70]. Unsupported staff provided less support to colleagues [36], weakening the generative mechanisms behind quality.

Developing close bonds with residents is not without risks: relationships developed over time can increase the emotional burden of care [45, 69, 71], feelings of helplessness and distress when unable to reduce suffering [33]; not always mitigated by caring experience [69]. Accordingly, some workplaces discouraged relationship-building with residents [46, 71] to reduce the emotional burden for staff [36, 69, 71].

Context-mechanism-outcome configuration 2: Expert Families

*Legitimising family involvement in care using a formal mechanism in the long-term care facility that invites their involvement (**context**), means smaller groups of staff of 'good fit' with the philosophy of the care environment, with regular and ongoing contact with a group of residents and relatives have a recognised role as the resident's advocate and expert (**mechanism – resource**). This creates a sense of shared endeavour and mutual respect,*

*promoting meaningful, reciprocal, relationships between staff, family and residents (**mechanism – response**) and greater personalisation of care (outcome).*

Family members are an important and valuable source of information and understanding for residents' needs and preferences [29, 42, 53, 54, 56, 65, 72, 73]. Staff engagement with family members - if desired – leads to family acting as experts in their relative's care [56, 64, 72, 73]. In a philosophically and behaviourally supportive context, these roles positively influence staff behaviours and create opportunities for relationship centred care [29, 53, 74, 75] – especially for residents living with dementia [72].

Family involvement is legitimised via formal mechanisms for involvement. This also encourages relationship building [58, 72, 74, 76] built around 'informing staff' and 'consulting with staff' through to 'co-deciding with staff' [72]. Mechanisms for meaningful participation include: invitations to care planning meetings [56, 72, 74, 77], support groups for family members [76], formal introductions to staff members at the facility [72, 74], and regular family information meetings [74, 77].

Relationships between staff and family members should be reciprocal and act as a vehicle for sharing information about residents [33, 53, 54, 58, 64, 72, 74], their preferences and other personal information for informed care [53, 54, 72, 73] and care planning [72]. Practical manifestations can be seen in staff avoiding foods that a resident dislikes and using personal belongings to create homely environments [53, 64]. Family may demonstrate successful behavioural strategies and interpretation with residents [33, 72, 76]. In turn, staff feel rewarded from positive relationships with families [33].

Establishing relationships with family members takes time [29, 33, 42, 53, 54, 74]. Once established, communicating care plan changes [74], health [33], and participation in activities can be sustained [53], generating a greater sense of shared caring responsibilities and mutual respect [33, 53, 64, 65].

Risks for staff associated with greater familial involvement include feelings of stress and anxiety arising from unrealistic demands and expectations on care provided [29, 33, 71, 72, 75] or an unwillingness from family to accept a resident's deterioration [71] or challenging behaviours [33]. One consequence are negative feedback loops of poor staff experience and negative attitudes towards families, diminishing recognition of continued importance of staff-family relationships [29, 72, 75], and subsequent relationship breakdown [29, 33, 71, 75].

Context-mechanism-outcome configuration 3: Team reciprocity

*Visible, unit level supervisors who minimise conflict and role model behaviours promoting team relationships (**context**), ensure open communication and information sharing between regular core groups of staff of an appropriate skill mix (care staff, senior care staff, Licensed Practical Nurses or Nursing Associates, and Registered Nurses) to meet residents' needs, working most shifts on the same unit (**mechanism resource**). Enhanced relationships create reciprocity within teams (**mechanism response**), with staff drawing on each other's knowledge and skills to promote individualised care for residents and better team working (**outcome**).*

Companionship is important in care work; being seen, needed and supported by reciprocating teammates provides satisfaction and meaning in work [46, 47]. Expressions of reciprocity included, “we depend on each other” [46, 64], “show respect for one another” [35, 65], “we take turns” [28], and “we are a part of each other’s decision making” [35]. Sometimes reciprocity was implicit in team work [32], meaningful relationships with colleagues [33, 63], shared values [30, 32, 47, 62, 64], mutual respect [30], a mutual understanding of each other’s work [33, 63], strong group relations [31], and unified commitment [31, 46, 78]. Whether explicit or implicit, reciprocity was linked with information exchange and the ability to draw on each other’s knowledge and skills to promote individualised care and enhance quality [28, 30-33, 35, 42, 46, 62-65, 79, 80]. Teams with high degrees of reciprocity were more open to advice seeking and collaborating [47, 80].

