A conceptual framework to promote effective relational outcomes within a residential intergenerational caring context in South Africa

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Preface

The article format was chosen for this study. This means that each article appearing in the thesis is presented in the precise form in which it was, or will be submitted to the journals according to each author guidelines. The respective author guidelines can be accessed in the appendices.

My promotors, Prof Vera Roos and Dr Matthews Katjene, reviewed the articles and provided research advice and guidance throughout the study. Both promotors are aware that the four articles form part of this thesis and are submitted for degree purposes (Doctor of Philosophy in Relational Dynamics and Development at the North-West University).

The articles were or will be submitted to the following journals:

Article 1: *Public Health Review (Accepted and published)*

Article 2: *International Journal of Care and Caring (Submitted)*

Article 3: *International Journal of Environmental Research and Public Health (To be Submitted as invited paper)*

Article 4: *International Journal of Care and Caring (To be Submitted)*

List of abbreviations

CaRD	-	Care and Relational Dynamics
CG	-	Caregiver
CIDA	-	Created-Image Data Analysis
CW	-	Care Worker
EA	-	Eden Alternative™
FRCE	-	Formal Residential Care Ecologies
NCDs	-	Non-communicable diseases
OP	-	Older Person
PCC	-	Person-centred care
SA	-	South Africa
SIGT	-	Self-interactional Group Theory
SSA	-	Sub-Saharan Africa
UN	-	United Nations
UNDESA	-	United Nations Department of Economic and Social Affairs
UNICEF	-	United Nations International Children's Emergency Fund
WHO	-	World Health Organisation

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Executive Summary

It is predicted that with the global increase in the number of older persons (OPs), including in Sub-Saharan Africa (SSA) and South Africa (SA), and the proportionate increase in OPs' care needs, human care capital and financial resources will come heavily under pressure. While high-income countries have to some extent developed adequate infrastructure to accommodate their older individuals' increasing care needs, older South Africans age in environments that may be described broadly as care-unfriendly and without adequate infrastructure. Unfortunately, SA lacks cohesive care policies for integrating long-term care of OPs across various settings, and in general there is a lack of focus on the development of a sustainable caregiving workforce, unintentionally compromising the provision of effective care for poor and marginalised groups within a growing older population. Moreover, literature does not pay enough attention to understanding the relationships between OPs and CWs (care workers paid to perform care actions) in a formal care setting. This, according to literature, is important because it is directly related to quality of life and well-being. Even though formal residential care ecologies (FRCE) for OPs are not always a feasible option, and although there is a global drive to promote ageing in the right place, for some OPs formal residential care is sometimes their only alternative. The focus on FRCE is selected for this study because it provides a more structured environment for looking at relationships as opposed to the sometimes less structured environment of home-based or community-based care settings. Irrespective of whether OPs and CWs interact in formal care contexts, at a community level or in their homes, the focus remains on the quality of the relationship.

Although several care models (e.g. person-centred and relationship-centred) proclaim the importance of relationships, they do not pay sufficient attention to the involvement of both OPs and CWs. Accordingly, this study approaches relationships from the interactional viewpoint as the continuous and circular processes of acting and reacting. To explain this

complexity, a critical realist meta-theoretical framework was applied to identify mechanisms on the different levels of social reality (empirical, actual, and real) in dynamic interplay with context (broader environments, the formal care setting, and the interpersonal) towards promoting (effective) relational outcomes. To develop a conceptual framework to explain the complexity of interactions between OPs and CWs in a FRCE, a multi-phased qualitative research approach was followed, producing four articles.

In Phase 1, titled *Effective relationships between younger caregivers and older care recipients across a continuum of formal residential care settings: A scoping review and a critical analysis*, publications between January 2000 and December 2021 were consulted and, after applying exclusion criteria, 36 articles were analysed critically. Four important findings emerged. 1) Context is important. OPs and CWs assign different meanings to the same context. CWs function in their workplace, with care protocols guiding their routines and caregiving, while OPs find themselves at home, so to speak, receiving care. 2) The formal care setting is characterised by diversity. OPs with different levels of functioning interact with diverse CWs, who are younger and often speak a different language (e.g. adopt different sociocultural norms). 3) Focusing on the interpersonal context, two important insights were gained. Control in caregiving interactions manifests with CWs moving for a one-up position and OPs adopting a submissive position; and several relational qualities were identified in the interactions, presenting on a continuum from effective to ineffective. 4) Relational outcomes resulting from the interactions were reportedly effective or ineffective. Phase 1 indicated the importance of an interaction-centric approach to caregiving. To explore what occurs in the interactions between OPs and CWs, Self-Interactional Group Theory (SIGT) was applied because it proposes that the subjective impact resulting from interactions can give an indication of what is transpiring on the inter-individual (between the CWs and OPs), or on the group level, when group identities are triggered. SIGT analyses the interactions between CWs

and OPs on four different levels: (1) the intra-individual level, which gives an indication of the subjective impact resulting from the interactions; (2) the inter-individual level, including relational qualities, moves for control in the relationship, the motivation for the interaction which in this instance involves addressing the OPs' care needs, and reciprocal interactions; (3) the group level, involving intra- and inter-group dynamics; and, (4), of particular relevance, context, which refers to the broader environments, in this case, the formal care setting, and the interpersonal context.

Phase 2 and 3 involve an empirical study to obtain a varied perspective of the interactions between CWs and OPs in FRCE. Three settings in Durban, KwaZulu Natal, SA were selected because they accommodate middle- to low-income pensioners. The three facilities ranged from independent living to assisted care and frail care. The three settings are identified as A, B and C. Setting A adopts no specific care approach, Setting B uses the Eden Alternative as a specific care approach, and Setting C adopts a more general person-centred approach. The three settings combined accommodate 374 OPs and employ 133 CWs. The majority (98%) of OPs are white, and a small number Indian and Black, while all the CWs are younger Black women (social remnants of previous racial exclusive practices in public service provisions). Both OPs and CWs were fluent in English. The Mmogo-method, a visual data-collection method, was used to obtain data both from OPs and CWs, in four phases. The Mmogo-method draws on the notion of social justice by providing an equal opportunity for participants to join in the research. Visual and textual data were subjected to a multi-method of analysis using in-case and cross-case analysis, and thematic integration. Interactions are complex, and therefore focus or punctuation was called for.

Phase 2 focuses first on the experiences of OPs, resulting in the article *Older persons' experiences of their relationships with care workers in formal residential care ecologies* and contextualised OPs' experiences of caregiving in a formal setting, mainly from their internal

beliefs about caregiving and associations with quality of life and expectations of the characteristics CWs should possess: the necessary skills to perform caregiving and to relate to OPs as the care recipients. Very few studies reported on OPs as active participants in the caregiving relationship. Phase 2 presented important knowledge in the development of a conceptual framework, which is summarised as follows: 1) The physical care setting with its care policies and care actions and the interpersonal context informs the interactions involving both OPs and CWs; 2) On the intra-personal level, OPs demonstrate agency to be involved in some form of self-care, and a care imprint is elicited in the caregiving relationship; 3) Effective relational qualities are associated with relational outcomes, such as emotional closeness, confirmation, and collaboration, while ineffective relational outcomes emerged as incongruence, distancing and conflict.

The article *Care workers' experiences of their relationships with older persons in formal residential care ecologies*, presented in Phase 3, reports on CWs' experiences of their interactions with OPs. The following insights emerged: 1) Adopted care approaches, with a relational focus, were not demonstrated when CWs performed instrumental care actions; 2) Perspectives on ageing (e.g. active ageing and disengagement), and sociocultural norms inform interactions; 3) Relational qualities both of CWs and OPs were identified on the inter-individual level, as well as intra-group and (ambivalent) intergenerational dynamics. 4) Interactions involved reciprocal actions and reactions, with relational outcomes.

Phase 4 presents the article *A conceptual framework explaining Care and Relational Dynamics (CaRD) in formal residential care ecologies.* A critical realist approach and the findings of the three preceding phases were used to explain mechanisms in dynamic interplay with contexts (e.g. broader environments, the formal care setting, and interpersonal) on the actual level to produce effective relational outcomes, which were observable on the empirical level. Mechanisms presented on different logical levels of different layers of abstraction,

including individual, inter-individual, group, and intergenerational, as well as the families of OPs and of CWs. The application of the CaRD framework, presented here for the first time, was illustrated by two examples demonstrating the dynamic interplay between mechanisms and context, which yielded effective or ineffective relational outcomes. CaRD is presented in this study as a flexible framework to explain relational dynamics towards effective relational outcomes for OPs and CWs in FRCE. CaRD makes it possible to transfer knowledge to other care contexts, and guide and facilitate interventions, training, programming and policy in a variety of contexts in which relational dynamics are an important part of the process.

The study concludes with contributions, and critical reflections on, the research, with recommendations for future investigation. Conceptually, CaRD offers an interaction-centric approach to caregiving which can guide the practical application of operationalising caregiving. This study has broader implications for the field of intergenerational care, contributes to the discourses on OPs agency, recognises the significance both of OPs and CWs in care and relational outcomes, and presents a challenge for FRCE to promote more equitable relational policies. The CaRD framework provides a pathway for creating opportunities for OPs and CWs to engage constructively and authentically, thus enhancing care quality while acknowledging the significant contribution of both parties to the relationship within FRCE. CaRD promotes a view of the formal care economy as a complex web of inter-related micro- and macro-systems, with the OP-CW dyadic system in dynamic interplay with broader and immediate contexts and mechanisms, thus creating a dynamic, interaction-centric eco-system that is both holistic and inclusive.

Keywords: Older persons; Care workers; Formal residential care ecologies; Relational dynamics; Critical realism; Conceptual framework; South Africa

Chapter 1

Contextualising the study and problem statement

The care of older persons (OPs), aged 60 years and older, is set against the background of an increasingly ageing global population. In 2019, there were around 1 billion people in this age group, which is expected to grow to 1.4 billion by 2030 and reach approximately 2.1 billion by 2050. This demographic shift, particularly prominent in developed countries, highlights the increase in the number of people aged 80 and older. By 2050, it is anticipated that around 426 million people will be included in this "oldest old" age group, up from an estimated 125 million in 2021 (Aboderin, 2022; UN, 2023; WHO, 2024).

The increase in ageing populations, which Kaplan et al. (2017) refer to as a "longevity revolution", is not limited to high-income countries. Low- and middle-income countries will also experience rapid and dramatic demographic changes. In 2020, there were over 66 million people aged 60 years and older in Sub-Saharan Africa (SSA), and it is anticipated that by 2050 the number will have risen sharply to 215 million (WHO, 2020). South Africa (SA), although still a country with a young population, follows a similar trend, with a rapidly ageing population (Aboderin, 2022). In SA, the OP population was 5.42 million in 2024 (9% of the total population) and is expected to increase to 12.26 million in 2050 (UNDESA, 2019).

Global population ageing is set against the World Health Organisation's (WHO) drive to establish age-friendly, age-integrated, and intergenerational communities that foster healthy and active ageing (WHO, 2020). Such environments are designed to offer older adults opportunities for social engagement, thus contributing to their communities while preserving their autonomy, health, and dignity (Aboderin, 2017; Paoletti, 2015). However, despite the drive to promote healthy ageing, a large number of older adults suffer ill-health (McNabney et al., 2022) or find themselves living in age-unfriendly environments (Mapira et al., 2019; Scheil-Adlung, 2015). Non-communicable diseases (NCDs) are expected to

increase globally, resulting in a greater need for care because OPs are expected to be unable to live without the assistance of others (Awuviry-Newton 2021; WHO, 2020). The WHO (2020) predicts that the number of OPs who are no longer able to look after themselves in developing countries will quadruple by 2050 to over 18 million people, expanding the care burden in coming decades and emphasising the importance of the care economy (Aboderin, 2018).

Problem Statement

As the demand for care increases, the availability of adequate resources is expected to come under pressure (Cowper et al., 2020; Rankin & Hoffman, 2024). While high-income countries possess more developed infrastructure to address these growing needs, SA faces significant challenges in providing long-term care. The country's history of apartheid, forced removals, and ongoing socioeconomic disparities has resulted in an inadequate long-term care framework (Hungwe, 2011; Keating et al., 2013; Mayosi et al., 2009). Government policies do not integrate long-term care across various settings, nor do they offer strategies for developing a sustainable and financially viable care workforce (Cowper et al., 2020; Hoffman & Pype, 2016; Tshesebe & Strydom, 2016; UN, 2020). As a result, non-governmental and faith-based organisations have attempted to bridge the "care deficit" in SSA and SA, but their efforts remain insufficient, unregulated, and unsupported by cohesive policy frameworks (Schatz & Seeley, 2015; Hlongwane, 2024).

Given these challenges, formal residential care is often the only option for OPs' ageing in the right place. A key component of healthy ageing in the context of formal residential care is the quality of relationships between unrelated OPs (G1) and younger carers (G2 or G3) responsible for their care (Hagestad, 2008). Strong intergenerational relationships are not only essential for the well-being of OPs and CWs but also contribute to the

development of sustainable and inclusive societies (Kaplan et al., 2017). Despite widespread recognition of the importance of relationships in caregiving (Baart, 2016; Brownie & Nancarrow, 2013; Larkey, 2022; Van Heijst, 2007; Wilby et al., 2016), existing care approaches in formal residential care often assume a universal understanding of what constitutes an effective relationship. Current models do not sufficiently account for how interpersonal and contextual factors interact to shape relationships between OPs and CWs within formal residential care ecologies (FRCE).

There are empirical gaps in the understanding of care relationships in FRCE in terms of the interpersonal context**,** insufficient examination of the interactions between OPs and CWs, and a limited understanding of relationship dynamics in caregiving relationships. In addition, there is an inadequate explanation of mechanisms in formal caregiving relationships and a lack of a conceptual framework to explain relational outcomes**.**

To narrow the empirical and theoretical gaps in the literature, the overarching aim of this study is to develop a conceptual framework that identifies and explains the mechanisms informing the relational interactions between CWs and OPs in FRCEs. By examining these mechanisms within a specific FRCE, the study seeks to generate insights about the mechanisms informing the quality of the interactions between OPs and CWs towards relational outcomes that can be applied to other formal caregiving environments.

The guiding research question is:

What mechanisms are at play within a residential intergenerational caring context to produce outcomes for effective relationships?

Objectives

To achieve this aim, the study has three key objectives:

1. Conduct a scoping review and critical analysis to gain a comprehensive understanding of the existing literature on relational dynamics in FRCEs.
2. Gather empirical data on CW-OP relationships through a two-phase process: first collect experiences from OPs, followed by obtaining the experiences from CWs about their relationships within an FRCE.
3. Identify and analyse the mechanisms at play in the relational dynamics between CWs and OPs, integrating findings from both the literature review and empirical data to develop a conceptual framework.

This study's findings anticipate provide valuable insights for refining caregiving practices, fostering stronger intergenerational relationships, and informing policies to enhance the effectiveness and sustainability of formal residential care. By deepening the understanding of relational mechanisms, the research will guide the development of targeted interventions, training programs, and policies that improve the quality of life for OPs while supporting a more resilient and sustainable care economy.

To establish a contextual foundation for this study, key aspects related to the care of OPs and their interactions with CWs will be further outlined. These include the care economy, caregiving ecologies; encompassing both formal and informal care, intergenerational caregiving, and various care approaches.

The care economy

The care economy refers to a variety of systems of care work that support a population (Razavi & Staab, 2012): the structure, costs, and systems of care for OPs (Dorrington & Schulz-Herzenberg, 2024; Moore & Kelly, 2024). Care provision allows OPs who are dependent on assistance to manage their limitations, fulfil social needs, and improve their

functional abilities and quality of life (WHO, 2020). This support encompasses a variety of services and activities aimed at helping OPs with basic practical, health and social care needs (Glasby et al., 2023; WHO, 2024). A well-developed care economy may provide affordable, accessible, culturally appropriate, equitable, and quality care for OPs (Aboderin, 2018), acknowledging that ageing in the right place for as long as possible is the preferable option (WHO, 2020). The rise in NCDs among older adults and other complex social and family challenges demand broader caregiving opportunities within the care economy so that OPs are able to access appropriate and effective care (Razavi & Staab, 2012). Consequently, several caregiving ecologies will coexist, which will be discussed next.

Caregiving Ecologies

Caregiving ecologies refer to the different components around OPs' care, which can include the type of caregiving (e.g. informal, or formal in a care setting), the intergenerational nature of the caregiving relationship involving care workers (CWs) and OPs, adopted care approaches, and the family. It is anticipated that caregiving will take place across a spectrum, from informal, family-based care to formal, organised care such as home or community-based to residential care or blended care with home-based and institutional elements.

Informal care

Informal care to support ageing in place is endorsed by the WHO and the United Nations (UN). Ageing in place capitalises on familial and community networks to deliver essential health and social care for older adults (United Nations International Children's Emergency Fund [UNICEF], 2009; WHO, 2020). Traditional care practices, kinship-oriented care, and filial piety emphasise strong intergenerational bonds which can reduce loneliness and foster emotional security, dignity and a sense of belonging among OPs (Cheng & Chan, 2006). Central to understanding intergenerational relationships in SSA is the philosophy of Ubuntu,

encapsulated in the phrase *"umuntu ngumuntu ngabantu"* meaning "a person is a person through other people" (Mbiti, 1969). Ubuntu fosters a moral framework that prioritises communal well-being, interdependence, and reciprocity, reinforcing the idea that caring for people is not merely an individual or familial obligation but a societal responsibility (Mwende Twikirize et al., 2023). However, how Ubuntu practically informs contemporary caregiving relationships remains underexplored.

There is limited knowledge about cultural variations in how family members provide intergenerational care for OPs in SSA. Additionally, little is understood about how families negotiate and distribute caregiving responsibilities. Research on the quality of interpersonal relationships in these caregiving arrangements, as well as the influence of traditional care practices, remains scarce (Moore, 2023). Gaining deeper insight into relational dynamics and how they play out in the delivery of care is important for ageing research in SSA (Aboderin & Hoffman, 2015).

While caring for OPs in SSA is widely accepted as a communal and familial duty (Awuviry-Newton, 2021; Schatz & Seeley, 2015), nonetheless, reliance on family-based care can be problematic. Informal caregiving is predominantly performed by adult women relatives (Bartha & Zentai, 2020). This feminisation of caregiving positions women as primary caregivers (Payne, 1995), often without compensation (Harling et al., 2020; Manderson et al., 2017). Changes in family structure, such as increased divorce rates and the rise of blended families, introduce new caregiving dynamics whereby non-biological relatives may assume caregiving roles (Smock & Schwartz, 2020). The traditional model of the nuclear family is evolving, and many families face economic pressures that strain their ability to care both for older and younger generations simultaneously (Pashazade, et al., 2023; Wu et al., 2023). In some SSA countries, multigenerational households, often dependent on older

adults' pensions, are increasingly common, but these arrangements can exacerbate intergenerational tensions (Di Gessa & Zaninotto, 2023).

Moreover, the rise in NCDs among older adults presents complex health challenges that often exceed the capacity of informal caregivers (Awuviry-Newton 2021; Rankin & Hoffman, 2024). The escalating care needs of OPs place significant strain on informal caregiving systems, rendering family-based care an unsuitable option for all older adults (Rankin & Hoffman, 2024; Yahirun & Hamplová, 2021). Where informal caregiving falls short, formal care settings such as residential options may be more viable and sustainable for the long-term care of OPs (Poulain & Mackowicz, 2021; UNICEF, 2009). It is for the purpose of this research that the focus is on formal residential care settings.

Formal care

Formal care described as formal residential care ecologies (FRCE) is delivered by organisations; community-based or home-based, that employ paid professionals or care workers (CWs) (Ewen et al., 2017). The term care worker refers to unrelated, paid carers, according to the International Journal of Care and Caring (https://bristoluniversotypressdigital.com).

Residential facilities or institutions caring for older individuals usually provide accommodation and round-the-clock long-term care (Burchardt, et al., 2018). The literature indicates that the nature of formal caregiving globally focuses on physical care, nursing, or psycho-medical interventions (Schatz & Seeley, 2015). Some models include programmed activities to prevent boredom, loneliness, and inactivity (Panthi, 2022; Schatz & Seeley, 2015).

Formal care in SSA in the form of care homes, is not a familiar phenomenon because caring for OPs is expected to be performed by family members (Awuviry-Newton, 2021; Schatz & Seeley, 2015). In SA, during the pre-1994 political dispensation, government-

funded care homes were primarily available to white OPs, reflecting the racial disparities entrenched in public service provisions (Leibbrandt & Diaz Pabon, 2021). Under apartheid, residential care facilities were accessible to older white individuals only, while other racial groups were excluded from these services (Department of Social Development, 2010). An audit by the Department of Social Development (2010) revealed that a significant majority (79%) of these facilities are located in formal urban areas, with 16% in rural locations and only 5% situated in informal or squatter areas. According to SA legislation, residential facilities are "a building or other structure used primarily for the purposes of providing accommodation and of providing 24-hour service to older persons" (Older Persons Act, No. 13 of 2006, p. 7; Department of Social Development, 2010). This urban concentration contributes to predominantly white occupancy in these facilities (Hlongwane, 2024). Additionally, the distribution of residential care facilities is uneven across provinces, with a higher concentration in wealthier areas such as Gauteng and the Western Cape, while poorer provinces such as Limpopo, the Eastern Cape, and the Free State lack adequate facilities. This uneven provision of formal residential care highlights the disparities in access to formal care resources and the need for more equitable distribution to address the needs of all older adults across SA (Hlongwane, 2024).

Post-apartheid SA saw an opening of residential care options for all South Africans, but due to limited resources, poor OPs are excluded, and the availability of these facilities remains insufficient to meet demand (Seekings & Moore, 2013). Formal residential care in SA is therefore still skewed towards favouring affluent OPs (most of them white) and is not an affordable option for most OPs (Aboderin & Hoffman, 2022; Tshesebe & Strydom, 2016).

Non-governmental and faith-based organisations provide both residential and community-based care services. Many rely on donor funding and operate on a not-for-profit basis, in order to help vulnerable populations who may lack family support (Ferreira, 2013).

Private retirement villages, often with specialised medical support and amenities, are predominantly accessible to middle- and upper-income individuals (Ferreira, 2016). Community-based day-care centres engage OPs in activities and provide them with social and health support while they are still residing within their communities (Hlongwane, 2024).

Little systematic data are available, but there are some indications that the formal care sector in SA is fraught with major challenges, such as poor pay for CWs, challenging working conditions, employment insecurity, low morale, lack of adequate training, poor relationships with management, and continued racial discrimination (Lloyd-Sherlock, 2018; Moore & Kelly, 2024). Formal care can also take a blended form, which means that community day-care centres offer programmes and activities for OPs while they are residing with their families (Moore & Kelly, 2024). Home-based care involves live-in or commuting paid CWs who provide full or part-time care for OPs in their own homes, or their homes with the family (Burchardt et al., 2018). Reasons why OPs move to formal residential care vary and include: physical safety and security concerns (Jörgensen, 2006; van Hoof et al., 2022), health decline and the need for specialised care (White & Alton, 2022), reduced ability to perform activities of daily living (Abdi, et al., 2019), lack of family support and isolation (Pazhoothundathil & Bailey, 2021), a need for access to reliable food and nutrition (Napier et al., 2021), and housing access, such as wheelchair ramps (Henning-Smith et al., 2023). A recent study of the care of OPs in SA showed that for OPs good care involved access to resources, the infrastructure of the care system, CWs' attentiveness and responsiveness, companionship, and an experience of dignity (Rankin & Hoffman, 2024).

The decisions around OPs' relocation to formal residential care are complex. OPs have mixed emotions about moving away from their homes and communities, and struggle with feelings of fear and loss (Dybvik et al., 2014). Some OPs feel an obligation to stay within the family so that their pension can be used to meet their basic needs (Dorrington &

Schulz-Herzenberg, 2024). There is evidence that in some settings, when given a choice between leaving their familiar environment and moving away, even if the living conditions are better, OPs are reluctant to let go of their attachment to their current home (Falk et al., 2012). The expectation of informal care, kinship and filial piety in traditional families can either support this attachment, or place excessive pressure on the family (Jecker, 2022). Families are involved in OPs' decisions to enter formal care ecologies and accordingly literature reports on family members' experiences of guilt in moving their older family members to formal residential care settings, or concern that the OP might feel they are being rejected and abandoned by them (Reuss et al., 2005). In formal settings globally, young migrant women mostly perform caregiving (Shutes & Chiatti, 2012; Van Houtven et al., 2020), which highlights intergenerationality and cultural diversity in caregiving.

Intergenerational caregiving

Caregiving in FRCE is mainly, although not exclusively, performed by younger women and is therefore gender biased (Payne, 1995). The quality of the relationship between OPs and younger CWs is important for caregiving and relational outcomes, because, as Kaplan et al. (2017) propose, "strong intergenerational relationships are not only at the root of healthy and productive ageing; they are also an important component of sustainable and liveable societies" (p. 1). For this study, generational interactions refer to unrelated OPs (G1) and younger CWs (G2 and G3), and not to bookend generations (generations at the opposite ends of the age spectrum, G1-G3) (Hagestad, 2008). Different theories explain the relationship between OPs and younger people.

Theories explaining intergenerational relationships

Dominant intergenerational theories relevant to this study, include the intergenerational solidarity-conflict theory (Bengston & Roberts, 1991; Bengston et al., 2002);

intergenerational ambivalence (Lüscher & Pillemer, 1998; Lüscher 2002), and self-interactional group theory (SIGT) (Roos, 2016).

Intergenerational solidarity (Bengston & Roberts, 1991) proposes six dimensions to explain intergenerational cohesion, focusing on the patterns of interaction between family members: degrees of positive sentiment (affectual solidarity); agreement on values, attitudes, beliefs (consensual solidarity); support and exchange of resources between family members (functional solidarity); the strength of commitment to familial roles and obligations (normative solidarity); and opportunities which facilitate intergenerational relationships, such as frequency of contact and geographic closeness (associational and structural solidarity) (Connidis & McMullin, 2002). Conflict was added as the 7th dimension, which analyses the tension between generations (Bengston, et al., 2002).

Lüscher and Pillemer (1998) developed intergenerational ambivalence, differentiating between sociological ambivalence and structural ambivalence. Sociological ambivalence refers to the experiences of individuals when faced with contradictory social expectations within relationships. For example, a CW might feel torn between showing respect or enforcing boundaries. Structural ambivalence, on the other hand, involves the conflicting social roles or expectations embedded in institutional or family settings, such as balancing independence with care responsibilities. Psychological ambivalence, as explained by Lüscher and Hoff (2013) refers to holding both positive and negative feelings about the same person or group. In the context of intergenerational relationships, for instance, an OP may feel grateful for a CWs assistance, yet resent the loss of independence that comes with it. This ambivalence arises from navigating both dependency and autonomy within caregiving relationships.

The theoretical frameworks of intergenerational solidarity and conflict, and ambivalence are useful to explain the measurements or relational outcomes of solidarity or

ambivalence. However, existing intergenerational theories do not adequately take the significance of context into account. Depending on context, interactions inform relational outcomes. To this end, Roos (2016) developed SIGT, drawing on the Interactional Pattern Analysis (Vorster, 2011). SIGT proposes that intergenerational interactions are analysed on three levels: intra-individual, inter-individual, and group. The intra-individual consists of emotions and perceptions and provides the first indicator of an interactional process, which is the subjective impact resulting from what transpires between CWs and OPs. The inter-individual level includes the interpersonal context as a frame or conceptual boundary within which interactions take place; the definition of the relationship which describes how CWs and OPs move for control in the interaction; the relational qualities of those who are interacting, which could be effective or ineffective; and the motivation for the interaction between people in terms of needs fulfilment. The interactional nature of the relationship between people refers to continuous and circular processes of acting and reacting. The group level refers to intra- and inter-group level dynamics. The interactions between people, according to Roos (2016), are always embedded in broader environments, such as healthcare, sociopolitical or sociocultural. Intergenerational caregiving is informed by the immediate organisational level and broader environments. To understand the relational interactions between CWs and OPs, SIGT will guide the study (Roos, 2016). OPs' caregiving is informed by different care approaches, which will be discussed next.

Care approaches

The care approaches for this purpose are medicalised, person-centred, ethics of care, and relationship-centred care.

Medicalised care approach

The medical model of care for older persons (OPs) often focuses heavily on instrumental support, prioritising physical health needs such as medication and mobility over psychological, social, and emotional well-being (Schatz & Seeley, 2015; Tessier et al., 2022). A medicalised approach to caregiving provides care to people in a generalised manner, irrespective of the individual's particular care need. CWs decide what care needs are addressed and how care actions will take place, while OPs have limited opportunities to participate in any decisions concerning their care. A medical model usually imposes strict routines and controls in a highly hierarchical structure and reporting lines (Estabrooks, et al., 2020). While it makes sense that many OPs suffer from NCDs and increasing chronic health problems require medical attention (McNabney et al., 2022), a medical model of care in FRCE perpetuates the perspective of OPs as patients and can provoke several challenges (Moyle et al., 2021). The medical model's intrinsic power centring in the CW restricts contact with family and community that may lead to feelings of depersonalisation, fear, distress, and isolation (Estabrooks, et al., 2020; Tessier et al., 2022). The model's unidirectional caregiver-to-care-recipient dynamic often limits meaningful engagement, while reinforcing passive roles for OPs, which can diminish their sense of agency and overall life satisfaction (Moyle et al., 2021). To help rectify the difficulties associated with formal care and institutional living and to address the "dehumanising" approach to care, a person-centred approach to caregiving systems has been promoted by the WHO (Ghebreyesus, 2020; Malik et al., 2020).

Person-centred care approaches

Person-centred care (PCC) emphasises the emotional, social, and psychological needs of older persons (OPs) while promoting their personhood (Kitwood, 2013), autonomy, and self-determination within task-oriented care (Kitwood & Bredin, 1992; Koren, 2010; Wilby

et al., 2016). The PCC approach manifests in different variations. For example, the VIPS (acronym for Values, Individualised, Perspective and Social) model (Brooker & Latham, 2006) focuses on individual values and needs of OP, the Assessment Tool for Social and Occupational Engagement (Morgan-Brown & Chard, 2014), the Residential Environmental Impact Scale (Harrison et al., 2023) provide tools to enhance opportunities for social engagement and Dementia Care Mapping (DCM), focuses on core psychological needs of OPs with dementia (Güney, et al, 2021). Brooker (2005) expanded on Kitwood's work to develop DCM, and while dementia was an exclusion criterion of this study, DCM could be valuable in understanding the relationships between OPs and CWs by using observation of care interactions and how they impact the well-being of OPs, regardless of whether they have dementia. By identifying core psychological needs: attachment, comfort, identity, inclusion, and occupation, DCM helps assess whether CWs are fostering meaningful connections, emotional security, and engagement in OPs (Brooker, 2005).

The Eden Alternative™ (EA) (Brownie, 2011; Thomas, 2004) is one example of the approach. The EA promotes autonomy and self-determination towards emotional and social well-being in a convivial, home-like environment in which the value, dignity and growth of OPs are promoted (Brownie & Nancarrow, 2013; Wilby et al., 2016). The EA is based on 10 philosophical principles:

1. Loneliness, helplessness and boredom have a negative impact on OPs. To combat this, multiple activities and stimulation is provided, as well as opportunities for OPs to feel useful and productive.
2. Caring relationships mitigate against loneliness. Management, staff, and other service providers are encouraged to develop relationships with OPs that go beyond physical nursing and instrumental assistance.

3. Close, regular contact with children, animals and plants creates a human environment. Regular activities include interaction with children through reading programmes, residential pets, and the availability of green spaces such as gardens.
4. Mutual caregiving prevents helplessness. Residents are encouraged to support each other.
5. Fun and a variety of activities prevent boredom. They include exercise, games, crafts, excursions, and gardening.
6. Meaning in life is an essential value. Residents are encouraged to become involved in faith-based activities, discussion groups, and purposeful interaction within the residence and local communities.
7. All service providers (from the administrative to the kitchen staff) are seen as partners, rather than imposers of care. Care partners should respect the humanity of OPs Residents have high levels of decision-making autonomy over medical and other interventions.
8. Honour and respect all OPs. CWs are expected to treat older residents with dignity.
9. Growth continues throughout the lifespan. Opportunities for lifelong learning, and cognitive and creative stimulation are important components of the programmes.
10. Thriving is facilitated through wise leadership. Management and staff are trained in leadership skills and professional development is encouraged.

(Brownie, 2011; Carstensen, et. al., 2000; Thomas, 2004)

Unfortunately, there is scant research apart from anecdotal evidence into the effectiveness of the application of the 10 principles. The principles also do do not provide enough information in terms of the role of context and what constitutes effective interactions between CWs and OPs. Additional limitations of the EA include a lack of data about the experiences of CWs and OPs working and living in these facilities (Brownie, 2011,

Sampsell, 2003). Some studies (Custers et al., 2012) on the EA found the OPs' feeling connected, having a sense of belonging, autonomy, and competence (Custers, et al., 2012). In addition, purported benefits associated with the EA have, in general, been informed by data gleaned from residents' records, quality indicators, staff observations and staff reports and limited in terms of relational aspects of care and relationship dynamics (Lowenstein & Katz, 2012; Sánchez, et al., 2011).

Ethics of care

Ethics of care based on feminist philosophy (Gilligan, 1995; Tong et al, 2007) is an approach to morality that emphasises relationships and contextual experiences (Gilligan, 1982). Tronto (2020) identified four phases and four elements of care within the ethics of care philosophy. The four phases include specific elements: caring about, with attentiveness, taking care of, including responsibility, caregiving involving competence and care receiving referring to the responsiveness of the care receiver to the care being rendered (Edwards, 2009; Tronto, 2020). Ethics of care has been further developed as professional loving care (Van Heijst, 2007), and a presence-orientated approach to care (Klaver & Baart, 2011). Van Heijst (2007) proposes that ethical care cannot be separated from the structural system or context in which care takes place. Furthermore, she introduces a concept of care whereby the structures of professional care may need to adapt to guarantee effective and ethical care (Van Heijst, 2007). Baart (2016) emphasises a practical approach to care ethics whereby presence, attentiveness, and attunement to the relational aspects of care are important for meaningful relationships to preserve dignity (Klaver & Baart, 2011). Baart (2016) further argues that attentiveness as a practice can create a space in which a relationship may arise. He describes beneficent, as opposed to functional attentiveness, as creating an intersubjective space in which the emphasis is on the relationship between CWs giving care and OPs as care receivers. For this study, the dimensions of relationality (Baart, 2016), and context or situatedness (Van Heijst,

2007) are useful as guiding constructs to conceptualise effective relationships between CWs and OPs. Care ethics has informed and been applied to a variety of care models in different contexts (Brownie, 2011; Gilligan, 1995; Klaver & Baart, 2011; Thomas, 2004; Tong, et al., 2007). However, while ethics of care acknowledges the importance of relationality, little is said about the specific ways in which CWs, and OPs interact effectively within the context of formal caregiving relationships.

Relationship-centred care

The relationship-centred approach developed by Nolan and Allan (2012) proposes the Senses Framework, whereby caregiving is embedded in an inclusive network of relationships. The network includes everyone involved in the care of OPs, such as formal care service providers, family, and the wider community. The Senses Framework involves interdependence and equal relationships between OPs, CWs, managers, and family members based on a social convoy model, centralising the quality of care for OPs, according to Larkey (2022). Relationships between all parties should be experienced through six senses, including senses of security, belonging, continuity, purpose, achievement, and of significance. While the Senses Framework is helpful in offering guiding principles for relationship-centred care, studies have not fully articulated how CWs, and OPs interact to produce the senses that are promoted to achieve optimal care for OPs.

Care approaches unanimously proclaim the importance of relationships in the care of OPs in FRCE (Baart, 2016; Brownie & Nancarrow, 2013; Larkey, 2022; Van Heijst, 2007; Wilby et al., 2016). However, it is assumed that everyone understands relationships in caregiving from the same perspective. Existing care approaches do not sufficiently highlight how the intra-individual and inter-individual and group levels interplay to produce effective relational outcomes flowing from the relationship between CWs and OPs in FRCE.

As described earlier, SIGT explains what transpires on the intra-individual, inter-individual and group level and proposes that relational interactions between CWs and OPs are embedded in broader environments, but there are gaps in the theoretical understanding of way in which these complex dynamics are playing out. prrequires a meta-theoretical framework such as critical realism.

To address the theoretical gaps, this study adopts critical realism as a meta-theoretical framework, and a critical realist approach (Bhaskar, 1975) to examine the complex relational dynamics between CWs and OPs in FRCEs and to identify the causal mechanisms, and their manifestation in observable relational outcomes.

Meta-theoretical framework to explain complex dynamics: Critical Realism

Relational dynamics are complex and require an understanding of the multiple layers in dynamic interplay with context. The ontology of critical realism espouses three levels of reality: empirical, actual, and real (Bhaskar, 1975). This study uses a critical realist approach to identify the mechanisms on the actual level and the dynamic interplay with contexts (broader environments and interpersonal) on the real level, which can be observed as the relational outcomes between different generations, on the empirical level.

Mechanisms

Mechanisms refer to entities, processes, and social structures within broader environments, and between people and/or groups (Clark, et al., 2008). Mechanisms are triggered in a particular context (e.g. broader environments or interpersonal), which causes change or generates outcome patterns. The combination of intra-individual, inter-individual, and group-level mechanisms produces outcomes in dynamic interplay with particular socio-cultural-historical and intergenerational contexts. On an individual level, mechanisms refer to internal experiences, emotions, and attitudes that are not observable. Inter-individual mechanisms

could include relational qualities or how people move for control in relationships, while mechanisms on a group level are shaped by the group identities of OPs and CWs triggered in the interaction.

Context

Context refers to broader environments or settings or the interpersonal context. Broader environments in this instance could include the healthcare, sociopolitical or sociocultural environments. The interpersonal context provides, according to Vorster et al. (2013), a frame of reference, or a conceptual boundary for interpersonal interactions. The interpersonal context is important because when the context is unclear, meaning is obscured (Watzlawick et al., 2011). It is important to understand the relationship between CWs and OPs, in the context of a formal care setting in SA, to evaluate whether, how, for whom, and in what contexts relationships are effective (Westhorp, 2018).

Expected contribution of the study

The study provides a conceptual framework to explain intergenerational caregiving relationships in the context of FRCE. Moreover, the research can inform the training curriculums of CWs. The study couldbe useful as a map for conceptualising effective intergenerational relationships and informing interventions to support the interactions between CWs and OPs.

Conclusion

This chapter provided an overview of the context for the proposed research and outlined the phases to inform the development of a conceptual framework to explain the relational dynamics between CWs and OPs in the context of FRCE. The subsequent chapters will be used as the multiple phases informing the conceptual framework. Chapter 2 presents the

research methodology of the multiphased study. Chapter 3 offers a scoping review and critical analysis of the literature that describes effective relationships between CWs and OPs in FRCE, presented as Article 1. Chapter 4 explores the experiences of OPs regarding the caregiving relationship with CWs in FRCE, detailed in Article 2. Chapter 5 continues this exploration by focusing on CWs' experiences of their relationships with OPs, presented in Article 3. The findings of the three preceding chapters will be used in Chapter 6 to present the conceptual framework, as Article 4. Finally, Chapter 7 concludes the study by summarising key findings and discussing their implications.

The next chapter presents the research methodology, which was carried out in three phases.

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Chapter 2

Research methodology

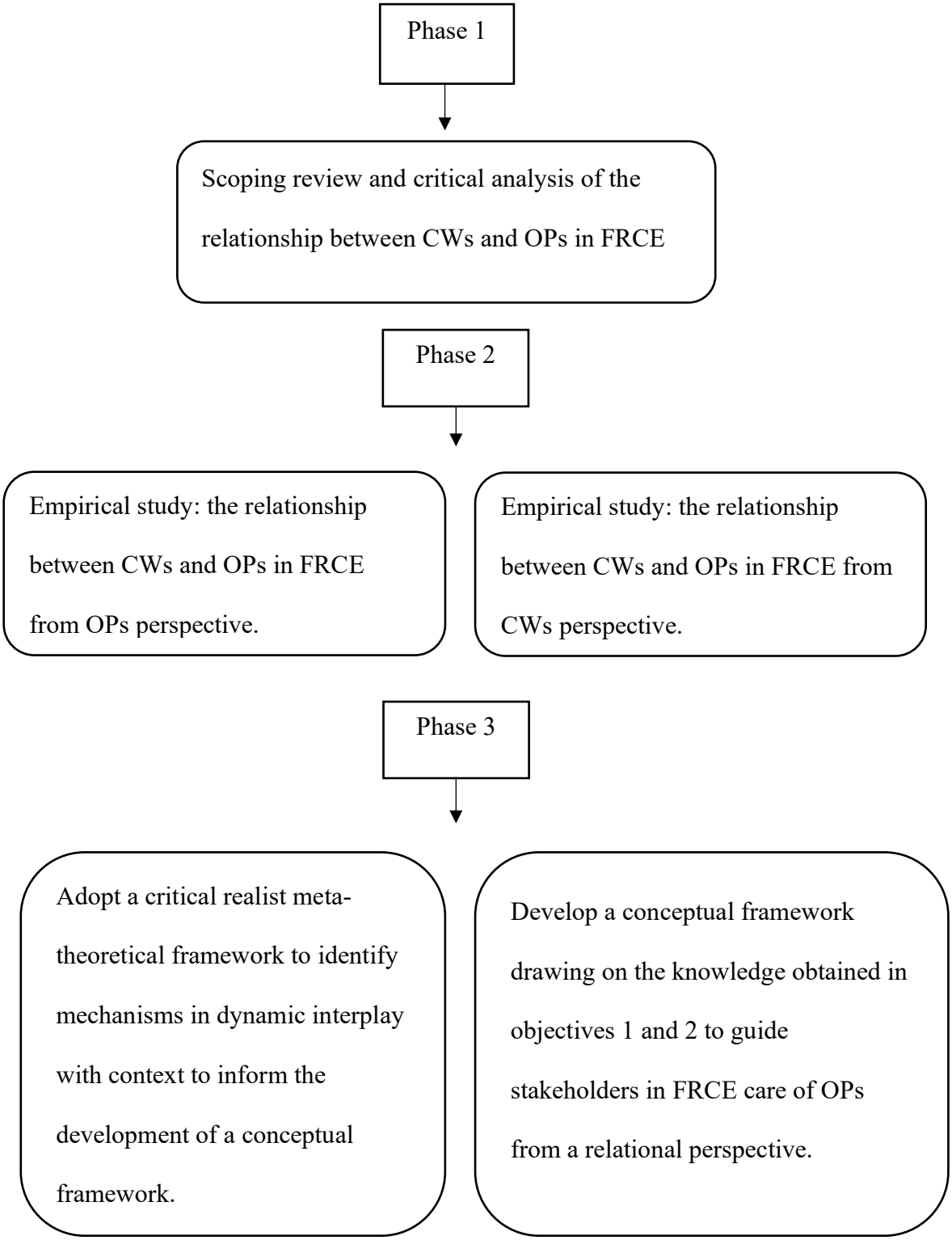
Qualitative research is used to obtain in-depth knowledge of social meanings associated with the caregiving relationship involving CWs and OPs. Qualitative research is indicated to investigate phenomena in their naturally occurring context (Shaw & Holland, 2014), which in this study meant accessing the experiences of the caregiving relationship in the residential settings in which the OPs live and the CWs work.

Research Approach

Critical realism enables the researcher to move between different perspectives to describe the complexity (Roos & Baart, 2016). Underpinned by the research question: "What mechanisms are at play within a residential intergenerational caring context to produce outcomes for effective relationships?" the research was conducted in three phases. Figure 1 below presents a visual representation of the phases of this study.

Figure 1

Phases of the study



An outline of the research methodology for each research phase follows next.

Phase 1: Scoping review

A scoping review and critical analysis was conducted. According to Peters et al. (2021) a scoping review is an assessment of the scope and number of studies and literature on a particular topic. A critical analysis reviews, evaluates, and synthesises existing research to provide insights, identify gaps, and outline trends offering a critical perspective on the findings (Barnett-Page & Thomas, 2009). To the knowledge of the researcher, research has not yet synthesised and critically analysed evidence of effective intergenerational relationships between CWs and OPs in FRCE. Three scoping reviews examined the characteristics, goals, outcomes and assessment tools of intergenerational programmes among OPs, with and without dementia or cognitive impairment, and the interactions with younger people (Galbraith et al., 2015; Gerritzen et al., 2020). Accordingly, the present study sought to undertake a scoping review to locate theories or heuristic constructs underpinning effective relationships involving both CWs and OPs across a continuum of FRCE in the extant literature. A critical analysis of identified research studies followed the review.

The review achieved three specific objectives:

1. Identified what existing psychological or sociological theories or heuristic constructs explain the elements present in intergenerational formal caregiving relationships.
2. Focused on existing literature that described intergenerational formal caregiving relationships between CWs and OPs in FRCE.
3. Performed a critical analysis of existing literature that described the relationships between CWs and OPs in FRCE.

Following Arksey and O'Malley (2005), and EPOC (2019), the protocol consisted of five stages and is discussed in Chapter 3 as part of the article publication.

Phase 2: Obtaining Older Persons' and Care Workers' Experiences

Phase 2 was conducted in two parts: first, the experiences of OPs were obtained, and second, the experiences of CWs.

Aim of the studies. The aim was to conduct a qualitative study to explore OPs' experiences of their relationships with CWs; and CWs' experiences of their relationships with OPs in the context of FRCE, with a particular focus on the interactional processes and outcomes for effective care relationships.

Research question. The guiding research question was: "What are OPs' and CWs' experiences of their relationships in FRCE?"

Research methodology. A qualitative research method was followed to investigate the experiences of CWs and OPs in the caregiving relationship. According to Neuman (2000), qualitative research can obtain rich data, describe human experiences, perceptions, motivations, and behaviour, and investigate the context in which experiences occur (Clissett, 2008). Qualitative research is valuable for obtaining rich data and describing experiences, perceptions, motivations, and behaviours within their contextual manifestations (Clissett, 2008; Neuman, 2000).

Research design. A descriptive interpretive research design (Sandelowski, 2010) was employed for this study because it sought to explore CWs' and OP's experiences of their relationships in FRCE. The application of this design captured the complexities of the caregiving relationship, thereby illustrating how various mechanisms shape the interactions and the social meanings participants attached to their experiences (Sandelowski, 2010).

Research context. Purposive sampling (Etikan et al., 2016; Rapley, 2014) was applied to select three settings in Durban, KwaZulu Natal, South Africa which accommodate middle to low-income pensioners because they provided a range of caregiving options, including

formal care homes with resident care, day-care facilities, and the provision of home-based CWs for non-residential OPs. For this purpose, settings offering formal residential care only to OPs were included. The three facilities ranged from independent living to assisted care and frail care, and the management of all three settings requested research to be carried out on the quality of the caregiving relationship. Three settings are identified as Settings A, B and C. Setting A adopted no specific care approach. At the time of the research, 40 women between 21-65 years provided care to 172 OPs (*n = 45* men, *n = 127* women), with ages ranging from 60-100 years. Setting B was a privately funded non-profit care home guided by the 10 principles of the Eden Alternative™ that in essence means a move away from the institutional hierarchical care model to a care approach that according to Brownie (2011), promotes active ageing and independence, fosters connectedness and acknowledgment of OP's ability to make autonomous decisions (Larkey, 2022). CWs in Setting B comprised 45 women, aged 25-65 years, caring for 142 OPs (*n = 36* men, *n = 106* women), between 62 to 100 years. Setting C adopted a general person-centred approach, with 48 women aged 27-62 years caring for 60 OPs (*n = 8* men, *n = 52* women) between the ages of 50-96 years. Contextualising detail is presented in Table 1.

Table 1

Facility details

Facility	Care Approach	No of OPs	No of CWs	Ratio of CW to OP	Shifts
A	Person-Centred	173	40	1:4 day 1:7 night	6am-6pm; 6pm-6am
B	Eden Alternative	142	45	1:6	Day 10.5 hrs Night: 11 hrs
C	Person-Centred	60	48	1:4 day 1:6 night	6am-6pm; 6pm-6am

FRCE in SA is skewed towards white representation (Lombard & Kruger, 2009; Schatz & Seeley, 2015). The sample settings are no exception with the majority (98%) OPs being white, and a small number Indian and Black, while all the CWs are Black. The racial classification is used here as a reflection on the political dispensation in SA pre-1994 that favoured white (affluent) older individuals by exclusively reserving residency and care for them during their old age (Department of Social Development, 2010), and CWs with limited educational opportunities, having to resort to low-paying caregiving jobs.

CWs are trained by an outside training academy offering either a Home-Based Carers Certificate after three months or a Vocational Certificate in Care after six months. The requirements for this training include a Grade 12 education (Allmed, 2020). Training involves knowledge modules such as ethics and values, quality of life and principles of communication, anatomy and physiology, mental illness, communicable and non-communicable diseases, and concepts and principles associated with ageing. Practical skills modules include basic first aid, physical care, developing a care plan, and emotional support (Allmed, 2020). Workplace experience includes an induction process which all CWs undergo with a mentor once they start work at the care facility, familiarising them with the particular care philosophy and procedures. The CWs' training, induction and mentoring processes reflect the general person-centred philosophy of care adopted by all three facilities. In addition to training, the job description for the CWs role would include strength and mobility, being people-oriented, patient and compassionate, maintaining composure, time management, flexibility, initiative, creativity and problem-solving skills, attention to detail, good verbal communication and grammatical English, which is considered essential.

Participants. Sampling was purposive (Etikan et al., 2016) to obtain rich data from participants directly involved in the caregiving relationship. Participants from formal private residential care facilities in Durban were invited to participate in the data-gathering process

because these residential care settings offered a range of living options for OPs, ensuring that diverse experiences were obtained.

Inclusion and exclusion criteria.

Older persons. The inclusion criteria for OPs required participants to:

- be over 60 years old,
- be able to communicate coherently,
- willing to engage in the study,
- generally in good physical health, with no visible cognitive disabilities, and with adequate mobility (as determined by facility care management),
- be fluent in English

Exclusion criteria were OPs who:

- had difficulties in coping with reality (as identified by care facility management)
- had recently experienced significant trauma or the loss of a loved one (as identified by care facility management),
- individuals who self-determined that the study would be too demanding, whether psychologically, emotionally, or physically.

More women than men chose to participate in the study and those who met the inclusion and exclusion criteria included 22 OPs, with ages ranging from 65-89 years. Setting A included 6 women and 3 men; Setting B included 7 women; and Setting C included 6 women.

Care workers. The inclusion criteria for CWs required participants to:

- be fluent in English,
- aged over 18

- be in full time employment as CWs at the facility for at least a year,
- be willing to participate.

Exclusion criteria were CWs who:

- were qualified nurses or employed as management, kitchen, or maintenance staff in the facility.

CWs (*n = 22*), between 30 and 55 years, from the 3 facilities volunteered to participate in the study and met the inclusion and exclusion criteria. Details of CWs who participated are presented in Table 2.

Table 2

Care workers' biographical information in each facility

Facility	Age	Language preference	Education and Training	Years in Facility
A	33	English	Home Based Carers Certificate	7
	37	English/isiZulu	Home Based Carers Certificate	13
	44	English/isiZulu	Vocational Certificate in Care	6
	44	English/isiZulu	Vocational Certificate in Care	3
	55	English/isiZulu	Home Based Carers Certificate	10
	57	English/isiZulu	Home Based Carers Certificate	8
B	30	English/isiZulu	Home Based Carers Certificate	10
	30	English/isiZulu	Vocational Certificate in Care	7
	30	English/isiZulu	Vocational Certificate in Care	4
	32	English/isiZulu	Home Based Carers Certificate	8
	37	English/isiZulu	Home Based Carers Certificate	10
	37	English/isiZulu	Vocational Certificate in Care	6

Facility	Age	Language preference	Education and Training	Years in Facility
C	30	English/isiZulu	Vocational Certificate in Care	4
	32	English/isiZulu	Vocational Certificate in Care	4
	35	English/isiZulu	Vocational Certificate in Care	5
	43	English/isiZulu	Home Based Carers Certificate	12
	47	English/isiZulu	Home Based Carers Certificate	10
	55	English/isiZulu	Home Based Carers Certificate	14

Participants included separate groups of no more than 10 OPs (aged 60 and above) living in the care facility and between 5 and 10 CWs (aged over 18) employed by the care facility. The sample size was limited due to prevailing Covid-19 restrictions (at the time of data collection) for group gatherings and also because rich, layered data can be collected from a small sample.

Should any volunteers have been eliminated by the exclusion criteria prior to the study, the researcher offered them a separate research activity to honour their willingness to participate, but this did not form part of the data collection process.

Procedure for data collection. Letters were written to the three respective managers of the formal care settings explaining the purpose and procedures of the study, and requesting confirmation for the research to be conducted, assistance with identifying a gatekeeper, and a suitable date to meet. The researcher subsequently met with management, senior nursing staff and care managers of the facilities to inform them about the aim of the study, expectations, what the data would be used for, who would have access to the data, and about confidentiality and its limitations. They were requested to complete a questionnaire and were extensively interviewed to gather contextual information about the facility's care philosophy, approach,

methodology, routine, training of CWs, and logistical and ethical requirements required to ensure the well-being of the participants. A senior CW, well known as a mentor to the CWs, was recommended to help participants if they needed to discuss their participation. A similar mentor was identified for the OPs. The care manager of each facility was identified as a suitable gatekeeper and signed a consent form agreeing to participate in the research study. The researcher then met with the identified gatekeepers to establish health protocols (both general, and specific to Covid 19 protocols relevant at the time of the study), assist with the selection of participants, determine the need for translators, organise logistics such as security procedures and the need for standby nurses, and obtain informed consent to conduct research in the specific settings from all relevant parties. Consideration was also given to providing CWs with the opportunity to participate without disrupting their caregiving responsibilities. Care managers assisted with rearranging shifts so that participating CWs could be present on the day the research was to take place. Arrangements were also made for psychological counsellors to be on hand during the data-collection phase should any of the participants experience emotional distress. English was used in all three settings, but to accommodate isiZulu-speaking CWs[1], it was decided that at least two fieldworkers fluent in isiZulu would be included in the research team. The researcher provided care managers with posters and flyers advertising the research study and inviting OPs and CWs to volunteer for the research. The posters were placed in the care facilities on notice boards visible to both OPs and CWs. A response form requesting contact details was provided and participants were invited to contact the care managers to indicate their interest in participating. An independent gatekeeper collected the forms from the care managers to mitigate the potential power that

[1] isiZulu is one of the 11 official languages of South Africa.

could have coerced participants into participation. The care managers met with the participants to verbally inform and explain what would be expected of them and indicate the risks and benefits associated with the research. Participants were made aware of the voluntary nature of their participation and were informed that they could withdraw from the study at any time without any negative consequences. The participants were also informed about the purpose of the study, expectations, what the data would be used for, who would have access to the data and the general procedure followed for the project, including the recording process and approximate duration of the study. It was stressed that confidentiality was limited and could be ensured only partially because data gathering would take place in a group context. Before requesting informed consent, participants were given time to discuss their participation with people they trusted to decide if they wanted to volunteer.

Data collection. On the days of the research, gatekeepers ensured OP participants had had breakfast, received their prescribed medication, and were well rested, and that CWs were relieved of their duties. Fieldworkers were included in the data collection process to assist with setting up materials, recording data, and creating a supportive and interpersonally safe research context for participants. Fieldworkers were trained to be proficient in the data-collection method and group dynamics and adhered to ethical boundaries of confidentiality, and complied with, and consented to, ethical codes of conduct in writing. Data was collected over three days and was conducted at each facility with two separate groups, with OPs in one group and CWs in another group, and participating in the study at different times. Provision was made for CWs' language differences, and two fieldworkers spoke isiZulu if translation was required. Provision was also made for OPs in terms of accommodating mobility and time, and the researcher and fieldworkers paid attention and remained sensitive to any

additional needs OPs had. The research was conducted in large rooms with sufficient tables and chairs to observe social distancing in view of COVID-19 restrictions.

Data-collection method. The Mmogo-method®[2], which is a projective data-collection method, was used (Roos 2016). Mmogo referred to a collaborative process of co-constructing and making meaning of phenomena in a relational context (Roos, 2016). The theoretical underpinning of the Mmogo method was informed by a hermeneutical and social constructivism approach (Roos & Baart, 2016), whereby the meaning of experienced reality was socially constructed. As researchers adopted a meta-reflexive stance, they moved between different positions, beginning first with the position of the participants, who visually created their unique and subjective social constructions of the phenomenon of effective relationships. The choice of the method was informed by the notion proposed by Roos and Baart (2016) that by taking a meta-reflexive stance three perspectives could be described: subjective meanings could be obtained; broken patterns of social reality could be described, and data beyond the descriptive level could be interpreted to identify mechanisms in dynamic interplay with context. Fieldworkers were trained in the Mmogo-method, thus ensuring they were proficient in conducting the procedure.

The Mmogo method was conducted with two separate groups, with OPs in one group and CWs in another group. The groups met at separate times in large rooms with the tables and chairs arranged so that participants could observe one another's visual representations and participate in discussions. With each group, the data collection occurred in four phases (Roos, 2016) as follows.

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[2] The Mmogo-method is trademarked by the North-West University

Phase 1. Entering the research context. The context was created by introducing group norms and establishing the conditions for optimal participation. The creation of a clear context was important for participants to feel safe and to understand the process, as well as the reason for it and the value of their contribution. The explanations were simple and clear and included the aim of the study and its relevance for them. Participants were invited to ask questions to ensure they understood the procedure and the purpose of the research. A safe interpersonal research context was also created by informing participants about what they could expect during the data-collection process, and they were assured their visual constructions would not be judged. Participants were invited to ask questions to clarify the process and were informed that they could withdraw from the study at any time and for any reason, without prejudice.

Participants confirmed that they had given informed consent and were also reminded that only partial confidentiality could be granted because research was conducted as a group. Participants were also reminded that their visual constructions would be photographed, and the interviews recorded. However, they were reassured that researchers would maintain confidentiality and protect the participants' identities when reporting the findings of the study.

Phase 2. Construction. The two groups of CWs and OPs worked separately (at different times). The participants were invited to sit around a table and were each given a container with a standard set of materials. These were a ball of clay, beads of different colours, dried grass stalks, and a circular piece of cloth. The participants were given the following open-ended prompt:

To the OPs: "Please use the materials and make anything that will show us how you experience your relationship with a younger care worker who cares for you."

To the CWs: “Please use the materials and make anything that will show us how you experience your relationship with an older person that you care for.”

Following this, participants were given time to construct their visual representations of the phenomenon of intergenerational care relationships. During this time, the researcher and fieldworkers maintained a respectful distance and remained quiet unless asked a question by the participants. This process was video recorded, and the final constructions photographed to form the visual data of the study.

Phase 3. Discussion. Once sufficient time had passed and all participants had completed their constructions, they were invited to explain these in response to the open-ended prompt: “[Name], please describe what you have made.” Participants were given uninterrupted time to describe their constructions. The researcher mirrored back what had been shared, either directly or in summary form, essentialising the content. This process served as a form of member checking to ensure accuracy, with the focus relevant to the research question. The researcher continued to ask open-ended questions about the elements that had been included in the construction to collect rich and layered data. These questions were in line with the focus of the research, which was to understand the relationship between CWs and OPs in FRCE. This information was audio-recorded as textual data.

Phase 4. Debriefing. Further textual data were gathered by debriefing the participants. In addition, fieldworkers who assisted the researcher were included in the debriefing. They also contributed by documenting (using journaling and memos) their experiences, processes, challenges, and insights. Such documentation was crucial for enriching the data and providing a multidimensional understanding of the relational dynamics between CWs and OPs.

The researcher also allowed for the layering of data and multiple perspectives on the phenomenon of care relationships between CWs and OPs in FRCE, which were integrated into the final results.

Data Analysis. A three-step approach guided the analysis.

In-case analysis using Created-Image Data Analysis (CIDA). First, an in-case analysis using Created-Image Data Analysis (CIDA) for visual and textual data proposed by Baart and Roos (2022) and consisting of five phases was conducted. Phase 1 entailed formulating initial impressions and reporting basic information about what was represented in the visual data, including the context and reason for the construction. Phase 2 included descriptions of the elements and how the form was organised and composed, detailing the content and quality of the visual representation. Phase 3 was an analysis of the internal order or logic and cohesion of the visual representation, focusing on how prominent details were connected, their relevance, and symbolism. Phase 4 involved interpreting the meaning of the prominent details and symbolism, summarising an overall impression, and understanding the storyline of the visual representation. This phase also included comparison and integration with the textual data in terms of the meaning of the visual data in relation to the textual data. Phase 5 outlined the significance of the interpretation in relation to the research question and evaluated the procedure.

Thematic analysis. Second, the textual data were analysed using a thematic analysis approach drawing on Braun and Clarke (2006). This included an iterative process of familiarisation with the data, identification of initial codes, and sorting according to themes and subthemes, generating a thematic map, and collating a unified story.

Cross-case analysis. Third, a cross-case analysis of the integrated data was conducted by comparing in-case and cross-case themes and subthemes to identify patterns (Cloutier &

Ravasi, 2020). The strategies that were used to ensure the trustworthiness of the study are discussed next.

This comprehensive approach allowed both for in-depth case analysis and cross-case comparisons, ensuring a robust understanding of relational dynamics in FRCE settings (Smith & Firth, 2011; Vaismoradi et al., 2013). The use of multiple methods of analysis, repeated transcription, and collaborative coding enhanced the reliability and depth of the analysis (Creswell, 2010). ATLAS.ti 22 for Mac (ATLAS. ti Scientific Software Development GmbH, 2022) was employed as a tool to supplement the data analysis process.

Trustworthiness. The same criteria as those discussed in Phase 1 including credibility, dependability, and confirmability, were applied (see Guba, 1981). In addition, member checking (Harper & Cole, 2012) was conducted, including the independent and iterative analysis of textual and visual data, which was then synthesised using perspectives shared by participants as well as researchers. Multiple analytical techniques were applied to generate rich, detailed descriptions of the data. The research process maintained conceptual coherence by aligning the research question with data collection and analysis methods (Morse et al., 2002). Crystallisation was used to strengthen the analysis by employing multiple methods of data interpretation (Neves et al., 2023). Furthermore, researchers engaged in reflective practice following the data analysis phase to deepen their understanding of the diverse perspectives of participants (Neves et al., 2023). Cross-case analysis facilitated the generation of transferable knowledge (Cloutier & Ravasi, 2020; Gale et al., 2013; Goldsmith, 2021). The broad principles of sensitivity to contexts, commitment, rigour, transparency, coherence, impact, and importance guided the researcher throughout the research project (Guba, 1981; Guba & Lincoln, 1982; 1994; Khamitov et al., 2024; Pitney, 2024). Data saturation in this study was approached from the viewpoint that meaning was discovered by the researcher who actively searched for contextual understandings and a thorough

interpretation of the data (Braun & Clarke, 2019). Furthermore, the richness of the visual and textual data from the Mmogo-method to understand the data and to develop the conceptual model was used rather than to rely on data redundancy (see Morse, 1995). Because the researcher and fieldworkers were involved in the research project, there was also sensitivity to the fact that, as Gilbert (2000) indicated, their reactions might have shaped the direction and depth of their understanding of the experiences of the study participants.

Ethical considerations

Permission to conduct the research was obtained before data gathering commenced, from the Humanities and Health Research Ethics Committee of North-West University (HSSREC), with reference number NWU 01153-21-A7. The researcher did the following to ensure that the ethical principles were adhered to:

- Ensured that all participants in the project clearly understood the purpose of the research and gave informed consent. This was done in three stages. First, when meeting with the management of the facilities, the researcher described the research in detail, including objectives and methodology. The researcher obtained consent from the management to conduct research in the facility by requesting the completion of a signed consent form. Second, the researcher explained the consent process for participants to the management so that, if any CWs or OPs wanted to discuss their choice to participate with management, the process was understood and could be clearly explained. The researcher communicated with management regularly to ensure the research process was fully understood. Third, on the day of the research, the researcher explained the process directly, in person, to participants and allowed for questions. Participants were made aware of the voluntary nature of their participation and their freedom to withdraw from the study at any time without any negative consequences. The participants were further informed about the purpose, procedure,

duration, and expectations of the study. It was stressed that only partial confidentiality could be ensured due to data gathering taking place in a group context. Participants were asked to sign or verbally consent to participate in the research, and their answers were recorded.

- Maintained the privacy, anonymity, and confidentiality of all information obtained from participants, while at the same time ensuring participants understood that only partial confidentiality could be ensured as a result of the group setting of data gathering
- Ensured that no harm was done to any participant during the research process by providing access to support services for anyone who experienced distress during the inquiry process.
- Displayed sensitive awareness of the context and sensitivity to the unique needs of OPs. This included sensitivity to time, physical comfort, patience with explanations, and awareness of emotional, psychological, and physical needs.
- Paid attention to and respected the needs and unique contextual issues CWs had in participating in such research, such as language and cultural differences, which required the use of a translator or advisor.
- There was also a debriefing process in terms of discussions around potential stereotypical interpretations, what worked well, and what could be offered as suggestions for application in the care facility. Participants were made aware of the availability of psychological services after the research process due to the possibility of eliciting emotional content.
- COVID-19 restrictions and protocols were adhered to as this research took place as the pandemic was coming to an end.

- Following the completion of the study, the researcher committed to returning to the research setting to offer feedback to the management, staff, and research participants. The feedback would take the form of sharing information and providing an explanation of the value of their contribution to the field of study. Some psychoeducation will be offered, with suggestions for learning from their ideas about what effective caring encompasses. This process is intended to both inform and give closure to participants by their leaving something of value behind.

Phase 3. Conceptual framework: A conceptual framework for effective relational outcomes was developed

Objective. A conceptual framework consisting of mechanisms in the dynamic interplay between CWs and OPs within an FRCE context was likely to yield effective relational outcomes was proposed. A conceptual framework was essential to bring focus to the research question and content and to establish a link between literature, methodology, and results. This phase incorporated the findings (key elements) of the preceding phases and generated principles, which guided the development of a framework for various applications, including training of CWs, intergenerational programs, activities, interventions, initiatives, and policy development for FRCE at multiple societal levels.

Conceptual Model. The data collected from Phases 1 and 2 were integrated to develop a conceptual model for effective relationships between CWs and OPs in the context of FRCE to transfer knowledge (Baker & Bouchard, 2016) to other contexts. A critical realist approach, drawing on critical realism (CR), was used to identify mechanisms and explain their dynamic interplay with contexts that were likely to produce effective relational outcomes. This involved identifying mechanisms from existing literature and the experiences of OPs and CWs in the caregiving relationship. The result was a conceptual framework built

through careful, systematic inductive analysis throughout the research process to address the research question (Archer et al., 2013). The development of the conceptual framework followed a critical realist framework (Hall, 1980; Lawani, 2020) and was presented in three phases:

1. A critical realist framework to explain mechanisms in dynamic interplay with context to produce care outcomes was adopted.
2. Mechanisms from existing literature and the experiences of OPs and CWs in the caregiving relationship were identified.
3. A conceptual framework was developed.

Ethical Considerations of the Conceptual Framework. Given that this phase of the research did not involve direct human participants, the ethical risks were minimal. However, ethical responsibility remained crucial in ensuring confidentiality, particularly in handling any data or secondary sources used and the integrity of the research process was maintained (APA, 2020). Even in the absence of direct participants, researchers adhered to principles of honesty, transparency, and accountability when reporting findings or utilizing secondary data sources (Resnik, 2018).

Trustworthiness. To ensure the trustworthiness of the conceptual framework, key principles from the grounded theory approach guided its development, focusing on three critical aspects:

1. **Research Abilities:** Researchers demonstrated an in-depth understanding of both the data and the analytical process to produce valid interpretations (Corbin & Strauss, 2008). Effective research abilities were critical for developing an accurate conceptual framework grounded in the data.
2. **Methodological Correspondence (or Methodological Congruence):** The selected methodology aligned with the research objectives. Methodological congruence

ensured coherence between the research questions, methods, and the overall purpose of the study. This principle ensured that the chosen methodology was appropriate for generating the intended conceptual outcomes (Birks & Mills, 2022). Ensuring this correspondence helped maintain internal consistency and enhanced the theoretical relevance of the framework.

3. **Procedural Accuracy:** Procedural accuracy referred to the meticulous application of critical realism throughout the research process. This included systematically gathering, coding, and analyzing data. Maintaining procedural accuracy ensured that the conceptual framework was deeply rooted in empirical evidence and that its development followed a rigorous methodological path (Corbin & Strauss, 2008). Adhering to this principle supported the credibility and validity of the findings.

In addition, **transferability (**Guba and Lincoln, 1982) was applied, and to facilitate the transfer of knowledge, the mechanisms involved in the formal care context were explained in the conceptual model.

By following these principles, the study's conceptual framework was developed with a high degree of trustworthiness, ensuring its methodological rigor and theoretical integrity (Corbin & Strauss, 2008; Glaser & Strauss, 2017).

From the four phases described above, four articles were written

1. **Title: Effective relationships between care workers and older care recipients in formal care: A scoping review and critical analysis**. In this article a scoping review and critical analysis was conducted to explore the theoretical underpinnings and existing research into what constituted effective relationships between care workers (CWs) and older persons (OPs) in formal residential care ecologies applicable in SSA. This article provided a starting point for describing

the constructs applicable in the relational dynamics between CWs and OPs in FRCE.

2. **Title: Older persons' experiences of their relationships with care workers in formal residential care ecologies.** In this article qualitative research conducted from the perspective of OPs regarding their experiences of relationships with CWs in residential caring facilities in KwaZulu-Natal, South Africa was presented.
3. **Title: Care workers' experiences of their relationships with older persons in formal residential care ecologies.** In this article qualitative research conducted from the perspective of CWs regarding their experiences of relationships with OPs from the same residential caring facilities in KwaZulu-Natal, South Africa was presented.
4. **Title: A proposed conceptual framework to explain the relational dynamics between care workers and older persons in formal residential care ecologies.** In this article the findings from Articles 2 and 3 were analysed to identify what mechanisms were in dynamic interplay with FRCE to promote effective relational dynamics between CWs and OPs. A conceptual framework for explaining these relational dynamics was developed.

Expected contribution of the study

The study provides a conceptual framework to explain intergenerational caregiving relationships in the context of FRCE. The research will inform the training curriculums of CWs. Moreover, the study will be useful as a map for conceptualising effective intergenerational relationships and informing interventions to support the interactions between CWs and OPs.

Conclusion

This chapter provides an overview of the research methodology for this multiphased study to inform the development of a conceptual framework explaining the relational dynamics between CWs and OPs in the context of FRCE. In the following chapters, first, the scoping review, critical analysis of literature and findings describing effective relationships between CWs and OPs in FRCE will be presented as Article 1. Second, Article 2 the findings which describe the experiences of OPs about the caregiving relationship with CWs in FRCE will be presented. Third, using the same research methodology, Article 3 will describe the findings of the experiences of CWs about the caregiving relationship in FRCE. Fourth, the final Article 4 will present the conceptual framework. The final chapter concludes the study. Critically analysing the relevant literature serves as the guiding step in designing and proposing a conceptual framework in this regard and is presented next.

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Chapter 3

Article 1

Effective relationships between care workers and older care recipients in formal care: A scoping review

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Abstract

Objective:

This article aims to conduct a scoping review of what constitutes effective relationships between care workers (CWs) and older persons (OPs) to develop transferable knowledge about effective relationships, applicable in Sub-Saharan Africa (SSA).

Methods: A scoping review of publications between January 2000 and December 2020, yielded 10 929 articles, and after removing duplicates and applying exclusion criteria, 36 articles were analysed.

Results: Four themes emerged: (1) Different perspectives on the same context: for OPs it is home, while for CWs, their workplace. (2) CWs adopt a leading and OPs a following position (complementary), or as friends (parallel). When OPs move for control, dissonance is observed. (3) Relational qualities have been mostly associated with CWs, confirming care as a unidirectional action (4). Relationships between CWs and OPs result either in effective or ineffective care outcomes.

Conclusion: The dual meanings attached to the same context (home vs. workplace) limit the authentic, spontaneous interactions between CWs and OPs. We challenge the unidirectional nature of care by proposing relationship-centred caregiving involving both CWs and OPs, changing the relational definition and demonstrating effective relational qualities.

Keywords: Effective relationships; Formal residential care ecologies; Older persons; Care workers; Sub-Saharan Africa

Introduction

This article focuses on residential care (a contained environment) as a departure point to develop transferable relational principles applicable within any organised formal care setting

relevant to the context in Sub-Saharan Africa (SSA): institutional or community based. Residential facilities provide care across the continuum of independent living, assisted living to full-time frail care. The increase in future cohorts of OPs, in Africa in particular, and more specifically, SSA, as the youngest of all the world's regions (1, 2, 3), presents an urgent challenge to better understanding OPs' care needs. Even though the care of OPs is viewed primarily as a family concern (4, 5), families may be faced with limited financial and time resources, changing family demographics, and sometimes strained interpersonal relationships (1, 6, 7, 8, 9). Formal care provided by paid professionals or carers focuses on physical care, nursing, or psycho-medical interventions (10). To counteract the perceived 'dehumanising' approach to care associated with a medical model, person-centred care (PCC) approaches developed (11, 12, 13, 14), such as: the Eden Alternative, which considers OPs' emotional, social, and psychological needs while promoting their autonomy and self-determination (15, 16); the Values, Individualised, Perspective and Social (VIPS) model, which endorses the individual values and needs of OPs; Green Houses, advocating for the autonomy and dignity of OPs, and Dementia Care Mapping, which focuses on the needs of OPs with dementia (17); the Senses Framework emphasising the interdependence between OP and CW [18]; and Swanson's middle-range theory of caring explaining the process whereby caring is enacted [19].

Drawing on an ethic of care philosophy (20), PCC highlights the context in which caregiving takes place, and the quality of the relationship (15, 21, 22). The focus on relationships in caregiving is further supported by Agenda 2063, which aspires to an Africa that is people-centred and caring (2, 3). Research clearly associates effective relationships with healthy ageing (213, 24), but to date, research on the nature of relationships between OPs and CWs in formal care reports ineffective relationships (7, 17); or focuses (punctuates) on the

intrapersonal level (the subjective experiences) (7, 14, 17). Scoping reviews deal with the quality of care for older adults (14); life-story work in long-term care of OPs (25); the perceptions and experiences of PCC from the CWs' perspective (17); and care-related research (7). What remains underexplored is: What are the constructs underpinning effective relationships involving CWs and OPs in formal residential care environments? Relationships, drawing on the interactional approach, are the interactions (observable verbal and nonverbal messages) involving both CWs and OPs. Every interaction has an impact (a registering effect) on the recipient and a corresponding reaction, which in turn impacts the sender (26-29). Moreover, interactions between people are always embedded in a particular environment, which informs behaviour (28). The article aims to identify constructs underpinning effective relationships involving both CWs and OPs across a continuum of formal residential care context in extant literature.

Methods

Information Sources and Search Strategy

Arksey and O'Malley's (31) five stages guided the scoping review: (1) identify the research question(s); (2) identify relevant studies; (3) data extraction; (4) chart the data; and (5) collate, summarise, and report the results. The PRISMA-P (Preferred Reporting Items for Systematic Review and Meta-Analysis Protocols) (30) checklist was used to ensure rigour. Scoping reviews involve an iterative and rigorous process; hence this protocol was revised as needed (32).

Review questions. What theories or heuristic constructs identified an understanding of effective relational interactions between CWs and OPs in FRCE? How were intergenerational formal care relationships in formal care settings described?

***Research setting and sampling methods*.** Purposive sampling was used to select relevant studies targeted at the review's objective and research questions which in this instance was to determine what constructs emerged in literature around effective intergenerational formal care relationships (Etikan, 2017). This was appropriate as the purpose of the review was to scope a body of literature, identify gaps, clarify concepts and definitions, and investigate research methodology and conduct (Munn et al., 2018). The scoping review was conducted to identify qualitative and mixed method articles with the selected databases by using a combination of Boolean phrases and specific keywords which were identified according to the research questions (Peters et al. 2015). Keywords: **formal care-giver*"* OR *care-giver** OR formal *carer** OR carer* OR elder-care* OR non-kinship carer*, AND *elder** OR elderly *retiree** OR *pensioner** OR *aged** OR *older people** OR *senior** AND *care-receiver* OR care-recipient* OR* (Abstract), AND *intergenerational relationship* *solidarity* OR *harmony* OR *cohesi** OR *"social closeness"* OR *interact** OR *experience** OR *mutual* OR *meaning** OR *perception** OR *communication* OR connection**.

Searches were guided by Cooke et al. (2012) by applying specific inclusion criteria, such as primary empirical studies published in English between January 2000 and December 2021 (when PhD study started). An article was considered relevant if the content applied to the context (Arksey & O'Malley, 2005), in this case, intergenerational relationships between CWs and OPs in FRCE. Exclusion criteria were: (1) Informal care relationships, grandparents, children, grandchildren, youth, family, kinship carers, medically trained healthcare personnel, nurses for specific conditions (e.g. HIV, Alzeimer's) OPs in hospital settings, and OPs with dementia or cognitive impairment; (2) Non-peer-reviewed studies (e.g. training manuals, reference to blogs, newspaper articles or magazine articles), literature reviews, book reviews, policy documents, and government literature. Grey literature was excluded as it did not cover empirical studies on the topic. After the above-mentioned

inclusion and exclusion criteria were applied, the preliminary search results were limited to the relevance and availability of each article.

The following databases were searched: EBSCOHost (Academic Search Premier, Africa-
Wide Information, Ejournals, ERIC, PsycArticles, PsycINFO, and SocINDEX), Scopus, African Journals (previously SAePublications) and Web of Science. The search strategy was based on the methodology and guidance of Peters et al. (33).

The eligibility criteria applied included: publications in English between January 2000 –December 2021; CWs and OPs aged 60+ in formal care settings; studies including OPs who are cognitively intact; and studies presenting interactional dynamics involving both CWs and OPs. The run-up to the Madrid International Plan of Action on Ageing (MIPAA) in 2002 and the subsequent momentum of ageing research broadly motivated the focus of 2 decades following that dynamic. Studies excluded were: ineffective relationships (e.g. elder abuse), studies with children or youth samples, informal or kinship carers, OPs in hospital settings, medically trained healthcare personnel, nursing for specific medical conditions (e.g. HIV, Alzheimer's), and studies including OPs with dementia or cognitive impairment. Publication types not accepted for this review were literature reviews, book reviews, policy documents, government documents, grey literature, and non-peer-reviewed studies (e.g. training manuals, reference to blogs, newspaper articles or magazine articles).

During the search process, three co-researchers independently identified 10 929 articles and screened article titles, abstracts, and key words for eligibility. After duplicates had been removed and exclusion and inclusion criteria applied, 1 034 articles were read, disagreements resolved with consensus discussions, and 36 articles analysed.

Data-collection methods and recording. Measures were applied to access available, full-content articles. If an identified article could not be accessed after the following measures were applied, in chronological order, the article was considered unavailable:

1. Perform a search on the selected relevant databases (EbscoHost databases: (Academic Search Premier, Africa-Wide Information, E-Journals, ERIC, PsycArticles, PsycINFO, and SocINDEX), Scopus, African Journals (previously SAePublications) and Web of Science).
2. Perform a search on the NWU Library local and worldwide database.
3. Perform a specific search on Google scholar.
4. Perform a general search on Google and ChatGPT.
5. Manual searches of reference lists of identified articles.
6. Contact the author(s) if information supplied.

Researchers ensured that the search results were accurate and the selected articles, and the data they included were trustworthy. In addition, relevant ethical aspects were considered. On completion, keywords, Boolean phrases, article titles, and abstracts were screened by two independent researchers to determine if articles were relevant or not. A third researcher was involved in consensus discussions.

The full list of Boolean phrases used during the search is presented in Table 1.

Table 1

Boolean Phrases to identify articles regarding the relationship between care workers and older care recipients in a formal care context

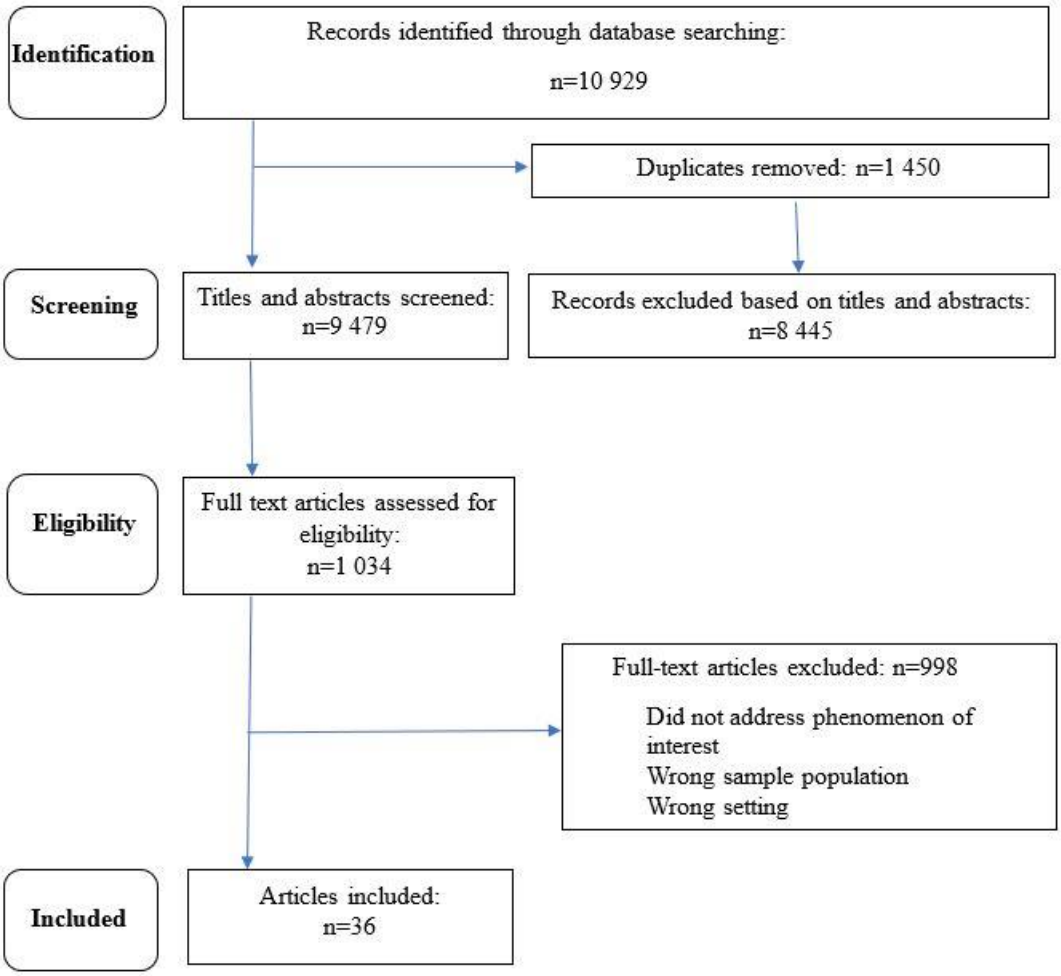
	Search Strings	Hits (before exclusion criteria)	After exclusion criteria	Total included after full text review
1	(Care-giver* OR Carer OR "Elder care" OR "Non-kinship care" OR "Formal carer" "Formal care*" OR nurse OR Allied health personnel OR "Care provider") AND ("Care receiver" OR "Care recipient" OR patient) AND (Elder* OR "Old* people") AND ("Old age home" OR "Care home" OR "Residential care") AND (relation* OR interaction* OR "social closeness")	1336	318	13
2	(Care-giver* OR "Non-kinship care" OR "Formal carer" "Formal care*") AND (patient OR "gerontological community") AND (Aged OR pensioner*) AND (Elder* OR "old* people" OR geriatric) AND ("Assisted living" OR Nursing homes OR "Retirement home") AND ("Interactional patterns" OR "Relational dynamics" OR relation* OR interaction* OR Connection OR Communication OR "Social closeness" OR Reciproc* OR Interpersonal relations OR Intergenerational relations)	225	20	0
3	(Care-giver* OR Carer OR "Elder care" OR "Non-kinship care" OR "Formal carer" "Formal care*" OR nurse OR Allied health personnel OR "Care provider") AND ("Care receiver" OR "Care recipient" OR patient OR "gerontological community") AND ("Old age home" OR "Care home" OR "Residential care") AND (relation* OR interaction*)	2938	156	6
4	(Care-giver* OR "Non-kinship care" OR "Formal carer" "Formal care*" OR Allied health personnel OR "Care provider") AND (patient OR "gerontological community") AND ("Nursing homes" OR "Retirement home") AND (relation* OR interaction* OR reciproc* OR communication)	610	60	0
5	(Care-giver* OR Carer OR "Elder care" OR "Non-kinship care" OR "Formal carer" OR	1997	94	7

	nurse OR Allied health personnel OR “Care provider”) AND (“Care receiver” OR “Care recipient” OR patient OR “gerontological community”) AND (“Retirement facility” OR respite care OR Homes for the aged) AND (relation* OR interaction*)			
6	(Care-giver* OR Carer OR “Elder care” OR “Non-kinship care” OR “Formal carer” “Formal care*” OR nurse OR Allied health personnel OR “Care provider”) AND (“Care receiver” OR “Care recipient” OR patient OR “gerontological community”) AND (Assisted living facility* OR “Long-term care” OR “private care homes”) AND “Social closeness” OR Reciproc* OR “Interpersonal relations” OR “Intergenerational relations”	235	40	10
7	(Care-giver* OR Carer OR “Elder care” OR “Non-kinship care” OR “Formal carer” “Formal care*” OR nurse OR Allied health personnel OR “Care provider”) AND (“Care receiver” OR “Care recipient” OR patient OR “gerontological community”) AND (“congregate housing” OR “Community based care”)	236	86	0
8	(Care-giver* OR “Elder care” OR “Non-kinship care” OR “Formal carer” “Formal care*” OR Allied health personnel) AND (Elder* OR “Old* people”) AND (“Interactional patterns” OR interaction*)	1641	138	0
9	(Care-giver* OR “Elder care” OR “Non-kinship care” OR “Formal carer” “Formal care*” OR Allied health personnel) AND (Elder* OR “Old* people) AND ("old age home" OR "retirement facility" OR "assisted living facility" OR "long-term care") AND (connection OR communication OR relation*)	1293	73	0
10	(Care-giver* OR Carer OR “Elder care” OR “Non-kinship care” OR “Formal carer” “Formal care*” OR nurse OR Allied health personnel OR “Care provider”) AND (“Care receiver” OR “Care recipient” OR patient OR “gerontological community”) AND (“Old age home” OR “Care home” OR “Residential care”) AND (relation* OR interaction*)	1388	49	0
	Total	10929		

The PRISMA process is presented in Figure 1.