Leaders - at unit level - exhibited various behaviours designed to foster reciprocity:

- Clearly communicating expectations of staff, ways of working and their behaviours [28, 35, 42, 62];
- Promoting shared goals and mutual respect [30, 62];
- Helping out on the long-term care facility floor [28, 35, 64, 65];
- Holding regular meetings inclusive of all staff [28, 35, 62];
- Openly discussing and resolving problems as a team [28, 30, 35];
- Flexible working structures for staff [32, 34, 36, 42, 63, 65];
- Encouraging the sharing of ideas [28, 30, 32, 35, 63];
- Bringing staff together as a close-knit group bound together by common interests and experiences [30, 62, 64];
- Regular staff supervision [28, 32, 63].

Role experience was a modifier of reciprocity reinforcing behaviours. Experienced staff often used reciprocal behaviours to build confidence with less experienced/confident staff [36, 42, 44, 47, 48, 81-85]. Such behaviours were nested in relationships built on open communication and respect for the less experienced [84, 86]. Managerial support meant experienced staff shared greater knowledge and experiences [36, 44, 46, 83, 87]; especially amongst staff caring for people living with dementia [46, 55, 73, 88]. Units that discouraged co-worker relationships often lacked team reciprocity [71], and of poorer quality. Unit-level supervisors that minimise conflict and role model relationship building behaviours provide the context in this context-mechanism-outcome configuration.

Role modelling and reciprocity do not always co-exist. Negative outcomes include complacent staff generating and sustaining power imbalances or bullying - particularly in chronically short-staffed homes. Examples included ignoring or excluding team members or withholding information about resident care [89]. Understaffed care teams have higher workloads, less time available for interpersonal discussions and less time for defusing frustrations, leading to conflict [89]. Effective leadership and management is crucial for minimising such unintended outcomes [38, 71, 85, 89].

Context-mechanism-outcome configuration 4: Autonomy in everyday work

*When staff are treated as expert partners in care with a recognised role as the resident’s advocate (**context**), then a core group of staff of ‘good fit’ (with the philosophy of the care*

*environment) with regular and ongoing contact with a group of residents/relatives and other staff, acquire the skills, knowledge and experience of what is expected of them (**mechanism resource**). This leads to greater sense of autonomy in role and confidence in their judgements, decision making and problem solving within the boundaries of their role (**mechanism response**). The result is care that is timely and individualised, enhanced job satisfaction, and efficient use of the capacities and capabilities of the wider team (**outcome**).*

Greater perceived autonomy means greater staff engagement with work [29, 33, 61, 90] or role empowerment [29, 80, 85, 91]. Autonomy is a positive and necessary feature of delivering individualised resident care [29, 33, 56, 90, 91]. Flexibility in staff responses to needs is highly valued, leading to higher perceived quality amongst family and residents [31, 73, 90]. Increasing autonomy is easier in smaller teams of staff, working consistently with the same group of residents and colleagues [41].

Autonomy, behavioural enactment, and leadership co-exist in a positive feedback loop. Collective agreement resulting from reciprocity, strengthens collective knowledge and shared values/mission, which in turn gives staff greater confidence to act independently [47]. Shared values are vital to developing professional values and integrity, refining staff skills, supporting further learning and development of skills and satisfaction with work [47]. These leadership elements constitute the context in this context-mechanism-outcome configuration. In such long-term care facilities, management practices foster staff with the skills, knowledge [29], opportunity [28] and confidence to become autonomous workers [88].