Figure 1

Flow diagram illustrating scoping review process



Charting the data. Guided by Peters et al. (2021), involved the extraction and mapping of data from the selected studies in a data charting form. Data were charted in the following categories: preliminary details: date of study, author/s, journal source, article title, aim of study, and findings (see Table 2 in Appendix B), following Arksey and O'Malley (30) and Peters et al. (33). Contextual details included were: country, research setting, and participants' perspectives. The software program ATLAS.ti 22 was used to assign

preliminary codes, which were discussed and reviewed to create categories, and refined into themes.

Data Analysis. The information was analysed using thematic analysis and the 6 steps proposed by Braun and Clarke (2006). These included:

1. Familiarisation with the data – this involved transcribing the data, reading and re-reading transcripts, and listening to or watching recordings.
2. Generating initial codes – identification of preliminary numerous and specific codes that provide context. The software program ATLAS.ti 22 for Mac (ATLAS. ti Scientific Software Development GmbH, 2022) was used to assign preliminary codes.
3. Searching for themes – relevant data was sorted according to overarching themes, relationships between codes, themes, and subthemes.
4. Reviewing themes – a thematic map was generated.
5. Defining and naming themes – a coherent story that emerged from the data was collated.
6. Producing the report – was achieved by relaying the results, and outlining the merits and the validity of the thematic analysis, in line with the research question.

Ethical Considerations. Scoping reviews present unique ethical challenges, such as the potential for researcher bias, when a researcher might exclude studies that contradict their initial viewpoint (Cooper, et al., 2019). In this study, however, all relevant literature, regardless of alignment with the researcher's perspective, was included. Another ethical issue is the risk of excluding relevant literature (Ballard & Montgomery, 2017). To address this, a transparent explanation of article selection and detailed reporting of the data analysis process was provided, with two researchers cross-checking each step (Peters et al., 2021).

***Trustworthiness of scoping reviews*.** To ensure trustworthiness, Lincoln and Guba's (1982) criteria: credibility, dependability, and confirmability were applied:

Credibility: Credibility was ensured by acknowledging potential biases in sampling and by maintaining continuous reflection on data collection and analysis methods (Johnson et al., 2020). The researcher's familiarity with the formal residential care environment was considered as a potential for introducing bias, but regular peer reviews with two promotors and keeping a journal helped to mitigate this. Detailed records of findings were kept, thus providing transparency, and direct quotes and thick descriptions supported the clarity of data analysis and interpretation. Ethical transparency was a crucial aspect of this review, reinforcing following of recognised guidelines such as PRISMA-P to maintain rigour and accountability (Peters et al, 2021).

Dependability: Research procedures were carefully documented, allowing an external reviewer was allowed to audit and evaluate the process (Nazar et al., 2023). This ensured that the study's methodology was critiqued by others.

Confirmability: To achieve confirmability, data was cross-checked by researchers until consensus was reached.

Results

Description of Included Studies

The selected literature is generally skewed towards the feminisation of care and Global North contexts. North America (*n = 11*), Europe, Scandinavia and UK (*n = 16*), New Zealand (*n = 1*), South America (*n = 1*), Middle East (*n = 2*), Asia (*n = 3*), and Africa (*n = 2*), presented in Table 2 (Appendix B). Country classifications according to developed or developing are based on the United Nations World Economic Situation and Prospects (34). The socio-economic context plays a role in care resources, but here the focus is to identify effective relational constructs transferable across contexts.

Articles included report the perspective of OPs regarding care perceptions and experiences (35-40); care for thriving (41); emotional containment (42), dignity (43, 44); trust (45); and OPs' experiences of their relationship with CWs (27, 46-48). From the perspective of CWs, studies include the meanings associated with the role of caregiving (49-53); communication strategies in caregiving (54-56); and the competence of CWs (57, 58). Studies focusing on the care relationship both from OPs' and CWs' perspectives include the requirements to perform caregiving (59); the meaning of care (60-62); the effects of ethnic differences (63); beliefs about and assumptions about care (64) and the social needs of OPs (65). A few studies explored the care relationship in long-term care from multiple perspectives, including family members and staff (66-69).

The articles focused mostly on CWs while the relational qualities of OPs are seldom reported, implying that caregiving is a unidirectional act without consideration of the complex interplay between OPs and CWs [35, 46, 48, 60, 67, 68]. Studies punctuating on the relational level, describe heuristic constructs of social closeness and distance [63] and the concept of reciprocity [48, 51, 56, 67] as important in relational dynamics. The literature is, however, vague on practical application, and lacks a nuanced discussion of effective relational constructs. While the concept of reciprocity is reported as a mutual exchange in relationships between OPs and CWs [48, 51, 56, 66, 67] the focus does not adequately describe relational dynamics between both CWs and OPs (and in most cases only focus on one party). The quotations in the studies yielded rich descriptive data about the interactions between OPs and CWs, which were critically analysed using a thematic analysis framework to identify effective relational constructs.

Relational Constructs Informing Interactional Dynamics

Four themes and 15 subthemes are presented in Figure 2.

Figure 2

Themes and subthemes relevant to relational interactions between OPs and CWs.

Theme 1 ***Formal Care Setting***	**Theme 2** ***Definition of the Relationship between OPs and CWs (control)***	**Theme 3** ***Relational Qualities of CWs***	**Theme 4** ***Reciprocal Interactions***
Differences in the formal care setting	*Complementary relational definition*	*Transparent caregiving* *Anticipating care needs and responsiveness* *Warm understanding and Attentive listening* *Unconditional acceptance* *Empathy and perspective taking* *Visibility as human beings* *Confirmation* *Flexibility* *Physical and emotional closeness*	*Action, impact eliciting a corresponding reaction*
Dual meaning of the same context	*Parallel-defined relationship*		
	Symmetrically defined relationship		

Formal Care Settings

Diverse Perspectives in the Formal Care Setting

Relational interactions between CWs and OPs take place in a formal care environment characterised by diversity: age, socio-cultural norms, language, and ethnicity. Age differences are mentioned in relation to younger migrant workers. Socio-cultural differences manifest in the daily practices, for example, when CWs are serving tea to the OPs. In the example below, the OP experienced frustration in relation to CWs who did not act according to the OP's expected socio-cultural norms:

> How to make a cup of tea for example, she [Hungarian migrant care worker] was just making half a cup of milk and just a bit of tea. So, everybody was criticising the tea because it was cold, and I taught her how to make it (61, p.17).

Language differences impact differently on OPs and CWs. OPs experienced the language barrier as inhibiting their spontaneous reactions, such as using humour: “You know, we don’t understand [them], and you can’t always joke because they don’t understand the joke.” (OP) (61, p.16). CWs try to deal with the language differences by consulting a dictionary, but this impacts on the flow of the interaction with OPs. “It’s like we were talking to the residents with the dictionary and the patients were just waiting you know while you check with the book” (CW) (61, p.16). On the other hand, when OPs and CWs share a common language, the relationship deepens: “The nurses take his hand, and they know a lot of words in Russian. He is looked after well. He kisses the hand of the nurses and calls them sweetheart” (CW) (66, p.4).

Age and ethnic differences between OPs and CWs led to the assignment of stereotypical labels. CWs, for example, reported as follows: “I keep thinking, ‘Oh, they’re old or they’re senile’” (CW) (63, p.116). When OPs and CWs engage in an effective interaction, they challenge stereotypical labelling and adopt new behaviour, as illustrated in the following example from the perspective of a CW.

> One lady, she looked at me and says: “Oh, you’re a colored girl.” And I said, “What’s that?” And she said, “You know, colored.” And I said, “No, I don’t know what that is. You’re going to have to tell me what that is.” She says, “You know, you people are called colored people.” And I said, “No, I think we’re called African American.” And I said, “Like you, you’re probably labelled as European American.” And she says, “Is that what they’re doing now?” I said, “Yes.” She goes, “Well, tell me that again, so I can remember it.” So she doesn’t use the word “colored” anymore, she says “African American” now (63, p.118).

Ambiguities of Expectations in the Same Context

The context is simultaneously the workplace of the CWs while also the home of the OPs, as a CW explains: “Often we have to remember that we’re working in their home, they’re not living in our workplace” (CW) (57, p. 150). Context informs behaviour, illustrated by the use of time. CWs are required to perform tasks according to a set time schedule “Everything is time, …. and if you don’t do it in a certain way then you run out of time and then you end up rushing and not giving quality care.” (51, p. 2). When OPs feel the pressure of time in their interactions with CWs, they do not want to cooperate: “If she is giving me a bath and she is rushing, I wouldn’t want to take a bath. If she has the time to sit and talk with me, it makes me feel that I can trust her” (OP) (36, p. 8).

Definition of Relationship Involving OP and CW

In every interaction, individuals move for control, which is explained by how the relationship is defined such as: one individual adopts a one-up position and the other accepts the control by adopting a one-down position (complementary), a relationship between equals where control is flexibly shared between interacting individuals (parallel); and, a non-acceptance of the control by either individual leading to escalations, misunderstanding, and frustration (symmetrical) [29, 70, 71]. The relationship between CWs and OPs mostly emerged as complementary, with CWs in the one-up position and OPs in a one-down position: “The staff would sit in the shared living room for their coffee breaks and lead the conversation with the residents” (OP) (48, p. 7). However, when CWs and OPs interact as friends or equals (parallel-defined relationship), they share information mutually: “She does not see me anymore as a patient, she sees the person behind that. I tell her about myself, and she tells me about herself” (OP) (36, p. 7). This type of relational definition enables OPs and CWs to

become more visible as human beings, sharing jokes and enjoying the relationship as indicated below:

> Both of us undressed and stood there in our bras and then we started to laugh . . . here—you and I, she said, in our bras! (laughing) and we're going to try on blouses (CW) (45, p. 7).

In the residential setting, the assumption is that CWs are leading the caregiving relationship. However, when OPs demonstrate keen interest and involvement in the direction and quality of their own care, they move for control and a symmetrically-defined relationship is observed illustrated by the following example:

> I'm really used to directing my own care . . . and that does not always go over real well with people in a place like this because I'm used to telling people what to do and having it done when I tell them to do it (OP) (67, p. 64).

Relational Qualities of CWs

From the perspective of both OPs and CWs, CWs should have the following relational qualities: transparent caregiving, anticipating OPs' needs, warm understanding, unconditional acceptance, empathy, perspective taking, visibility as a human being, confirmation, flexibility, physical and emotional closeness.

Transparent caregiving refers to the notion that CWs should be clear in terms of what the act of care involves and what is expected of OPs, illustrated in the following quote: "They tell me what they are going to do, and I like it" (OP) (61, p. 7). In anticipating OPs' care needs CWs apply their professional experiences and knowledge of interpersonal behaviour to respond appropriately, expressed by a CW: "You know the noise . . . you know the gestures

they make you . . . You already know before they ask you . . . you already know what they mean what they want" (CW) (61, p 6). CWs get to know OPs' needs by spending time with them: "Coming to work everyday...I walk around a lot...and I know what they want"(CW) (61, p. 6). Responding appropriately means that CWs attend to the OP's needs promptly. CWs' quick and consistently reliable responses contribute to a sense of interpersonal safety, according to an OP: "I always say I feel safe with her. If I ask her for something, she does it . . . and you know that she will come back with somebody very soon" (OP) (36, p.7). When OPs experience interpersonal safety, they engage more freely with CWs: ". . . eventually they'll feel safe enough to come out, but you just got a make it happy otherwise it's not going to get that way" (CW) (56, p. 47).

Warm and understanding CWs provide an inviting interpersonal space, as illustrated by an OP, who said: "I choose the person who willingly listens to my problems and is able to give good advice" (OP) (43, p. 8). CWs who are warm and listen attentively to OPs and repeat (or mirror) what the OP has said are regarded as reliable. An OP expressed it as follows: "If she (CW) has the time to sit and talk with me it makes me feel that I can trust her. That is important to have someone who you can trust" (36, p.8).

Unconditional acceptance means a total and authentic acceptance of another person, without judgement. This is described by the OP: "Yes, she calms me down and she really takes me as I am, she is a wonderful person" (41, p. 4).

Emotional empathy means that the CW is attuned to the emotional needs of the OP and responds appropriately, illustrated below:

> I saw that the resident could not stop crying in her bed when I was walking around the room, so I asked what had happened . . . She told me something about her family

> history . . . I comforted her patiently . . . she felt a lot better . . . Since then, she always tells me that I am the one who really cares about her (the resident) ... She gave me fruit occasionally . . . This showed me that if you care about the residents, they appreciate that (CW) (64, p. 1).

Taking the perspective of the OPs elicits empathy in CWs: “I guess I was just thinking at that moment about him and how he felt . . . if that had been me, you know? What would I have wanted someone to do to make me feel more better about the situation?” (CW) (50, p. 8). When CWs display empathy and adopt the perspective of the OP, the OP responds with cooperative behaviour:

> Well, put yourself in their shoes. If you were laying there all night and somebody walks in with their, “Oh, we’ve got to get you up.” Would you want to get up? Would you want that person to even touch you? So walk in and say good morning, put a smile on your face and cheer them up and get them in a good mood that they would want to get out of bed (CW) (51, p. 1).

OPs confirm that the experience of perspective taking and empathy from CWs results in an outcome of trust: “Residents thought that empathy involving an understanding of their situation, perspective, and feelings was a necessary basis for constructive and trusting relationships with staff” (36, p. 7).

Being visible as a human being, means people are authentic or truly themselves. When OPs and CWs act authentically, differences seem to diminish: “We usually joke. It feels good . . . we’re the same . . . was not different from her and she was not different from me (giggling)” (CW) (45, p. 7). Becoming more visible in the relationship is also promoted through a

prolonged relationship (72). One of the outcomes of treating OPs as human beings is that they become actively engaged in their own care (50) because they feel taken seriously, and not categorised as a patient.

Confirmation refers to acknowledging the other and can take different forms, for example, when CWs greet OPs: “Good morning is a big thing for them. I think greeting is more of psychological reassurance that had value in their life” (CW) (65, p. 8). Confirmation also means validating OPs’ experiences and their needs: “Caring for the whole person includes treating residents like individuals, viewing the patient as a person, responding to emotional undertones or needs and validating the resident experience, wishes and values” (CW) (51, p. 1). OPs also confirm CWs, illustrated in the following description by a CW: “You feel really confident in your job, and you feel important for them” (61, p.13). Eliciting a reaction from being confirmed is illustrated in the following non-verbal message from an OP: “Seeing the result . . . a smile possibly, from someone who has been low, and suddenly it’s there . . . this positive aspect of one’s efforts, when one succeeds, it is like seeing life being restored” (CW) (52, p. 4).

Being flexible means adapting to another’s needs or behaviour. In this instance a CW describes how she responds to OPs: “They all have different preferences, and you have to adjust and you have to do what they prefer, because you are taking care of them” (CW) (51, p. 1). Being flexible in a caregiving context means that care is situational and specific to the individual relationship.

Closeness in a relationship is experienced on a continuum of being too close or too distant and can be expressed physically or emotionally. Physical closeness expressed by touch

creates safety for an OP, who may need reassurance and support: “Like just touching their hand or holding their hand and giving them security in a different way” (CW) (51, p.1). Physical closeness is also expressed when a CW is a comforting companion for an OP and joins in what they want to do: “Or when a resident who sits next to me and wants to watch TV, so I go with her and we watch together the programme; like being her mother, being close” (CW) (59, p. 5). Emotional closeness involves sharing emotions, losses, pain, laughter, and joy: “We have shared very intimate experiences. This brings you close together, so many tragedies and so many good times . . . and they are the ones standing next to you” (OP) (49, p. 554).

Three relational outcomes emerged from emotional closeness both for CWs and OPs. First, OPs become attached: “I am becoming very attached to them and I love them, just love them as my own grandchildren” (OP) (36, p. 7). Second, the relationship contributes to greater visibility: “We are like granddaughter and granny, the relationship is like that. We always have a good laugh, we always talk about everything” (CW) (61, p. 12). Third, it transgresses differences: “The nurses take his hand, and they know a lot of words in Russian. He kisses the hand of the nurses and calls them sweetheart” (66, p. 4). The disruption of a physically and emotionally close relationship creates a deep sense of loss, as illustrated by the following example:

> There is this pretty young girl . . . I like her as I like my grandchildren and she treats me not just like a patient but she sees me like her grandma. She knows intimate details about me, and she knows my likes and dislikes. But now they transferred her to another unit. I truly miss her (OP) (36, p. 9).

Reciprocal Interactions

Reciprocal interactions mean that both OPs and CWs are involved in the interaction (consisting of action, impact, and a corresponding reaction) (26, 28). This reciprocity in the interaction is reported by CWs as well as OPs, as illustrated in the following two examples: "A conversation would be more meaningful if both parties are listening to each other attentively. You will listen to me; I will listen to you" (OP) (43, p. 8); and "You will talk about you and your family, and they will talk about them and their family and their husbands, and then give you tips that you do not know" (OP) (61, p. 5). One CW describes the behaviour she might elicit from an OP as a result of her actions: "They'll (OP) respond to you positively if you treat them right. If you do not, they are not like a light bulb. You just cannot switch them off ... If you have been rude, they remember how you treated them. If you are nice to them, they will know it" (CW) (50, p. 6).

Discussion

The sample sizes in the 36 qualitative studies were generally small (30 study participants or fewer) and only two studies included sample sizes of more than 80 CWs and OPs (52, 61). The search strategy was challenging because the construct caregiver was used inconsistently and interchangeably with care worker, nurses, nurse-aides, care managers, and other healthcare workers (18, 19, 27, 51–53, 57–59, 62, 63, 66, 69). The exclusion criteria for OPs did not distinguish between mild and severe cognitive impairment, and as a result, some studies could have been excluded. It is recommended that future studies include the voices of this target group. Despite the inclusion of both OPs and CWs, studies focused more on CWs' effective relational qualities and very little on OPs' relational qualities, and interactions.

Theoretical Analysis

Analytical approaches to understanding the relational dynamics between CWs and OPs in formal care settings are presented in Table 3 (Appendix C), with one article (37) using two theoretical lenses.

Intrapersonal approaches, theoretical frameworks and heuristic constructs explain experiences of relationships from within a person; how CWs and OPs make sense and understand the meaning of and in care (40, 49, 53, 62, 64), OPs self- determination (37), affect containment (42), CWs' care philosophy and motivation to care (39, 50, 52), CWs' cultural competence and relational qualities (57–59) and OPs needs (36, 38, 41, 43–45, 65). These frameworks and heuristic constructs provided explanations on an intrapersonal level. Interpersonal theories that explain interactions between people include communication theories (35, 46, 54, 55), and theories describing a good fit between care environment and OPs (37, 47, 61, 69). Theories describing relational interactions (18, 19, 43, 47, 60, 61, 68, 69) do not adequately explore OPs' observable responses to caregiving.

Potential relational dynamics can be extracted from three articles, not primarily developed from a healthcare perspective: Buber's I-Thou using the construct of mutuality (68), but it fails to explain observable interactions between CWs and OPs. Relational Dialectics Theory (60) assumes three tensions in relationships: connectedness vs. separateness, certainty vs. uncertainty, and openness vs. closedness but lacks an explanation of effective relationships between CWs and OPs. The Self-Interactional Group Theory (SIGT) explains relational interactions and the dynamic interplay on three levels: intrapersonal, interpersonal, and group (27). The intrapersonal presents emotions and perceptions as the impact informing what is taking place on the interpersonal and group levels. The interpersonal level analyses the interaction from five perspectives: context, definition of the relationship, relational qualities,

motivation for the interaction, and the circular processes of interaction. The group level includes group dynamics within and between groups. SIGT suggests that relational dynamics are embedded in specific environments (73).

The nature of the formal caregiving context creates a dissonance: CWs are performing their care duties, and interacting with OPs in an unidirectional way while OPs accept the care as recipients. CWs are in the one-up and OPs in a one-down position. In this position, OPs may choose to resign their autonomy (and parts of who they are), even though they may be able to care for themselves (47, 65). In this caregiving context, OPs may not always be viewed as active participants in the relationship.

Limitations

When interpreting the results, it should be kept in mind that drawing exclusively on English publications may have eliminated useful research. CWs encompass a broad range of people who do not interact directly with OPs in a reciprocal relationship. The inconsistent definitions of caregiving and the selection of specific search engines could have presented biased results. However, this first known scoping review presents detailed knowledge of what constitutes effective relational constructs between OPs and CWs in formal residential care environments.

Conclusion

This scoping of articles and data focuses on the relationships between CWs and OPs across a continuum of formal residential care contexts. Results indicated that the formal caregiving context unintentionally creates dissonance in the relationship involving OPs and CWs (e.g., home vs. workplace; manoeuvres for control in the relationship). In this sense, both CWs and OPs redefine their autonomy, and care itself becomes the ultimate goal, thereby repositioning

the relational context and content. Despite the assumption that PCC care in formal care settings adopts a relational focus, the context is inherently counterproductive to the development of authentic human relationships. The relational qualities underpinning effective relationships highlight the unidirectional nature of care and relating. We therefore recommend adopting a relational caregiving approach considering the interactions of both CWs and OPs; a (re)- designing of how the formal care contexts function by intentionally focusing on the co-creation of authentic (equal) relationships. To this end, the care should be the outcome of effective relationships and not the goal. This study also identified the need for an integrated conceptual framework to analyse the interactions between CWs and OPs in formal care settings toward developing effective relationships.

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Chapter 4

Article 2

Older persons' experiences of their relationships with care workers in formal residential care ecologies

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Abstract

This article presents older persons' (OPs) experiences of their relationships with care workers (CWs) in formal care settings. Twenty-two OPs (aged 65-89) from three settings in South Africa (SA) participated in a visual data-collection method, and analysis yielded four themes. (1) Inconsistent caregiving protocols are counterproductive to authentic relationships. (2) OPs co-create care outcomes. (3) OPs contribute to the relational dynamics by displaying effective and ineffective relational qualities. (4) Caregiving elicits a care imprint. The operationalisation of caregiving overrides the care philosophy. OPs are active participants in the relationship. A conducive interpersonal context enables OPs to express their needs more effectively.

Keywords: Older persons; Care workers; Relationships; Formal residential care ecologies.

Introduction

Population ageing and the exponential growth in age-related care needs imply that some older individuals will require some form of formal care (Aboderin, 2004; WHO, 2021). Formal caregiving of older persons refers to care provided by paid professionals or carers, with a focus on physical and social care, (Güney et al., 2021; Xie et al., 2006), and is offered across a range of care environments, from community-based to formal residential care. For this purpose, the focus is on formal care as boundaried spaces and not a community-based setting, which tends to be more flexible in its caregiving arrangements. The quality of relationships in formal caregiving is important for OPs' well-being, belonging, dignity, and trust (Bergland & Kirkevold, 2005; Custers et al., 2012; Høy et al., 2016; Stuck & Rogers, 2019; Teka & Adamek, 2014). However, OPs' experiences of effective caregiving relationships have been largely unexplored (see Chapter 2). Research focuses mainly on the caregiving relationship from the perspective of care workers (CWs) (see Chapter 2), OPs' beliefs about, meanings

attached to, and the quality of care, including ineffective caregiving relationships (Güney et al., 2021; Nolan et al., 2004). This article aims to present OPs' experiences of their relationship with CWs in formal residential care ecologies (FRCE). A relational perspective takes account of what transpires in the relationship as reciprocal interactions between OPs and CWs, drawing on the interactional approach (Watzlawick et al., 2011). The article covers (1) Research conducted from the perspective of OPs regarding their experiences of the caregiving relationship; (2) Theoretical framework; (3) Research method; (4) Findings; (5) Discussion of findings; and (6) Conclusion.

An overview of existing research into OPs' experiences of the caregiving relationship is presented next.

A Brief Overview of Research from the Perspective of Older Persons Regarding their Experiences of the Caregiving Relationship

Existing research explores OPs' beliefs about caring, the meaning and quality of care, and life for thriving (Bowers et al., 2001; Dybvik et al., 2014; Figueredo-Borda & Zabalegui-Yarnoz, 2015; Holmberg et al., 2019; Lung & Liu, 2016; Westin & Danielson, 2007). The findings are useful for caregiving in general, expectations related to the nature of caregiving, and the outcomes of effective caregiving, but yield little insight into what is taking place on a relational level.

Research from the perspective of OPs about CWs includes CWs' caring attitudes (e.g. commitment, kindness, patience, and empathy) and their professional competencies, such as time management, and observational and communication skills (Band-Winterstein et al., 2019; Bowers et al., 2001; Dybvik et al., 2014). OPs' expectations of CWs' interpersonal skills relate to their ability to connect with older persons, and respect for OPs' individuality, autonomy, and personal space, as well as demonstrations of empathy, positive regard and

mutual sharing of information (Adra et al., 2019; Custers et al., 2012; Lung & Lui, 2016; McGilton & Boscart, 2007; Nakrem et al., 2011; Westin & Danielson, 2007; Wilson & Davies, 2009). The findings from these studies' present knowledge of OPs' expectations of CWs' behaviour, but lack detail related to the quality of the relationship, and what is actually transpiring in the space between OP and CW.

Research on OPs' descriptions of effective relationships includes how CWs address OPs' care needs, the experience of the relationship, with CWs in an equal relationship (such as between friends), or between family members (e.g. mother/daughter) (Berdes & Eckert, 2001; Bowers et al., 2001; Walsh & Shutes, 2013). In contrast, ineffective relationships with CWs are created when OPs feel unseen, without having their needs for confirmation, congruence and unconditional positive regard addressed (Hwang et al., 2013; McGilton & Boscart, 2007). The nature of the caregiving relationship from the perspective of OPs is underexplored. To this end, the following question will guide the research: What are OPs' experiences of the relationships with CWs in a FRCE? Using OPs' experiences as a focus (punctuation) will give an indication of what is transpiring in the relationships (interactions) between OPs and CWs. The focus on the interactions between OPs and CWs makes it appropriate for the application of Self-Interactional Group Theory (SIGT), discussed next.

Theoretical Framework

Self-Interactional Group Theory (SIGT) informed by the interactional approach, offers an explanation of the interactions between individuals on three levels: the intra-individual, the inter-individual, and the group (Roos, 2016). The intra-individual level includes experiences or perceptions of individuals in a relationship that indicate what is transpiring on the inter-individual or group levels. The inter-individual level details the interaction from five perspectives: context, definition of the relationship, relational qualities, motivation for the

interaction, and the circular processes of interaction. The group level includes dynamics within and between groups. SIGT suggests that relational dynamics are embedded in broader environments, such as the setting in which caregiving is provided (Roos, 2016). This study aims to explore OPs' experiences of their relationships with caregivers in formal residential care settings. The Mmogo-method was used in this phase to explore OPs' experiences of their relationship with CWs in FRCE. A detailed discussion of the qualitative research methodology and its application with OPs in FRCE is presented in Chapter 2.

Findings

The themes and subthemes that emerged from the study are presented in Table 1: Context of formal residential care ecologies, care needs of OPs, OPs' relational qualities, and previous caregiving experiences.

Table 1

Themes and subthemes of older persons' experiences of care workers

Theme	Context of formal residential care ecologies	Care needs of older persons	Older persons' relational qualities	Previous caregiving experiences elicited
Sub-themes	Older persons' living worlds are divided into inside and outside Multiple care workers provide care on a continuum	Instrumental care Compassionate care Emotional closeness Confirmation Equal relationship	Perspective-taking and validation Incongruence	Elicitation of care imprint Elicitation of relational trauma

Context of Formal Residential Care Ecologies

Three subthemes emerged from the analysis: (1) OPs' living worlds are divided into inside and outside; and (2) multiple CWs provide effective and ineffective care to which OPs respond.

Older persons' living worlds are divided into an inside and an outside. When OPs enter a FRCE their living worlds become divided inside and outside. The inside of a FRCE functions as a 'bubble' of caregiving, where older residents are separated from the outside world. An older woman says: "We have everything, libraries and tuck shops, and hairdressers" (P14, Setting A). In some instances, OPs can engage actively as individuals in recreational offerings, such as an older woman who makes use of the garden: "I go out into the garden I see my friends" (P22, Setting C), and an older man confirms: "I love working in the garden. It's beautiful" (P13, Setting A).

Continuous caregiving is ensured in this inside world as CWs work at different stations and their time is divided into shifts, as P14 (Setting A) explains: "The difficulty is that they change so many times. You just get to know somebody, and they move to another floor." However, consequently, OPs receive care from different CWs, thereby impacting the quality of the caregiving relationship, according to P11: "Look at the fact that they work on a shift basis. So sadly, we don't get to see the same decent people every day" (Setting A). OPs experience the disruption of the caregiving relationship as disturbing, illustrated by the following two quotes:

> But I don't know what happened to [CW]. But they took out all our good staff at one stage. And I was very upset about that (P19, Setting C).
>
> I was very attached to her (Miss Z), she was so good and so helpful. And then when she told me that she was leaving, I told her, Miss Z, 'I

> am very sad that you are going and I am going to miss you very, very much.' And then I started to cry (P22, Setting C).

In contrast, when CWs are consistently involved with OPs, a meaningful relationship can develop: "I've got two perfect carers who looked after me ever since I came here. And if they weren't here, I would have left a long time ago" (P19, Setting C).

When OPs enter the caregiving environment the family becomes part of the outside world. Since the main goal of formal care is to ensure good care, the family expresses an interest in the quality of caregiving: "My children are very grateful for how kind the caregivers are. I tell them that J is so caring, and they say tell her 'thank-you.'" (P6, Setting B). In some instances, families and CWs differ in their care approaches, as P4 (Setting B) describes: "My son and daughter-in-law said when I visit them at the farm, I must bring my walking stick but when I come back to the home the caregivers say I must use the walker... to keep me safe".

Multiple caregivers provide care on a continuum. Multiple CWs provide different caregiving tasks. An older woman from Setting A explains: "She [CW] has been doing my washing and ironing. The others are shower-givers" (P15). P5 (Setting B) points out that CWs provide support and stability. The caregiving takes place on a continuum ranging from ineffective (rigid or neglectful) to effective (supportive and attuned) and would elicit a response from the older residents.

***Ineffective caregiving*.** This type of caregiving manifests as rigid or neglectful**.** A rigid caregiving relationship refers to CWs who limit OPs' decision-making and their choices or apply caregiving routines without consideration of individual needs. Two participants express it as follows: "You've got to ask the sister if you want to go out" (P22, Setting C), and "I'm not allowed to go to the shower myself. I might fall, but I'm quite capable of doing it" (P9,

Setting A). OPs innovatively find ways to preserve their autonomy in response to rigid caregiving, which an older woman describes as follows:

> I'm a very private person, and I don't like to be an exhibit, I hate going in the shower and somebody is watching me, and I pulled my curtain. So, if I can get a sneaky chance, I sneak to the shower myself and I enjoy my shower (P9, Setting A).

Caregiving is neglectful when care is absent, which P14 (Setting A) explains as follows: "My biggest complaint is over the showering. They say, 'We'll come later, we'll come just now', but that later could be that they've forgotten." OPs are particularly vulnerable when they need help without and CWs are unresponsive. An older man confirms waiting for CWs to respond: "I was waiting for a caregiver to come and help me, because I desperately needed… and nobody came" (P8, Setting A). However, OPs perceive neglectful caregiving as a reflection of their value as an individual human being, which is illustrated by an older man: "So what am I? Am I just a blob waiting to be served?" (P8, Setting A).

Effective caregiving. Supportive and attuned caregiving as effective caregiving recognises OPs' agency and their ability to perform their care tasks within the limits of their capabilities, as P5 (Setting B) explains: "By just being there if you need something they will be there to assist you." Attuned caregiving also means CWs meet the OPs' emotional experiences at the right level, as P6 (Setting B) says: "They joke and laugh with you and at times get a bit tearful with you." In response to effective caregiving, OPs experience confidence and reassurance, as described by P10 (Setting A): "It gives me confidence and makes me feel like I'm doing all right."

Care Needs of Older Persons

Older persons' diverse needs include instrumental care, compassionate care, and relational support (confirmation in an equal relationship), which they express effectively or ineffectively.

Instrumental care. CWs provide instrumental support, which complements the OP's physical mobility. For P18 (Setting C) this means: "She [CW] makes sure that I don't fall because if I fall, that's it." Physical support is illustrated in Fig 1, which shows a CW providing stability by holding the OP: "The caregiver [is there] to help when the patient (self-reference of the OP) falls or needs help in any kind of way" (P1, Setting B). This is illustrated in Figure 1.

Figure 1

Visual data of P1 receiving physical support from CW



The physical support should, however, always be complementary to enable OPs to continue to perform some aspect of their own care, which P17 (Setting C) describes as "doing things for myself". Moreover, due to the close proximity in which caregiving takes place, CWs' personal hygiene is important, as confirmed by P21 (Setting C): "I see them with braids in their hair … they look after themselves, they are clean, the cleanliness is godliness."

Compassionate care refers to sympathy and empathy, particularly when OPs are experiencing difficult times. One older woman describes this as being treated well: “They listen to us, you can go crying to them and get sympathy” (P3, Setting B), while another describes it as comforting care: “When I do experience troubles /worries I can go to one of them” (P4, Setting B). P6 (Setting B) describes how she was able to share personal information: “We share some very personal things with each other.”

Emotional closeness is experienced when there is a personal connection and familiar bond between two people. P6 (Setting B) experiences this emotional closeness with her CW, who reminds her of her family: “She is like my family, you know. It's like having my mom back in my life, they cannot do enough for me. They joke and laugh with you and at times get a bit tearful with you. We share some very personal things with each other.”

Confirmation. To feel visible, be heard, and receive validation is expressed as being confirmed, which an older woman explains as follows: “Whenever she sees me, we greet each other and she always asks how I am, and she always smiles, and I feel much happier. It makes me feel... there is someone that really likes me” (P7, Setting A). Another older woman describes the importance of being validated:

> You know I’m told that I’m a very moody person, with a lousy temper, and they seem to be able to filter that quite often which to me is important you see. Sometimes I get carried away with myself which is not very nice for the other people. They [CWs] come across and say: ‘Oh you’re feeling bad?’ … you know it’s all it takes (P11, Setting A).

Equal relationship. Control is shared between CWs and OPs in an equal relationship, rather than the CWs adopting a one-up position and OPs in a one-down position, or vice versa. One older woman explains an equal relationship with CWs: “I could, on the same level

… have a conversation with [CW], and we read the same page" (P14, Setting A). In an equal relationship, OPs and CWs exchange personal information, which is demonstrated in the following dialogue between the researcher and P12 (Setting A) and in Figure 2.

R: "What happens between the two of you when you get on with each other?"

P12: "Well, I ask her about her children and her grandchildren, and what's going on, and who's moving into that room, you know, all the gossip that she gives me, and normal conversations."

Figure 2

An equal and mutual relationship between a CW and an older woman



OPs do not always express their needs clearly and effectively. In response to an older person being asked if she voices her needs to CWs, P9 (Setting A) answers: "No, I don't. No, I don't complain."

Older Persons' Relational Qualities

In describing the caregiving relationship, the following relational qualities that OPs present are observed: perspective-taking, validation, and incongruence.

Perspective-taking and validation. Perspective-taking is present if one person can adopt the perspective of another person, which is illustrated in the following to quotes about CWs:

> It's not easy for them, because they come from a background where it's a hard life. They've got to go home and do hard work when they get back, but they've got home problems and personal problems too (P14, Setting A).
>
> We have quite a lot of our caregivers, who had lousy times at home…and so they sometimes have days when they (are) just flat like that and they're cross with everybody (P10, Setting A).

OPs also validate CWs, which P20 (Setting C) describes as follows: "They [CWs] are born carers. They just put everything of themselves into those people [OPs], they're so caring. They're never rude".

Incongruence. Incongruence refers to a misalignment between verbal and nonverbal communication. For instance, an older woman illustrates this incongruence when she shares: **"**I'm actually very nice, you will think I'm a sourpuss, but I am not. I like to laugh. I like to joke with people" (P17, Setting C). Here, the older woman's words reveal an internal contrast: while others may perceive her as unapproachable or stern, she identifies herself as warm, humorous, and sociable. The misalignment between the OPs' verbal and nonverbal messages can create confusion because CWs are faced with the dilemma of understanding beyond surface-level messages and to respond appropriately.

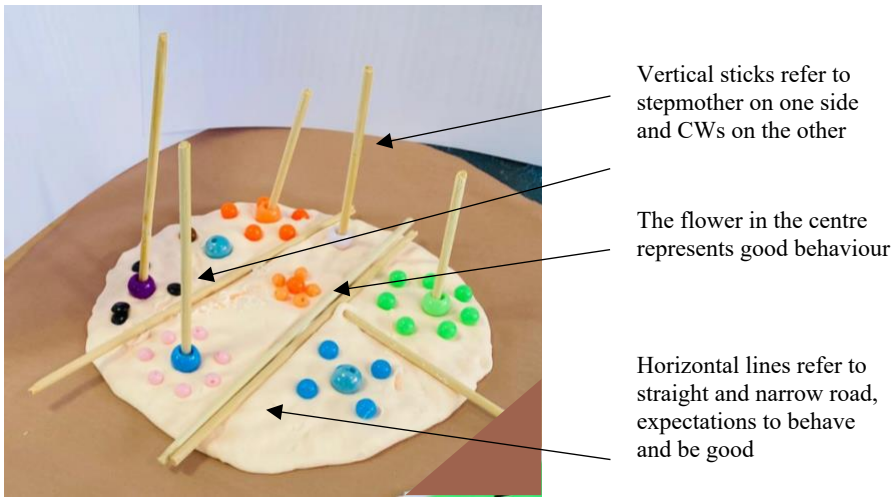
Previous caregiving experiences elicited

OPs' experiences of caregiving elicited previous relational impressions: a care imprint and relational trauma.

Elicitation of care imprint. In the caregiving relationship, early memories (imprint) of a caring relationship are elicited and could be positive or negative. An example of a positive care imprint is given by an older woman in relation to her own late mother: “I just know that they [CW] are there if you need them … It gives me confidence and makes me feel like I’m doing alright… it’s like having my mom back in my life” (P1, Setting B). A negative care imprint was observed in the description of an older woman, who relates a neglectful caregiving experience in her relationship with her stepmother: “My mother died when I was born so I had a stepmother. She was very strict… when I am not good, the caregivers ignore me more and then I just go and read” (P2, Setting B). Figure 3 illustrates the participant's experience of the caregiving relationship with CWs and her late stepmother.

Figure 3

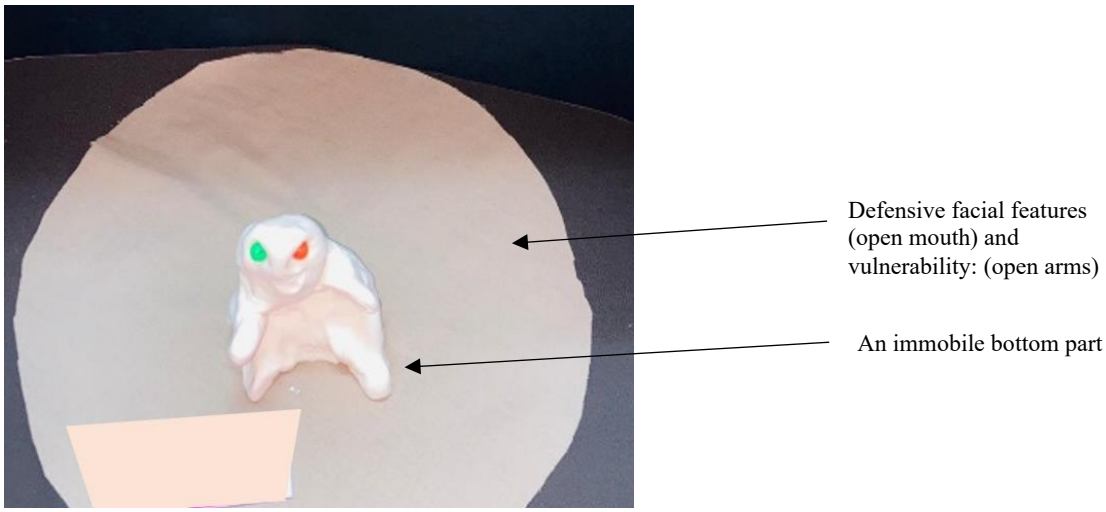
A negative care imprint elicited in the caregiving relationship.



Elicitation of relational trauma. Relational trauma is elicited from a trauma memory in relation to a trigger in a relational interaction (Jordan, 2007; Schore, 2001; Teicher & Samson, 2016). In this instance, cold and perfunctory caregiving triggered the experience of parental abuse and aroused both vulnerability and defensive self-protection, which can be observed in the visual data (Figure 4), supported in the textual explanation: "[CWs] a bit abrupt and it just makes me a bit angry...but it's also a broken relationship. It goes right back when I was a child. I grew up in an abused home" (P7, Setting A)

Figure 4

An older woman's visual representation and related data associated with parental abuse (P7, Setting A)



Discussion of Findings

In the exploration of OPs' experiences of their relationships with CWs, findings confirmed the physical and social environment has a significant impact on older individuals, according to SIGT (Roos, 2016) and Larkey (2022). OPs who enter a FRCE, become part of a bubble of caregiving guided by organisational procedures and policies. In some of the sampled settings, time schedules disrupted the contact of CWs with OPs. According to the person-centred and Eden Alternative care approaches, such disruptions are not conducive to sustained relationships (Funk & Outcalt, 2019; Larkey, 2022; Palacios-Cena et al., 2012). Unintendedly, having multiple CWs who are changing continuously could contribute to the development of intergroup dynamics according to Brown and Pehrson (2019), which in this research manifested as an unhealthy differentiation between 'us versus them'. From an intergenerational perspective, according to socioemotional sensitivity theory (Carstensen et

al., 2000) OPs prefer familiarity in relationships, while younger people are more adaptable and prefer novelty.

Findings indicated that when a care setting has no specific care approach or adopts a generalised caregiving model, OPs experience the caregiving relationship as ineffective (rigid and neglectful). In contrast, when a setting adopts the Eden Alternative care approach, for example, OPs described the relationship as effective (supportive, attuned, compassionate and close). However, even in the absence of an explicitly adopted care approach, OPs experience CWs as affirming and engaging in an equal relationship with them. This indicates that individual CWs demonstrate a relationship focused approach regardless of the organisation's adopted care philosophy. When OPs enter a FRCE, an arbitrary division is made between the care approaches adopted inside the setting and outside. If inside and outside care approaches differ, OPs are left to deal with the ambiguity.

Caregiving in this study emerged as CW-directed or OP-directed. CW-directed caregiving is performed from the perspective of the CWs and could mean that rules are applied rigidly without consideration of the situatedness of the OPs which manifested in this research as a disregarding of OPs' agency and need for privacy. When CWs perform their care duties from a CW-directed care approach, the literature indicates that CWs tend to meet organisational requirements at the cost of individualised and relationship focused care (Larkey, 2022). The study contributed to the finding that when CWs display a medical care approach, OPs respond by adopting a patient identity. CWs who provide OP-directed care provide attuned care and recognise OPs' innate need to preserve their agency. Honouring OPs agency is, however, situation- and individual-specific. While the importance of supporting OPs' agency is acknowledged, it is also recognised that OPs' agency can change, and they may not always have the capabilities to always exercise their agency to their benefit (see Doran et al., 2019).

This research contributes to a relationship focus on caregiving by focussing on the reciprocal interactions including both the CWs and OPs. In a reciprocal relationship, OPs, as active participants, co-constructed the relationship with CWs. In an effective caregiving relationship, OPs clearly and congruently express their needs, hence the CWs could check their understanding of what is being asked of them and respond relationally. The onus is, therefore, not only on CWs to learn how to relate effectively, but also on OPs. This research demonstrated the relational potential of OPs by perspective-taking and confirmation, which literature sees as effective (see Barrett-Lennard, 2015, Roos & Du Toit, 2014). Confirmation (validation) affirms the inherent worth and value of another person (Cavé et al., 2024; Dailey, 2023; Rogers, 1957). OPs also demonstrate ineffective relational qualities, such as incongruence. Research indicates that incongruence threatens relational connection (see Cavé et al., 2024).