Staff exhibit active autonomy in resident care in various ways that promote quality of care: reporting they are involved in care planning [22, 29, 90, 91], asking for advice [22, 29], being encouraged to innovate with different ways of providing care or undertaking work [29, 33, 61, 63], meeting residents' needs flexibly [46, 63] and being consulted for their views, ideas and opinions [29, 39, 45, 80, 91, 92], and feeling valued for such input [22, 29, 48, 80].

Staff who see themselves as equal partners in care experienced a sense of shared responsibility [22] and mutual respect [29]. Staff capacities and capabilities when recognised and used efficiently result in work geared to meeting individual resident needs, rather than institutional routines [22, 29, 45, 48, 63, 90, 91]. Autonomy allowed staff time to 'do the little extra's' [47]. As a result, staff were more likely to be independent in their work [61], considered themselves able to make decisions [80, 91, 92], and shared work [29, 48, 61]. A high degree of flexibility in their work plans makes it easier for staff to collaborate and consult with each other in short informal meetings and, further, to support and help each other during the shift [47].

Context-mechanism-outcome configuration 5: Reward and recognition

*Employer and manager recognition and reward of staff (**context**) creates the opportunity for personal and professional development (**mechanism resource**), enhancing the perceived capabilities of staff, promoting in-role satisfaction and motivation (**mechanism resources**), and increasing staff commitment and intention to stay in post, and care quality promoting behaviours (**outcome**).*

Rewarding and recognising staff influenced how staff felt about their work and shaped behaviours. Reward and recognition happen formally and informally. Formal endorsement arises from:

- the senior executive team (organisational level) and/or long-term care facility leaders [91];
- the organisational mission statement (placing as much value on staff as residents) [22, 28, 45];
- training and education [22, 29, 31, 34, 49, 61, 87, 91, 93, 94];
- career advancement opportunities [20, 22, 34, 49, 91, 93];
- adequate pay [20, 29];
- coaching and mentoring [20, 28, 35, 45, 49, 50]; and
- involvement in decision-making about resident care for the resident's they knew well [22, 45, 93].

Surprisingly, little evidence exists regarding the influence of pay on perceptions of work and staff behaviours.

Informally, recognition can be:

- managers addressing staff by first or preferred name and praising staff for their contribution [28, 29, 35, 52, 91];
- utilising the unique knowledge staff have about individual residents by asking them for their opinions on how best to support the resident population [29, 35];
- managers 'pitching in' with the day to day work, such as making beds and assisting at meal times, to support staff [28, 35]; and
- providing emotional support for any anxieties staff experience as a result of providing care [36, 57].

Rewards are wide ranging but included offering small gifts or arranging social gatherings to demonstrate appreciation for a job well done [28, 62]. The investment in staff through rewards and recognition had a positive impact on how staff felt about their work, enhanced staff-manager relationships, and led to behaviours that promoted quality in the long-term care facility and for the benefit of residents [22, 28, 31, 45, 48, 52, 57, 91].

Context-mechanism-outcome configuration 6: Cultural competence

*Organisations endorsing and facilitating culturally appropriate interactions between staff and residents (**context**), create opportunities for staff to adapt care to the needs of all residents (**mechanism resource**), creating a sense of shared mutual respect (**mechanism response**) and culturally appropriate resident care (**outcome**).*

Cultural competence, the ability to understand, communicate and effectively interact with people of different cultures, helps staff meet residents' needs and promote quality of care and life [29, 36, 76, 95]. Manifestations of cultural competence included:

- Employing staff from different backgrounds, which was identified as valuable for promoting cross-cultural relationships with residents, family and co-workers [29, 36, 51, 70, 76, 84].

- Respecting religious beliefs [36, 70, 84], cultural norms [29, 43, 51, 84, 96], and sexual orientation [95, 97] made a positive difference to daily lives of residents [29, 36, 43, 51, 84].
- Knowing how to provide culturally appropriate personal care – such as meal preparation [51, 96], honouring rituals [29, 36, 51, 70], greeting residents using their first language [84], being in tune with local dialects [98], touching a resident in a culturally appropriate manner [29, 84], and/ or using appropriate non-verbal communication [36, 51, 76, 84].

These factors all helped develop and maintain (cross-cultural) relationships between staff and residents [29, 51, 84].

Quality promoting relationships are hindered [76, 84] when staff experience discriminatory behaviour from residents; for example, verbal abuse on the basis of skin colour [51], accent [51], sexual orientation [95, 97], and language difficulties [51, 73, 76, 80, 84, 97]. Management intervention is essential to repair relationships [36].

Cultural competence is developed on the job [36, 73, 84, 95] and reinforced through team reciprocity [51, 84], exhibited as respect and tolerance of each other's cultures, effective cross-cultural communication and learning [84, 97], and promotion of relationships between co-workers [51, 73].

DISCUSSION

Our realist review outlined six theoretical propositions (context-mechanism-outcome configurations) as necessary conditions for behaviour systems that influence quality as experienced by long-term care facility residents. Context-mechanism-outcome configurations build on previous reviews examining staff numbers and mix and the broad and possibly unhelpful conclusion that *some* numbers and models of deployment have *some* impact on *some* clinical indicators of quality; a conclusion borne of scant and often low quality evidence [2-4]. Our explanatory framework has been 'sense-checked' with those living, working (or working with) and visiting long-term care facilities.

As figure 3 illustrates, our six context-mechanism-outcome configurations connect and impact on each other. However, one thread ran through all of them: each context-mechanism-outcome configuration required effective leadership *behaviours* (at all levels) to trigger the effective use of *resources* (mechanism), that cultivated the *relationships* (mechanism response) required for staff to behave in ways that promote *quality* (outcome).

INSERT FIGURE 3 HERE

A clear organisational philosophy of care, endorsed and enacted by the long-term care facility manager supports relationship building between staff, residents and relatives. This role modelling influences other leaders in the long-term care facility to also enact and support these relationship building behaviours across the unit and/ or facility (depending on their level of leadership). Good working relationships support team learning opportunities, rewards and recognition. The way care teams are organised, alongside opportunities for listening and problem solving, are important, provide direction, promote positive

behaviours and minimise conflict in the home. Such leadership behaviours are summarised in Table 2.

INSERT TABLE 2 HERE

The 'generative mechanism' underpinning each of our context-mechanism-outcome configurations is relationships. The link between relationships and behaviour to promote quality in health care is well established [99-101]. Whilst relationships are a central component of theories often enacted in social care, such as Person Centred Care [102, 103] and relationship centred care, [99] empirical research is more limited: largely limited to qualitative studies [43, 100, 104, 105] that have developed slowly since the genesis of formal theories in the mid-1990s [106].

Our findings resonate with other frameworks from an interactionist perspective. Nolan et al. suggest that people, their families and care staff must satisfy the six senses of security, belonging, purpose, continuity, achievement and significance in the context of their relationships to thrive [100]. Kitwood [102] emphasises that upholding the personhood of people living with dementia can only be achieved by upholding the personhood of staff, in the context of a caring organisation which acknowledges, respects and rewards staff contributions (and as acknowledged in our fifth context-mechanism-outcome configuration) [102]. McCormack et al. [107, 108] further support this by placing no distinction between the resident, the family (or friends) and care staff. Indeed, they argue that the only way quality can be experienced by residents and families is for care staff to experience respect and recognition for their personhood and for caring cultures to be created. These aspects are incorporated in our programme theories. Our review is the first to synthesise empirical research into why relationship centred care in long-term care facilities might work, for who and under what circumstances, alongside the contexts and mechanisms for influencing these relationships.

Our context-mechanism-outcome configurations are presented as drivers for positive relationships underpinning positive staff behaviours. However, they can also introduce and sustain poor staff behaviours and lower quality. Official inquiries and case studies of organisational failures leading to poor quality care [109-114] often highlight negative cultures within organisations, leadership and bullying, all sustained in part by relationships and unequal distributions of social capital.

Our review highlights sufficient staff numbers as necessary but not sufficient for quality promoting behaviours. Like almost all behavioural aspects of health and social care, staffing (as context) is important. Relationships, as a generative mechanism for quality, were more heavily influenced by leadership rather than simply staff numbers.