A novel finding of this study revealed that the caregiving relationship with CWs elicited previous caregiving experiences (a care imprint) that had developed between OPs and caregivers in their formative years. The theory of imprinting suggests that early social contact and caregiving experiences shape the quality of adult caregiving/care receiving (Robledo et al., 2022). The elicitation of a primary care imprint is significant for the caregiving relationship because it could trigger a positive or negative caregiving memory, to which OPs respond, and which again in turn elicits a response from the CWs. The relational impact of cold and distanced caregiving could trigger relational trauma and arouse strong emotions and defensive self-protection. When CWs behave consistently in a congruent, warm, and unconditionally accepting manner (Rogers, 1957), they could elicit a corresponding reaction from OPs, irrespective of the nature of the care imprint.

When interpreting the findings, it may be useful to consider that the process of collecting data as part of a group could have yielded socially appropriate responses from OPs.

The data yielded a plethora of information, and it is possible that analysis of themes and subthemes may not have captured all the OPs' experiences. In addition, in this article the voices of CWs are silent. Nevertheless, useful implications can be drawn from the findings to support caregiving in FCRE.

Implications and call for actions

- The broader environments and adopted care approach inform the nature of the relationship between CWs and OPs. Within a FRCE, group dynamics and systemic factors impact the development of relationships between OPs and CWs. Formal caregiving should allow for opportunities both for OPs and CWs to engage as individuals in non-caregiving activities.
- CWs who work shifts (day or night shift, rotation of tasks), compromise the familiarity, predictability and consistency of the caregiving relationship. A predictable and consistent caregiving relationship fosters interpersonal safety and trust. A predictable and consistent caregiving relationship fosters interpersonal safety and trust, particularly for OPs who rely on familiarity, consistency, and predictability for a sense of security and trust. On the other hand, younger CWs can adapt to changes in shift more readily. These intergenerational differences can lead to confusion and misunderstandings.Supporting both CWs and OPs to understand differences could facilitate perspective taking, leading to effective relationships.
- The nomenclature of caregiving perpetuates the idea of unidirectional care from CW to OP. A relational-focus caregiving approach includes the needs of OPs in the contexts in which they function and considers their agency and capacity to perform some of the care actions to the extent that they could exercise it to their benefit.

- A person-centred interview conducted by care managers could identify OPs' care and relational needs and relational qualities which could be fine-tuned to support more effective interactions with CWs and fellow residents.
- Implicit in the caregiving relationship is a care imprint which could explain OPs' reactions to CWs. CWs with the ability to create an optimal interpersonal context would be able to adapt their approach to a greater understanding, thereby promoting the integrity of the relationship.

Conclusion

Caregiving in a FRCE as a boundaried space is guided by the organisation's adopted care philosophy and informs the operationalisation of caregiving and the development of authentic relationships between CWs and OPs. The operationalisation of caregiving sometimes overrides the care philosophy, particularly when not explicitly formulated. With literature overemphasising the responsibility of CWs to learn and demonstrate a relational care approach, OPs may not always be viewed as active participants in the relationship. OPs are part and parcel of the relational dynamics that develop between them and CWs and it is in the relational interactions that effective or ineffective relational responses are elicited, and care needs expressed effectively or ineffectively. Dedicated efforts could support the development of effective interpersonal contexts involving both CW and OPs as care partners and by harnessing the OPs' relational potential and co-creating an authentic caregiving relationship. In an optimal caregiving relationship, OPs and CWs are mutually responsible for demonstrating relational qualities that benefit the relationship. By leveraging insights into relational dynamics, care settings can move beyond task-oriented caregiving toward relationally rich interactional approaches**.** The ultimate goal is to cultivate care

environments where meaningful intergenerational relationships are nurtured, leading to a higher quality of life for OPs and a more fulfilling professional experience for CWs.

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Chapter 5

Article 3

Care workers' experiences of their relationships with older persons in formal residential care ecologies

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Abstract

Objective:

This article aims to present research conducted from the perspective of younger care workers (CWs) regarding experiences of their relationships with older persons (OPs) in formal residential care ecologies (FRCE).

Method: Seventeen CWs (aged 30-57) from three formal residential care settings in KwaZulu-Natal, South Africa, participated in the Mmogo-method. Textual and visual data were analysed using Created-Image Data Analysis (CIDA) (Baart & Roos, 2022).
Results: Medicalised and person-centred approaches informed CWs' caregiving. Perspectives on ageing found expression in CWs' promotion of active ageing and OPs' disengagement. CWs' views of OPs in the context of contemporary South Africa (SA), were based on their interpretations of an indigenous African philosophy (Ubuntu) proposing mutual interdependence and care strategies adapted to accommodate OPs' cultural differences and personal preferences. In the context of the FCRE, group dynamics between OPs and CWs contributed to the assignment of CWs' stereotypical views of OPs. Caregiving was interactional, involving both CWs' and OPs' actions and reactions (relational qualities that could be effective or ineffective) towards attuned or incongruent care outcomes.
Conclusion: Caregiving in FRCE was complex and multilayered. Caregiving practices were not always sensitive to relationships and context implying a reconsideration of training curricula and induction programmes. Perspectives on ageing (e.g. active ageing and disengagement), intergenerational dynamics, and sociocultural views (e.g. Ubuntu) informed CWs' interactions with OPs. The reciprocal actions and reactions between CWs and OPs manifested in effective and ineffective relational and care outcomes. The intergenerational relationship between OPs and CWs was ambivalent, with implications for the quality of the relationship because people tended to respond negatively to ambivalence. Unhealthy group dynamics between CWs and OPs could be addressed by introducing opportunities for CWs and OPs to discover shared interests and engage as individuals. An interactional caregiving approach acknowledges both CWs' and OPs' involvement in the caregiving relationship.
Keywords: Older persons; Care workers; Intergenerational relationships; Interactional caregiving; Formal residential care ecologies; South Africa.

Introduction

This article seeks to explore the experiences of younger care workers (CWs) about their relationships with older persons (OPs) in formal residential care ecologies FRCE. FRCE considers various dimensions of caregiving, including broader environments, the family, the setting, the caregiving relationship, and the specific care approaches informing caregiving (Burchardt et al., 2018). CWs refer to care workers fulfil a professional role and are paid for providing care (see journal guidelines of Journal of Care and Caring (https://bristoluniversotypressdigital.com)**.** This research focuses on FRCE because it is anticipated that the increase in the number of OPs globally will mean that proportionately some will require, or choose formal care within the broader care continuum as the right place to age (Dowling, 2022; WHO, 2021).

Existing literature on the caregiving relationship focuses mostly on CWs' characteristics and their frame of reference informing the caregiving relationship (Anderson et al., 2005; Band-Winterstein et al., 2019; Eldh et al., 2016, Figueredo-Borda & Zabalegui-Yarnoz, 2014; Villa et al., 2021). The literature is also clear on CWs' competence (knowledge, skills, and attitudes) to perform tasks associated with caregiving, and the principles of person-centred care (PCC) and relationship-centred caregiving for OPs (Band-Winterstein et al., 2019; Nolan & Allan, 2012; Teka & Adamek, 2014). The literature identifies different centred approaches to caregiving (Hughes, et al., 2008) such as medical, person-centred (Brownie, 2011), or relationship-centred care (RCC) approaches (Medvene & Wolcott, 2010; Nolan & Allan, 2012). Relationship-centred caregiving highlights the importance of meaningful interactions in the care of OPs (Larkey 2022; Teka & Adamek, 2014). Relationships according to this perspective, are based on an inclusive view of relationships including family, all staff in a formal care setting (e.g. administrative, cleaning)

and the community (see Nolan & Allan, 2012). However, this perspective remains one-sided, with the focus on the roles and responsibilities of CWs to render care. To fully understand CWs' relational experiences with OPs, the following question will guide the research: What are CWs' experiences of the relationships with OPs in formal residential caregiving ecologies? The article sets out to (1) Present a brief overview of research highlighting the relational nature of caregiving; (2) Self-interactional group theory (SIGT) as a theoretical framework; (3) Research method; (4) Findings; (5) Discussion of findings; and (6) Conclusion.

Next follows an orientation of what is meant by a relationship focus, followed by care approaches that specifically address relational aspects. Although many care approaches entail relational aspects, for this article, person-centred (e.g. Eden Alternative), ethics of care, and relationship-centred approaches will be discussed to problematise the medical model, concluding with a summary of CWs' skills related to a relational focus.

An overview of literature focussing on relational caregiving

The critical discussion contextualises relationships in a caregiving environment, presents different care approaches relevant to the purpose of this study, indicating problems associated with a medicalised care approach, and submits CWs' skills relevant for an interactional approach to caregiving.

Contextualising relationships in a formal caregiving environment.

In the context of a formal care setting, where CWs are involved with OPs on a constant (not rotating) basis, the nature of relationships between CWs and OPs has been described by Wilson and Davies (2009) as responsive, which concentrates on respectful communication with OPs; and reciprocal, in which CWs consider the needs of OPs. Similarly, in a study by Funk and Outcalt (2020) the relationship between OPs and CWs is described as a friendship or kinship bond whereby CWs experience an emotional connection and companionship with OPs. In a relationship-orientated care setting, Eldh et al. (2016) described CWs' relationship with OPs as love. Expanding on this relational focus, Levy-Storms et al. (2011) introduce three key constructs that shape effective caregiving relationships: connectedness**,** the sense of emotional and relational closeness between CWs and OPs; certainty**,** the predictability and stability that foster trust and security in their interactions; and openness**,** the willingness to communicate, share, and understand each other's perspectives.

Care approaches focussing on relationships between care workers and older persons.

Care approaches for this purpose include the person-centred, ethics of care, and relationship-centred approach. These care approaches are used to problematise the medical care model.

Person-centred care approaches. Person-centred care (PCC) (Doran, 2018; Kitwood & Bredin, 1992), including the Eden Alternative (Brownie, 2011; Larkey, 2022) focuses on OPs' emotional, social, and psychological needs while promoting their autonomy, self-determination, and mutual decision-making with staff and family (Partis, 2009). Caregiving from a PCC is OP-directed and acknowledge the importance of meaningful relationships for the well-being of OPs, also reflected in the act of caregiving practice (Li & Porock, 2014). In contrast, care from the medical model, pays scant attention to relationships (Chalmers, 2003; Chapter 2). Caregiving is CW-directed which means that CWs take a leading position on deciding what and how care is rendered, and task completion overrides emotional and

relational needs of OPs who are expected to comply (Malik et al., 2020), also referred to as a 'dehumanising' approach to care (Ghebreyesus, 2020; Mitchell et al., 2020).

Ethics of care approaches Care approaches informed by the Ethics of care (Vosman et al., 2020) recognise CWs' situatedness and relationality according to the theory of presence (Timmerman & Baart, 2022). The theory of presence emphasises being present, spending quality time with a person, getting to know them and their environment, affirming their dignity, being patient, unconditionally attentive, receptive, engaged, and taking on role-appropriate responsibilities (Timmerman & Baart, 2022). In a medical care model, CWs are rotated to serve the purpose of staff management and organisational scheduling. CWs are often detached, focussing on providing instrumental care and completing tasks under pressure within specific time frames (Strandell, 2020).

Relationship-centred care approaches, for example The Senses Framework (Nolan & Allan, 2012), define caregiving as inclusive, whereby the relationships of everyone involved in the care of OPs, including family, friends, and the wider community, are considered. This is confirmed by Larkey (2022), who found that a network of relationships contributes to the quality of care. Nolan et al. (2006) developed the Senses Framework, which involves the interdependence between people and the caregiving environment, and equal relationships between OPs, CWs, family members, and all other parties (e.g. administrative staff, and managers) involved in caring for OPs. The relationship should be experienced through six senses, which include a sense of security, a sense of belonging, a sense of continuity, a sense of purpose, a sense of achievement, and a sense of significance. The Senses Framework has been used in a variety of research but have not fully articulated how CWs and OPs interact to achieve optimal care for OPs. A medicalised approach is characterised by caregiving as a unidirectional act without considering the complex relational

interplay between OPs and CWs, or for that matter any other relationship involved in the caregiving of OPs (Chapter 2; Larkey, 2022).

Relational qualities describe the way people present observable verbal and nonverbal behaviour (Roos, 2016). These are demonstrated through CW's relational skills which are motivated by OPs' care needs. In the literature, CWs' skills relevant to effective caregiving relationships manifest on the intra-individual and inter-individual levels. Coping with stress and self-control are intra-individual skills where CWs maintain boundaries between professional and personal lives, express feelings to colleagues, and create space for self-care (Band-Winterstein et al., 2019; Villa et al., 2021). CWs also restrain themselves from reacting to difficult interactions with OP by creating physical distance and time between themselves and OPs, trying to make sense of OPs' behaviour, and asking colleagues for help (Anderson et al., 2005, Band-Winterstein et al., 2019). Inter-individual skills described in the literature relevant for relational interactions include listening, flexibility, positive regard, empathy and perspective taking, transparency, confirmation and creative problem solving. When CWs take time to listen and observe their non-verbal behaviour, they better understand the needs of OPs. Through attentive listening and asking questions, CWs get to know OPs, and learn the meaning of their unique phrases, prosody, gestures and body posture (Eldh et al., 2016; Jansson et al., 2017; Villa et al., 2021). CWs demonstrate flexibility by adapting to fluctuating work contexts and unpredictable needs of OPs, being willing to learn about and accept OP's preferences and differences and using a "yes-and" approach to their needs Band-Winterstein et al., 2019; Eaton et al., 2019; Eldh et al., 2016. CWs display positive regard by accepting OPs inherent value and worth as individuals and through caring for and validating their personhood, treating them with respect, and ensuring their dignity and autonomy (Eaton et al., 2019; Eldh et al., 2016; Figueredo-Borda & Zabalegui-Yarnoz, 2014; Medvene & Lann-Wolcott, 2010; Tayab & Narushima, 2015; Walsh & Shutes, 2013). CWs exhibit

empathy and perspective taking when they are good-hearted, feel for OPs, and see their point of view. CWs put themselves in the OPs' shoes, take time to understand and accept their feelings and needs with compassion and affection (Band-Winterstein et al., 2019; Eaton et al., 2019; Eldh et al., 2016; Figueredo-Borda & Zabalegui-Yarnoz, 2014; Medvene & Lann-Wolcott, 2010). Transparency (visibility) is evident when CWs are aware of their self-presentation, show more of themselves, sharing their opinions and self-disclose to OPs by telling OPs about themselves, their families, and likes and dislikes (Eaton et al., 2019; Medvene & Lann-Wolcott, 2010; McGilton et al., 2006). Confirmation is illustrated when CWs express love and appreciation for OPs, share positive affirmations, enjoy their company, and do extra favours (Eldh et al., 2016; Medvene & Lann-Wolcott, 2010; Teka & Adamek, 2014; Villa et al., 2021; Wilson & Davies, 2009). CWs use creative problem-solving ideas and insight to meet the needs of, engage with and facilitate co-operative interactions with OPs. This can be through storytelling, singing, distracting OPs from agitation and distress, playfulness, helping OP with technology or aesthetics and facilitating interactions between OPs (Band-Winterstein et al., 2019; Eaton et al., 2019; Funk & Outcalt, 2019; Medvene & Lann-Wolcott, 2010; Wilson & Davies, 2009).

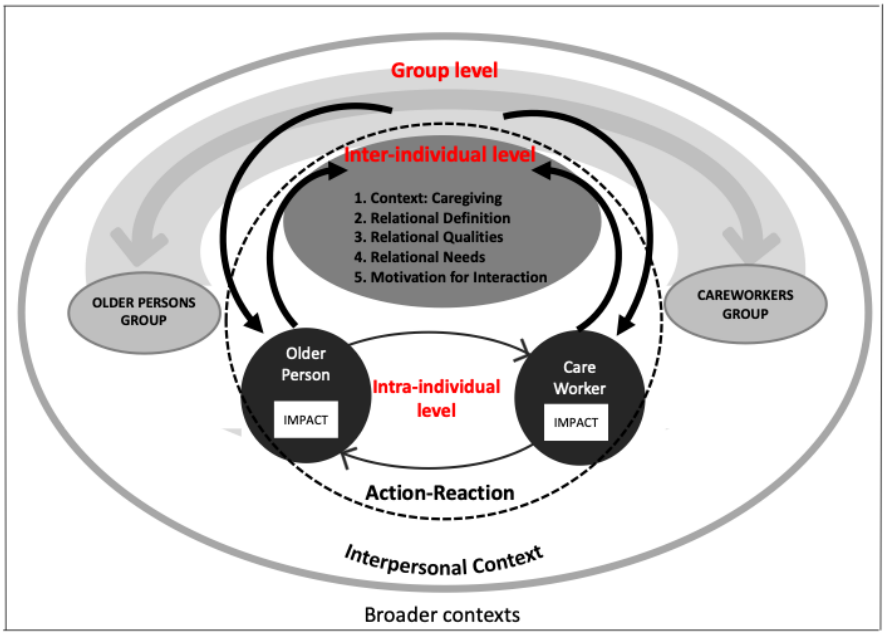
The relational skills of CWs imply that caregiving is rather a continuous process involving both CWs and OPs, and how they interact in the interpersonal context within the FRCE. However, the experiences of the caregiving relationship from the perspective of CWs remains underexplored. To address this gap, the study is guided by the following research question: What are CWs' experiences of their relationships with OPs in a FRCE? Centering CWs' experiences provides insight into the dynamics of these interactions, shedding light on how relationships between OPs and CWs unfold in practice. Given this focus on relational interactions, Self-Interactional Group Theory (SIGT) offers a suitable framework for analysis, as discussed in the following section.

Theoretical Framework

SIGT is. Useful framework as it proposes experiences as a focus (punctuation) to give an indication of what is transpiring within the relational interactions between OPs and CWs. SIGT also considers interactions on multiple levels, making it well-suited for understanding the complexity of relationships. SIGT elucidates interactions between individuals at three distinct levels: the intra-individual, the inter-individual, and the group (Roos, 2016). In addition, SIGT posits that relational dynamics are embedded in broader environments (e.g. healthcare, sociopolitical) and the specific care facility. See Figure 1 below for a visual illustration of SIGT.

Figure 1

Self-Interactional Group Theory (Roos, 2016)



On the **intra-individual level,** individuals' experiences refer to the subjective impact of events and exchanges with others, which, according to Vorster et al. (2013) and Roos (2016)

explains what is occurring at both the inter-individual and group levels. The **inter-individual level** examines interactions from five perspectives: interpersonal context, definition of the relationship, relational qualities, motivation for the interaction, and circular processes of interaction. (1) The interpersonal context is relevant because it provides a framework for the interactions and refers to the particular social situation between people and within which they interact. (2) Definition of the relationship refers to how individuals move for control in the interactions. (3) Relational qualities describe the way people present observable verbal and nonverbal behaviour, which can be effective or ineffective. (4) Motivation for interaction, in this instance addressing OPs' care needs. (5) Circular processes of interaction, which refer to ongoing actions and reactions between CWs and OPs. SIGT posits that relational dynamics are embedded in broader contexts, such as care approaches, the specific care facility or organisation, and the sociocultural context.

The Mmogo-method was used in this phase to explore CWs' experiences of their relationship with OPs in FRCE. A detailed discussion of the research methodology is presented in Chapter 2.

Findings

Data collected from the visual and textual Mmogo-method technique supported six themes and subthemes of CW's experiences of relationships with OPs in formal residential care ecologies, which are presented in Table 1.

Table 1.

Themes and subthemes of care workers' experiences of relationships with older persons in formal care ecologies

Theme	Care Approaches	Perspectives on Ageing	Operationalisation of Care	Relational Qualities	Ambivalent intergenerational dynamics	Caregiving is interactional involving both CWs and OPs
Subthemes	Medicalised care Person-centred care	Older persons disengage from active participation Care workers promote active ageing Ubuntu perspective	Older persons are diverse Care workers' agency to apply strategies to deal with diversity Older persons' expression of needs Care workers address older persons' care needs + Attuned care + Incongruent care + Congruent care	Care workers - Effective relational qualities + Unconditional acceptance + Perspective taking + Congruence + Flexibility + Problem solving + Expression of needs - Ineffective relational qualities + Judgement + Incongruence Older persons - Effective relational qualities + Confirmation + Perspective taking + Emotional closeness	Unitedness of CWs and OPs Negative group identity assigned to older persons	Reciprocity manifests as action and reaction Impact and intention Outcomes of effective caregiving relationships

Theme 1. Care approaches

In the broader context of the care philosophies deliberately selected for the respective facilities (see Table 2), the following approaches emerged: medical and person-centred.

Medicalised care. CWs treat OPs as patients, which is illustrated in Figure 2 constructed by CW1 (Setting C). The textual and visual data present a dissonance. In the verbal explanation, the focus is on the older person being a patient and how CWs provide instrumental care, which is appropriate for the caregiving needs of the OPs: "I made a bed for a frail patient. She's lying on the bed. She needs to get up during the day to use a chair."

Figure 2

Care workers are busy caring, while the older person is lying alone (CW1)



However, when considering the visual data the visual representation demarcates the separation between the CWs who are busy but not engaging with the OP. Caregiving clearly illustrates instrumental care by demonstrating how equipment (a drip) is used to address the OP's medical needs and to ensure physical comfort (bed, pillow) and even a chair for the OP

to sit in so that they can get out of bed during the day. A focus on relationship care could involve CWs engaging with OPs, while in the process of performing instrumental care. In the visual presentation, CWs are presented at the back of the bed and the chair, not directly interacting with the OPs.

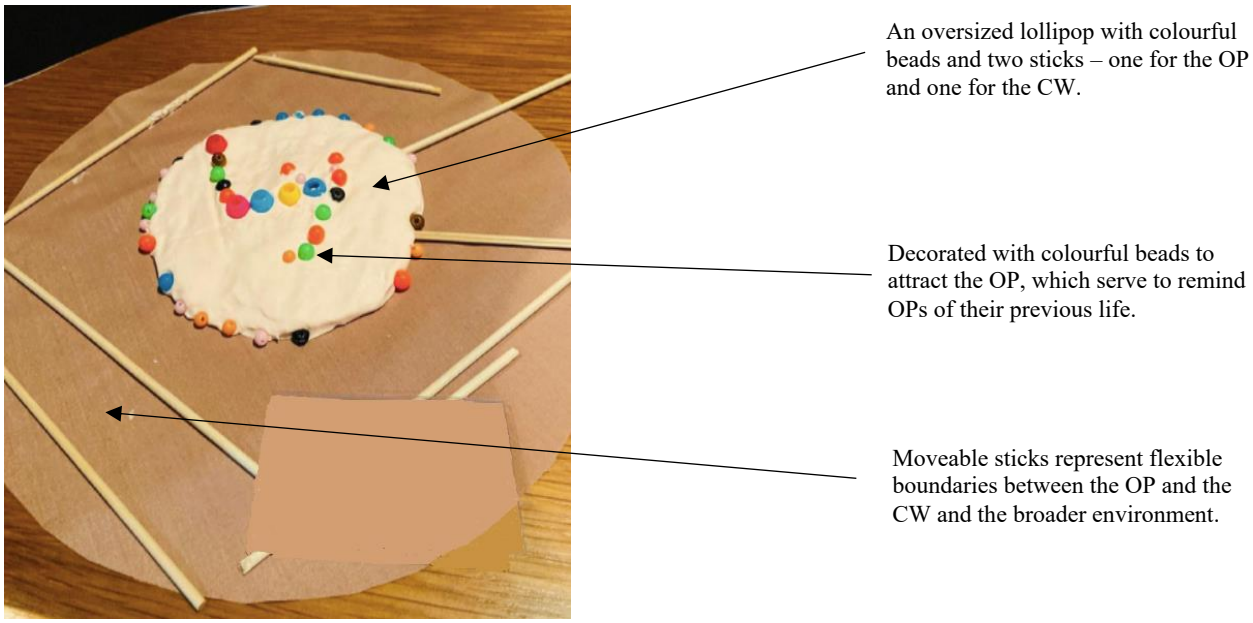
Person-centred care. A person-centred approach is care directed at the OP. CW16 (Setting A) explains as follows:

> If they are having a bad day, I would ask them what is wrong and when they engage that's when I talk to them about the problem and when they do not want to engage, I leave the room and give them space then come back after a few hours. What is important is communication and building trust with them.

In CW16' visual representation, the caregiving relationship is illustrated as an unusually large lollipop with two sticks, one for the OP and one for the CW because, according to this CW, caring is sharing.

Figure 3

Sharing a colourful lollipop is caring (CW16)



CW16 emphasises that communication with the OP is important to build a trusting relationship. A trusting relationship elicits a reciprocal reaction from OPs which in this instance occurs when the OP' responds to the observed need of the CW for emotional support. CW16 says "They do ask and usually when I enter their floor, and they see that I am not smiling they would ask me why I am not smiling."

Theme 2. Perspectives on ageing

Three perspectives on ageing emerged from the findings: disengagement from the perspective of OPs, active ageing from the perspective of CWs, and Ubuntu philosophy.

Older persons disengage from active participation. OPs withdraw from actively participating in activities in the residential setting. This disengagement by OPs sets in motion attempts by CWs to change their inactivity to active engagement. In the following excerpt, CWs find the disengagement of the OP concerning and something they must fix. For this CW, inactivity equates to illness. CW2 (Setting C) explains:

> It's very hard with them. X [OP] said, 'Oh I'm too old. I just came here to have a rest. I've been working for so many years.' [CW replies]: 'Okay you've been working for so many years but try and do something. You can't just sit all day from morning. Eat and sit, eat and sit. You must try and do something. We understand that you've been working so many years, but as we're here, you can't just sit. You'll get sick like that, sitting all day. Just try and do something. Let me do some little bit exercises.' You take her leg; you start stretching it. Little [by little] … you change it.

Care workers promote active ageing. Active ageing means, according to CWs, to foster OPs' well-being by engaging them in activities such as games. CW6 (Setting C) says: "We play games with them." Involving OPs actively aims to occupy them so that they can "… forget about all their old stories" (CW2, Setting C). The activities can take place

indoors or outdoors, as indicated by CW17 *(Setting B):* "Take them outside to get a bit of fresh air, to exercise, sit in the sun, play games, watch TV, and listen to music.*"*

Ubuntu perspective. Ubuntu, which holds the belief that: "umuntu ngumuntu ngabantu" in isiZulu meaning that 'I am a person through other persons' (Keevy, 2009). Ubuntu embodies compassion and humanity, emphasising respect, community and human connectedness, without dismissing the intrinsic value of the individual (Murote & Mungai, 2023). In this sociocultural context, CWs adopt the philosophical perspective of Ubuntu to explain their relationship with OPs as follows:

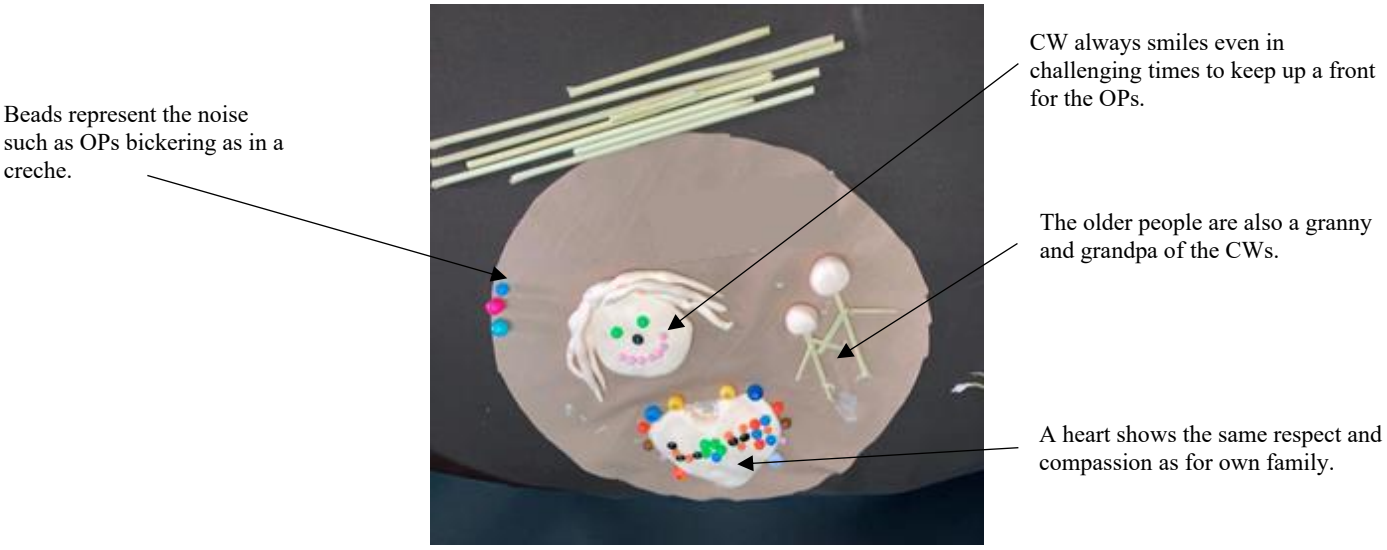
(1) Respect and appreciation for OPs. CW13 (Setting B) explains: "I understand that the elderly need more respect and love, and in our culture, it brings blessings to respect an elder." Appreciation for OPs is confirmed by CW5 (Setting C):

> They [OPs] all deserve five roses ... It's a symbol of love, and if you give someone roses, you give this person this big smile. I can even pick one flower in the garden and give it to her, she always be happy. She's like my mom ... she's like a mother to me. She's different that lady, so I understand her.

(2) Treating everyone, irrespective of who they, are as family, confirmed by the textual and visual data (see Fig 3) of CW7 (Setting A) who says: "So, for me, this is like your family away from your family … I treat the residents as if they are my parents, or my grandparents. So, [with] the same compassion and the same respect you would have for your family at home."

Figure 4

Older persons are family, but they also behave like children in a crèche (CW7)



(3) Together as one. This is reflected in CW11's (Setting A) description of her visual representation, which shows caregiving relationships metaphorised as a soccer team:

> This is a person. It's a human being. This can be anyone. It can be my resident; it can be me ... I was making it all the same … so I have to put them all together in the same place. These are people … it's me, residents and my colleagues, so we all together as one.

Theme 3. Operationalisation of care

CWs are aware of the diverse needs of OPs and use different strategies to deal with them.

Older persons are diverse. CWs noted OPs' diversity in terms of background, ethnicity, language, and religion as well as their various care needs. Participant CW17 (Setting B) expresses it as follows: "They represent a rainbow nation, and here at the care centre there are a lot of different races." CWs sometimes find it difficult when OPs from diverse backgrounds are integrated into the residential setting because the CWs have to

become united with people who differ from them: “They are coming from different backgrounds, races, and when they come here, they become united” (CW12, Setting B).

OPs have different physical and social care needs. Two CWs explain the manifestation of these diverse needs.

> People are not the same. Some of the people don’t want you to come closer to them. Some of them do. We have to know them one by one. One likes hugs and kisses, and others don’t like that (CW3, Setting C).
>
> Some of them do not want to talk at all … some will scream, and shout, get violent with you and after a few minutes they will come … and apologise (CW17, Setting A).

Care workers’ agency to apply strategies to deal with diversity. CWs adopt different strategies to deal with the diverse OPs in their care.

First, CWs accept it as their responsibility to make adjustments. CW1 (Setting C): “It’s our duty as the carers, that we get to relate with them and understand them.”

Second, CWs are sensitive to the sociocultural background of OPs and use different languages to accommodate their preferences. If CWs do not know the language required to communicate, they are prepared to learn a new language.

> Understanding a person’s culture is very important. Some of them are Zulu so I speak Zulu and for the Indian individuals I speak English. Some [OPs] talk Afrikaans and are trying to teach me Afrikaans (CW13, Setting B).

Third, CWs refrain from addressing sensitive topics: *“*You cannot speak to God to someone who doesn’t believe in God” (C13, Setting B). Nevertheless, to overcome diversity, CWs pray together and with OPs before they begin their caregiving: “We pray before we start

the job, then we start to be united. My colleagues, my resident, everybody. With prayer, I think God helps us to be united like this" (CW8, Setting A).

Fourth, CWs consider the unique situation of each older person to address their specific needs: "Since I've been with them for some time, I understand the needs of this one, and the needs of that one" (CW1, Setting C).

Fifth, CWs group together OPs with similar functioning (e.g. cognitive, mobility) and treat them according to their varying needs: "It's always the best to group them with the ones on the very same level" (CW1, Setting C).

Older persons' expression of needs. CWs observe that OPs express their needs either effectively or ineffectively. Effective expression includes clear expression.
CW5 (Setting C) explains the OP's clear expression of needs which is unambiguous, specific and clearly distinguished in terms of the OP's preferences and thus elicits greater understanding:

> She's simple and straightforward. If she doesn't want this, she doesn't want it. So I like it for this. She's different, that lady. She doesn't eat, like this cake. She don't want this one, she wants a different one. So I understand her. Oh, she's different.

Clear expression is also emphatic, leaving no room for misunderstandings as CW2 (Setting C) describes an OP: "She said 'no, no, no, no, put the TV on. I'm watching TV'. She don't want to do anything. She don't want to be the part of anything."
The effectiveness of the OPs' needs expression is observed if CWs can address the need, illustrated by CW11 (Setting A): "She can say she wants this and you give her that. The way she likes it. She can express that I need this."

Ineffective expression of needs occurs when CWs are confused or unable to interpret OPs' needs. CW1 (Setting C) gives an example of an OP who is not talking and expressing

her needs but is observed to be listening: “Sometimes she’s not talking but I can see that she's listening, and that’s hard for me to understand.” CW17 (Setting B) notes how some OPs avoid engagement: “Some of them do not want to talk at all … when I find them crying, they would say ‘no do not ask me questions’,” which makes it difficult for CWs to understand their needs.

Care workers address older persons’ care needs. Two strategies are identified in the findings. CWs are either attuned or incongruent.

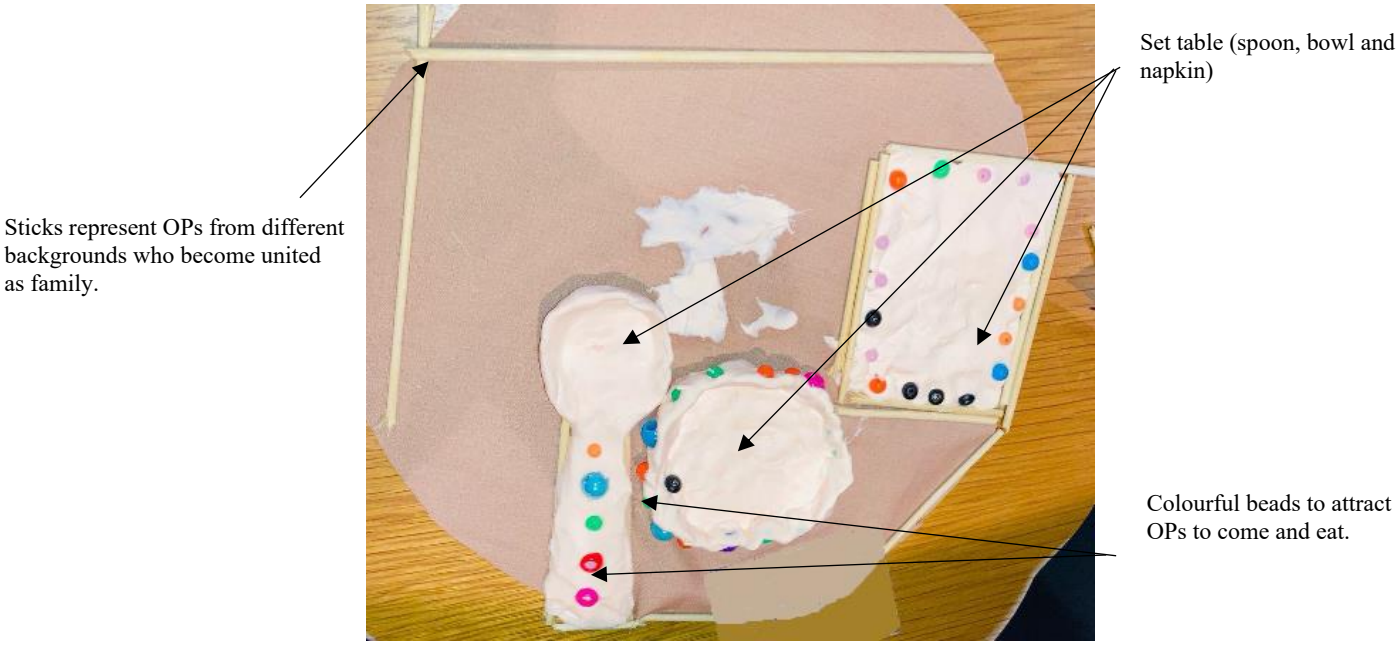
Attuned care. CWs respond to the care needs of OPs in an attuned manner illustrated by CW11 (Setting A): “If the resident wants to talk to you about something you need to listen, you need to understand, you need to show her that you care, and you feel what they are feeling at that time.” Attuned care is also given when CWs read the OP’s mood, and act appropriately, as CW7 (Setting B) explains: “You can read when a resident is having a bad day, also their facial expressions. You can sense that she’s not in a good mood; you just leave her.*”* Sometimes attuned care involves taking the necessary action. CW5 (Setting C) explains that she facilitated contact with the OPs’ family.

> She was missing her family, but they are not here, they’re overseas. So, she was very cross because she missed them. I said, ‘Just sit down and watch movies. Maybe you can give them a call with the Skype video call or what so that you can try to release that pain.

Incongruent care. Incongruent care refers to a misalignment between OPs’ care needs and how CWs respond. Incongruent care is observed through CWs’ coercive actions which is illustrated in Figure 5 by CW12 (Setting B) who made a visual representation of a set table with a colourful decorated spoon, bowl and napkin to create the impression that there is a party, which she believes will encourage the OPs to eat.

Figure 5

Incongruent care illustrated by using decorative beads whereby CWs coerce the OPs to eat because they think it is a party (CW12)



Congruent care. In contrast, CWs give congruent care when their verbal and nonverbal messages are aligned with the care needs of OPs. In the following example, CW13 (Setting B) verbalises that grieving the loss of a loved one is difficult and recognises that for this OP it means that she misses her daughter very much:

> On a certain day an elderly lady was crying and said that she missed her daughter that passed away a long time ago. I did not know how to comfort her, but I told her that she has to be strong for the sake of the grandchildren that need her and I also need her as she is now part of my family.

This could be a demonstration of accurate empathy, and therefore, aligned with the emotional need of the OP. Congruence is also observed when CWs' verbal and non-verbal behaviours match, which, according to CW14 (Setting A), means that you are truthful when "your actions must always meet your words". CW10 (Setting B) explains how she demonstrates congruence:

> They [OP] always want to ask about your background and your life. Then telling the truth. Just be the true you. Be who you are to them, and they get to know you. Then you'll always be one person… You're always supposed to be one person.

Theme 4. Relational qualities

The effective and ineffective relational qualities of CWs are presented first, followed by the OPs' effective and ineffective relational qualities.

Care workers' effective relational qualities. Findings indicated the following: Unconditional acceptance of OPs, perspective taking, congruence, flexibility and problem solving.

Unconditional acceptance. CWs accept the OPs for who they are, illustrated in the following quote: "Let them be who they are all the time" (CW10, Setting B). This unconditional acceptance finds expression when CWs acknowledge the time OPs require to figure out what is bothering them, but they accept them as they are, in that moment. This is expressed by CW10 (Setting B) as follows:

> Give them time, listen to them and let them express themselves. Let them talk to you, let them tell you what they want to tell you. What is bothering them, whatsoever. If they're happy, they'll feel free to tell you. If they're angry, they'll feel free to tell you. So, you just become so understanding. They need someone who's not going to change their mood. They need someone who' going to be there.

Perspective taking. CWs adopt the perspective of the OPs, illustrated by two CWs. "It's not nice to be separated from your family and suddenly you have to live with strangers" (CW6, Setting C).

> I suppose if I put myself in their shoes, I would say it would be a bit of like ... if they've got something to tell you, it would be a bit of discouragement because, they want to confide in you, and you are turning away, and sometimes you could be their last hope that they want speak to you about something, and your time is taken elsewhere (CW7, Setting B).

Flexibility. In relationships in a caregiving context, flexibility means adapting behaviour to fit the OPs circumstances. CW14 (Setting A) explains how she flexibly adapts to suit the needs of different OPs.

> Communication is the key and being around them will build trust. I have to raise my voice because she is deaf and cannot hear properly but when I talk to another elder, I have to be soft. That is how communication differs. Some will not want to talk at times, so I give them space and let them calm down and engage at a later stage.

Problem solving. The capacity to solve interpersonal problems includes offering practical solutions to improve the mood of the OPs: "Like for me, for instance, they like to come and ask me to sort out their phones, or to help them with their phones, and just to see how happy they get once you've helped them. For me that's a plus" (CW7, Setting B). CW17 (Setting A) uses creative solutions to address OPs' concerns: "I would take them for a walk to pick flowers and after that, when we get back into the room, the elder will be okay." In some instances, CWs apply less obvious methods to solve OPs' problems:

> I had an elder that had a problem with another one and he always wanted to call the police or call his family. I went downstairs with him and asked the receptionist to call the police, and she pretended to call them. So every time he acts out and wants to call the police, I tell him that the matter is with the police and they will resolve it at a certain stage. After that, he will be calm and even forget (CW17, Setting A).

Expression of needs. CWs for their part express their needs to OPs as a request for help with their children, to which OPs respond by giving advice. Two CWs explain how they convey their own needs to OPs. “There are those that can listen to you and understand you, and give you advice” (CW11, Setting A).

> The elderly will also give me advice/encourage me when they see that I am not okay, and I do share with them that I do not have a child, so they give me advice on what to eat and how to take care of my body in order to get a child (CW13, Setting B).

Care workers’ ineffective relational qualities. CWs also express ineffective relational qualities that could jeopardise the relationship with OPs, such as judgement, or lack of perspective taking,

Judgement. A CW demonstrates disregard for how the OPs present themselves: “They can’t sit on the chair like this whole day. They feel very sad, yes. They must be happy. There must be activity” (CW2, Setting C). Judgement is also noted when CWs evaluate the actions of families in relation to OPs. CW6 (Setting A) tells how she thought that families acted in an unfair manner by placing them in formal care settings. This is also, according to the CW, responsible for the steady decline of OPs’ health and wellbeing.

> They feel that, you know, their family, has robbed them of their life, of their cars, of their money, of their comfort, everything. Their families decide to move them. Then

they become so weak, and some of them get sick, and then die, because then that was the loss of hope for them.

Incongruence. Incongruence in the interpersonal context on the inter-individual level, refers to the misalignment between oral expression (verbal language) and physical and paralinguistic signals (body language) (Rogers, 1957). CWs communicate incongruently for three reasons. (1) To reassure the OPs. CW16 (Setting A) explains her behaviour as follows: "When I enter their floor and they [OP] see that I am not smiling, they would ask me why I am not smiling. I would say I'm okay and start smiling". (2) To present an image of emotional strength. "We always be strong with them, even if we've got something going on at home" (CW8, Setting B) and CW5 (Setting C) who says "I come from home with my broken heart [but] 'I must just leave that in the gates and come inside with a big smile'. (3) To avoid arguments. "I keep quiet. Don't argue or show the negativity towards that. You just have to keep quiet, let them voice everything out" (CW10, Setting B).

Older persons' effective relational qualities. CWs identify how OPs actively contribute to relationship building through confirmation, perspective taking and emotional closeness.