Leadership's importance for improving quality in long-term care is well recognised by researchers [87, 115-118], regulators and policy makers [105, 119-121], and academics [122]. Our review suggests: (i) leaders in long-term care are not always the long-term care facility manager; that is, unit level supervisors also play an integral role; (ii) how these leaders operate influences the day-to-day work and activities of staff in the home; and (iii) that leadership behaviours effectively shape long-term care cultures and relationships

required for quality. Effective leadership occurs within and between levels that are connected, setting off chains of events. These events will always appear different in terms of the social actors involved, timescales and ordering, but they occur with sufficient regularity, are theoretically defensible, and thus considered predictable.

Formal models of leadership may be a useful mechanism for homes to enact some of the context-mechanism-outcome configurations presented. Transformational leadership [123, 124] - *'a form of leadership intended to motivate and inspire followers to pursue higher-order goals through the transformation of followers' attitudes, beliefs, values and behaviours'* (100: p543) – has been linked to Person Centred Care Theory [103] and is consistent with the leadership style implied by relationship centred care [100]. Whilst evidence for transformational leadership in nursing exists [126-130], the very limited evidence from long term care suggests it has the potential to encourage behaviours that promote quality, by empowering staff closest to the delivery of care [105]. Models such as “transformational leadership” often major on desired outcomes (such as shifts in attitudes, beliefs and behaviours) but lack of outcome definition hinders implementation and evaluation. Leadership and culture interact: culture can be manipulated by leaders [131-133], but may also be created by the actions and reactions of leaders, with leaders in turn shaped by that culture [131, 133]. Our review highlights the ill-defined nature of leadership and culture in empirical studies of staffing and quality. We have proposed specific leadership behaviours for promoting quality to make the concept more transparent (c.f. Table 2).

Review strengths and limitations

Much of the evidence base informing our review is descriptive, lacks comparison or controls, and is small scale. The lack of comparative research means providers and commissioners seeking to make evidence-informed decisions about which staffing models are likely to be most effective will not find definitive answers.

Limited information on personal characteristics of leaders mean establishing which attributes (i.e. age, gender, level of education, length of service in the home, length of service in care) were most influential is impossible. Descriptions of settings and pivotal concepts - leadership, culture or quality - were often superficial or poorly described, limiting the explanatory and predictive precision of our programme theory.

A strength of this review is the involvement of relevant stakeholders within the review process. More specifically, we engaged with residents, relatives, staff, providers, commissioners, regulators and policymakers to sense-check, improve explanation and theory development. This promotes relevance of our work for the sector. Another strength of our review is that we were able to use theory to unpack and operationalise concepts such as leadership in context for use in future research. This is the first realist review drawing on international evidence to consider how behaviours influence quality in the sector. The review has, for this first time, moved evidence-based discussion beyond numbers of staff in long term care and the relationship to quality, to a focus on the importance of what they do and how they do it.

Implications for future research

Future research should focus on comparative, theoretically informed studies that systematically extend empirical knowledge and theory. For example, a useful contribution to this field would be understanding the characteristics of leadership at different levels (such as at the organisation, unit, or informal level) and how this impacts quality. There is limited research to evaluate the impact of the relationship centred care model on quality. There may be interventions that could be developed based on our theories that could be tested. To enhance reproducibility and solid testing of theory, such studies should report interventions in structured ways [134]. Structured reporting enables systematic isolation, manipulation and optimisation of active ingredients. Researchers seeking to improve quality through a focus on changing staffing behaviours may wish to consider the role of international initiatives in optimisation of quality improvement such as Metalab [135], that have begun to be deployed in long term care [136].

Implications for practice

We have demonstrated the importance of leaders for ensuring relationships are central to the organisation of care and staff that are more likely to behave in quality-promoting ways. By highlighting the important role that the facility and unit manager have, as well as informal leaders, in creating relationships, this review provides a platform for those working in, managing, leading, or providing long-term care to consider quality improvement. We have highlighted the contextual factors required to support the nurturing of positive staff behaviours. This requires the support of effective leaders (as described by this review) to create environments that promote quality. Simply increasing staff numbers without considering staff relationships is unlikely to promote quality. While there is little analysis of costs in the included studies, we would argue that the focus on behaviours could be introduced with relatively little cost.