Confirmation. OPs confirm CWs by expressing their preference for a particular CW which CW10 (Setting B) observes as follows: "They prefer to be with me. Sometimes they ask can you come? They can ask for whoever they want." CW5 (Setting C) describes how an OP confirms her as a person by the feedback the OPs give to the nursing sister: "She even tell sister that 'Oh I love Y [CW5]. She knows how to help me'. "

Perspective taking. OPs take the perspective of the CWs, which CW13 (Setting B) verbalises as follows: "When my mother was sick and the elder knew that my mother was sick and when I came back to work, they would ask me how my mom is doing and tell me that I should not worry and that she will be okay."

***Emotional closeness*.** OPs move for closeness to get to know CWs by taking an interest in their personal lives. CW3 (Setting C) recounts: "She always asked ... asked me that 'how's your family?'." This sentiment is echoed by CW10 (Setting A): "They always want to ask about your background and your life. They even know about what's happening to our kids at home." Some OPs move for closeness through physical affection, as CW3 (Setting C) describes: "If they talk to you, they hug you and kiss you and come too close. How is Mrs so-and-so? She like hugs, she like kisses. Emotional closeness between OPs and CWs is facilitated by OPs who are open to CWs, listening to them attentively, and responding with advice. CW7 (Setting B) explains:

> Like if you need advice or you just need to talk. They'll never turn you away and say like how we will say: 'Oh, we're busy, can you just give us a few minutes.' They'll always talk to you. They'll never turn you away emotionally if you need something. They'll always talk to you …When I get a little bit of time I go and I visit like the residents I'll go and I'll sit, and I talk.

Theme 5. Ambivalent Intergenerational Dynamics

Ambivalence in this instance refers to CWs' positive and negative perceptions in relation to OPs (Lüscher & Pillemer, 1998).

Unitedness of CWs and OPs. On the one hand, CWs express their unitedness with OPs and other carers: "We are united…the colleagues, the residents, everybody" (CW8, Setting, A). CW 14 (Setting B) verbalises a sense of caring deeply for the OPs as their family, as follows: "The love that I give to the elders then a smile…they (OPs) know that I always give them a smile when I take care of them…. our connection is love and happiness."

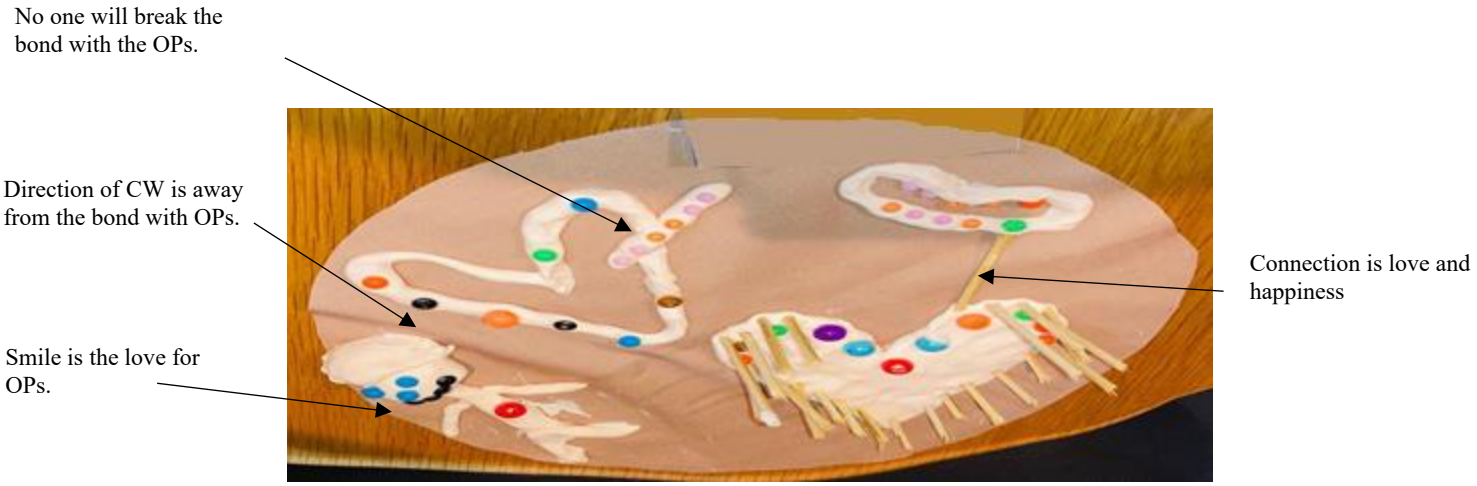
Negative group identity assigned to older persons. On the other hand, CWs expressed an ageist view toward the OPs, illustrated by CW1: "Because as they old

sometimes they are like babies" (Setting C), and CW7 (Setting B) who describes OPs as "bickering residents, fight like they are in a creche". However, when people meet as individuals, stereotypically assigned group identities are challenged, illustrated by CW3 (Setting C): "We are the same. She lost the husband. I lost my husband. So that is why we keep sharing things … I must give her love, and she gives me love … we always sharing the nice stories."

CW14's (Setting B) textual and visual data illustrate the ambivalence. In explaining her visual representation, CW 14 says the heart shape represents "that no one will come in between my relationship with the elderly…. this is our connection which is love and happiness", but the visual data contradicts the textual data when the CW is deliberately turning away from the connection.

Figure 6

Illustration of ambivalent intergenerational dynamics (CW14)



Theme 6: Caregiving is interactional

The caregiving relationship, according to CWs, is reciprocal, consisting of actions and reactions, whereby people respond to the impact of the actions and reactions.

Reciprocity manifests as actions and reactions. CWs and OPs are in a reciprocal relationship, which CW16 (Setting A) refers to as a "two-way street" and that manifests as follows: "It is not just about me taking care of the elderly because they also notice things about me." For CW7 (Setting B) this reciprocity manifests when OPs "come and ask me [CW7] to sort out their phones", and the OPs respond with happiness, which again elicits a response from the CW: "Just to see how happy they get once you've helped them. For me that's a plus."

Impact and intention. The subjective experiences refer to impact which CW7 describes as good: "I think it has a very good impact because you can see their face lights up as soon as you come through the door." However, CW1 (Setting C) distinguishes between impact and intention, illustrated by the following: *"*I'm trying, by all means, to calm her down and explain to her that ''m sorry. It wasn't my ... it wasn't my intention to get her angry."

Outcomes of an effective caregiving relationship. The CWs identified three outcomes: (1) The development of close attachment, expressed by CW14 (setting B). "No one will come in between my relationship and the bond I have with the elderly." (2) Prolonged engagement with the OPs enables CWs to know each OP's unique needs. "Since I've been with them for some time, I understand the needs of this one, and the needs of that one" *(*CW11, Setting B); and (3) More transparency between CWs and OPs, observed in the sharing of personal information. "Sometimes they (OP) will also want to see our kids. Maybe someone here is having a child, and they will want to hold that child. You've got to bring the child here for them" (CW10, Setting A).

Discussion

The operationalisation of caregiving is informed by the training curriculum based on the medical model which is a CW-directed (top-down) approach. This tendency warrants a critical reflection on the formal curriculum of care worker training that is predominantly aimed at treating physical and mental ill-health and not specifically focussing on relationality (Chapter 2).

Three examples of incongruence in the caregiving relationship threaten effective relational outcomes. First, an incongruent perspective on ageing, for example, when CWs expect OPs to conform to their active ageing attempts when OPs want to disengage from the busyness of activities. When CWs proclaim that the care facility is "like OPs' homes", surely, this should allow for greater flexibility in honouring the choices of OPs to engage or disengage. To promote the active engagement of OPs, CWs could create a supportive environment by inviting the OP's participation without coercion (see Roos & Zaaiman, 2017). Second, incongruent care is when CWs respond to how they interpret OPs' care needs without checking the accuracy of their understanding with the OPs. Incongruent care disregards the agency of OPs, inhibiting their spontaneous sharing of care and social needs. This potentially elicits symmetrical-relational dynamics where there is a struggle for control, drawing on SIGT (see Roos, 2016; Vorster et al., 2013). Third, incongruent communication observed in the misalignment of verbal and nonverbal messages is likely to trigger relational dynamics of dissonance and disunity (Cavé et al., 2024). The opposite of incongruent communication could be when CWs listen attentively to accurately understand the expressed needs creating a sense of trust and security, key to an effective relationship (Dewar & MacBride, 2017).

Interactions between CWs and OPs are embedded in broader sociocultural environments, according to SIGT (Roos, 2016), particularly when caregiving is performed by

migrant CWs. An interesting finding is that CWs in this sociocultural context view OPs from an Ubuntu perspective, expressing normative and affectual solidarity (Bengston et al., 2002). Normative solidarity refers to the expectations of familial piety and acceptance of an obligation to care for OPs, and affectual solidarity (closeness and connection between family members when CWs regard OPs as family, part of the unity of humanness). This raises the question: Is this group of CWs unique in addressing the diversity of OPs because they are socialised in a society characterised by its diversity? Caregiving practices could benefit from considering the philosophy of Ubuntu that views human beings as unique within the context of being with others, in the physical and non-material worlds, always in relationship (Mbiti, 1969). Intergenerational care could benefit from establishing kinship and filial piety between OPs and CWs (Jecker, 2022, Keevy, 2009). Ambivalent intergenerational dynamics (see Lüscher & Pillemer, 1998) develop between OPs and CWs. On the one hand, CWs express unitedness with the OPs, but on the other hand, a demeaning position towards OPs when they express stereotypical views. The ambivalence between the Ubuntu philosophy and dimensions of solidarity may be explained by the notion of performativity: while CWs express their unity with OPs, their perceptions about OPs and the practices of caregiving suggest more of a performance of care (see Van der Geest, 2002).

A novel finding of this research is the interactional nature of caregiving. By focusing on interactions, we can identify processes and dynamics that occur between people with effective or ineffective outcomes (Watzlawick et al., 2011). Actions and reactions consist of verbal and nonverbal messages translated as relational qualities (whether effective or ineffective) of both CWs and OPs that shape the caregiving relationship. Research links effective relationships to relational qualities such as unconditional acceptance and accurate perspective-taking (Rogers, 1957). Interestingly, the data did not show a theme of empathy from CWs but rather, the opposite: judgement, which according to Rogers (1957) is typical of

ineffective relationships. Unsurprisingly, flexibility and problem-solving emerged in this caregiving context because these are skills recruiters value when selecting candidates for care work. According to CWs, OPs exhibit qualities such as confirmation, perspective taking and appropriate emotional closeness, which Vorster et al. (2013) characterise as effective. A focus on interactions also reveals the distinction between *impact* and *intention*. Intention refers to an intra-individual disposition which is often unclear to the sender and receiver while impact refers to how the actions or words are subjectively experienced by the receiver (Vorster, 2011).

Conclusion

Caregiving is multifaceted and multilayered embedded in broader sociocultural, healthcare and sociopolitical environments. Beyond existing care approaches, this article proposes an interactional approach that acknowledges the interactions of both CWs and OPs in the caregiving relationship towards effective relational outcomes. This contribution offers exciting opportunities to inform training, research and policy, such as aligning the curriculum with delivery methods that demonstrate how interactions shape relational outcomes. Additionally, it suggests implementing intergenerational interventions where one-on-one interactions that highlight commonalities between OPs and CWs could help challenge unhealthy stereotypes about both groups. FRCE care policies aligned with an interactional care approach, where both OPs and CWs collaborate around policy-making decisions, will go a long way to mitigate against the uni-directional, task-oriented, perpetuating medicalised care practices.

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Chapter 6

Article 4

A conceptual framework explaining Care and Relational Dynamics (CaRD) in formal residential care ecologies

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Abstract

Objective: To propose a conceptual framework to explain care and relational dynamics between older persons (OPs) and care workers (CWs) in formal residential care ecologies (FRCE).

Approach: design and methodology: A critical realist approach was applied, first to identify the mechanisms in dynamic interplay with context from the findings obtained from a scoping review and the experiences of OPs and CWs about the caregiving relationship in a FRCE; and second, to explain the complex interactions between OPs and CWs in FRCE which lead to effective or ineffective relational outcomes.

Findings: Three contexts emerged: broader environments, the formal care setting, and the interpersonal context. Mechanisms on four levels included: family, group and intergenerational, inter-individual, and intra-individual. The dynamic interplay of mechanisms and context is integrated in a conceptual framework entitled the Care and Relational Dynamics (CaRD). The CaRD focuses on the interpersonal context to describe how interactions between OPs and CWs in the context of FRCE are shaped by context and mechanisms towards achieving effective relational outcomes.

Originality/value: The CaRD conceptual framework is presented here for the first time to explain the complex interactions between OPs and CWs in FRCE in relation to mechanisms in dynamic interplay with context. It presents a conceptual explanation of an interactional caregiving approach that includes both OPs' and CWs' contributions to the relational dynamics and how those dynamics in turn contribute to effective relational outcomes. An optimal caregiving relationship benefits OPs and CWs with care that flows organically in the give-and-take of the relationship. The transferable knowledge obtained through the development of the CaRD conceptual framework is its potential application to any formalised caregiving context.

Keywords: Care and relational dynamics (CaRD); Conceptual framework; Older persons; Care workers; Formal residential care ecologies; Critical realist approach.

Introduction

This article aims to propose a conceptual framework that explains care and relational dynamics between older persons (OPs) and care workers (CWs) in formal residential care ecologies (FRCE). FRCE encompass all the elements involved in formalised caregiving, such as: the healthcare environment with well-known care approaches, the formal residential setting and associated work protocols, and the inter-individual exchanges between OPs and CWs elicited by intra-individual experiences (Chapter 3). Focusing or punctuating on formal care is important in light of the anticipated global increase in the numbers of older persons (OPs), and accompanying proportionately age-declining functioning, which means that some might need a form of formal care (Dowling, 2022). Relationships play an important role in well-being, and it is expected that the caregiving relationships involving OPs and care workers (CWs) (people paid to provide care for them) are equally important (Razavi & Staab, 2010).

Existing care approaches acknowledge the importance of relationships in caregiving although these are expressed differently. In the medical model, the relationship is mainly CW-directed, which means that CWs decide when and how OPs are going to receive care. When this uni-directional, generalised care approach is followed, the unique situations or needs of OPs are not always considered (Chapter 3). A person-centred (PCC) approach, of which the best example is the Eden Alternative^{TM}, proposes that meaningful relationships with people and animals are important for the well-being of OPs (Brownie, 2011). By adopting a PPC, the relationship is OP-directed, which means that CWs consider the situatedness of OPs and their unique needs and preferences in caregiving (Brownie, 2011;

Carstensen, et. al., 2000; Thomas, 2004). A relationship focus approach explicitly acknowledges the importance of relationships and adopts a type of a social convoy model, with OPs' situatedness central to every stakeholder and service provider involved in their caregiving (see Larkey, 2022; Nolan & Allan, 2012). Research also indicated that relationships in caregiving involve both OPs and CWs from an interactional approach (Chapters 3 and 4). However, existing care approaches do not adequately describe formal caregiving in terms of the relational dynamics between OPs and CWs (Larkey, 2022; Nolan & Allan, 2012). To identify mechanisms in relation to context, a critical realist approach was adopted (Archer et al., 2013; Bhaskar, 1975). Explaining the complexity of mechanisms in dynamic interplay with context is necessary for proposing how effective relational outcomes could be achieved. The question guiding this article is: What conceptual model could explain mechanisms in dynamic interplay with contexts (e.g. broader environments, residential, and interpersonal) to produce effective relational outcomes? In this article, the development of a conceptual framework the Care and Relational Dynamics: CaRD is presented in three phases and introduced here for the first time. A critical reflection is offered on its development and potential application.

Development of the conceptual framework

A conceptual framework may be described as a network of linked concepts (Jabareen, 2009), displayed in graphic format (Heemskerk et al., 2003). The development of the CaRD conceptual framework took place in three phases:

1. Adoption of a critical realist approach to explain mechanisms in dynamic interplay with contexts that are likely to produce effective relational outcomes.
2. Identified mechanisms from existing literature and the experiences of OPs and CWs in the caregiving relationship.

3. Proposal of a conceptual framework to explain relational dynamics.

Phase 1 explains a critical realist approach.

Phase 1: Adopt a critical realist approach to explain mechanisms in dynamic interplay with contexts to produce effective relational outcomes

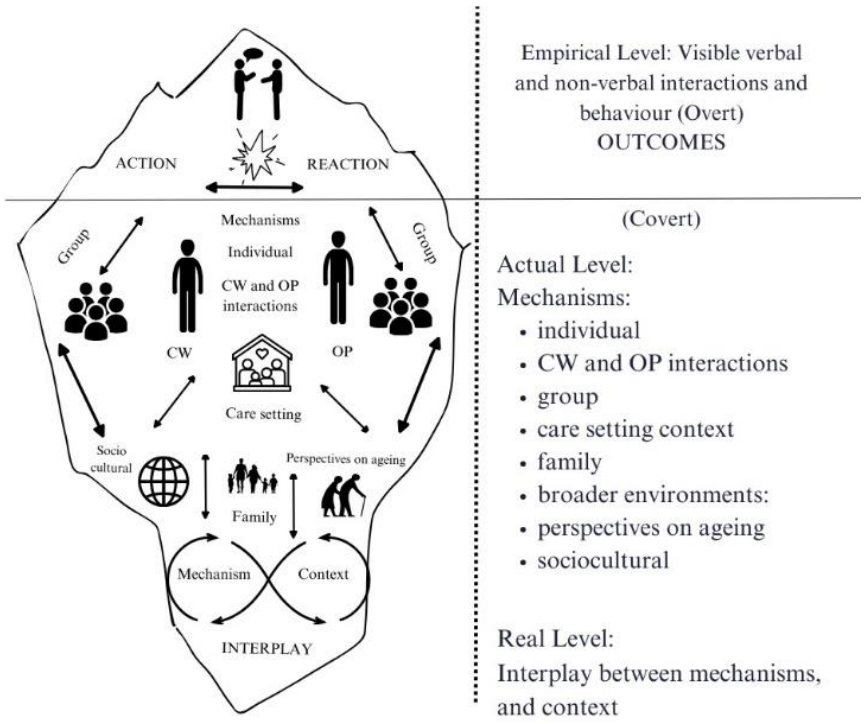
A critical realist approach drawing on critical realism (CR) proposes that social reality exists on three levels: empirical, actual, and real (Bhaskar, 1975). The empirical level consists of the observable (overt) verbal and non-verbal exchanges, which manifest in this instance as relational qualities between CWs and OPs, and relational outcomes. What is observed on the empirical level is shaped by covert interactional social processes and causative factors known as mechanisms (Clark et al., 2008). Mechanisms on the actual level include, for this purpose, individual, relational, group, and contextual. Mechanisms are in dynamic interplay with context on the real level and are not observable (covert) (Archer et al., 2013). Three contexts for this purpose are relevant: (1) Broader environments (e.g. sociopolitical). OPs and CWs do not have direct contact with the broader environments, but they set the scene for the interactions taking place in the interpersonal context. For example, formal caregiving in South Africa pre-1994 catered primarily for white OPs, and today this skewed demography is still present in most formal care homes (Venter et al., 2024), a finding which was confirmed in this study (see Chapters 4 and 5). Caregiving is a low-paying job in the South African context and attracts mostly younger black women (Gie & Hoffman, 2023). (2) The residential setting, which includes the organisational and physical environment, shapes the interactions between OPs and CWs; and (3) The interpersonal context, provides a frame or a conceptual boundary and informs behaviour from an interactional approach (see Roos, 2016; Vorster, 2011). In formal caregiving, the interpersonal context should be clear because meaning is obscured when the context is unclear (Watzlawick et al., 2011). Care and relational outcomes

manifest on the empirical level as a result of the interplay between mechanisms on the actual and real levels.

Figure 1. illustrates the three levels of social reality as proposed by CR drawing on the collected data in Phases 1, 2 and 3. On the empirical level visible relational qualities of OPs and CWs are observable and expressed in the verbal and nonverbal exchanges. These were identified in the scoping review (Phase 1), and the empirical study (Phase 2). Contexts and mechanisms on the actual level were first identified in the scoping review (Phase 1), and by obtaining information about the experiences of OPs and CWs in a FRCE (Phase 2). The dynamic interplay between mechanisms and context at the real level emerged in the integration and formulation of the conceptual framework in this chapter (Phase 3).

Figure 1

Illustration of the three levels of social reality applied to the relationship between older persons and care workers in formal residential care ecologies



The discussion will focus first on the actual level and present the contexts and mechanisms, then the dynamic interplay on the real level, and finally, the empirical level, with observable relational qualities, and relational outcomes.

Phase 2. Identify contexts and mechanisms from existing literature and the experiences of older persons and care workers on the actual level

The actual level comprises the different mechanisms that are unobservable and in dynamic interplay with each other and contexts (Clarke et al., 2008). The mechanisms are presented on different logical levels. The concept of logical levels is derived from Russell's theory of logical types (2020) and provides a framework for understanding and distinguishing between different layers of abstraction in human interactions. Logical levels help clarify the distinct categories and hierarchies present in relational dynamics, including individual, interpersonal, and group. This hierarchical structuring is important because, without it, the result is confusion (Vorster, 2011; Vorster et al., 2013). By structuring relational analysis along logical levels, we achieve precision in observing the complex, dynamic processes that occur in relational dynamics. To study this complexity, the heuristic construct of punctuation (focusing on) (see Watzlawick et al., 2011) is applied.

Contexts and mechanisms were identified in four steps and their interplay will be illustrated. Finally, on the empirical level, observable relational qualities and relational outcomes will be discussed.

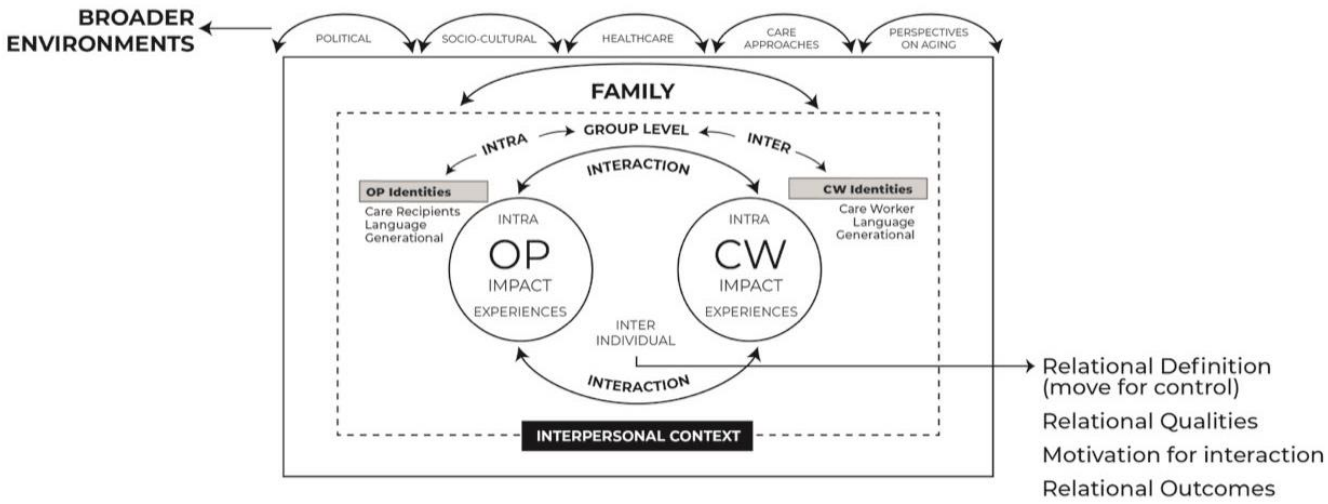
Step 1. Identify contexts and mechanisms from a scoping review.

Three broader environments that inform the caregiving relationship emerged: (1) Sociocultural. Caregiving is mostly performed by younger, migrant CWs, who speak a different language (as a proxy of ethnicity) from the OPs'; (2) Caregiving approaches emerged as medical, person-centred, and relationship-centred (see Chapter 1 for a discussion

of the models); (3) Theoretical propositions explaining relationships, which include Buber's I-Thou proposition and the construct of mutuality (Westerhof et al., 2014); Relational Dialectics Theory (Levy-Storms, et al., 2011), which describes relational outcomes as connectedness, certainty, and openness, or the opposite as separateness, uncertainty, and closedness; and self-interactional group theory (SIGT). According to SIGT, relational interactions are embedded in broader environments (Roos, 2016) and in the interpersonal context. SIGT explains relational interactions on three levels: intra-individual, inter-individual, and group (Roos, 2016), presented in Fig 2.

Figure 2

Self-interactional group theory to explain different levels



The literature review yielded relevant information about the relationship between OPs and CWs. Two configurations of control emerged: CWs in a one-up and OPs in a one-down position (complementarily defined relationship) or a friendship-type relationship (parallel-defined relationship). SIGT is useful in clarifying what elements constitute interactions but is unclear on how the mechanisms interact in relation to context to explain relational dynamics in a caregiving relationship.

Step 2. Identify contexts and mechanisms from the experiences of older persons and care workers.

The context identified as broader environments, the residential care setting, and the interpersonal context. Mechanisms identified in the caregiving relationship involving OPs and CWs are the following: family, group, intergenerational, inter-individual, and intra-individual.

Context. Broader environments, the residential setting as well as the interpersonal emerged as context.

Broader environments. Three broader systems shape interactions between OPs and CWs, namely: healthcare, discourses concerning perspectives on ageing, and sociocultural. (1) The healthcare environment, with its defined care models, informs the operationalisation of caregiving. For example, a medicalised model results in CW-directed interactions, while a person-centred care model situates the OP central to care decisions and actions. The broader healthcare environment develops policies to guide caregiving and informs the content in CWs' formal training curriculums as well as induction programmes (Brownie & Nancarrow, 2013; Dewar & McBride, 2017). (2) Discourses on perspectives on ageing, which emerged in this research, are active ageing or disengagement (Ayalon & Tesch-Römer, 2018; Buffel & Handler, 2023; Roos & Zaaiman, 2017). These perspectives inform CWs' and OPs' actions and resultantly, the caregiving relationship. (3) The sociocultural environment, which in this instance emerged when CWs adopted an indigenous worldview (e.g. Ubuntu philosophy) (Murote & Mungai, 2023), informing their interactions with OPs in a contemporary care setting in South Africa.

The residential caring setting. Caregiving protocols are guided by care policies adopted in a care setting and inform how job descriptions are formulated to provide

instrumental, health or social care to OPs. Caregiving in the South African context is organised according to staffing ratios (the ratio of CWs to OPs, stipulated by law to be between 1:4 (day-shift) and 1:6 (night-shift) (The Older Persons Act, 2006, South Africa) and the rotation of CWs to care for the diverse and multiple care needs of OPs (Razavi & Staab, 2010). The formal care setting, it was found in research, simultaneously functions as a workplace for CWs and a home for OPs (see Chap. 2).

Interpersonal context. The interpersonal context provides a conceptual boundary around the interactions of OPs and CWs and serves a referential function because the same word or phrases have significantly different meanings in different contexts. Appropriate behaviour can be explained in that context only (Hill et al., 2016; Vorster et al., 2013). For example, when the relationship is defined as friendship, but the OPs and CWs are giving each other instructions, it means they are moving for a one-up controlling position (complementarily defined relationship), which is not aligned with the interpersonal context defined as a friendship-type relationship. This could elicit confusion because context is not considered by the participants. The interpersonal context is the unit of analysis (Roller & Lavrakas, 2015) because it refers to the focus of the caregiving relationship, for which the conceptual framework is being developed. Focusing on the interpersonal context is important because it can reveal effective and ineffective relational outcomes between OPs and CWs in FRCE, which according to the critical realist approach, derive from the interplay between context and mechanisms.

Mechanisms. The following mechanisms emerged: the family, group and intergenerational dynamics, inter-individual, and intra-individual.

Family mechanisms. Family mechanisms from both CWs and OPs are present. The family as a mechanism is introduced when the OP enters a formal care setting. Relational dynamics are triggered when the family and CWs' caregiving practices are not aligned. For

CWs, their family dynamics are relevant because, in this context, CWs are part of multigenerational households. The effect of family dynamics playing out in their own home is brought with them into the formal care setting, shaping their interactions with OPs.

***Group and intergenerational dynamics*.** Intra-group and inter-group dynamics are activated by the interactions between OPs and CWs. At the intra-group level, underlying processes shape the group's identity by establishing shared norms, roles, relationships, and goals (Yalom & Crouch, 1990). For instance, CWs develop a team identity characterised by group norms and collaborative caregiving roles, which inform their interactions with OPs, to whom they assign stereotypical group identities based on age. The inter-group level encompasses the interactions based on the group's perceptions of other groups (Pasqualini et al., 2021). For example, how the group of CWs perceives the group of OPs and vice versa could be observed in "us-them" language.

Ambivalent intergenerational mechanisms (see Lüscher & Pillemer, 1998) emerged. On one hand, consensual solidarity (Bengston & Roberts, 1991) is expressed when CWs as well as OPs share interests and fun as women. Functional solidarity (Bengston & Roberts, 1991) is observed when CWs ask OPs for their advice about parenting, family planning, or relationships with their partners, while OPs ask younger CWs for assistance in using technology. On the other hand, CWs express ageist views while OPs judge them for being different or lacking intelligence in their view.

Inter-individual mechanisms in dynamic interplay with the interpersonal context. Mechanisms on the inter-individual level include moving for control, which manifests as complementarily defined when either the CW or the OP adopts a one-up position, and the other accepts a submissive, one-down position in the relationship, or when they meet as equals (parallel-defined), or symmetrically-defined when there is a struggle for

control. Relational qualities emerge on a continuum from effective to ineffective and serve as mechanisms but are also present on the empirical level as observable behaviour.

Intra-individual mechanisms. The impact of the interactions on OPs and CWs acts as a mechanism. The impact is a subjective experience that depends on the meaning attached to it by the receiver (Vorster, 2011). In this instance, the impact was identified by exploring CWs' and OPs' experiences, which presented on a continuum from effective (e.g. fun) to ineffective (e.g. frustrated), as the elicitation of a prior care imprint or relational trauma in OPs, and as well as a sense of agency expressed by OPs and CWs. Table 1 provides a summary of the contexts and mechanisms on the different levels.

Table 1

Contexts in dynamic interplay with mechanisms and relational outcomes

Context Broader environments	**Context Formal care setting**	**Context Interpersonal**	**Mechanism Family**	**Mechanism Group and Intergenerational**	**Mechanism Inter-individual**	**Mechanism Intra-individual**	**Outcomes Relational (Effective and Ineffective)**
Theoretical propositions: - Buber's I-Thou - Relational Dialectics - SIGT Perspectives on ageing - Active ageing -Disengagement Sociopolitical Sociocultural Healthcare Care models: - Medicalised - Person-centred - Relationship-centred - Interactional	Care approaches Policies guiding care protocols and conduct Staffing arrangements - Staff ratios - Shift work - Job descriptions CWs: Work environment OPs: Home	Conceptual boundary or frame around CWs' and OPs' interactions Reciprocity - actions, subjective impact, reactions	OPs - Decision to place OPs in a formal setting - Care protocol - Contact CWs - Part of multigenerational households - Caregivers to own family members	Intra-group level OPs - Self-ageism CWs - Team of CWs Inter-group level OPs' identities - Care recipients - Language (proxy for ethnicity) - Generational CWs' identities - Language - Care worker - Generational Intergenerational ambivalence Solidarity and stereotypical views	Move for control - Complementary - Parallel - Symmetrical Relational qualities continuum - Effective - Ineffective Motivation for the interaction OPs' care needs - Instrumental - Social - Relational CWs' relational needs CWs' care delivery - Effective: supportive and attuned - Ineffective: intrusive, rigid, neglecting, incongruent	Subjective impact (experiences) OPs - Care imprint - Relational trauma - Agency to perform some care tasks CWs - Agency to adapt care strategies	Effective - Closeness - Consensus - Collaboration - Connection - Cooperation - Cohesion - Congruence Ineffective - Distance - Tensions - Strife - Disconnection - Discord - Dissonance - Incongruence

Step 3. Describe the interplay between context and mechanisms on the real level.

On the real level, the dynamic interplay between context and mechanisms yields relational outcomes that are observable on the empirical level. For example, the residential setting functions as an organisation, with policies to guide conduct and to organise CWs' caregiving to address OPs' health and social care needs. The quality of care performed (e.g. attuned or rigid or neglectful) triggers an impact that shapes the interactions between OPs and CWs, presenting as the observable relational qualities on a continuum from effective to ineffective.

Step 4. On the empirical level describe observable relational qualities and relational outcomes.

Relational qualities of OPs and CWs are observable and expressed in the verbal and nonverbal exchanges, on the empirical level. Effective relational qualities include unconditional positive regard, warmth, empathy, perspective taking, visibility as human beings, giving confirmation, being flexible, congruence and the appropriate emotional and physical closeness. Ineffective relational qualities include being judgemental, incongruent, rigid and too distant. The care needs of OPs are also observable (e.g. instrumental, social, relational) and how they express their care needs, which could be clear or ambiguous, elicits a care response from CWs (see Table. 3 in Appendix F for an explanation of relational qualities). The care needs of OPs elicit a caregiving response from CWs that could be effective (e.g. supportive and attuned) or ineffective (e.g. intrusive, rigid, neglecting, or incongruent), again eliciting a reaction from the OPs.

Relational outcomes vary on a continuum from effective to ineffective. Examples of effective and ineffective relational outcomes are presented in Table 2.

Table 2

Effective and ineffective relational outcomes: descriptions and examples

Relational outcome	Description	Example from data
Effective		
Closeness	Owing to the nature of the relationship between OPs and CWs, the speed with which they move towards the other and the levels of closeness should be appropriate to the interpersonal context and mutually negotiated. If one of the two, OPs or CWs, moves too quickly and too close, the other may feel threatened and create distance or even break off the interaction (Vorster et al., 2013).	OPs and CWs talk about the loss of their husbands, know a lot about one another's families, and share personal information. They respond to one another with interest, laughing, smiling or crying together. This behaviour is congruent with the interpersonal context of CWs and OPs who mutually move for closeness.
Connection	A connection is established when OPs and CWs communicate congruently and when they are clear, which Vorster et al. (2013) refer to as clarity of self-presentation. A person with clear self-presentation tends to be understood by other people, but someone with poor pronunciation or incomplete articulation tends to elicit avoidance (Roos, 2018). Connection is further promoted when OPs and CWs confirm each other, which means they send the message that they are appreciated and valued. Connection is optimal when OPs and CWs can take the perspective of the other and when they demonstrate positive regard (Vorster et al., 2013).	CW greets OP daily by smiling and taking an interest. OP asks a particular CW to attend to her needs because she understands the OP and the OP expresses her needs clearly. OPs appreciate CWs' attuned care, and CWs appreciate it when OPs make time to listen to their marital problems or children's achievements. The connection between CWs and OPs is strengthened when they take the perspective of the other. CWs express their understanding of how OPs feel when they miss their children and OPs understand that living in deprived economic environments in multigenerational households takes a toll on CWs. CWs and OPs express positive regard when they accept the other unconditionally.
Cooperation	Agreements on how control is shared in the interactions between OPs and CWs which include sharing control equally, depending on the care needs of the OPs and the interpersonal context. OPs and CWs cooperate towards achieving the same	OPs understand that CWs need to balance tasks associated with caregiving against time spent with the OPs. OPs reassure the CWs that they can perform some

	goals for the relationship. Cooperation means that OPs and CWs acknowledge the unique contributions of one another (Cavé, 2024; Vorster et al., 2013).	of their own care. CWs express appreciation and accept OPs contribution to self-care.
Cohesion	A sense of cohesion, which means that OPs and CWs develop a deeper understanding of the interaction and effectively work together in unity (Cavé, 2024).	CWs who speak a different language from OPs' take trouble to learn their language or phrases so that they can understand each other better. OPs are willing to learn about new ways of doing things by listening and adopting CWs' perspectives.
Consensus	Consensus reflects the degree of agreement on values, beliefs, opinions and perspectives (Cavé, 2024).	OPs and CWs share beliefs they have in common, particularly around social norms, roles and obligations in areas of their lives in which they share common ground. They reach consensus by exchanging information and because they see each other as equals there is more flexibility in coming to an agreement.
Collaboration	Goals for the interaction are mutually negotiated (Cavé, 2024).	Both CWs and CWs having agency and working together to achieve shared goals. OPs as well as CWs choose to watch TV together by discussing what to do with spare time in the evening. CWs help OPs to navigate the technology, and OPs choose the programme to watch. CW offers suggestions and OP chooses.
Congruence	Verbal communication is aligned with an internal subjective experience. Behaviour is appropriate and aligned with the context (Roos, 2018; Vorster et al., 2013).	OPs and CWs are congruently themselves in the interactions. CWs speak to OP as an equal adult, explaining clearly exactly what they will be doing while caregiving, checking that OP understands their intentions, offering choices, and being flexible to adapt. CWs speak honestly when asked how they are feeling. OPs express their needs straightforwardly with clarity, specifically stating what they want, and what they like or do not like, without ambiguity. They check to make

		sure CWs understand them, using an emphatic tone if needed, leaving little room for confusion.
Ineffective		
Distance	Distance is observed in moving for physical or emotional distance which is not congruent to the context. Emotional distance manifests when the space is too big and not aligned with the interpersonal context (Vorster et al, 2013).	Physical distance is observed when CWs and OPs move away or withdraw to avoid interacting with the other. OP is upset after a family interaction. CW offers to help OP with an invitation to participate in a board game. OP turns away in silence, visibly distressed and crying, CWs react by leaving the OP alone and in distress.
Strife/conflict	When there is incongruent communication, it is experienced as a lack of warmth, indifference or hostility. This can result in misunderstandings, disapproval, or judgement and a reaction of defensiveness (Cavé, 2024).	An OP asks for help to use the bathroom with frequent verbal requests and gestures, expressing an assumed expectation of an immediate response (sarcastic comments). CWs are inattentive and ignore OP or dismiss them abruptly saying they are busy. OP reacts with defensive self-protection and gets angry.
Disharmony	Disharmony occurs when people cannot cooperate, and the discord between them limits their ability to work out interpersonal control, retaining rigid one-up and/or one-down positions (Cavé, 2024; Prilleltensky & Prilleltensky, 2021).	Discord occurs when OPs and CWs are unable to agree on the protocols of care because they disregard the opinions and rights of the other or demonstrate rigidity and inability to shift in their one-up/one-down position. An OP wants to use a stick when walking and communicates that they are capable and mobile. CWs disregard their capability and insist they use a walker. The OP responds with frustration.
Disunity	Experiencing difficulties in acknowledging the benefits of working or learning together, with behaviour incongruent to context, rigid, with moves for control (Cavé, 2024).	An OP does not want assistance from a CW and expresses this emphatically, explaining it is because they do not believe they need to be in a care home and have been placed there involuntarily by family. The CW responds by moving away from the OP, who promptly calls for assistance, equally emphatically. The CW turns away and does not respond immediately. The OP becomes insistent and shouts. The CW returns and

		responds to the OP with indifference. Neither OP nor CW sees the benefit of working together, with the relational outcome of disunity.
Incongruence	Incongruence in communication occurs when verbal and nonverbal messages contradict each other. Incongruence to context means that actions are not aligned with the context and therefore the subjective impact is confusion (Cavé, 2024; Roos, 2018).	An OP who speaks a different language from the CW's expresses a need to find her laundry in a loud tone and by gesticulating, without looking in the direction of the CW (incongruent communication). The CW ignores the OP and starts talking to another CW in her own language (incongruent response to context). Both OP and CW are confused about the meaning of the other's communication and behavioural responses.
Tension	The lack of alignment regarding the relational roles creates tension, or when moving for greater closeness and the other moves for distance, which could result in an impact of rejection and hurt (Vorster et al., 2013).	An OP reaches out to hold the hand of one of the CWs close by and available while the CW pushes the OP's hand away and turns her back. This creates tension between OP and CW.

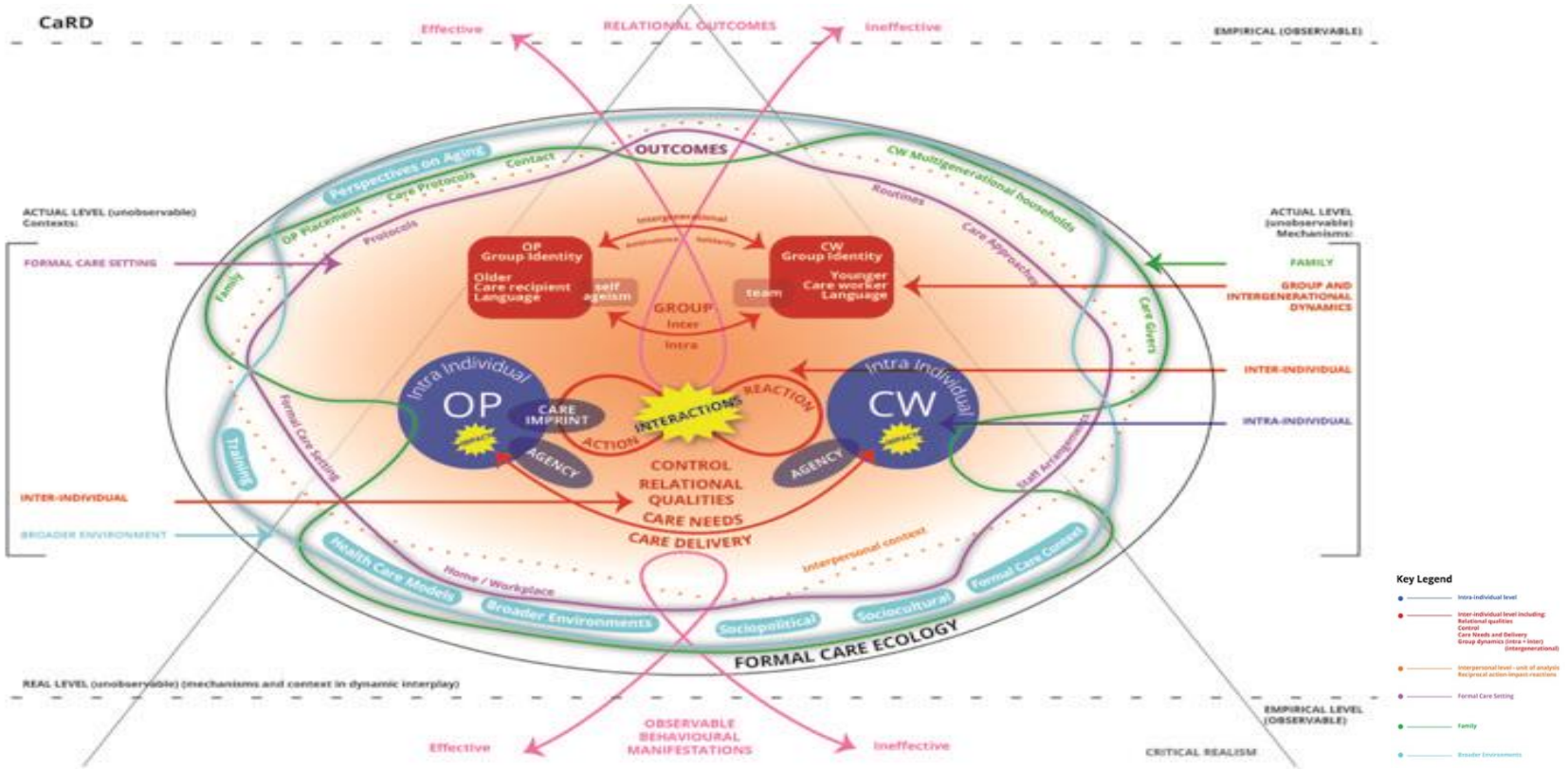
Phases 1 and 2 informed the development of a conceptual framework, which is now described in Phase 3.

Phase 3. Develop a conceptual framework – CaRD: Care and Relational Dynamics.

The CaRD (Care and Relational Dynamics) conceptual framework offers a comprehensive, multi-level explanation of the relational dynamics between OPs and CWs in FRCE. Care ecologies, in this case the FRCE, can be explained by drawing on Bronfenbrenner's bioecological theory, which posits that human development is shaped by Process, Person, Context and Time factors (PPCT), emphasising that proximal processes drive change between the person/people and their surrounding systems (macro-microsystems), and occur consistently over time within different environments (Tong & An, 2024). FRCE include the proximal processes between OPs and CWs (as a relational unit of analysis) and the surrounding systems, including the broader environment, formal care setting and the interpersonal context in which their relationship is embedded. This framework represents the dynamic interplay between the FRCE context and mechanisms at the inter-individual level that shape the relational outcomes between OPs and CWs, presented in Figure 3. The unit of analysis is the interpersonal context, in which all the mechanisms relevant to the focus of this study, i.e., the relationship between OPs and CWs, come together in dynamic interplay producing effective or ineffective relational outcomes.

Figure 3

An integrated conceptual framework to explain care and relational dynamics (CaRD) between older persons and care workers in formaresidential care ecologies. ial care ecologies



Two examples are presented to illustrate the application of the CaRD conceptual model.

Example 1. Punctuating on broader environments and how it shapes the interactions between OPs and CWs. The broader healthcare environment consists of proposed care approaches and how care should be performed. For example, by adopting a person-centred approach, care protocols are OP-directed, which means that their agency (intra-individual mechanism) is acknowledged, and drawing on Rogers's (1957) optimal relational qualities which inform the PCC, such as unconditional positive regard, warmth, and congruence (inter-individual mechanisms), effective reciprocal interactions are set in motion that are most likely to produce effective relational of outcomes such as collaboration. However, if CWs adopt a medicalised care approach, CW-directed care could lean towards rigid caregiving of OPs as patients as CWs comply with the prescriptive medical protocols. A symmetrically defined relationship could manifest when OPs move to control their own care, thereby demonstrating their agency. The relational outcome is disharmony and potentially conflict when the CWs drive their agenda by coercing OPs to comply or to participate.

Example 2. Punctuating on the interpersonal context and how it shapes the interactions between OPs and CWs. In the interpersonal context, OPs and CWs are interacting, and reciprocal processes of action, impact, and reaction are set in motion. For example, when OPs and CWs are trying on feminine garments (see Chapter 2), the interpersonal context that is created is one of equality, which is characteristic of a friendship-type relationship. In this interaction, both OPs and CWs describe the interaction as being fun (subjective impact). The effective relational qualities (inter-individual) demonstrated both by OPs and CWs include positive regard, confirmation, flexibility, and adopting the perspective of the other. This reciprocal process of action and reaction is likely to culminate in the relational outcome of greater emotional closeness. A process of increasingly becoming more

visible as human beings occurs when people display an appropriate level of emotional closeness. Caregiving outcomes are observed as mutual endeavors that are more aligned with the needs of OPs and CWs.

In contrast, in an interpersonal context in which CWs supposedly adopt a PCC approach but perform care actions from a one-up position, there is incongruence to context. For example, CWs decide about the form and execution of OPs' hygiene regimes, or wake OPs up very early in the morning to go to the bathroom and instruct them to undress, or they are undressed by the CWs. In this interpersonal context, CWs' observable ineffective relational qualities include disregard for the OPs, lack of perspective-taking, rigidity, and incongruence towards the OPs' care needs. The subjective impact on OPs of CWs' relational qualities is disrespect. OPs are likely to respond by demonstrating relational qualities such as compliance, becoming invisible, or becoming rigid. Relational outcomes from this type of interaction present as disharmony, disunity, and incongruence.

These examples explain the CaRD conceptual framework and illustrate its application to the interactions involving both OPs and CWs in FRCE. A critical reflection on the CaRD conceptual framework follows.

Critical reflection on the Care and Relational Dynamics conceptual framework: CaRD

The CaRD developed from the application of multiple iterative processes. First, an inductive process was followed to obtain data from the literature and from those who are the closest to the experiences of the caregiving relationship in FRCE: OPs and CWs. Then a deductive process was followed, whereby existing care approaches were used to identify gaps. Ultimately, the complexity of relationships between OPs and CWs in the CaRD is explained by the interplay between broader systems, micro systems, and the interpersonal

context and how it informs what is happening on the interpersonal level between OPs and CWs. The FRCE is unique to the sociocultural contexts in which caregiving takes place. The development and application of the CaRD included consideration of the importance of the interpersonal context as the unit of analysis. This directed the analytical scope of the CaRD on the relational dynamics. By punctuating on the interpersonal context as the unit of analysis, the framework explained specific interactional processes, thus helping to clarify how behaviours and relational patterns inform relational and care outcomes. This precision was important for identifying the mechanisms underlying effective or ineffective relational outcomes within, and in interplay with, the caregiving context. However, because of this focus, other relevant factors were excluded, such as greater detail around policy and legislation, economic constraints, or technological influences on caregiving practices.

South Africa's unique social history, including disparities in access to formal care and prevailing cultural attitudes toward ageing and caregiving, provided a rich and textured background to study the tapestry of interactions between OPs and CWs.South Africa's sociohistorical context of racial segregation and economic inequality significantly informs relational dynamics within the caregiving sector. Structural disparities in healthcare, employment, and social services impact CWs, often from historically marginalised backgrounds, resulting in financial insecurity, limited training, and precarious working conditions. These socioeconomic challenges affect CWs' emotional availability, stress levels, and job satisfaction, ultimately shaping caregiving relationships with OPs.

Simultaneously, South Africa's rich cultural heritage, particularly the philosophy of Ubuntu, offers a relational framework emphasising dignity, empathy, and mutual respect. Integrating Ubuntu into caregiving fosters deeper connections that transcend formal care

structures. Traditional cultural norms that revere older persons as custodians of wisdom and emphasise collective caregiving responsibilities further shape expectations in care relationships. However, the shift from traditional support systems to formalised care can create tensions, especially if OPs feel abandoned by family or if CWs struggle with balancing professional and cultural expectations.

The CaRD framework, when situated within this sociohistorical and cultural context, provides a comprehensive tool for analysing relational challenges in FRCE. By incorporating culturally responsive approaches, the framework promotes relational harmony and offers tailored caregiving solutions that address the economic, historical, and cultural realities of both CWs and OPs. Moreover, insights from South Africa's caregiving landscape, particularly through the lens of Ubuntu, highlight the global importance of cultural sensitivity, economic justice, and historical awareness in enhancing caregiving relationships.

South Africa as context highlighted important sociohistorical, sociocultural, and socioeconomic conditions shaping relational dynamics and consequent relational outcomes. South Africa's unique social history, including disparities in access to formal care and prevailing cultural attitudes toward ageing and caregiving, provided a rich and textured background to study the tapestry of interactions between OPs and CWs. By focusing on the context of FRCE, the CaRD can better analyse relational challenges to promote effective relational outcomes, tailor-made for context but avoiding an emphasis on structure.

The CaRD conceptual framework is not a static framework although it captures a snapshot (punctuation) of social processes but draws on the fluidity of interactions between

people involving ongoing change. For this reason, examples were given to explain the CaRD, as opposed to proposing rigid guidelines for its application.

Conclusion

This article introduces the CaRD conceptual framework as a novel, critical realist approach to understanding the complex interactions between OPs and CWs within FRCE. By identifying and analysing mechanisms in dynamic interplay with context, the CaRD addresses a gap in the existing literature and presents a flexible framework to explain interactions towards effective relational outcomes. This conceptual framework has potential practical implications for FRCE management and policy development because it underscores the importance of fostering positive, reciprocal relationships between OPs and CWs for optimal care outcomes. Future research can build on the CaRD to further refine relational approaches in caregiving, thereby contributing to enhanced care practices that meet the complex needs of ageing populations in FRCE.

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Chapter 7

Summary and implications

Introduction

This chapter builds upon a programme of work that aims to explain the caregiving relationship from an interaction-centric perspective. The study involved three key facets consisting of international knowledge on what transpires between older persons (OPs), and care workers (CWs) in FRCE, insights for OPs, and CWs in the same caregiving context. This chapter draws on these earlier contributions with a fourfold aim: First, to integrate insights from the four articles that investigated relational dynamics manifesting as mechanisms in dynamic interplay within the interpersonal context in which the relationship between older persons (OPs) and care workers (CWs) takes place, the residential care setting, and broader environments culminating in the development of the conceptual framework, Care and Relational Dynamics (CaRD); Second, to evaluate the CaRD's contributions; Third, to consider how this research and the CaRD can contribute to the body of knowledge and practice; and, Fourth, to present directions for future research, reflections on the research process and limitations, and a final statement.

The problem that motivated this study is the absence of a conceptual framework that integrates all the mechanisms that play out in dynamic interplay with broader and more immediate contexts in the formal residential caring setting in which OPs and CWs interact, thus resulting in care and relational outcomes. Because effective relationships lead to effective care, this study has a particular relational focus. The unit of analysis is the interpersonal space between OPs and CWs, where the relational dynamics are evident in the interactions between them. This study understands the interactive nature of the relationship

between people in terms of the continuous and circular interactional processes of acting and reacting (Watzlawick et al., 2011). Four articles addressing this problem have been included.

The four articles

Article 1

In setting the context for this study, Article 1 presented findings from a scoping review that examined theoretical frameworks and research related to caregiving relationships between OPs and younger CWs within FRCE. Article 1 offered a critical analysis of existing literature, focusing on interactions between OPs and CWs within the interpersonal context as the unit of analysis. Despite playing out in the traditionally CW-centric caregiving framework, relational interactions between CWs and OPs are inherently dynamic and reciprocal, in the form of actions (which have an impact) and reactions, with observable effective and ineffective relational qualities. These reciprocal interactions produce relational outcomes, which are also effective or ineffective. An interactional approach to caregiving, whereby both parties co-create the experience of care, is a significant contribution because it shifts the emphasis to effective care as an outcome of meaningful relationships, rather than an end goal. The contribution of this finding creates transferable knowledge relevant for other formal caregiving contexts, including formal community-based care. If an interactional approach to caregiving is indicated, further exploration of the interactions between OPs and CWs is needed. This informed the aim of Articles 2 and 3 in exploring the experiences of OPs and CWs about caregiving relationships.

Experiences, according to the Self-interactional group theory (SIGT), give an indication of the quality of the interactions between CWs and OPs. SIGT is applied to analyse the interactions between CWs and OPs on four different levels: (1) the intra-individual level,

drawing on experiences to obtain the subjective impact resulting from the interactions.; (2) the inter-individual level, including: relational qualities, moves for control in the relationship, the motivation for the interaction which in this instance involves caregiving, and reciprocal interactions; (3) the group level, which involves intra and inter-group dynamics, triggered by interactions between people on the inter-individual level; and, (4) the importance of context. Consequently, the findings of this article draw attention to the contextual elements in the broader social environments, as well as the more immediate formal care setting and interpersonal context which impact and inform the interactions between OPs and CWs.

Article 2

To explore OPs' experiences of relationships with CWs, the Mmogo-method, a visual data-collection approach, was used because literature indicates it for application as an appropriate method for obtaining relational dynamics (Roos, 2016; Roos & Baart, 2016) and to gather data by projections which counter the tendency to elicit only socially acceptable responses (Guba & Lincoln, 1982). Data were analysed using Baart and Roos's (2022) Created-Image Data Analysis (CIDA). From the perspective of OPs, this study confirmed that OPs are active participants in caregiving relationships, exercising agency and co-creating outcomes with CWs. A novel finding was how caregiving relationships can elicit previous caregiving experiences on the intra-individual level, specifically for OPs, in the form of a care imprint.

Article 3

Article 3 reported CWs' experiences of their interactions with OPs. The study confirmed the embeddedness of relationships in broader environments and more immediate contexts. Significantly, in the immediate context of formal care, discrepancies between the adopted care approach and operationalisation of care lead to several forms of incongruence in care relationships. Sociocultural norms, diversity, perspectives on ageing, and group and

intergenerational dynamics between OPs and younger CWs contribute to the complexity of their relationships. As the research setting for this study is situated in contemporary South Africa (SA), CWs' experiences are unique to this context. In the absence of a clear approach to care, or given incongruence in care protocols, CWs exercise agency and draw on their own experience by incorporating the philosophy of Ubuntu. Ubuntu embodies compassion and humanity, emphasising respect, community, and human connectedness, without dismissing the intrinsic value of the individual (Murote & Mungai, 2023). This has relevance for the relationship between OPs and CWs in FRCE, where CWs' agency and indigenous practices in caring for OPs intersect.

In order to present the complexity of relational dynamics between OPs and CWs that produce effective or ineffective relational outcomes, a conceptual framework was indicated. Article 4 addressed this gap, culminating in the development of the CaRD: Care and Relational Dynamics conceptual framework.

Article 4.

A critical realist approach was adopted (Archer et al., 2013; Bhaskar, 1975) to develop a conceptual framework that would explain mechanisms in dynamic interplay with contexts (e.g. broader environments, residential, and interpersonal) producing effective relational outcomes. Mechanisms manifested on four levels: family, group and intergenerational, inter-individual, and intra-individual. For the first time, the CaRD: Care and Relational Dynamics conceptual framework is presented as a flexible tool to explain relational dynamics towards effective relational outcomes for OPs and CWs in formal residential care ecologies (FRCE). The dynamic interplay between context and mechanisms yields relational outcomes that are observable in the verbal and non-verbal messages and behaviours between OPs and CWs.

CaRD offers to promote effective relational outcomes within FRCE, specifically focusing on the intergenerational relationships between older persons (OPs) and care workers (CWs).

A critical reflection on contributions

The contributions offered by the CaRD framework include conceptual, theoretical, methodological, intergenerational dynamics, policy development, and practical possibilities. This model would need to be explored and assessed in relation to other cultural contexts and other care environments.

Conceptual.

CaRD could guide the development of an interaction-centric care philosophy which positions effective relationships as central to, as opposed to part of, formal care ecologies. CaRD can guide the conceptual development of interaction-centric approaches to care, encompassing existing care philosophies (e.g. Ethics of Care) aligned with this approach. CaRD moves away from the rigid concept of medicalised care but includes the benefits offered by person-centred and relationship-centred approaches. By promoting the agency both of CWs and OPs and their unique contributions (e.g. sociocultural mechanisms), a more inclusive and interactional conceptualisation of the care ecology is possible.

CaRD is an inclusive framework and can be used to include other formal caregiving contexts, such as community-based long-term care services. This conceptual model also aligns with a global policy shift promoting “ageing in the right place”, which supports OPs living in their own homes and communities while still having access to formal care services (Aboderin & Hoffman, 2021). Formal community-based care using CaRD demonstrates the interrelatedness of different contexts and the embeddedness of relationships within these contexts. This approach emphasises mutual agency and shared contributions, both by OPs

and CWs, ensuring that the dyadic strength of effective relationships is integral to caregiving, rather than being viewed as a peripheral consideration. By doing so, CaRD contributes to a more relationally and culturally responsive care environment that adapts to the unique needs of all participants, thus advocating effective relational outcomes in care settings. Ultimately, CaRD's emphasis is on inclusive, flexible interactions co-created by OPs and CWs.

CaRD would need to be explored and assessed in relation to other care environments and consider contextually-relevant dynamics such as the broader socio-cultural, political, and economic environments. The application of the CaRD conceptual framework needs to take note of the guiding legislative frameworks of a particular country as well as the specific FRCE. Applying CaRD to informal care settings could provide insights into the relational dynamics playing out between OPs and unpaid CWs. These insights acknowledge CWs and OPs' contribution to the care and relational outcomes manifesting on a continuum of effective to ineffective.

The CaRD conceptual framework advances depth to existing theories of care. By integrating critical realist principles with findings from empirical research and the scoping review, CaRD provides a structured lens for understanding the interplay between context and mechanisms that influence care relationships. CaRD emphasises the relational dynamics between OPs and CWs, which are often left underexplored in existing caregiving models. By focusing on these interactions within FRCE, the framework bridges the gap between abstract theoretical constructs and the relational experiences of care work. In applying a critical realist approach, CaRD identifies and explains how underlying mechanisms (e.g. intergenerational interactions) operate within specific contexts to produce relational outcomes. CaRD shifts the focus from a one-sided approach to care to an interactional model that values the contributions both of OPs and CWs. This builds on contemporary theories (e.g. Ethics of

care), emphasising situationality, relationality and mutual co-creation of care (Timmerman & Baart, 2022). By linking relational dynamics to effective or ineffective caregiving outcomes, CaRD highlights the importance of relational quality as a determinant of care effectiveness, which can inform and refine theories of care ethics and relational autonomy. CaRD's structure is designed to be transferable across various formal caregiving contexts, allowing researchers and practitioners to adapt its principles to diverse settings. Its integration of multiple contextual layers and mechanisms fosters interdisciplinary collaboration, encouraging scholars from different fields to contribute to and refine the framework. This iterative process can lead to a more comprehensive theoretical understanding of care dynamics.

Methodological.

Data collection was conducted by the Mmogo-method (Roos, 2016) including CWs and OPs irrespective of age, ethnicity, thereby avoiding stereotypical differentiation based on diversity. This made it possible to use the same research method for both OPs and CWs, as its inclusivity provides an equal participatory opportunity for the voices of all to be included in the research. In addition, because both groups of OPs and CWs knew they were being included together in the research, there was the benefit of transparency. (Created-Image Data Analysis (CIDA) (Baart & Roos, 2022) was used to analyse 39 sets of visual and textual data, yielding rich, thick descriptions and integrating visual and textual data. Despite the cumbersome and daunting task of analysing a large volume of visual and textual data, CIDA provided a structured framework with detailed questions to guide the process, making it more possible to generate in-case and cross-case analyses. By interpreting visual images created by participants, researchers can gain insights into the broader social, cultural, and interpersonal factors that shape their relationships. This made CIDA particularly beneficial for this study in

which the relational and contextual dimensions are critical to understanding relational dynamics. In addition, analysing visual data can reveal subconscious elements of relational experiences, which are especially relevant in relational contexts in which much of the relational dynamics occurs on a non-verbal or symbolic level.

Intergenerational dynamics.

An important contribution of the CaRD conceptual framework is the recognition of the intergenerational nature of the relationships between OPs and CWs. Ambivalence creates incongruence in relationships, making it impossible to form authentic relationships. Ambivalence is characterised by its hesitant back-and-forth approach and aligns with the psychological experience of being in a double bind, a situation in which every action leads to a perceived failure or inadequacy (Bateson et al., 1956). If OPs are ambivalent about their care needs, their loss of autonomy, or their level of engagement in relationships, it creates incongruence in their relationship with CWs, who are left confused and uncertain about how to approach, or not approach, OPs. The same can apply vice versa, whereby CWs are ambivalent about their role or their degree of engagement with OPs in FRCE.

Some dimensions of solidarity in the relationship between OPs and CWs manifested in the form of Ubuntu philosophy. An important research question could be: How can we unlock the potential of solidarity and Ubuntu as it is practiced in contemporary South Africa, by identifying effective intergenerational relational outcomes reflected in intergenerational solidarity dimensions and Ubuntu philosophy which could inform intergenerational practices?

The relationship between younger CWs and OPs in the closed bubble of the formal care setting provides a unique opportunity for intergenerational interactions without the need to introduce intergenerational programmes with younger people unfamiliar to OPs, and with

whom they are unable to develop sustainable longer-term relationships. Understanding these dynamics can provide transferable knowledge for improving intergenerational relationships across various care contexts, as well as in broader societal interactions. The CaRD framework highlights the importance of intergenerational interaction and the need for further exploration of how OPs and CWs, from different generations, could engage optimally.

Policy.

CaRD can guide development policy for care work in the formal and informal sectors by applying an interaction-centric approach to the development of care policies. Such policies can inform the care protocols in formal residential settings and could be useful as a guide for developing induction programmes and inform job descriptions for care work that considers the OP-CW dyads. Instead of caregiving being done by CWs to OPs, the workflow rather involves relational processes equally between OPs and CWs. This perspective allows for developing a mutual and collaborative approach to care policies, with relational care guidelines.

Practice.

CaRD supports practitioners working in intergenerational contexts to help improve the quality of relationships between individuals from different generations by providing a meaningful framework to guide their practices. They involve practitioners who design and implement intergenerational programmes and activities to build mutual understanding and support between OPs and younger people and include:

-social workers, community developers,

-educators in community centres, schools, and FRCE

-healthcare practitioners, such as occupational therapists, psychologists and nurses who work with OPs and young people to create therapeutic activities to improve mental, emotional, and physical well-being

-academics, who research the benefits and methodologies of intergenerational programmes, often in partnership with OPs and younger people in contained environments such as FRCE to test or implement their findings

-non-profit NGO leaders and faith-based organisations that lead projects that connect generations and often bridge generational divides by offering volunteer mentoring programmes and service projects; and

-advocates and planners who work to create age-friendly cities that facilitate intergenerational interaction (e.g. shared housing or community spaces).

All can benefit from CaRD to understand the complexity of intergenerational relationships within the formal care economy. The CaRD conceptual framework can provide essential input to guide and make adaptations to and develop new and existing intergenerational interventions. Two examples illustrate the possibilities: (1) From the opposite perspective on intergenerational relationships, in Uganda (as in many other countries in Africa) OPs occupy the role of caregivers for younger people (Matovu et al., 2024). An organisation such as the Grandmothers' Advocacy Network in Uganda promotes activities between older caregivers and orphaned younger people. While their work has an impact on the rights of OPs and orphans, their current campaigns lack a focus on their relationships and could benefit from CaRD to inform their programme development; (2) CoGenerate is a non-profit organisation in the USA (cogenerate.org) that brings OPs and younger people together to solve problems, bridge divides and co-create a future together. The conceptual framework

emanating from this study could provide valuable empirically based guidelines to support their vision.

The practical operationalisation of interactional effectiveness can be implemented in terms of skills training for OPs and CWs, for example by providing intergenerational workshops that include OPs as well as CWs engaging in facilitated dialogue as pairs (Hendrix & Hunt, 2021; Weger et al., 2014). This serves a dual purpose: first, to train OPs and CWs in effective interactional effectiveness, and second, as a by-product to provide a safe, appropriate interpersonal context for OP-CW dyads to interact on a more personal level, which in turn will impact care outcomes.

The same approach could apply to groups of OPs and CWs in the form of "communologue" (Wahrman & Ko, 2024), which involves creating safe conversations and deep connecting dialogues within and between groups. In this process, diverse groups of people sit together in a circle and are guided through a structured process whereby group norms are agreed to facilitate emotional safety, thus cultivating empathy and perspective-taking (Wahrman & Brehm, 2007). Principles such as equivalence (all voices have equal value), as opposed to equality, and pre-validation (everyone makes sense from their own perspective) are used to contain and anchor the process of facilitating inclusivity, transparency, and collaboration (Owen & Buck, 2020).

The CaRD conceptual framework can support familial caregivers by guiding the development of accredited training in effective interactional skills for both caregivers and their family members in practical interactive workshops. This could improve their relationship with family, advance their skills and career development, and provide greater job satisfaction and opportunities for skills transfer. CWs in the care sector may also benefit from the development of accredited training based on the interactive approach, including induction

programmes and interaction-centric guidelines for care. Using this process with OPs, CWs, family members and other people involved in the care economy will be able to contribute to the challenge of ageism and other stereotypes which plague intergenerational relationships.

Broader implications of the study for the field of intergenerational care

Discourses on agency of OPs

The current discourse on OPs' agency in care settings, particularly in FRCE, has evolved to emphasise autonomy, dignity, and the right to self-determination, while also recognising the complexities and constraints posed by the care environment. Scholars, practitioners, and policymakers debate how best to uphold the agency of older adults while balancing the realities of physical, cognitive, and institutional limitations (Ayalon & Tesch-Römer, 2021). Although there is a strong movement advocating for relational and person-centred care that enhances agency, real-world limitations often mean that achieving full agency is challenging. Moving forward, the debate calls for innovative and flexible both-and processes, such as an interactive approach promotes.

Contribution of OPs

OPs are by no means passive recipients of care and their contribution to the caregiving relationship is significant. This study recognises the active role that many OPs play in their own care, their contribution to their families, peers and communities, and in the microsystem of the interactions between themselves and CWs, impacting the quality of their relationships with CWs. Even when OPs sometimes choose to disengage at certain points in their life, they are still communicating, because it is not possible to not communicate (Watzlawick et al., 2011). This aligns with the World Health Organisation's commitment to challenging ageism

and ensuring that older adults can contribute meaningfully within their communities (WHO, 2021).

Contribution of CWs

CWs have a powerful impact on the well-being of OPs in FRCE in every small interaction, in their words and actions and relational nuances as they engage in care activities. CWs in FRCE are often not recognised for this impact they have in the broader system and can remain invisible and dismissible. CWs often face marginalisation and undervaluation, stemming from a complex mix of social and structural factors (Gie & Hoffman, 2023). The general perception of care work as low-skilled frequently positions CWs at the bottom of the food chain in the healthcare hierarchy. This status is compounded by limited recognition and respect for their crucial role in the well-being of OPs, which in turn impacts their job satisfaction, financial stability, and professional development (Aboderin, 2018). Research highlights that CWs are often underpaid and work in precarious conditions, especially when their roles are filled by migrant or low-paid workers (Cowper et al., 2020). The systemic undervaluation of care work is visible both in the global north and the south (Galandini & Spoors, 2024). In response, scholars and advocates are calling for a shift to a care economy that prioritises fair pay, job security, and the recognition of care work as a socially valuable profession for CWs (Gie & Hoffman, 2023). The interactional approach acknowledges the significant impact CWs have on the well-being of OPs in formal care, through even small interactions, by their words, gestures, actions, or the subtle relational nuances present in each engagement. By harnessing their essential contribution, especially in the field of intergenerational interventions, and offering training in effective relational qualities and outcomes, their work increases in professional value, potentially contributing to increased job satisfaction and meaning.

Challenge for FRCE

FRCE in South Africa is disproportionately skewed towards affluent OPs (primarily white) and remains unaffordable for most OPs there and in other developing countries (Aboderin, 2018; Lloyd-Sherlock, 2021). Concerns and criticism have been raised about the provision of formal residential care, questioning its suitability for the majority of OPs (Rankin & Hoffman, 2024). This exclusion from FRCE is due in some measure to South Africa's political history, which was responsible for a lack of adequate infrastructure and available facilities for the majority of OPs. In addition, CWs are inadequately trained in SA and this is compounded by the absence of accredited, internationally recognised caregiver training (Gie & Hoffman, 2023; Scheil-Adlung, 2015). This study's findings on intergenerational care relationships highlight the need for policies that integrate equitable access to FRCE and recognise the diverse needs of OPs and CWs in such settings. Recognising these implications, the following recommendations for future research are proposed.

Recommendations for future research

Future research could explore the role of institutional structures across different FRCEs, examining how variations in organisational frameworks, resources, and management practices inform the relational dynamics in caregiving relationships. Comparative studies between FRCEs that adopt care philosophies such as the Eden Alternative and those that do not could provide valuable insights into the impact of such approaches on relational dynamics. Additionally, further investigation could examine how cultural backgrounds of both CWs and OPs inform interactions within FRCEs. This line of inquiry is particularly relevant in South Africa's multicultural context, where historical legacies of racial segregation continue to impact social and economic structures.

Ageism as a critical construct in intergenerational relationships and the quality of caregiving relationships warrants exploration. Moreover, future research should aim to align caregiving concepts and contextual realities more closely, ensuring that theoretical frameworks like the CaRD conceptual framework are effectively grounded in the relational experiences of both CWs and OPs.

The CaRD conceptual framework, within the FRCE context, represents a multi-level contribution and opportunities for research. The CaRD invites researchers to test its assumptions, refine its mechanisms, and expand its applicability. Future studies should aim to validate and rigorously examine this framework across several dimensions: application, contextual relevance, therapeutic relevance, and longitudinal research.

Application

Refine the application of the conceptual framework within South African FRCE and other culturally diverse contexts; and in the exploration of non-Western approaches to care relationships and practices in FRCE. The CaRD highlights the need for relational training and cultural competence for CWs, particularly in diverse contexts such as South Africa. This framework promotes further research into how CWs' sociocultural backgrounds influence care work, and foster relational dynamics with OPs, with effective or ineffective outcomes. By exploring these cultural perspectives, insights into culturally responsive behaviour may be obtained and applied to the development of training and care protocols.

Use the CaRD conceptual framework, as a comparative measure to evaluate existing training and induction programmes, identifying the gaps in order to propose recommendations for more effective training in the interactional approach to care, followed by practical application and field testing across contexts. In particular, an interactional approach to training and induction of staff offers exciting possibilities for more embodied and

experiential training of CWs, because theoretical care models do not always translate in practice. As CWs and OPs work and live in the same environment, their intergenerational relationship presents itself as a laboratory to investigate, apply, practice, and field test one on one interactional processes in vivo.

Contextual relevance

Explore the CaRD's relevance to FRCE on a global scale and its transferability to different contexts within the care economy, such as community-based care of OPs, to meet the complex needs of ageing populations and those who care for them in FRCE. The CaRD offers research opportunities at macro (broader environments, formal care ecologies) and micro (formal care setting, interpersonal context) contextual levels and each of the mechanisms, to confirm or further refine how the dynamic interplay leads to relational outcomes. For example, taking a micro perspective of the formal care setting as a home for OPs, and as work for CWs, the living arrangements, daily rhythms and daily care practices of OPs could be further explored, particularly regarding how OPs provide informal care for each other through peer support. This would suggest an interesting research possibility by providing further insight into relational dynamics and using the CaRD as a framework for the research (Pazhoothundathil & Bailey, 2021).

Therapeutic relevance

Provide a research opportunity for the benefit of the therapeutic community to produce evidence-based outcomes for therapeutic practice. Explore the use of the CaRD in providing a map to explore relational dynamics between people by focusing on how the quality of relationships can trigger previous experiences from different contexts, which in turn inform reactions on the inter-individual level.

Longitudinal studies

As the CaRD framework introduces new relational dynamics into FRCE, longitudinal studies are needed to determine whether it consistently produces positive relational outcomes and if it can adapt effectively to the evolving needs of the FRCE.

Limitations

While the scoping review included literature up to 2020, the evolving nature of care relationships necessitates the integration of more recent studies. Factors such as the COVID-19 pandemic, policy reforms, and emerging trends in aged care have likely influenced caregiving dynamics. Incorporating literature from the past four years would enhance the study's contextual relevance, ensuring alignment with the latest theoretical and empirical developments in the field.

The sociocultural, socioeconomic, and regulatory contexts of the study present complex, intersecting factors. Given the scale of this study, it is not expected that all these influences could be comprehensively represented within the scope of this thesis. The study also did not directly reference literature on the impact of the institutional culture, facility design, and regulatory frameworks on caregiving relationships. Furthermore, literature examining the impact of individual care planning and service-user/patient involvement on the power balance within care relationships was not directly included. Recognising the importance of person-centered care, this omission is also noted for consideration in future research.

Additionally, although there are inherent challenges in separating the perspectives of CWs and OPs, it is not possible to study relational dynamics all at once. Therefore, the heuristic construct of punctuation (Watzlawick et al., 2011) was applied.

The contextual specificity of the development of CaRD as a conceptual framework developed within South Africa's FRCE, may not fully capture the sociocultural, socioeconomic, and regulatory variations present in FRCE settings globally.

Moreover, the framework's reliance on an interaction-centric approach, while valuable, may face practical challenges in environments in which resources and training in relational caregiving are limited, or in which entrenched medical models dominate care protocols. The conceptual framework also assumes a mutual understanding of relational care concepts among CWs, OPs, and other stakeholders, which may not apply universally.

Personal reflections

I share my personal reflections for the reader to keep in mind while reading this study. Conceptualising relational dynamics has been a daunting task, "like building an aeroplane in the air". The nature of relationships is dynamic and evolving, and what may be effective in one context is ineffective in another. As a therapist working with relationships for the past 25 years, and believing that I understood the nature of relationships intimately, my conceptualisation of what constitutes a relationship has been challenged. This research has called into question my focus on relationships through an individual lens, which involved extracting the internal landscape (feelings, experiences, stories) from each participant in the relationship, and facilitating a deeper understanding of one another's different perspectives. In practicing Imago Relationship Therapy (Hendrix & Hunt, 2021) we can only know about another person's internal experiences if they are externalised through verbal and non-verbal messages: words and explanations demonstrated in verbal expression, requiring a sharer and a listener. While understanding another's perspective is necessary, it does not fully explain the co-created relational dynamics and interactions between individuals, nor does it consistently facilitate change. This evolving understanding of relationships has transcended

my personal experience and informed my therapeutic practice. Furthermore, practitioners working in practice-oriented environments often neglect empirically grounded outcomes, failing to reflect systematically on what works, for whom, when, and why. Although insights from the therapeutic process with couples are experienced, the absence of recorded methodologies and effective dissemination limits the cascading benefits of shared knowledge. As a practitioner engaged with both South African and international colleagues, presenting this research, along with its methodological framework, through workshops, training sessions, and supervision could enhance awareness of the value of contributing to empirically supported research in relationships. Moreover, promoting an interaction-focused approach to relationship dynamics within therapeutic contexts has the potential to advance practice in this field.

The research processes

My intrapsychic therapeutic bias became evident during the research process when interviewing both CWs and OPs and focusing questions more on their intra-individual, as opposed to their inter-individual, experiences. I discovered during data analysis that punctuating on the interpersonal context and focusing on the verbal and non-verbal observable interactions between people from a meta-perspective (Vorster, 2011) has particular value. From this perspective, we can start to observe the impact of actions and reactions on the relational space between people, which in turn loops back to an individual impact triggering a reciprocal reaction, and so on in ever-evolving reciprocal loops between people. The awareness of how individuals impact each other, how they react, and in what context, observable in their verbal and non-verbal presentation, has been for me the missing link in fully understanding relational dynamics. It has also made it more possible to reflect upon effective and ineffective relational qualities and outcomes and more clearly identify

nodal points for change. Without this bias, the data-collection process could have yielded different results. However, the analysis process evolved increasingly towards extracting experiences about interactions, specifically from the non-verbal visual data. Outside of the research process, and on a professional level as a therapist working with relationships, this research has already contributed to my work with couples through the application of this useful interactional and contextual approach. It is also anticipated that I will contribute knowledge gained in this study to the interactional caregiving community in presentations and workshops. I also plan to present a digestible version of the findings to the residential caring facilities who kindly allowed me to conduct research at their FRCE.

The participants

In reflecting on the empirical study further, and particularly on my assumptions, I realise I know very little about CWs' lived experiences of life. Superficial assumptions included second-hand knowledge about their disadvantaged, sometimes risky living conditions, with multiple generations sharing a home, often as single mothers, caring for older family members, and reliant on inconsistent public transport to travel to work, which may be far from home. Empathy for their "hard life" may have created a bias, as assumptions always do, and a lack of appreciation of their resilience, creativity, and relational capacity to impact the lives of OPs significantly and contribute to the philosophy of care (as in Ubuntu). This resulted in my questions focusing more on the challenges they experienced as CWs, rather than on their holistic experiences of interactions with OPs. All participants in the sample of CWs were women. Due to the feminisation of care, and particularly in the South African context, the care economy is almost exclusively representative of younger black women. By not including men in the sample studied they could have been marginalised and their voices unintentionally excluded.

In regard to OPs, I have a mother of 90 years who lives in a care home for OPs with cognitive impairment. My experience of other OPs with cognitive impairment led me to an assumption that OPs in care homes may not fully understand the complexities of the research question about their experiences of relationships with CWs.

It was also initially anticipated that the OPs in the study might find the Mmogo method infantilising, with an expectation of having to take part in "back-to-school art classes" (Hoffman, 2016). In practice, this was very different for the participants in this study, who articulated rich and detailed experiences during the research process. However, some OPs did express their discomfort with creating "good enough" creative representations because they felt vulnerable about their incompetence and lack of creativity. In addition, being in a group setting made them feel exposed, thereby provoking a need to provide "the right" response, both in terms of their expectations of their peers' opinions, and the researchers' needs. This may have prevented an authentic expression of their experiences.

Research setting

Some reflections are relevant regarding the physical setting of the data collection, which took place in meeting places ordinarily used for management meetings, conferences with OPs and their families, or dining-rooms for OPs. The physical setting had a specific meaning for the data collection: in this instance, it manifested as a place that is inclusive of OPs, who are familiar with the settings because they are used to meeting or dining there, but at the same time exclusive of CWs, who are not frequently invited into these spaces, and consequently are not familiar with them. This highlights and emphasises the divisions that prevail in some rigid and structured hierarchical formal care organisations in which there are inclusive and exclusive spaces that are accessible to either OPs or CWs. In this study, inviting CWs into a

space to which they had not been invited previously, contributed to breaking down the rigid divisions between those included and those excluded in specific places.

Conclusion

This study contributes uniquely to the relationships in formal residential caring contexts focussing on relationships between OPs and CWs as a dyadic unit embedded within broader on environments, and in more immediate contexts on a micro level. The quality of these relationships has a significant impact on the overall quality of care provided. Establishing effective relationships within this framework is challenging and, prior to this research, lacked both structured guidance and practical strategies to foster an optimal interpersonal environment. To this end, the CaRD framework was developed, based on rigorous evidence-based research. This framework offers researchers, policymakers, training institutions, and care organisations a structured foundation for developing further models (e.g. care approaches, training programmes) aimed at achieving effective relational outcomes through an interactive approach. Additionally, it provides a pathway for creating opportunities for OPs and CWs to engage constructively and authentically, thus enhancing care quality while acknowledging the significant contribution of both groups to the relationship within FRCE. The CaRD conceptual framework contributes transferable knowledge on fostering effective relational outcomes, which could be applicable to other contexts in which intergenerational interactions aim to achieve effective relational outcomes. It sees the formal residential caring context as a complex web of inter-related micro- and macro-systems in which the OP-CW dyadic system is impacted and influenced by the immediate and broader contexts, thus creating a dynamic, responsive eco-system that is holistic as well as inclusive.

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Appendices

Appendix A

AUTHOR GUIDELINES (PUBLIC HEALTH REVIEWS)

1. GENERAL INFORMATION

Public Health Reviews (PHR) is an independent society journal of the non-profit Swiss School of Public Health (SSPH+), Zurich, Switzerland and is published by Frontiers, Lausanne, Switzerland. It publishes Open Access with Frontiers as of January 2021. American English is the official language of PHR, and submissions must be made in English.

1.1. Contacts

For inquiries related to the submission platform and process, and calls for papers, please contact the PHR Development Office: mailto:phr.publishers.office@ssph-journal.org

For inquiries related to the progress of peer review, please contact the PHR Operations Office: phr@ssph- journal.org.

For inquiries related to accepted and published papers, please contact the PHR Production Office: production@ssph-journal.org.

For all other queries, and if you would like to feature your accepted article in the IJPH blog or social media channels, please contact the PHR Editorial Office: phr@swisstph.ch.

Due to the amount of interest, the PHR editors cannot advise interested authors on the suitability of a manuscript before submission. In section 4 you can find helpful information.

1.2. Article Processing Charges (APC)

PHR publishes all accepted contents Open Access. This incurs an Article Processing Charge (APC). APC comprises the production costs of the publisher and the editorial costs of the owner, the Swiss School of Public Health (SSPH+). SSPH+ discounts the editorial costs for first authors from low- and middle- income countries according to the research4life country classification (group A and B countries).

APC support requests must be submitted directly after manuscript submission.

APCs may be subject to periodic revision. The invoiced APC is the one valid at the time of

manuscript submission. Please find the APC and all discount options on the journal website.

1.3. Licensing

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1.4. Open Data Policy

PHR encourages authors to make their datasets on which the conclusions of the paper rely available to readers as Supplementary Material or in publicly available repositories. The publisher, Frontiers, provides general information, please see the links below:

- List of Repositories
- Research Data Policy

2. ARTICLE TYPES

Manuscripts should be written with a view to submit as a specific article type. All PHR format requirements detailed in this section and in sections 3 and 4 should be fully adopted. We encourage authors to refer to the reporting guidelines for health research hosted by the EQUATOR network when preparing their manuscript. Checklists are available for a number of study designs here: http://www.equator-network.org/.

2.1. Peer Reviewed

Policy Brief

Policy Briefs are short reports to support decision-makers in understanding and addressing a relevant public

health issue. Policy Briefs begin with an outline of the specific issue and should highlight the importance of policy action (Background). They further provide an examination and summary of the available (local and global) evidence related to the issue, and current policy approaches (Analysis). The central section of a Policy Brief is a critical assessment of potential policy options to address the issue, their likely impacts, potential barriers, and facilitators to their implementation (Policy Options). Finally, Policy Briefs end by summarizing primary insights and presented options (Conclusion).

Policy Briefs have the following format:

- Title: Short and concise.
- Abstract: 180 words max, structured: Background, Analysis, Policy Options, Conclusion.
- Article Structure: Background: Introduction to the public health issue and the importance for policy action. Analysis: Examination and summary of evidence, and current policy approaches. Policy Options: Critical assessment of potential policy options, expected outcomes, and factors influencing their implementation. Conclusion: Summary of primary insights and policy options.
- Main text: 2'500 words max (abstract, reference list excluded).
- References: up to 30 references.
- Figures and Tables: A maximum of 4 figures and tables are allowed. The captions of figures and tables should contain the source and date of the presented data. Figures and tables and their captions should be fully self-explanatory.

Systematic Review

Systematic Reviews present a synthesis of previous research on a given topic that uses systematic and clearly defined methods to identify, categorize, analyze and report aggregated evidence on a specific topic. Included in this article type are meta-synthesis, meta-analysis, systematic review, and systematic review with a meta- analysis. Systematic reviews should clearly define the research question in terms of population, interventions, comparators, outcomes and study designs (PICOS). They should state which reporting guidelines were used in the study for design and reporting (e.g., PRISMA, Cochrane, Campbell), include the PRISMA flow diagram (http://prisma-statement.org/prismastatement/flowdiagram.aspx), include funding information (if no specific funding to carry out the research, please state so). Systematic Reviews have the following format:
Systematic Reviews have the following format:

- The title should include the words systematic review/meta-synthesis/meta-analysis, as appropriate. No abbreviations
- Abstract: 180 words max. Structure: Objectives, Methods, Results, Conclusions
- Main text: 4'500 words max (abstract, reference list, figure and table captions excluded)
- Structure: Introduction, Methods (including systematic review protocol; search strategy; data sources; studies sections and data extraction; analysis), Results (including a flow diagram of the studies retrieved for the review; study selection and characteristics; synthesized findings; assessment of risk of bias), Discussion (including summary of main findings, limitations, conclusions)
- Figures and tables: up to 6 (total)

Review (all formats except for Systematic Review and Mini-Review)

Research Reviews should concentrate on the most recent developments in the field. Authors should confirm during submission in the "Contribution to the Field" section (appearing during online submission process) that the topic was not covered in a recently published review in PHR or other journals. Literature searches for all Reviews should

follow a defined systematic protocol and should be comprehensive.

Review articles have the following format:

- Abstract: 180 words max. Structure: Objectives, Methods, Results, Conclusions
- Main text: 4’500 words max (abstract, reference list, figure and table captions excluded)
- Structure: Introduction, Methods, Results and Discussion (including limitations and conclusions). Reviews should reference all included studies
- Figures and tables: up to 6 (total)

Narrative Review

PHR considers well-constructed Narrative Reviews that provide an up-to date overview and interpretation of a specific topic or field. Narrative reviews do not necessarily include a methods section but should identify the theoretical framework or model used as starting point. Additionally, the authors must clearly describe why they chose a narrative review approach over a reproducible review type. The title of the manuscript should contain the term “Narrative Review” (or the specific type of Narrative Review used).