CONCLUSION

This is the first review of international literature to offer theory-based explanations of why, how and in what circumstances, staff behaviours promote quality for older people living in long-term care facilities. It shifts the debate from numbers of staff and their relationship to quality indicators toward recognising the ways in which staff influence experiences of care and thus quality. Our findings will be useful for people and organisations making policy and delivering services on the best ways to deploy and support quality in care homes through the most valuable resource for any long-term care facility: its staff.

Declaration of interests

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: CG is NIHR Senior Investigator and receives support from the National Institute of Health Research (NIHR) Applied Research Collaboration East of England (ARC EoE) programme.

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Table 1: Summary of context-mechanism-outcome configurations

Theory	Context	Mechanism				Evidence summary
		+ Resource	Response	= Outcome		
Theory 1: Resident centred care	A clear, managerially endorsed, philosophy putting residents at the centre of care	+ enables work to be structured so that a core number of consistent staff have regular and ongoing contact with a group of residents and relatives, providing opportunities to spend time understanding and responding to resident's preferences and values	to promote meaningful reciprocal relationships between staff and residents	= which leads, to development of empathy amongst staff and more individual needs and preferences of residents being met	43 studies contributed to context-mechanism-outcome configuration 1: interview and/or focus groups (n=20), cross-sectional (n=7), case study (n=6), literature review (n=5) ethnography (n=4), and non-ethnographic interview and observations (n=1).	
Theory 2: Family as experts	A formal mechanism that legitimises and invites family involvement	+ means smaller groups of staff of 'good fit' (with the philosophy of the care environment), with regular and ongoing contact with a group of residents and relatives have a recognised role as the resident's advocate	and this creates a sense of shared endeavour and mutual respect, promoting meaningful, reciprocal, relationships between staff, family and residents	= which leads to greater personalisation of care	15 studies contributed to context-mechanism-outcome configuration 2: interview and/or focus groups (n=8), cross-sectional (n=1), case study (n=2), and literature review (n=4).	
Theory 3: Reciprocity among teams	Visible, unit level supervisors who minimise conflict and role model behaviours that	+ ensure open communication and information sharing between regular core groups of staff of an appropriate skill mix (care	and this leads to enhanced relationships and creates reciprocity within teams	= with staff drawing on each other's knowledge and skills to promote individualised care for residents and better team	33 studies contributed to context-mechanism-outcome configuration 3: interview and/or focus groups (n=13), cross-	

	promote team relationships		staff, senior care staff, Licensed Practical Nurses or Nursing Associates, and Registered Nurses) to meet residents' needs, working most shifts on the same unit		working	sectional (n=8), case study (n=5), literature review (n=2), ethnography (n=2), mixed methods (n=2), and RCT (n=1).	
Theory 4: Autonomy in everyday work	When staff are treated as expert partners in care with a recognised role as the resident's advocate	+	then a core group of staff of 'good fit' (with the philosophy of the care environment) have regular and ongoing contact with a group of residents/relatives and other staff, acquire the skills, knowledge and experience to understand what is expected of them		=	so that care that is timely and individualised, enhanced job satisfaction, and efficient use of the capacities and capabilities of the wider team	20 studies contributed to context-mechanism-outcome configuration 4: interview and/or focus groups (n=6), cross-sectional (n=6), case study (n=2), literature review (n=3), ethnography (n=1), RCT (n=1), and mixed methods (n=1).
Theory 5: Reward and recognition	Employer and manager recognition and reward of staff	+	creates the opportunity for personal and professional development,		=	which leads to increased staff commitment and intention to stay in post, and care quality promoting behaviours	20 studies contributed to context-mechanism-outcome configuration 5: interview and/or focus groups (n=7), cross-sectional (n=6), case study (n=2), literature review (n=2), ethnography (n=1), pre and post-test