The authors should confirm during submission in the “Contribution to the Field” section (appearing during the online submission process) that the topic was not covered in a recently published review in PHR or other journals.

Narrative Review articles should adopt the following format:

- Abstract: Usually unstructured;180 words max.
- Text body: 4’500 words max (abstract, reference list, figure and table captions excluded); Structure: Introduction; Main Text Body (broken into subsections with short descriptive headings); Discussion (including Conclusions).
- All included studies should be referenced.
- Figures and tables: up to 6 (total).

Mini Review

Mini Review articles cover focused aspects of a current area of investigation and its recent developments. They offer a succinct and clear summary of the topic, allowing readers to get up-to-date on new developments and/or emerging concepts, as well as discuss the following: 1) Differences between studies (e.g.in methods), schools of thought or controversies, 2) Current research gaps, 3) Potential future developments in the field. Mini Review articles must not include unpublished material (unpublished/original data, submitted manuscripts, or personal communications) and may be rejected or reclassified, at a significant delay, if found to include such content.

Mini Reviews have the following format:

- Abstract: 120 words max

- Main text: 2’500 words max (abstract, reference list and captions excluded)
- Structure: Introduction, Methods, Results, Conclusions
- Figures and tables: up to 2 (total)

Guidance

This new article type provides guidance to public-health scientists and practitioners on best practices, techniques, and methodologies that enhance the quality of synthesis research as reported in systematic reviews, scoping reviews, meta-analyses and policy briefs. Topics can encompass (but are not limited to) outlining and critically discussing the following:

- Systematic Reviews: Steps and practices for conducting comprehensive and unbiased reviews.
- Scoping Reviews: Methods to map out existing literature or evidence in a specific field.
- Meta-Analysis: Statistical techniques and best practices for contrasting and combining results from different studies.
- Policy Briefs: Methods or guidelines on distilling research findings for concise summaries to inform or validate policy decisions and policy recommendations.

Guidance has the following format:

- Abstract: 180 words max
- Main text: 4’500 words max (abstract, reference list, and figure & table captions excluded).
- Structure: Background, Discussion, Conclusions
- Figures and tables: up to 5 combined figures and tables in total. The captions of figures and tables should contain the source and date of the presented data.

2.2. Not Peer Reviewed

Editorial

Editorials express the author’s viewpoint, or they explain journal policies. Editorials are usually invited by the editors. These should have:

- 800 words max (reference list excluded), up to 10 references
- A short and attractive title

Commentary

Commentary articles are invited and are more in-depth opinion pieces that should not contain unpublished or original data. These should be:

- 1’200 words max (reference list excluded), up to 10 references

Letter to the Editor

Letters are reactions relating to recently published articles in PHR. Letters should be submitted no later than 3 months after publication of the article. Usually, the authors of the published article are invited to respond to the Letter.

Society Statement

Society Statements are produced or commissioned by Presidents and Executive Boards of Schools of Public Health or Public Health Associations. The submitting author ensures that the main manuscript file presents the following line after the author affiliations: "Statement of the <FULL NAME OF SOCIETY (abbreviation of the society name-if any)>". These should be:

- 1'200 words max (reference list excluded), up to 10 references

2.3. Correction of errors in published articles

Corrigendum

Should authors notice errors that affect the scholarly record or the integrity of the paper, they should submit the correction online. The correction must detail the reason(s) for the error(s) and include only the elements (e.g. sections, sentence, figure) of the manuscript being revised or corrected. All authors of the original paper need to agree to the request for changes. The contribution to the field statement should be used to clearly state the reason for the correction. Depending on the extent of the correction required, corrections may require peer review. Authors are informed that requests for changes beyond that described here may not be accepted for publication. The title of the submitted correction should read: "Corrigendum: Title of original publication".

Erratum

Should authors notice differences between their approved galley proofs and the final published article, thus leading to errors that affect the scholarly record or the integrity of the paper, they should contact the Production Office (production@ssph-journal.org), clearly specifying the error and the correct information. They should submit the correction online and the title should read: "Erratum: Title of original publication".

3. SUBMISSION – GENERAL INFORMATION

When considering submitting your work to PHR, please first make sure your article fits the scope of the journal. You may also look up the PHR archive for related articles and find out more about the suitability of your article for PHR.

When preparing the manuscript for submission, please exactly follow the structure, length and format rules for the article type. All rules are detailed in this document in the sections Article Types and Manuscript Formatting Guidelines, and on the PHR website (for

Authors /Article types). ATTENTION: If the main text and abstract of the manuscript deviate from the requested structure and length, the publisher office will send back the article and request to correct format/length and resubmit before sending it to the Editors-in-Chief for the prescreen. This will delay the processing of your manuscript.

3.1. Types of papers

Public Health Reviews publishes Reviews (all formats), Policy Briefs and editorial material. Please see the section Article types I this document and on the PHR website. PHR does not publish original research or opinion articles. Editorials and Commentaries are invited.

The link for submission and a submission checklist are provided on the PHR website.

4. MANUSCRIPT FORMATTING GUIDELINES

4.1. Article Type

PHR requires authors to carefully select the appropriate article type for their manuscript and to comply with the article type descriptions given here and in the “Article Types” page of the journal website.

We encourage authors to refer to the minimum reporting guidelines for health research hosted by the EQUATOR network when preparing their manuscript. Checklists are available for Systematic Reviews and other review formats.

4.2. Manuscript Length

Authors should follow the article word count lengths given in the “Article Types” section above or on the website. The manuscript length includes only the main body of the text and all citations within it, and excludes the abstract, figure and table captions, funding statement, acknowledgments, and references in the reference list. The Abstract length refers only to the Abstract, manuscript title and keywords excluded.

Please indicate the number of words and the number of figures and tables included in your manuscript on the first page.

4.3. Language Style

The default language style at PHR is American English. For any questions regarding style, PHR recommends authors to consult the Chicago Manual of Style.

4.4. Search Engine Optimization (SEO)

There are a few simple ways to maximize your article’s discoverability. Follow the steps below to improve search results of your article:

- Include a few of your article's keywords in the title of the article
- Do not use long article titles
- Pick 5 to 8 keywords using a mix of generic and more specific terms on the article subject(s)
- Use the maximum amount of keywords in the first 2 sentences of the abstract
- Use some of the keywords in level 1 headings

4.5. CrossMark Policy

CrossMark is a multi-publisher initiative to provide a standard way for readers to locate the current version of a piece of content. By applying the CrossMark logo PHR is committed to maintaining the content it publishes and to alerting readers to changes if and when they occur. Clicking on the CrossMark logo will tell you the current status of a document and may also give you additional publication record information about the document.

4.6. Title

The title should be concise, avoid repetitive words abbreviations and terms that are implicit. The title should (where possible) be a statement of the main result or conclusion presented in the manuscript. The title should not contain any abbreviations. The study name and the acronym of the study should not be part of the title but should be presented as keywords. Consider if a title meant to be thought-provoking might be misinterpreted as offensive or alarming. Authors should try to avoid, if possible:

- Titles that are a mere question without giving the answer;
- Unambitious titles, for example starting with "Towards," "A description of," "A characterization of," "Preliminary study on;";
- Vague titles, for example starting with "Role of…," "Link between…," "Effect of..." that do not specify the role, link, or effect.

For corrections of published articles, the title of the submitted correction should have the following format:

"Corrigendum: Title of Original Article".

The running title should be a maximum of 5 words in length.

4.7. Authors and Affiliations

Author information should not be included in any submitted files due to the PHR double anonymized peer review. Author information should be provided only as online data during the submission process:

- Corresponding author name, affiliation and email address
- Co-authors (if any - names and affiliation)
- Order of authors

4.8. Author list

Authorship should be clarified thoroughly before submission. Please follow the authorship guidelines of the International Committee of Medical Journal Editors (http://www.icmje.org/). The authors, co-authors and the order of authors should not be altered once the manuscript was submitted. Please follow the guidelines of the International Committee of Medical Journal Editors (http://www.icmje.org/) and include all authors qualifying for authorship, and acknowledge other contributors provided they have agreed.

Provide exact and correct author names separated by commas, as these will be indexed in official archives. Affiliations should be keyed to the author's name with superscript numbers and be listed as follows: Laboratory, Institute, Department, Organization, City, State abbreviation (only for United States, Canada, and Australia), and Country (without detailed address information such as city zip codes or street names). Example:

Maxine Meyer[1]

1 Department of Excellence, International University of Science, New York, NY, United States.

4.8.1. Correspondence

The Corresponding Author(s) should be marked with an asterisk in the author list. Provide the exact contact email address of the corresponding author(s) in a separate section.

Example: Max Maximus
maximus@iuscience.edu

If any authors wish to include a change of address, list the present address(es) below the correspondence details using a unique superscript symbol keyed to the author(s) in the author list.

4.8.2. Equal contributions

The authors who have contributed equally should be marked with a symbol (†) in the

Equal contribution	These authors have contributed equally to this work
First authorship	These authors share first authorship
Senior authorship	These authors share senior authorship
Last authorship	These authors share last authorship
Equal contribution & First authorship	These authors have contributed equally to this work and share first authorship
Equal contribution & Senior authorship	These authors have contributed equally to this work and share senior authorship
Equal contribution & Last authorship	These authors have contributed equally to this work and share last authorship

author list of the doc/latex and pdf files of the manuscript uploaded at submission.

Standard statements to include in the author list:

4.8.3. Consortium/Group and Collaborative Authors

Consortium/group authorship should be listed in the manuscript with the other author(s).

In cases where authorship is retained by the consortium/group, the consortium/group should be listed as an author separated by "," or "and,". The consortium/group name will appear in the author list, in the citation, and in the copyright. If provided, the consortium/group members will be listed in a separate section at the end of the article. For the collaborators of the consortium/group to be indexed in PubMed, they do not have to be inserted in the submission system individually. However, in the manuscript itself, provide a section with the name of the consortium/group as the heading followed by the list of collaborators, so they can be tagged accordingly and indexed properly.

Example: John Smith, Barbara Smith and The Collaborative Working Group.

In cases where work is presented by the author(s) on behalf of a consortium/group, it should be included in the author list separated with the wording "for" or "on behalf of." The consortium/group will not retain authorship and will only appear in the author list.

Example: John Smith and Barbara Smith on behalf of The Collaborative Working Group.

4.9. Abstract

As a primary goal, the abstract should render the general significance and conceptual advance of the work clearly accessible to a broad readership. In the abstract, do not use unexplained abbreviations and do not cite references, figures or tables. Please find the detailed information on word count and structure in the section above about Article Types.

4.10. Keywords

All article types require a minimum of 5 and a maximum of 8 keywords.

4.11. Text

The entire document should be single-spaced and must contain page and line numbers in order to facilitate the review process. The manuscript should be written using either Word or LaTeX. All files must be anonymized. An anonymized manuscript should be free from any information that allows the reviewers to identify the authors.

4.12. Nomenclature

- The use of abbreviations should be kept to a minimum. Non-standard

abbreviations should be avoided unless they appear at least four Click here to enter text. Times and defined upon first use in the main text. Consider also giving a list of non-standard abbreviations at the end, immediately before the Acknowledgments.

- Equations should be inserted in editable format from the equation editor
- We encourage the use of Standard International Units
- Chemical compounds and biomolecules should be referred to using systematic nomenclature, preferably using the recommendations by IUPAC

4.13. Sections

The manuscript is organized by headings and subheadings. The section headings are pre-determined for each article type, please see the journal website for the correct headings (under For Authors/Article types).

4.14. Acknowledgments

This is a short text to acknowledge the contributions of specific funds, colleagues, institutions, or agencies that aided the efforts of the authors. Please omit author names and affiliations from the Acknowledgements. The names of the funding organizations should be written in full (not abbreviated).

4.15. Contribution to the Field Statement

When you submit your manuscript, you will be required to briefly summarize in 200 words your manuscript's contribution to, and position in, the existing literature in your field. This should be written avoiding any technical language or non-standard acronyms. The aim should be to convey the meaning and importance of this research to a non-expert.

Your statement should frame the question(s) you have addressed in your work in the context of the current body of knowledge, providing evidence that the findings - whether positive or negative - contribute to progress in your research discipline. This will assist the Editors-in-Chief to determine whether your manuscript fits within the scope of a specialty as defined in its mission statement; a detailed statement will also facilitate the identification of the editors and reviewers most appropriate to evaluate your work, ultimately expediting your manuscript's initial consideration.

4.16. CC-BY License

All figures, tables, and images will be published under a Creative Commons CC-BY license, and permission must be obtained for use of copyrighted material from other sources (including re- published/adapted/modified/partial figures and images from the internet). It is the responsibility of the authors to acquire the licenses, follow any citation instructions requested by third-party rights holders, and cover any supplementary charges.

4.17. Figure Requirements and Style Guidelines

- PHR requires figures to be submitted individually (anonymized), in the same order as they are referred to in the manuscript; the figures will then be automatically embedded at the end of the submitted manuscript. Kindly ensure that each figure is mentioned in the text and in numerical order
- For figures with more than one panel, panels should be clearly indicated using labels (A), (B), (C), (D), etc. However, do not embed the part labels over any part of the image, these labels will be replaced during typesetting according to the journal style. For graphs, there must be a self-explanatory label (including units) along each axis
- For LaTeX files, figures should be included in the provided PDF. In case of acceptance, our Production Office might require high-resolution files of the figures included in the manuscript in EPS, JPEG or TIF/TIFF format
- In order to be able to upload more than one figure at a time, save the figures (labeled in order of appearance in the manuscript) in a zip file and upload them as 'Supplementary Material Presentation'

Please note that figures not in accordance with the guidelines will cause substantial delay during the production process.

4.17.1. Captions

Captions should be preceded by the appropriate label, for example "Figure 1." Figure captions should be placed at the end of the manuscript. Figure panels are referred to by bold capital letters in brackets: (A), (B), (C), (D), etc. Captions should be free from abbreviations. At the end of each caption should appear the study type, countries or region and the years of the study. Example: Risk of bias graph Community-based interventions for cardiovascular disease prevention in low- and middle-income countries (systematic review, low- and middle- income countries, 2000–2019).

4.17.2. Image Size and Resolution Requirements

Figures should be prepared with the PDF layout in mind. Individual figures should not be longer than one page and with a width that corresponds to 1 column (85 mm) or 2 columns (180 mm).

All images must have a resolution of 300 dpi at final size. Check the resolution of your figure by enlarging it to 150%. If the image appears blurry, jagged or has a stair-stepped effect, the resolution is too low.

- The text should be legible and of high quality. The smallest visible text should be no less than 8 points in height when viewed at actual size
- Solid lines should not be broken up. Any lines in the graphic should be no smaller than 2 points wide

Please note that saving a figure directly as an image file (JPEG, TIF) can greatly affect the resolution of your image. To avoid this, one option is to export the file as PDF, then convert into TIFF or EPS using a graphics software.

4.17.3. Format and Color Image Mode

- The following formats are accepted: TIF/TIFF (.tif/.tiff), JPEG (.jpg), and EPS (.eps) (upon acceptance)
- Images must be submitted in the color mode RGB.

4.18. Chemical Structures

Chemical structures should be prepared using ChemDraw or a similar program. If working with another program, please follow the guidelines given below:

- Drawing settings: chain angle, 120° bond spacing, 18% width; fixed length, 14.4 pt; bold width, 2.0 pt; line width, 0.6 pt; margin width, 1.6 pt; hash spacing, 2.5 pt. Scale100% Atom Label settings: font, Arial; size, 8 pt
- Assign all chemical compounds a bold, Arabic numeral in the order in which the compounds are presented in the manuscript text

4.19. Table Requirements and Style Guidelines

- Tables should be inserted at the end of the manuscript in an editable format. If you use a word processor, build your table in Word. If you use a LaTeX processor, build your table in LaTeX. An empty line should be left before and after the table
- Table captions must be placed immediately before the table. Captions should be preceded by the appropriate label, for example "Table 1." Please use only a single paragraph for the caption
- All captions of tables should be free from abbreviations; at the end of each caption should appear the study type, the countries or region and the years of the study. Example: Cardiovascular outcomes (systematic review, low- and middle-income countries, 2000– 2019)
- Kindly ensure that each table is mentioned in the text and in numerical order
- Please note that large tables covering several pages cannot be included in the final PDF for formatting reasons. These tables will be published as supplementary material (anonymized)

Please note that tables which are not according to the guidelines will cause substantial delay during the production process.

4.20. Accessibility

PHR encourages authors to make the figures and visual elements of their articles accessible for the visually impaired. An effective use of color can help people with low visual acuity, or color blindness, understand all the content of an article.

These guidelines are easy to implement and are in accordance with the W3C Web Content Accessibility Guidelines (WCAG 2.1), the standard for web accessibility best practices.

Ensure sufficient contrast between text and its background

People who have low visual acuity or color blindness could find it difficult to read text with low contrast background color. Try using colors that provide maximum contrast.

WC3 recommends the following contrast ratio levels:

- Level AA, contrast ratio of at least 4.5:1
- Level AAA, contrast ratio of at least 7:1
- You can verify the contrast ratio of your palette with these online ratio checkers:
    - WebAIM
    - Color Safe

Avoid using red or green indicators

More than 99% of color-blind people have a red-green color vision deficiency.

Avoid using only color to communicate information

Elements with complex information like charts and graphs can be hard to read when only color is used to distinguish the data. Try to use other visual aspects to communicate information, such as shape, labels, and size. Incorporating patterns into the shape fills also make differences clearer.

4.21. Supplementary Material

Data that are not of primary importance to the text, or which cannot be included in the article because they are too large or the current format does not permit it (such as videos, raw data traces, PowerPoint presentations, etc.), can be uploaded as Supplementary Material during the submission procedure and will be displayed along with the published article. All supplementary files are deposited to Figshare for permanent storage and receive a DOI. Please ensure all supplementary files are anonymized.

Supplementary Material is not typeset, so please ensure that all information is clearly presented without tracked changes/highlighted text/line numbers, and the appropriate caption is included in the file. To avoid discrepancies between the published article and the supplementary material, please do not add the title, author list, affiliations or correspondence in the supplementary files.

The Supplementary Material can be uploaded as Data Sheet, anonymized (Word, Excel, CSV, CDX, FASTA, PDF or Zip files), Presentation (PowerPoint, PDF or Zip files), Image (CDX, EPS, JPEG, PDF, PNG or TIF/TIFF), Table (Word, Excel, CSV or PDF), Audio (MP3, WAV or WMA) or Video (AVI, DIVX, FLV, MOV, MP4, MPEG, MPG or WMV).

4.22. References

All citations in the text, figures or tables must be in the reference list and vice-versa.

- The names of the first six authors followed by et al. and the DOI (when available) should be provided
- The reference list should only include articles that are published or accepted
- Unpublished data, submitted manuscripts or personal communications should be cited within the text only, for the article types that allow such inclusions
- For accepted but unpublished works use "in press" instead of page numbers
- Data sets that have been deposited to an online repository should be included in the reference list. Include the version and unique identifier when available
- Personal communications should be documented by a letter of permission
- Website URLs should be included as footnotes
- Any inclusion of verbatim text must be contained in quotation marks and clearly reference the original source
- Preprints can be cited as long as a DOI or archive URL is available, and the citation clearly mentions that the contribution is a preprint. If a peer-reviewed journal publication for the same preprint exists, the official journal publication is the preferred source

4.22.1. In-text Citations

- Please apply the Vancouver system for in-text citations
- In-text citations should be numbered consecutively in order of appearance in the text - identified by Arabic numerals in parenthesis

1.1. Reference - format example

ARTICLE IN A PRINT JOURNAL

Sondheimer N, Lindquist S. Rnq1: an epigenetic modifier of protein function in yeast. MolCell (2000) 5:163-72.

ARTICLE IN AN ONLINE JOURNAL

Tahimic CGT, Wang Y, Bikle DD. Anabolic effects of IGF-1 signaling on the skeleton. Front Endocrinol (2013) 4:6. doi: 10.3389/fendo.2013.00006

ARTICLE OR CHAPTER IN A BOOK

Sorenson PW, Caprio JC. "Chemoreception,". In: Evans DH, editor. The Physiology of Fishes. Boca Raton, FL: CRC Press (1998). p. 375-405.

BOOK

Cowan WM, Jessell TM, Zipursky SL. Molecular and Cellular Approaches to NeuralDevelopment. New York: Oxford University Press (1997). 345 p.

ABSTRACT

Christensen S, Oppacher F. An analysis of Koza's computational effort statistic for genetic programming. In: Foster JA, editor. Genetic Programming. EuroGP 2002: Proceedings of the 5th European Conference on Genetic Programming; 2002 Apr 3–5; Kinsdale, Ireland. Berlin: Springer (2002). p. 182–91.

WEBSITE

World Health Organization. E. coli (2018). https://www.who.int/news-room/fact-sheets/detail/e-coli [Accessed March 15, 2018].

PATENT

Pagedas AC, inventor; Ancel Surgical R&D Inc., assignee. Flexible Endoscopic Grasping and Cutting Device and Positioning Tool Assembly. United States patent US 20020103498(2002).

DATA

Perdiguero P, Venturas M, Cervera MT, Gil L, Collada C. Data from: Massive sequencing of Ulms minor's transcriptome provides new molecular tools for a genus under the constant threat of Dutch elm disease. Dryad Digital Repository. (2015) http://dx.doi.org/10.5061/dryad.ps837

THESES AND DISSERTATIONS

Smith, J. (2008) Post-structuralist discourse relative to phenomological pursuits in the deconstructivist arena. [dissertation/master’s thesis]. [Chicago (IL)]: University of Chicago

PREPRINT

Smith, J. Title of the document. Preprint repository name [Preprint] (2008). Available at: https://persistent-url (Accessed March 15, 2018).

5. ARTIFICIAL INTELLIGENCE

These guidelines cover acceptable uses of generative AI technologies such as Large Language Models (ChatGPT, Jasper) and text-to-image generators (DALL-E 2, Midjourney, Stable Diffusion) in the writing or editing of manuscripts submitted to PHR.

5.1. AI use by authors

Authors should not list a generative AI technology as a co-author or author of any submitted manuscript. Generative AI technologies cannot be held accountable for all aspects of a manuscript and consequently do not meet the criteria required for authorship.

If the author of a submitted manuscript has used written or visual content produced by or edited using a generative AI technology, this use must follow all PHR guidelines and policies. Specifically, the author is responsible for checking the factual accuracy of any content created by the generative AI technology. This includes, but is not limited to, any quotes, citations or references. Figures produced by or edited using a generative AI technology must be checked to ensure they accurately reflect the data presented in the manuscript. Authors must also check that any written or visual content produced by or edited using a generative AI technology is free from plagiarism.

If the author of a submitted manuscript has used written or visual content produced by or edited using a generative AI technology, such use must be acknowledged in the acknowledgements section of the manuscript and the methods section if applicable. This explanation must list the name, version, model, and source of the generative AI technology.

We encourage authors to upload all input prompts provided to a generative AI technology and outputs received from a generative AI technology in the supplementary files for the manuscript.

6. ETHICAL STANDARDS

To ensure objectivity and transparency in research and to ensure that accepted principles of ethical and professional conduct have been followed, authors should include information regarding sources of funding, potential conflicts of interest (financial or non-financial), informed consent if the research involved human participants, and a statement on welfare of animals if the research involved animals.

During submission, the submitting author will be required to answer questions regarding the manuscript and research, as well as provide information and consent for all authors. Below is a checklist detailing the information that will be required (if applicable to the study):

Conflict of interest (mandatory for all article types)

- Funding (if applicable)
- Ethical approval (including record number) (if applicable)
- Informed consent (if applicable)
- Research involving Human Participants and/or Animals (if applicable)

The corresponding author should be prepared to collect documentation of compliance with ethical standards and send if requested during peer review or after publication.

The Editors reserve the right to reject manuscripts that do not comply with the above-mentioned guidelines. The author will be held responsible for false statements or failure to fulfill the above-mentioned guidelines.

6.1. Conflict of interest

Authors must disclose all conflicts of interest that could influence or bias the work. Although an author may not feel there are conflicts, disclosure of relationships and interests affords a more transparent process, leading to an accurate and objective assessment of the work. Awareness of real or perceived conflicts of interests is a perspective to which the readers are entitled and is not meant to imply that a financial relationship with an organization that sponsored the research or compensation for consultancy work is inappropriate. Examples of potential conflicts of interests that are directly or indirectly related to the research may include but are not limited to the following:

- Research grants from funding agencies (please give the research funder and the grant number)
- Honoraria for speaking at symposia
- Financial support for attending symposia
- Financial support for educational programs
- Employment or consultation
- Support from a project sponsor
- Position on advisory board or board of directors or other type of management relationships
- Multiple affiliations
- Financial relationships, for example equity ownership or investment interest
- Intellectual property rights (e.g. patents, copyrights and royalties from such rights)
- Holdings of spouse and/or children that may have financial interest in the work

In addition, interests that go beyond financial interests and compensation (non-financial interests) that may be important to readers should be disclosed. These may include but are not limited to personal relationships or competing interests directly or indirectly tied to this research, or professional interests or personal beliefs that may influence your research.

Conflicts of interest should be stated upon submission of an article in the submission system.

The corresponding author will include a summary statement in the submission system that

discloses any potential conflict of interest.

6.1.1. Examples for funding and conflict of interest statements

Funding:

“This study was funded by X (grant number X)”.

For commercial funding, the role of the funder must be declared. We recommend the following statements for any commercially-funded manuscript:

"The authors declare that this study received funding from XXXXXXX. The funder had the following involvement with the study: XXXXXXX".

- "The authors declare that this study received funding from XXXXXXX. The funder was not involved in the study design, collection, analysis, interpretation of data, the writing of this article or the decision to submit it for publication".

6.1.2. Conflict of interest:

"Author A has received research grants from Company A. Author Bhas received a speaker honorarium from Company X and owns stock in Company Y. Author C is a member of committee Z.

If no conflict exists, the authors will be able to select the following: *The authors declare that the research was conducted in the absence of any commercial or financial relationships that constitute a (potential) conflict of interest.*

6.2. Research involving human participants

6.2.1. Statement of human rights

When reporting studies that involve human participants, authors should include a statement that the studies have been approved by the appropriate institutional and/or national research ethics committee and have been performed in accordance with the ethical standards as laid down in the 1964 Declaration of Helsinki and its later amendments or comparable ethical standards.

If doubt exists whether the research was conducted in accordance with the 1964 Helsinki Declaration or comparable standards, the authors must explain the reasons for their approach, and demonstrate that the independent ethics committee or institutional review board explicitly approved the doubtful aspects of the study. If a study was granted exemption from requiring ethics approval, this should also be detailed in the manuscript (including the name of the ethics committee that granted the exemption and the reasons for the exemption).

Authors must - in all situations as described above - include the name of the ethics committee and the reference number where appropriate.

See below examples:

Ethical approval: “All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee (include name of committee + reference number) and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.”

6.2.2. Ethical approval of studies using pre-existing data

Data should be anonymized and irreversibly de-identified to protect patient, health care professional and/or hospital privacy. For studies using pre-existing and de-identified data, formal approval from the ethics committee is not required.

6.3. Informed consent

All individuals have individual rights that are not to be infringed. Individual participants in studies have, for example, the right to decide what happens to the (identifiable) personal data gathered, to what they have said during a study or an interview, as well as to any photograph that was taken.

Hence it is important that all participants gave their informed consent in writing prior to inclusion in the study. Identifying details (names, dates of birth, identity numbers and other information) of the participants that were studied should not be published in written descriptions, photographs, and genetic profiles unless the information is essential for scientific purposes and the participant (or parent or guardian if the participant is incapable) gave written informed consent for publication. Complete anonymity is difficult to achieve in some cases, and informed consent should be obtained if there is any doubt. For example, masking the eye region in photographs of participants is inadequate protection of anonymity. If identifying characteristics are altered to protect anonymity, such as in genetic profiles, authors should provide assurance that alterations do not distort scientific meaning. The following statement should be included:

Informed consent: “Informed consent was obtained from all individual participants included in the study.”

If identifying information about participants is available in the article, the following statement should be included: “Additional informed consent was obtained from all individual participants for whom identifying information is included in this article.”

An ethics questionnaire is a mandatory feature of the submission system. Please ensure that the relevant ethical approval and consent details were received and are available on request by the editor or editorial office. You will be requested to declare involvement of any human or animal subjects, and inclusion of identifiable human data for the research during the submission process; declaration statements will be generated and automatically added to your manuscript.

6.4. Ethical responsibilities of authors

Please read carefully the following sections about the ethical responsibilities of authors.

Submissions that do not meet all of the ethical requirements are returned to the author shortly after submission or rejected immediately. Co-authorship should fully comply with the criteria defined by the ICMJE guidelines.

This journal is committed to upholding the integrity of the scientific record. The publisher of PHR, Frontiers, is a member of the Committee on Publication Ethics (COPE) and thus the journal will follow the COPE guidelines on how to deal with potential acts of misconduct.

Authors should refrain from misrepresenting research results which could damage trust in the journal, the professionalism of scientific authorship, and ultimately the entire scientific endeavor. Maintaining integrity of the research and its presentation is helped by following the rules of good scientific practice, which include*:

- The manuscript should not be submitted to more than one journal for simultaneous consideration
- The submitted work should be original and should not have been published elsewhere in any form or language (partially or in full), unless the new work concerns an expansion of previous work. (Please provide transparency on the re- use of material to avoid the concerns about text- recycling ('self-plagiarism')
- A single study should not be split up into several parts to increase the quantity of submissions and submitted to various journals or to one journal over time (i.e. 'salami-slicing/publishing')
- Concurrent or secondary publication is sometimes justifiable, provided certain conditions are met. Examples include translations or a manuscript that is intended for a different group of readers
- Results should be presented clearly, honestly, and without fabrication, falsification or inappropriate data manipulation (including image-based manipulation). Authors should adhere to discipline-specific rules for acquiring, selecting and processing data
- No data, text, or theories by others are presented as if they were the author's own ('plagiarism'). Proper acknowledgements to other works must be given (this includes material that is closely copied (near verbatim), summarized and/or paraphrased), quotation marks (to indicate words taken from another source) are used for verbatim copying of material, and permissions secured for material that is copyrighted.

The journal uses software to screen all submissions and revised versions for plagiarism.

- Authors should make sure they have permissions for the use of software, questionnaires/(web) surveys and scales in their studies (if appropriate)
- Authors should avoid untrue statements about an entity (who can be an individual person or a company) or descriptions of their behavior or actions that could potentially be seen as personal attacks or allegations about that person
- Research that may be misapplied to pose a threat to public health or national security should be clearly identified in the manuscript (e.g. dual use of research). Examples include the creation of harmful consequences of biological agents or toxins,

disruption of immunity of vaccines, unusual hazards in the use of chemicals, weaponization of research/technology (amongst others)

- Authors are strongly advised to ensure the author group, the Corresponding Author, and the order of authors are all correct at submission. Adding and/or deleting authors during the revision stages is generally not permitted, but in some cases may be warranted. Reasons for changes in authorship should be explained in detail. Please note that changes to authorship cannot be made after acceptance of a manuscript
- Upon request, authors should be prepared to send relevant documentation or data in order to verify the validity of the results presented. This could be in the form of raw data, samples, records, etc. Sensitive information in the form of confidential or proprietary data is excluded. *All the above are guidelines and authors need to make sure to respect third parties' rights such as copyright and/or moral rights

If there is suspicion of misbehavior or alleged fraud the Journal and/or Publisher will carry out an investigation following COPE guidelines. If, after investigation, there are valid concerns, the author(s) concerned will be contacted under their given e-mail address and given an opportunity to address the issue. Depending on the situation, this may result in the Journal's and/or Publisher's implementation of the following measures, including, but not limited to:

- If the manuscript is still under consideration, it may be rejected and returned to the author.
- If the article has already been published online, depending on the nature and severity of the infraction:
    - a Correction may be placed with the article
    - an expression of concern may be placed with the article
    - In severe cases retraction of the article may occur. The reason will be given in the published erratum, expression of concern or retraction note, which will accompany the original article. Please note that retraction means that the article is maintained on the platform, watermarked "retracted" and the explanation for the retraction is provided in a note linked to the watermarked article

- The author's institution may be informed
- A notice of suspected transgression of ethical standards in the peer review system may be included as part of the author's and article's bibliographic record

7. ENGLISH LANGUAGE EDITING

For editors and reviewers to accurately assess the work presented in your manuscript authors need to ensure the English language is of sufficient quality to be understood. If you need help with writing in English, you should consider:

- Asking a colleague who is a native English speaker to review your manuscript for clarity and grammar.
- Using a professional language editing service where editors will improve the English

to ensure that your meaning is clear and identify problems that require your review

Please note that the use of a language editing service is not a requirement for publication in this journal and does not imply or guarantee that the article will be selected for peer review or will be accepted for publication.

If your manuscript is accepted, it will be checked by our copy editors for spelling and formal style before publication.

8. PROOF READING

The purpose of the proof is to check for typesetting or conversion errors and the completeness and accuracy of the title, author names and affiliations, text, tables and figures. Substantial changes in content, e.g., new results, corrected values, title and authorship, are not allowed without the approval of the Editor.

After online publication, further changes can only be made in the form of a Correction, which will be hyperlinked to the article. To avoid a Correction connected to your article, please correct proofs very thoroughly Please take a look at all numbers and data in text, tables and figures. Double check the author names and affiliations, references. Please note, not even small changes are possible after online publication.

Appendix B

Table 2

Selected literature datachart

YEAR	AUTHOR	PUB/JNL	TITLE	COUNTRY	AIM	SETTING	SAMPLE	DESIGN	METHOD	FINDINGS
2001	Berdes, C., & Eckert, J. M. (2001). Race relations and caregiving relationships: A qualitative examination of perspectives from residents and nurse's aides in three nursing homes. Research on aging, 23(1), 109-126.	Research on Aging	Race Relations and Caregiving Relationships	USA	To explore the effects of racial and ethnic differences between residents and nurse's aides in nursing homes from the perspectives of both groups.	Nursing home	60 participants - 30 residents & 30 Nurse aids BOTH	Qualitative	Semi-structured interviews	Many CW experience racism in their work with OP. CW who discounted racism from OP as a result of age, condition were able to maintain a caring relationship with OP. Intra-personal - subjective experiences, feelings of CW when confronted with racism.
2001	Bowers, B. J., Fibich, B., & Jacobson, N. (2001). Care-as-service, case-as-relating, care-as-comfort: Understanding nursing home residents' definitions of quality. The Gerontologist, 41(4), 539-545.	The gerontologist	Care-as-Service, Care-as-Relating, Care-as-comfort: Understanding Home Residents' Definition of Quality	USA	To explore how nursing home residents define quality of care	LTC Facility	26 residents OP ONLY	Grounded dimensional analysis	In depth interviews	Residents defined quality in three ways: (a) Care-as-service residents focused on instrumental aspects of care. They assessed quality using the parameters of efficiency, competence, and value. (b) Care-as-relating residents emphasized the affective aspects of care, defining quality as care that demonstrated friendship and allowed them to show reciprocity with their caregivers. (c) Care-as-comfort residents defined quality as care that allowed them to maintain their physical comfort, a state that required minute and often repetitive adjustments in response to their bodily cues.

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2003	Edvardsson, J. D., Sandman, P. O., & Rasmussen, B. H. (2003). Meanings of giving touch in the care of older patients: becoming a valuable person and professional. Journal of clinical nursing, 12(4), 601–609.	Jnl Clin Nursing	Meanings of giving touch in the care of older patients: becoming a valuable person and professional	Sweden	To illuminate CW's meanings of giving touch in nursing care of older patients.	Different care settings	12 participants - Health care professionals - all qualified - nurses/OT's CW ONLY	Qualitative inquiry	Open-ended interviews	The findings show that giving touch in the care of older patients is a transforming experience, where one suddenly perceives oneself as both a valuable person and professional who no longer powerlessly confronts patients' haunted and disrupted bodies, but who, by means of touch, has gained power to ease this suffering.
2005	Anderson, R. A., Ammarell, N., Bailey, D., Jr., Colón-Emeric, C., Corazzini, K. N., Lillie, M., Piven, M. L. S., Utley-Smith, Q., & McDaniel, R. R., Jr. (2005). Nurse Assistant Mental Models, Sensemaking, Care Actions, and Consequences for Nursing Home Residents. Qualitative health research, 15(8), 1006-1021.	Qualitative Health research	Nurse Assistant Mental Models, Sensemaking, Care Actions, and Consequences for Nursing Home Residents	USA	Illuminating the cognitive processes of CNAs in caregiving will provide new knowledge to inform nursing home management practices and public policy.	Nursing Home	11 Female CNA ONLY CW	Case Study	Observations Open ended Interviews	Two mental models guide CW's in resident care. The Golden Rule and Mother Wit. Both impact the way CW's approach relationships and care they offer OP. Impacted CW self control and affection but also resulted in CW infantilising OP and treating them like children.CW motivations for care offered outlined. Some description of how these intra-psychic factors translate into caring behaviour and impact on OP.
2005	Bergland Å, Kirkevold M. Resident-Caregiver Relationships and Thriving Among Nursing Home Residents. Res Nurs Health (2005) 28(5):365–75. doi:10.1002/nur.20097	Research in Nursing Health	Resident-Caregiver Relationships and Thriving among Nursing Home Residents	Norway	To describe nursing home residents' experiences and perceptions of relationships with caregivers and to explore their importance to thriving	Nursing home	26 mentally lucid residents - 20 women & 6 men OP ONLY	Descriptive, exploratory	Field observations & open ended interviews	Interactions between residents and caregivers depend on the needs and expectations of the residents. Differing abilities varies of OP to establish or engage in supportive relationships with the caregivers. The CW bear the responsibility for creating an environment that is supportive of thriving among all residents, regardless of their level of ability and personal resources. Socioemotional selectivity theory: When future time is perceived as more limited, as is typical in old age, people are motivated to pursue emotionally meaningful goals.Thus are they more motivated to also pursue more meaningful social

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										relationships? While Socioemotional selectivity theory (SST) maintains that when futures loom large, as they typically do in youth, people are motivated to explore.
2006	McGilton, K. S., & Boscart, V. M. (2007). Close care provider–resident relationships in long-term care environments. Journal of Clinical Nursing, 16(11), 2149-2157. .	Jnl of Clinical Nursing	Close care provider-resident relationships in long-term care environments	Canada	To analyse perceptions of residents, family and care providers, with regard to close care provider–resident relationships in long-term care.	Care facility	25 residents, 25 family members & 32 care providers BOTH	Descriptive	Face-to-face & telephone interviews	Care providers perceived the closeness of relationships by the degree of reciprocity they experienced with their residents and by their emotional connection with them. Residents defined close relationships with care providers based on the care providers' availability, caring attitude and behaviours. Feeling connected, Knowing the resident, Reciprocity, Confidant, Having my best interests at heart, Taking initiatives, Being dependable. = The development of trust is described in the context of close and personal relationships between care providers and residents in care homes
2007	Westin, L., & Danielson, E. (2007). Encounters in Swedish nursing homes: a hermeneutic study of residents' experiences. Journal of advanced nursing, 60(2), 172–180.	Jnl Adv Nursing	Encounters in Swedish nursing homes: a hermeneutic study of residents' experiences	Sweden	To illuminate and interpret the meaning of residents' experiences of encounters with nurses in nursing homes.	Nursing Home	12 Residents 5 men, 7 women OP ONLY	Qualitative	Narrative Interviews	Being somebody, To be seen, To be confirmed, To be respected, To be affected or not being somebody and not to be all above. Being part of a community, To share life with someone, To live in a meaningful way

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2008	Wilson, C. B., & Davies, S. (2009). Developing relationships in long term care environments: the contribution of staff. Journal of Clinical Nursing (Wiley-Blackwell), 18(12), 1746-1755.	Jnl Clin Nusring	Developing Relationships in long term care environments: the contribution of staff	England	To consider how staff in long term care environments contribute to the development of their relationship with older people through the routines of care.	Care Homes	59 participants - 16 residents, 25 staff members & 18 families BOTH	Constructivist	Observations, interviews & focus groups	The findings reported here reveal how the approach staff adopted during care delivery became an important influence on the type of relationships that developed. 3 types of interaction, pragmatic task related relationships = getting the job done and getting to know the resident; personal responsive relationships = finding out what matters and why nb for resident (ref also Bowers: care-as-relating) and reciprocal relationships - developing shared understanding and finding a compromise in the planning of care, and also finding out more about how resident's fits in larger context. All about seeing OP as individual.
2009	Medvene, L. J., & Lann-Wolcott, H. (2010). An exploratory study of nurse aides communication behaviours: Giving positive regard as a strategy. International Journal of Older People Nursing, 5(1), 41-50.	Intl Jnl Older People Nursing	An exploratory study of nurse aides' communication behaviours: giving 'positive regard' as a strategy	USA	To identify the communication behaviours and strategies used by socially skilled geriatric nurse aides working with residents in long term care facilities.	Nursing Home	16 Nurse Aides 15 female, 1 male CW ONLY	Qualitative	Semi-structured interviews	The novel finding that all of the aides used a communication strategy that could be characterized as 'giving positive regard', defined as acknowledging the resident, treating the resident with respect.
2011	Levy-Storms, L., Claver, M., Gutierrez, V. F., & Curry, L. (2011). Individualized care in practice: Communication strategies of nursing aides and residents in nursing homes. Journal of Applied Communication Research, 39(3), 271-289	Jnl of App Com Research	Individulized Care in Practice: Communication Strategies of Nursing Aides and Residents in Nursing homes	USA	To characterize the meaning of and experiences with individualized care from the perspectives of both nursing aides and nursing-home residents.	Nursing Homes	17 Nursing aides & 15 residents from 2 nursing homes BOTH	Focus-group methodology	Focus groups	Four themes emerged related to communication strategies: (a) getting to know versus maintaining a protective distance, (b) mutual respect versus disrespect, (c) avoiding versus addressing conflict, and (d) equity versus perceived favouritism. Three interpersonal dimensions: mutuality, continuity, and emotional distance. A connection can be made between communication and quality of care in that communication is a core element of IC, which has been shown to improve quality of care.

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2011	Nakrem, S., Vinsnes, A. G., & Seim, A. (2011). Residents' experiences of interpersonal factors in nursing home care: A qualitative study. International Journal of Nursing Studies, 48(11), 1357-1366.	Int Jrnl Nursing Studies	Residents' experiences of interpersonal factors in nursing home care: A qualitative Study	Norway	To describe the nursing home residents' experience with direct nursing care, related to the interpersonal aspects of quality of care.	Nursing home	15 mentally lucid residents OP ONLY	Descriptive exploratory	In depth interviews	Quality nursing care in nursing home implies a balanced, individual approach to medical, physical and psychosocial care, including interpersonal aspects of care. The interpersonal relationship between resident and nurse implies long-term commitment, reciprocal relationship on a personal level and interpersonal competence of the nurses to understand each resident's needs.
2012	Custers, A. F. J., Westerhof, G. J., Kuin, Y., Gerritsen, D. L., & Riksen-Walraven, J. M. (2012). Relatedness, autonomy, and competence in the caring relationship: The perspective of nursing home residents. Journal of Aging Studies, 26(3), 319-326.	Jnl of Aging Studies	Relatedness, autonomy, and competence in the caring relationship: The perspective of nusing home residents	Netherlands	To investigate the importance and experiences of relatedness, autonomy, and competence in the caring relationship from the perspective of residents of somatic nursing homes.	Nursing home	75 recently admitted somatic nursing home residents OP ONLY	Longitudinal study	Structured questionaires & semi-structured interviews	The results show that relatedness was considered as more important than autonomy and competence, on average, but there also was large variation between residents in the importance attached to these three needs.
2013	Hwang, H. L., Hsieh, P. F., & Wang, H. H. (2013). Taiwanese long-term care facility residents' experiences of caring: a qualitative study. Scandinavian Journal of Caring Sciences, 27(3), 695-703.	Scan Jnl Caring Sci	Taiwanese long-term care facility residents' experiences of caring: a qualitative study	Taiwan	To elucidate the nature of caring by describing the experience of elderly residents of Taiwan LTCFs.	LTC Facility	12 participants - elderly residents OP ONLY	Qualitative	Semi-structured interviews	The findings of this study confirm the need for managers of LTCFs to address the physical and psychosocial needs of their residents. The findings can be used to develop education programmes and clinical protocols for nurses in the caring field and to develop instruments for measuring perceived caring in LTCFs. The study uses Caring Process - Watson (Caritas) as a basis for evaluating care from OP perspective. Focus on expectations of OP..