Theory 6: Cultural competence	Organisations endorsing and facilitating culturally appropriate interactions between staff and residents	create opportunities for staff to adapt care to the needs of all residents	creating a sense of shared mutual respect	resulting in culturally appropriate resident care	intervention (n=1), and mixed methods (n=1). 10 studies contributed to context-mechanism-outcome configuration 6: interview and/or focus groups (n=8), literature review (n=1), and ethnography (n=1).
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Table 2. Leadership behaviours (at all levels of the organisation) that lead to quality**A resident centred approach to organising care**

- Giving permission' to prioritise residents' needs adapt and adopt behaviours encouraging expression of residents' preferences as part of everyday care i.e. Work is scheduled around individual needs of residents, rather than the routines of long-term care facilities
- Creating smaller teams of staff, who work consistently with the same group of residents and co-workers

Effective communication

- Clearly communicating expectations of staff, ways of working and their behaviours
- Promoting shared goals and mutual respect
- Actively listening to staff, resident and families' concerns
- Openly discussing the challenges faced in the home, discussing and resolving problems as a team
- Invitations of family to care planning meetings
- Formal introductions between family and staff members at the facility

Promote confidence

- Reinforcing individual staff contribution to collective care
- Coaching and mentoring
- Encouraging the sharing of ideas
- Involvement in decision-making about resident care for the resident's they knew well
- Increasing perceived autonomy
- Holding regular meetings inclusive of all staff
- Regular family information meetings

Provide practical support

- Physically helping out with resident needs and supporting staff i.e. pitching in' with the day to day work, such as making beds and assisting at mealtimes, to support staff
- Being visible

Provide emotional support

- Providing emotional support for anxieties staff experience as a result of providing care
- Bringing staff together as a close-knit group bound together by common interests and experiences
- Support groups for family members

Show recognition

- The organisational mission statement and the senior executive team (organisational level) placing as much value on staff as residents)
- Flexible working structures for staff
- Addressing staff by first or preferred name and praising staff for their contribution
- Creating opportunities for training and education
- Career advancement opportunities
- Formally inviting family involvement to 'inform staff' and 'consult with staff' through to 'co-deciding with staff'

Encourage diversity

- Employing staff from different backgrounds, which was identified as valuable for promoting cross-cultural relationships with residents, family and co-workers
- Respecting religious beliefs, cultural norms and sexual orientation.

Box 1: Working definitions of realist terms

Context: the conditions constituting the setting for the intervention. Context influences the way resources are perceived to generate outcomes

Mechanism: the resource the intervention provides and the impact it has on the reasoning of staff

Demi-regularity: a semi-predictable pattern of outcomes i.e. frequently reproduced behaviours

Outcome: the expected or unexpected result

Programme Theory: describes how the intervention is expected to generate effects and under what conditions (usually expressed as context-mechanism-outcome configurations)

Context-mechanism-outcome configuration: the unit of analysis used to synthesise across studies to build and refine programme theory

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Figure 1: Review process and document flow

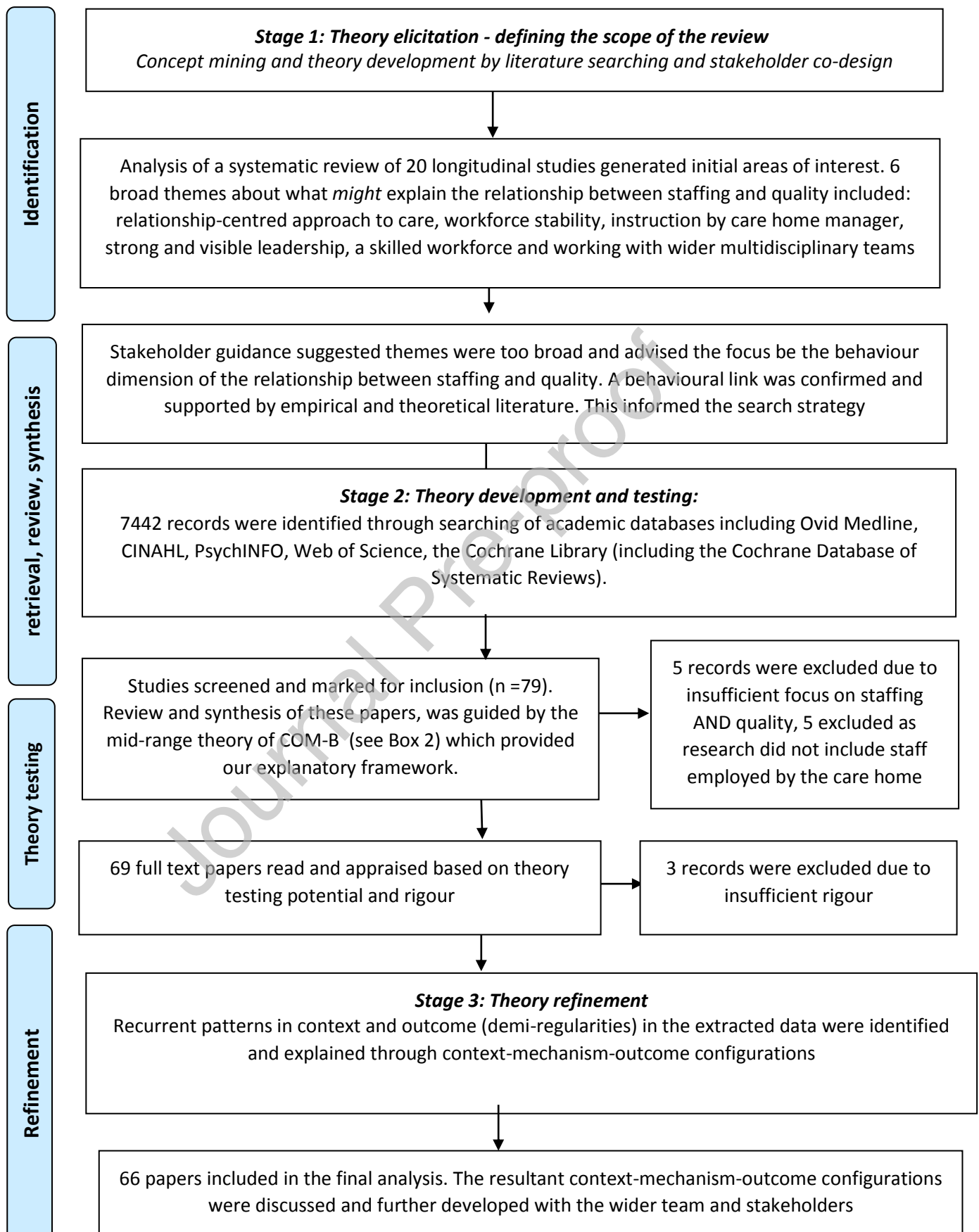
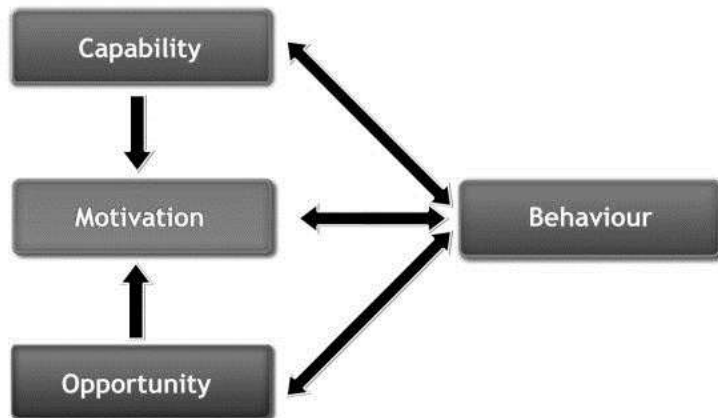


Figure 2: The COM-B model - a framework for understanding behaviour [23].



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Figure 3: summary of context-mechanism-outcome configurations