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2013	Walsh, K., & Shutes, I. (2013). Care relationships, quality of care and migrant workers caring for older people. Aging & Society, 33(3), 393-420.	Aging and Society	Care relationships, quality of care and migrant workers caring for older people	UK	To explore the relationship between migrant care workers and older people in Ireland and the UK	Nursing Home	41 Residents. 90 Migrant care workers BOTH	Mixed method	Focus groups. semi-structured interviews	Significant element of reciprocity embedded within the care relationship. Rship characterised by a reciprocal, need orientated or friendship and familial-like set of dynamics. Older people and migrant care workers connect in care experiences and products of their experiences. Reflecting a relational co-construction. The care relationship is, thus, potentially a means of enhancing the wellbeing of both the older person and their carer.
2014	Dybvik, T. K., Gjengedal, E., & Lykkeslet, E. (2014). At the mercy of others - for better or worse. Scandinavian Journal of Caring Sciences, 28(3), 537-543.	Scandanavian Jnl Caring Sciences	At the mercy of others - for better or worse	Norway	To identify typical aspects related to a good life in a nursing home according to OP descriptions.	Nursing Home	6 Residents OP ONLY	Lifeworld perspective	In depth interviews	The findings identified both physical and psychosocial elements, and the following three main themes emerged: receiving help when the body fails is good, meaningful days despite loss and limitations, and time as a friend or foe.
2014	Marsden, S., & Holmes, J. (2014). Talking to the elderly in New Zealand residential care settings. Journal of Pragmatics, 64, 17-34.	Jnl of Pragmatics	Talking to the elderly in New Zealand residential care settings	New Zealand	To analyse the talk between caregivers and care receivers as co-constructed negotiations of social meaning.	Residential care home	About 700 participants over 35 workplaces OP ONLY	Ethnographic	Participant observation	Our data suggests that interactions between carers and elderly residents are rich and complex, often raising issues of face threat for both participants.
2014	Palacios-Ceña, D., Losa-Iglesias, M. E., Gómez-Calero, C., Cachón-Pérez, J. M., Brea-Rivero, M., & Fernández-de-las-Peñas, C. (2014). A qualitative study of the relationships between residents and nursing homes nurses. Journal of Clinical Nursing, 23(3-4), 550-559. cn.12202	Jnl of Clinical Nursing	A qualitative study of the relationships between residents and nuirsing homes nurses	Spain	To explore the relationships between residents and nurses in Spanish nursing homes.	Nursing home	26 participants OP ONLY	Qualitative, phenomenological	Unstructured & Semi-structured interviews, research field notes, personal dairies and letters from residents	Two main themes emerged: (1) 'meeting the nursing home nurses,' residents interact with nurses and establish relationships with them. The relationship is perceived as positive yet distant, and at times it is difficult to establish a closer relationship; and (2) 'managing relationships with the nursing home nurses,' residents learn to manage their relationships with the nurses, acquiring new behaviours to get closer to them, avoiding confrontations and helping each other.

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2014	Plejert, C., Jansson, G., & Yazdanpanah, M. (2014). Response practices in multilingual interaction with an older Persian woman in a Swedish residential home. Journal of Cross-Cultural Gerontology, 29(1), 1-23.	Jnl Cross Cult Geront	Response Practices in Multilingual Interaction with an older Persian woman in a Swedish residential Home	Sweden	To investigate a care encounter between an older multilingual (Farsi/Swedish/English) Persian woman and staff in an ordinary, Swedish residential home.	Nursing Home	1 Older resident. 2 Care workers BOTH	Conversation analysis	Case study audio recording	Three approaches to care delivery influenced the type of relationships that were developed between residents, families and staff, individualised task-centred, resident-centred and relationship-centred.
2014	Roos, V., & Du Toit, F. (2014). Perceptions of effective relationships in an institutional care setting for older people. SA Journal of Industrial Psychology, 40(1).	SA Journal of Industrial Psychology	Perceptions of effective relationships in an institutional care setting for older people	RSA	To explore what older people perceived as effective relationships in an institutional residential setting.	Residential home	Residents - OP ONLY 9 males 10 females	World Café, qualitative participatory action	Positively framed questions. Visual and textual data.	Older residents perceive care managers as friendly and trustworthy and co-residents as caring. Care managers were seen as flexible, empathetic and congruent leaders and they confirmed residents. Relationships between residents were parallel-defined with relational qualities such as empathy and unconditional acceptance. Residents' needs for privacy were honoured and they felt confirmed. Group dynamics were underpinned by caring and a stimulating environment provided opportunities for engagement.
2014	Teka, A., & Adamek, M. E. (2014). "We prefer greeting rather than eating:" Life in an elder care center in Ethiopia. Journal of cross-cultural andgerontology, 29, 389-404.	Jnl Cross Cult Geront	"We Prefer Greeting Rather Than Eating:" Life in an Elder Care Center in Ethiopia	Ethiopia	To explore the psycho-social needs of older adults in a residential elder care center in Ethiopia from the perspective of both staff and residents.	Care Center	29 participants - 24 residents & 5 staff persons BOTH	Ethnology	Observation, interviews & Focus groups	The results are presented according to the five overarching themes that emerged from the data:gratitude for shelter despite inadequate provisions, lack of professional care, a strong desire for meaningful social interaction, the centrality of spiritual coping, and old age as a blessing.

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2014	Westerhof, G. J., van Vuuren, M., Brummans, B. H. J. M., & Custers, A. F. J. (2014). A Buberian approach to the co-construction of relationships between professional caregivers and residents in nursing homes. The Gerontologist, 54(3), 354-362.	The gerontologist	A Buberian Approach to the Co-construction of Relationships Between Professional Caregivers and Residents in Nursing homes	Netherlands	To analyze interactional data from an observational study on morning care between caregivers and residents in Dutch nursing homes.	Nursing Homes	Case study?	Observational	Non-participant observation	I-it versus I-Thou
2015	Figueredo-Borda, N., & Zabalegui-Yárnoz, A. (2015). Long-Term Care of the Elderly in Uruguay. Journal of Transcultural Nursing, 26(2), 178-184.	Jnl of Transcultural Nursing	Long-Term Care of Elderly in Uruguay	Uruguay	To exlpore perceptions of long-term care of the elderly in Uruguay	LTC Facility	23 participants - 7 providers of direct care, 8 admin/center managers & 8 residents BOTH	Participant observation	Participation observation & in-depth interviews	Meaning of care: ensuring the dignity of the person, meeting basic needs, and caregiver duties. CW and R experience of care: excessive burden, compassionate disposition to care, exchange of affection, recognition, solidarity.
2015	Roberts, T., & Bowers, B. (2015). How nursing home residents develop relationships with peers and staff: A grounded theory study. International Journal of Nursing Studies, 52(1), 57-67.	Int Jrnl Nursing Studies	How nursing home residents develop relationships with peers and staff: A grounded theory study	USA	To explore the ways resident, develop relationships with peers and staff in nursing homes.	Nursing home	Residents - OP ONLY	Qualitative grounded theory approach	Unstructured one-on-one open ended interviews	Residents developed relationships with peers and staff largely as an unintended consequence of trying to have a life in the nursing home. Having a life was a two-step process: life motivations (Being Self and Creating a Positive Atmosphere) & the strategies residents used for achieving their required daily activities (Passing Time and Getting Needs Met).
2015	Tayab, A., & Narushima, M. (2015). “Here for the Residents”: A Case Study of Cultural Competence of Personal Support Workers in a Long-Term Care Home. Journal of Transcultural Nursing, 26(2), 146-156.	Jnl of Transcultural Nursing	"Here for the residents":A Case Study of Cultural Competence of Personal Support Workers in a Long-Term Care Home	Canada	To explore the perception of cultural competence of personal support workers (PSWs) in a long-term care (LTC) home in Ontario.	LTC Facility	6 participants - employees at the LTC Home CW ONLY	Qualitative case study	Document analysis, key informant interview & focus groups	Our findings illuminated the PSWs’ broad definition of culture, the processof developing cultural competence and its strong connections to person-centered care, and the organizational factors that facilitate or hinder PSWs’ cultural competence.

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2016	Eldh, A. C., van der Zijpp, T., McMullan, C., McCormack, B., Seers, K., & Rycroft-Malone, J. (2016). 'I have the world's best job'—Staff experience of the advantages of caring for older people. Scandinavian Journal of Caring Sciences, 30(2), 365-373	Scan Jnl Caring Sci	I have the world's best job' - staff experience of the advantages of caring for older people	Ireland, Netherlands & Sweden	To explore staff experience of the advantages of working in LTC settings for older people	LTC Facilities	85 participants - 26 Ireland, 10 Netherlands & 49 Sweden CW ONLY	Narrative description	Interviews	Working in LTC signifies bonding with the older people residing there, their next of kin and the team members. It means autonomy in one's daily tasks amalgamated with being a part of an affirmative team. Participants reported a sense of accomplishment and fulf-ilment; caring meant consideration and recognition of the older people and the relationships formed, which provided for professional and personal growth. The shar-ing of compassion between staff and residents indicated reciprocity of the relationship with residents.

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2016	Høy, B., Lillestø, B., Slettebø, Å., Sæteren, B., Heggestad, A. K. T., Caspari, S., Aasgaard, T., Lohne, V., Rehnsfeldt, A., Råholm, M.-B., Lindwall, L., & Nåden, D. (2016). Maintaining dignity in vulnerability: A qualitative study of the residents' perspective on dignity in nursing homes. International Journal of Nursing Studies, 60, 91-98.	Intl Jnl of Nursing Studies	Maintaining dignity in vulnerability: A qualitative study of the residents' persepectiveon dignity in nursing homes	Scandinavia	To illuminate the meaning of maintaining dignity from the perspective of older people living in nursing homes.	Nursing homes	28 nursing home residents OP ONLY	Qualitative	Individual interviews	The meaning of maintaining dignity was constituted in a sense of vulnerability tothe self, and elucidated in three major interrelated themes: Being involved as a human being, being involved as the person one is and strives to become, and being involved as an integrated member of the society. CW Maintaining OP dignity through discretion and supporting OP efforts to look good and maintain independence. Social concerns or relationship dynamics which can erode or bolster a person's sense of dignity) t the context of illness, it was shown, that dignity was protected by: good professional care (e.g., being treated with respect), a supportive social network and adequate coping capacities. Further, it was shown that two mechanisms were especially important to maintain or regain dignity: the feeling that one is in control of one's life and the feeling that one is regarded as a worthwhile person. In the context of care, three themes were identiffed: respect and recognition, participation, and dignity in care. .

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2016	Lung, C.-C., & Liu, J. Y. W. (2016). How the perspectives of nursing assistants and frail elderly residents on their daily interaction in nursing homes affect their interaction: a qualitative study. BMC geriatrics, 16, 13.	BMC Geriatrics	How the perspectives of nursing assistants and frail elderly residents on their daily interaction in nursing homes affect their interaction: a qualitative study	Hong Kong	To identify the types of daily interactions perceived by NAs and residents. We also investigated those intentions / beliefs held by NAs and residents that might direct their interactive behaviors.	Nursing Home	18 Nursing Assistants 15 Residents BOTH	Descriptive, exploratory	Unstructured interview	3 types of interactions found: physiological, cordial, reciprocal social. Positive interactions promotes well-being, co-operation with care, mutual reciprocal interaction - good for both. Views of both groups.
2017	de Guzman, A. B., Valdez, L. P., Pascasio, B. N. D. C., Pascual, F. J. C., & Pelayo, S. C. (2017). When everything is under control: Chronicling the affective containment experiences of Filipino elderly in institutionalized settings. Educational Gerontology, 43(5), 226-237.	Edu Gerontology	When everything is under control: Chronicling the affective containment experiences of Filipino elderlyin institutionalised setting	Philippines	To describe the process by which affective containment is experienced by a select group of institutionalized Filipino elderly.	institutionalised care settings	20 Filipino elderly OP ONLY	Grounded theory design	cartographic sketch and indepth one-on-one interview	Three unique and fascinating sets of phases emerged relative to how affective containment was experienced by a selectgroup of institutionalized Filipino elderly. Dubbed as the 3-Stage Analogy of Elderly Affective Containment, this model describes how emotions are managed through the acts of Holding-up, Gearing-up, and Opening-up. Similar to the ability of a dam to contain and distribute water, the elderly's emotions build up to a critical level. Thus, prompting behaviors geared toward projection and containment of emotions to another individual.

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2017	Jansson, G., Wadensjö, C., & Plejert, C. (2017). Managing complaints in multilingual care encounters. Multilingua, 36(3), 313-345.	Mulitilingua	Managing complaints in multilingual care encounters	Sweden	To examine the handling of an older person's complaints in multilingual care encounters that involve participants who do not share a common language.	Residential Homes	8 Participants - all care givers CW ONLY	Conversation analysis	Video recording & ethnographic fieldwork	The findings from this study provide evidence for the creativity and attentiveness of caregivers with different knowledge in different languages in using their multilingual competence. Pursuing the role of a mediator between the resident and a colleague through translating, rephrasing, and voicing talk stands out as an essential resource in these settings of multiparty interaction, where the participants do not share a common language. In sum, the findings from this study highlight the role of multi-party work such as translating, moving between languages and sensibly moving between framings (conflict, intimacy, amusement) – in addressing issues of wrongdoing, responsibility, accountability and remedial actions.

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2019	Adra, M., Aharonian, Z., & Sibai, A. M. (2019). Exploring resident-staff relationships in nursing homes in Lebanon. International Journal of Qualitative Studies on Health & Well-Being, 14(1), 1-12.	Intl Jnl of Qual Studies on Health and Wellbeing	Exploring resident-staff relationships in nursing homes in Lebanon	Lebanon	To explore the prevailing relationships between nursing home residents and staff, and the factors that influence these relationships from the standpoint of the older residents themselves, in order to design and shape supportive programs that aim at enhancing and personalizing service improvement. To develop an interpretive framework to understand how relationships influence the experience of residents and staff in nursing homes.	Nursing Homes	13 older residents ONLY OP	Qual Phenomenological	Semi-structured interviews	Two main themes representing resident perceptions about their interactions with the nurses emerged: (1) relationships to satisfy the need for physical care, (2) relationships that foster a bond of caring and trust. CW caring attitude, behviour and charcteristics of reliability, empathy and consistency contribute to development of caring relationship.

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2019	Band-Winterstein, T., Doron, I., Zisberg, L., Shulyaev, K., & Zisberg, A. (2019). The meanings of the unlicensed assistive personnel role in nursing homes: A triadic job analysis perspective [Article]. Journal of Nursing Management (John Wiley & Sons, Inc.), 27(3), 575-583.	Jnl Nursing Manag	The meaning of the unlicensed assistiveWpersonnel role in nursing homes: A triadic job analysis perspective	Israel	Described and analyzed how older residents, professional nurses and unlicensed assistive personnel (UAP) perceive the meaning and content of the job carried out by UAP in nursing homes (NHs), as a basis for job analysis	Nursing homes	50 participants - 18 UAP, 15 certified nurses & 17 older NH residents BOTH groups included	Qual Phenom	Semi-structured in-depth interviews	Six content dimensions in both CW and OP descriptions regarding the meanings of the roles and duties of the CW: (a) care for the physical environment, (b) bodily-physical care, (c) psycho-social interpersonal care, (d) professional hierarchy and boundaries, (e) CW personal traits and (f) CW skills, or the need for training and professional education.
2019	Holmberg, B., Hellström, I., Norberg, A., & Österlind, J. (2019). Assenting to exposedness – meanings of receiving assisted bodily care in a nursing home as narrated by older persons. Scandinavian Journal of Caring Sciences, 33(4), 868-877.	Scandanavian Jnl Caring Sciences	Assenting to exposedness – meanings of receiving assisted bodily care in a nursing home as narrated by older persons	Sweden	To elucidate meanings of receiving assisted bodily care, as narrated by older persons living in a nursing home.	Nursing Home	16 Older people	Lifeworld design	Open ended interviews	Themes: Assenting to exposedness: to have hope in hopelessness', 'To relinquish one's body into others' hands', 'To be between power and powerlessness', 'To oscillate between one's own responsibility and demands', 'To be in an ongoing interaction. Receiving assisted bodily care means to be exposed, but not passively. Rather, it means to be self-determinant for as long as possible, to perceive the body as lived. When the body must be relinquished to others, itmight be objectified, leading to care-suffering. To avoid this, the older persons use a certain competence, acquired through life, to decide when to take action or when to assent.

YEAR	AUTHOR	PUB/JNL	TITLE	COUNTRY	AIM	SETTING	SAMPLE	DESIGN	METHOD	FINDINGS
2019	Stuck, R. E., & Rogers, W. A. (2019). Supporting trust in home healthcare providers: Insights into the care recipients' perspective. Home Health Care Services Quarterly, 38(2), 61-79.	Jnl of Community Care	Supporting trust in home healthcare providers: Insights into the care recipients' perspective	USA	To explore what older care recipients perceive as supporting trust in home care providers.	Own home & care facility	24 participants - 12 assisted living & 12 independent living OP ONLY	Mixed methods	In-depth questionaire & semi-structured interview	The results from this study demonstrate that aspects that influence the establishment of trust overlap with and are similar to those that have been identified as supporting general successful home healthcare and general trust.
2020	Eaton, J., Cloyes, K., Paulsen, B., Madden, C., & Ellington, L. (2020). Certified nursing assistants as agents of creative caregiving in long-term care. International Journal of Older People Nursing, 15(1).	Int Jnl of Older People Nursing	Certified nusing assistants as agents of creative caregiving in long-term care	USA	Using focus groups to describe CW's de!nitions and perceptions of creativity in relation to care of LTC residents.	LTC Facility	14 participants - CNAs CW ONLY	Mixed method, participatory action approach	Focus groups	Certified nursing assistants denied creativity as formal art-making, yet they also described creative approaches to engaging residents in order to build relationships and reduce challenging behaviour. While most linked creativity with discerning and responding to resident needs, creativity was also foundational to time management, teamwork and navigating challenges.
2020	Funk, L. M., & Outcalt, L. (2020). Maintaining the 'caring self' and working relationships: A critically informed analysis of meaning-construction among paid companions in long-term residential care. Ageing & Society, 40(7), 1511-1528.	Jnl Ageing & Society	Maintaining the 'caring self' and working relationships: a critically informed analysis of meaning-construction among paid companions in long-term residential care	Canada	To examine interpretations of the expected work of companions of older people in long term residential care.	LTC Facilities	19 participants - 6 independent workers & 13 private home care	Qualitative	Interviews	We interpret companions' accounts in relation to their need to justify the necessity for their work to their employers (families), to nurture good relationships with the facilities in which they work, and to maintain a sense of identity as a responsible, conscientious and 'caring self'.

YEAR	AUTHOR	PUB/JNL	TITLE	COUNTRY	AIM	SETTING	SAMPLE	DESIGN	METHOD	FINDINGS
2021	Villa, G., Pennestrì, F., Rosa, D., Giannetta, N., Sala, R., Mordacci, R., & Manara, D. F. (2021). Moral Distress in Community and Hospital Settings for the Care of Elderly People. A Grounded Theory Qualitative Study. Healthcare (Basel, Switzerland), 9(10).	Jnl Heathcare	Moral Distress in Community and Hospital Settings for Elderly People. A Grounded Theory Qualitative Study	Italy	To describe the experience of moral distress in all the types of professionals providing daily care to elderly patients and residents.	Hospital & Nursing facilities	13 Participants - 6 from hospital setting & 7 from 2 nursing facilities	Corbin and Strauss Grounded Theory	Semi-structured interviews	Four categories were derived from the data: talking and listening, care provider wellbeing, decision making, protective factors, and potential solutions. The core category identified was “sharing daily”. Interviewees confirm how hard it may be to communicate to the elderly, but at the same time, how adequate communication with the leader is a protective factor of moral distress. They also confirm how communication is key to managing or downsizing misunderstandings at all levels. Findings highlight the scarcity of operators as a fundamental trigger of moral distress.

Appendix C

Table 3

Theoretical Analysis

References	Theoretical approaches, theories and heuristic constructs	Summary of approach
Intrapersonal approaches explaining experiences of relationship from within a person		
Anderson, R. A., Ammarell, N., Bailey, D., Jr., Colón-Emeric, C., Corazzini, K. N., Lillie, M., Piven, M. L. S., Utley-Smith, Q., & McDaniel, R. R., Jr. (2005). Nurse Assistant Mental Models, Sensemaking, Care Actions, and Consequences for Nursing Home Residents. Qualitative health research, 15(8), 1006-1021.	Mental models Sense making	A mental model is an explanation or representation of a person's inner thoughts, which may motivate behaviour and decisions. Sensemaking is how people make sense of their environment to make decisions. CWs use mental models and sensemaking to make sense of OPs needs and how this impacts their caregiving.
Figueredo-Borda, N., & Zabalegui-Yárnoz, A. (2015). Long-Term Care of the Elderly in Uruguay. Journal of Transcultural Nursing, 26(2), 178-184	Meaning making The meaning of care	Meaning of care, experience of care, continuity of care for the fulfilment of OPs' needs
Funk, L. M., & Outcalt, L. (2020). Maintaining the 'caring self' and working relationships: A critically informed analysis of meaning-construction among paid companions in long-term residential care. Ageing & Society, 40(7), 1511-1528.	Meaning making The meaning of care	CWs' meaning of care and the caring self.
Lung, C.-C., & Liu, J. Y. W. (2016). How the perspectives	Intention and beliefs	Intentions or beliefs of CWs and residents direct their interactive behaviour.

of nursing assistants and frail elderly residents on their daily interaction in nursing homes affect their interaction: a qualitative study. BMC geriatrics, 16, 13. Westin, L., & Danielson, E. (2007). Encounters in Swedish nursing homes: a hermeneutic study of residents' experiences. Journal of advanced nursing, 60(2), 172–180.	Meaning in life defined as being somebody versus being nobody	Explores OPs' feelings about their encounters with CWs: Being somebody versus being nobody; Being part of a community, Existing as a person and the impact this has on the meaning in their lives.
Intrapersonal theories explaining experiences of relationship from within a person		
Custers, A. F. J., Westerhof, G. J., Kuin, Y., Gerritsen, D. L., & Riksen-Walraven, J. M. (2012). Relatedness, autonomy, and competence in the caring relationship: The perspective of nursing home residents. Journal of Aging Studies, 26(3), 319-326	Self-determination theory	Self-determination theory: three universal basic psychological needs, important for psychological growth and well-being. 1. relatedness (connected and belonging) 2. autonomy 3. competence. Need fulfilment provided by relationship with CWs related to OPs well-being.
de Guzman, A. B., Valdez, L. P., Pascasio, B. N. D. C., Pascual, F. J. C., & Pelayo, S. C. (2017). When everything is under control: Chronicling the affective containment experiences of Filipino elderly in institutionalized settings. Educational Gerontology, 43(5), 226-237.	Affect containment theory	OPs contain, regulate or project emotions to cope in response to stress How OPs cope in Long Term Care (LTC).
Eaton, J., Cloyes, K., Paulsen, B., Madden, C., & Ellington, L. (2020). Certified nursing assistants as agents of creative caregiving in long-term care. International Journal of Older People Nursing, 15(1).	Structural empowerment theory	Structural Empowerment Theory – If a person believes they have influence, they feel empowered. If CWs perceive they have an influence on job (on OPs or management), more likely to feel empowered

		and use creative caring behaviours.
Eldh, A. C., van der Zijpp, T., McMullan, C., McCormack, B., Seers, K., & Rycroft-Malone, J. (2016). 'I have the world's best job'—Staff experience of the advantages of caring for older people. Scandinavian Journal of Caring Sciences, 30(2), 365-373.	Eriksson's caritative theory	Love as a central aspect and motivation in caring in order to fulfil OPs' needs
Hwang, H. L., Hsieh, P. F., & Wang, H. H. (2013). Taiwanese long-term care facility residents' experiences of caring: a qualitative study. Scandinavian Journal of Caring Sciences, 27(3), 695-703	Caring process theory	The core philosophy of the Caring Process theory is that humans cannot be treated as objects and cannot be separated from self, other, nature, and the larger workforce. How CWs enable OPs to achieve well-being and fulfil their needs.
Heuristic constructs **(**part of a theory) explaining experiences of relationship from within a person		
Band-Winterstein, T., Doron, I., Zisberg, L., Shulyaev, K., & Zisberg, A. (2019). The meanings of the unlicensed assistive personnel role in nursing homes: A triadic job analysis perspective [Article]. Journal of Nursing Management (John Wiley & Sons, Inc.), 27(3), 575-583.	Characteristics for good care	CWs' personal qualities for good care for fulfilment of OPs' needs.
Bowers, B. J., Fibich, B., & Jacobson, N. (2001). Care-as-service, case-as-relating, care-as-comfort: Understanding nursing home residents' definitions of quality. The Gerontologist, 41(4), 539-545.	Autonomy and social relationships	Care-as-relating in findings: references to importance of individualised care, choice and autonomy, reciprocity and social relationships to fulfil OPs need for quality care.
Dybvik, T. K., Gjengedal, E., & Lykkeslet, E. (2014). At the mercy of others - for better or worse. Scandinavian Journal of Caring Sciences, 28(3), 537-543.	Dependency	OPs' experiences of dependency in LTC.

Holmberg, B., Hellström, I., Norberg, A., & Österlind, J. (2019). Assenting to exposedness – meanings of receiving assisted bodily care in a nursing home as narrated by older persons. Scandinavian Journal of Caring Sciences, 33(4), 868-877.	Self-determination versus dependency	Receiving assisted bodily care (R-ABC) creates tension between autonomy of OP and dependency on care.
Teka, A., & Adamek, M. E. (2014). "We prefer greeting rather than eating:" Life in an elder care center in Ethiopia. Journal of cross-cultural gerontology, 29, 389-404.	Dependency syndrome	Dependency syndrome defined as an attitude and belief that a group cannot solve its own problems without outside help.
Stuck, R. E., & Rogers, W. A. (2019). Supporting trust in home healthcare providers: Insights into the care recipients' perspective. Home Health Care Services Quarterly, 38(2), 61-79.	Trust vulnerability	OPs' trust in CWs measured by their willingness to be vulnerable. Trust is what allows OPs to receive care despite the potential risks associated with doing so. How CWs engender trust in OPs.
Tayab, A., & Narushima, M. (2015). "Here for the Residents": A Case Study of Cultural Competence of Personal Support Workers in a Long-Term Care Home. Journal of Transcultural Nursing, 26(2), 146-156.	Cultural competence	Cultural competence is the ability to understand different cultures and adapt accordingly, needed to meet needs of OPs.
Teka, A., & Adamek, M. E. (2014). "We prefer greeting rather than eating:" Life in an elder care center in Ethiopia. Journal of cross-cultural gerontology, 29, 389-404.	Caregiving relationship defined as home	OP's perceptions of caregiving relationship as "home".
Villa, G., Pennestrì, F., Rosa, D., Giannetta, N., Sala, R., Mordacci, R., & Manara, D. F. (2021). Moral Distress in Community and Hospital	Moral Distress CWs' relational qualities	CWs' experiences of Moral Distress (MD). Caregiving and relational qualities needed to deal with MD when working with OPs.

Settings for the Care of Elderly People. A Grounded Theory Qualitative Study. Healthcare (Basel, Switzerland), 9(10).		
Høy, B., Lillestø, B., Slettebø, Å., Sæteren, B., Heggestad, A. K. T., Caspari, S., Aasgaard, T., Lohne, V., Rehnsfeldt, A., Råholm, M.-B., Lindwall, L., & Nåden, D. (2016). Maintaining dignity in vulnerability: A qualitative study of the residents' perspective on dignity in nursing homes. International Journal of Nursing Studies, 60, 91-98.	Dignity-in-Relation CWs characteristic of confirmation	Concept of dignity-in-relation: OPs internal experience of dignity maintained when confirmed by CWs when they reflect worth and value back to the individual through word or deed.
Bergland, Å., & Kirkevold, M. (2005). Resident-Caregiver Relationships and Thriving among Nursing Home Residents. Research in nursing & health, 28(5), 365-375.	Thriving	Thriving: The ongoing process of interaction with environment, resulting in social, physical, and psychological resilience and growth.
Heuristic constructs explaining interactions between people		
Berdes, C., & Eckert, J. M. (2001). Race relations and caregiving relationships: A qualitative examination of perspectives from residents and nurse's aides in three nursing homes. Research on aging, 23(1), 109-126.	Distance and closeness in relationships	Racial differences in facilities create social distance between residents and staff.
Palacios-Ceña, D., Losa-Iglesias, M. E., Gómez-Calero, C., Cachón-Pérez, J. M., Brea-Rivero, M., & Fernández-de-las-Peñas, C. (2014). A qualitative study of the relationships between residents and nursing homes nurses. Journal of Clinical Nursing, 23(3-4), 550-559.	Reciprocity in terms of OPs creating balance in relationship	Mutual exchange between two individuals in a relationship. Caregiving relationship unbalanced, with CWs giving care. OPs use various strategies to create balance and reciprocity.
Roberts, T., & Bowers, B. (2015). How nursing home residents develop relationships	Reciprocity in terms of human responsiveness	Back and forth interaction depending on the elicited reaction.

with peers and staff: A grounded theory study. International journal of nursing studies, 52(1), 57-67.		OPs strategies in developing relationships with CWs depend on responsiveness of CWs as positive or negative.
Medvene, L. J., & Lann-Wolcott, H. (2010). An exploratory study of nurse aides communication behaviours: Giving positive regard as a strategy. International Journal of Older People Nursing, 5(1), 41-50.	Reciprocity and positive regard as relational strategies	Positive regard and reciprocity are strategies which takes a caregiving relationship beyond task orientation.
McGilton, K. S., & Boscart, V. M. (2007). Close care provider–resident relationships in long-term care environments. Journal of Clinical Nursing, 16(11), 2149-2157.	Reciprocity defines close relationships	Concept of "close relationship" defined and examined from CWs, OPs and family perspectives. Close relationships achieved through reciprocity between OPs and CWs.
Edvardsson, J. D., Sandman, P. O., & Rasmussen, B. H. (2003). Meanings of giving touch in the care of older patients: becoming a valuable person and professional. Journal of clinical nursing, 12(4), 601–609.	Reciprocity through meaningful touch	Touch as a vehicle for relational connection between CWs and OPs.
Høy, B., Lillestø, B., Slettebø, Å., Sæteren, B., Heggestad, A. K. T., Caspari, S., Aasgaard, T., Lohne, V., Rehnsfeldt, A., Råholm, M.-B., Lindwall, L., & Nåden, D. (2016). Maintaining dignity in vulnerability: A qualitative study of the residents' perspective on dignity in nursing homes. International	Dignity-in-Relation CWs characteristic of confirmation	Concept of dignity-in-relation: OPs internal experience of dignity maintained when confirmed by CWs when they reflect worth and value back to the individual through word or deed.

Journal of Nursing Studies, 60, 91-98.		
Interpersonal theories explaining interactions between people		
Adra, M., Aharonian, Z., & Sibai, A. M. (2019). Exploring resident-staff relationships in nursing homes in Lebanon. International Journal of Qualitative Studies on Health & Well-Being, 14(1), 1-12.	7 Cs Continuity of care	7 Cs: the factors necessary to promote "appreciative caring conversations" for compassionate care. Continuity of care relies on CWs characteristics: reliability, empathy to fulfil OP needs.
Marsden, S., & Holmes, J. (2014). Talking to the elderly in New Zealand residential care settings. Journal of Pragmatics, 64, 17-34.	Communication accommodation theory (CAT)	CAT seeks to explain when, how, and why individuals adjust verbal and non-verbal interactions with others, as well as recipients' inferences, attributions, and evaluations of, and responses to, them in order to fulfil OP needs.
Wilson, C. B., & Davies, S. (2009). Developing relationships in long term care environments: the contribution of staff. Journal of Clinical Nursing (Wiley-Blackwell), 18(12), 1746-1755.	Senses Framework from CWs frame of reference	6 Senses 1. security 2. belonging 3. continuity 4. purpose 5. achievement 6. significance Relationship qualities of CWs. Relationship-centred care defined as care for OPs, negotiated with all people in OP's life. How enabling relationships are developed and the relationship qualities needed for creating relationship-centred care approach to care of OPs with the outcome of a positive experience of care.
Nakrem, S., Vinsnes, A. G., & Seim, A. (2011). Residents' experiences of interpersonal factors in nursing home care: A qualitative study. International	Senses Framework from CWs frame of reference	The Senses Framework - the interpersonal relationship between resident and CWs implies long-term commitment,

Journal of Nursing Studies, 48(11), 1357-1366. Walsh, K., & Shutes, I. (2013). Care relationships, quality of care and migrant workers caring for older people. Ageing & Society, 33(3), 393-420.	 Senses Framework from both CWs and OPs frame of reference	reciprocal relationships and understanding of each resident's needs. Senses Framework used to understand CW's (migrant) and OP's perceptions of quality of care, relational aspects of good care. Focus on reciprocity and discrimination. Influence on care delivery and organisational structure.
Custers, A. F. J., Westerhof, G. J., Kuin, Y., Gerritsen, D. L., & Riksen-Walraven, J. M. (2012). Relatedness, autonomy, and competence in the caring relationship: The perspective of nursing home residents. Journal of Ageing Studies, 26(3), 319-326.	Person-Environment (P-E) Congruence Model	Person-Environment (P-E) congruence model: a person's well-being will be affected by the fit between their important needs and the environment around them. Need fulfilment provided by relationship with CWs related to OPs well-being.
Jansson, G., Wadensjö, C., & Plejert, C. (2017). Managing complaints in multilingual care encounters. Multilingua, 36(3), 313-345. Plejert, C., Jansson, G., & Yazdanpanah, M. (2014). Response practices in multilingual interaction with an older persian woman in a swedish residential home. Journal of Cross-Cultural Gerontology, 29(1), 1–23.	Communication Analysis	How CWs communicate with OPs to maintain an intimate and cheerful atmosphere. How they deal with complaints and fulfil their needs. The systematic examination of verbal and nonverbal behaviours to understand how people communicate with each other and maintain interactional social order. Cultural and linguistic matching between CW and OP important for fulfilment of OP needs.
Interpersonal theories explaining relational dynamics between people		
Westerhof, G. J., van Vuuren, M., Brummans, B. H. J. M., & Custers, A. F. J. (2014). A Buberian approach to the co-	Buber I-Thou mutual co-construction of relationships	Buber (1958/2000) distinguished between I-Thou and I-It relationships. I-It is uni-directional, I-

construction of relationships between professional caregivers and residents in nursing homes. The Gerontologist, 54(3), 354-362.		Thou is bi-directional. The relationship between the CW and the OP is co-constructed and quality of care is mutually constructed.
Levy-Storms, L., Claver, M., Gutierrez, V. F., & Curry, L. (2011). Individualized care in practice: Communication strategies of nursing aides and residents in nursing homes. Journal of Applied Communication Research, 39(3), 271-289.	Relational dialectic theory	Relational dialectics theory assumes three different types of tensions in relationships: connectedness vs. separateness, certainty vs. uncertainty, and openness vs. closedness.
Roos, V., & Du Toit, F. (2014). Perceptions of effective relationships in an institutional care setting for older people. *SA Journal of Industrial Psychology, 40*(1).	Self-Interactional Group theory	SIGT explains the relational/interactional nature of intergenerational relations. Relationships are viewed as the reciprocal, continuous communicative interactions between members of different generations.

Appendix D

AUTHOR GUIDELINES (THE INTERNATIONAL JOURNAL OF CARE AND CARING)

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- Please do not embed bibliographic references in the text, footnotes, live links or macros; the final submitted file should be clear of track changes and ready for print.
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- Carer, caregiver and care worker- terminology: The IJCC Editors recognise that many carers and carers' organisations reject 'informal' care as a descriptor of what carers do,

unpaid, as part of family or other affective relationships, despite the widespread use of this term among researchers and scholars.
In the IJCC, our preference is to use 'carer' to describe those who provide care within pre-existing relationships, usually unpaid (albeit perhaps supported by an allowance or cash contribution to compensate for earnings or to recognise carers contributions). In much popular discourse, and some research, 'carer' (or the North American term 'caregiver') is also used to describe those who give care to others as part of their employment. We prefer 'care worker' as the term for those who provide care as part of their paid work or professional role, and request contributors to the IJCC to adopt this terminology wherever possible.

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References

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Bengtson, V.L. and Lowenstein, A. (2003) *Global Aging and its Challenge to Families*, New Jersey, NJ: Transaction Publishers.

Darling, D. (2010) *Injustice: Why Social Inequality Persists*, Bristol: Policy Press.

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Bengtson, V.L. and Lowenstein, A. (2003) Citizenship in action: the lived experiences of citizens with dementia who campaign for social change, in R. Smith, R. Means and K. Keegan (eds) *Global Aging and its Challenge to Families*, New Jersey, NJ: Transaction Publishers, pp 305–26.

Journal reference:

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Contact us

Editorial enquiries:

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Sharon Harris: ijcc-editorial@bristol.ac.uk

Appendix E

AUTHOR GUIDELINES: (INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH)

To be applied to Article 3 upon submission

International Journal of Environmental Research and Public Health is a transdisciplinary, peer-reviewed, open access journal published monthly online by MDPI. It covers Global Health, Healthcare Sciences, Behavioral and Mental Health, Infectious Diseases, Chronic Diseases and Disease Prevention, Exercise and Health Related Quality of Life, Environmental Health and Environmental Sciences. The International Society Doctors for the Environment (ISDE) and Italian Society of Environmental Medicine (SIMA) are affiliated with *IJERPH* and their members receive a discount on the article processing charges.

Instructions for Authors

Shortcuts

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- Conflicts of Interest
- Editorial Procedures and Peer Review
- Transfer Service
- Promoting Equity, Diversity and Inclusiveness within MDPI Journals
- Resource Identification Initiative

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5. Authors are encouraged to add a biography (optional) to the submission and post it to SciProfiles.

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    - Research manuscript sections: Introduction, Materials and Methods, Results, Discussion, Conclusions.
    - Back matter: Supplementary Materials, Acknowledgments, Author Contributions, Conflicts of Interest, References.
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Data availability status	Recommended Data Availability Statement
Data available in a publicly accessible repository	The original data presented in the study are openly available in [repository name, e.g., FigShare] at [DOI/URL] or [reference/accession number].
Data available on request due to restrictions (e.g., privacy, legal or ethical reasons)	The data presented in this study are available on request from the corresponding author due to (specify the reason for the restriction).
3rd Party Data	Restrictions apply to the availability of these data. Data were obtained from [third party] and are available [from the authors/at URL] with the permission of [third party].
Embargo on data due to commercial restrictions	The data that support the findings will be available in [repository name] at [URL / DOI link] following an embargo from the date of

	publication to allow for commercialization of research findings.
Restrictions apply to the datasets	The datasets presented in this article are not readily available because [include reason, e.g., the data are part of an ongoing study or due to technical/ time limitations]. Requests to access the datasets should be directed to [text input].
Data derived from public domain resources	The data presented in this study are available in [repository name] at [URL/DOI], reference number [reference number]. These data were derived from the following resources available in the public domain: [list resources and URLs].
Data sharing is not applicable (only appropriate if no new data is generated or the article describes entirely theoretical research	No new data were created or analyzed in this study. Data sharing is not applicable to this article.
Data is contained within the article or supplementary material	The original contributions presented in this study are included in the article/supplementary material. Further inquiries can be directed to the corresponding author(s).

Dataset available on request from the authors	The raw data supporting the conclusions of this article will be made available by the authors on request.

Data preservation

MDPI acknowledges that researchers, institutions, journals, and data repositories have a shared responsibility to ensure long-term data preservation, and MDPI encourages authors to select data repositories with this goal in mind.

MDPI encourages authors to commit to preserving their datasets on their laboratory or institutional servers, for at least five years after publication. If, during that time, the repository to which the data were originally submitted disappears or experiences data loss, we may ask the authors to upload the data to another repository and publish a correction or update to the original publication.

If authors remove their data from the original public repository or change access criteria in a manner that is inconsistent with the publication, we may ask authors to notify the editorial office as soon as possible.

How to choose an appropriate data repository

MDPI encourages the submission of data to community-recognized data repositories where possible. We recommend the authors visit re3data.org or fairsharing.org to help identify registered and certified data repositories relevant to their subject area if no community resource is available. If the authors' institution has its generalist data repository this can be

used to host authors' data as long as the repository can mint DataCite DOIs, and allows for data to be shared under open terms of use (for example the CC0 waiver).

Data repository criteria

The following criteria should be considered when selecting an appropriate repository, ensuring that platforms:

- Ensure long-term persistence and preservation of datasets in their published form;
- Provide stable identifiers for submitted datasets (DOIs in most cases);
- Allow public access to data without barriers, such as logins or paywalls;
- Support open licenses (CC0 and CC-BY, or their equivalents, are required in most cases);
- Provide confidential review of submitted datasets without the requirement for reviewers to provide identifying information.

Data citation

Authors are encouraged to formally cite any datasets stored in external repositories that are mentioned within their manuscript, including the main datasets that are the focus of the submission, as well as any other datasets that have been used in the work. For previously published datasets, authors should cite both the related research articles and the datasets themselves. Appropriate citation of data is checked and enforced by *Journal Editorial* staff before publication.

Computer Code and Software

For work where novel computer code was developed, authors should release the code either by depositing in a recognized, public repository such as GitHub or uploading as supplementary information to the publication. The name, version, corporation and location

information for all software used should be clearly indicated. Please include all the parameters used to run software/programs analyses.

Supplementary Material

Additional data and files can be uploaded as "Supplementary Files" during the manuscript submission process. The supplementary files will also be available to the referees as part of the peer review process. Any file format is acceptable; however, we recommend that common, non-proprietary formats are used where possible. For more information on supplementary materials, please refer to https://www.mdpi.com/authors/layout#_bookmark83.

References in Supplementary Files

Citations and References in Supplementary files are permitted provided that they also appear in the reference list of the main text.

Unpublished Data

Restrictions on data availability should be noted during submission and in the manuscript. "Data not shown" should be avoided: authors are encouraged to publish all observations related to the submitted manuscript as Supplementary Material. "Unpublished data" intended for publication in a manuscript that is either planned, "in preparation" or "submitted" but not yet accepted, should be cited in the text and a reference should be added in the References section. "Personal Communication" should also be cited in the text and reference added in the References section. (see also the MDPI reference list and citations style guide).

Remote Hosting and Large Data Sets

Data may be deposited with specialized service providers or institutional/subject repositories, preferably those that use the DataCite mechanism. Large data sets and files greater than 60 MB must be deposited in this way. For a list of other repositories specialized in scientific and experimental data, please consult databib.org or re3data.org. The data repository name, link to the data set (URL) and accession number, doi or handle number of the data set must be provided in the paper. The journal Data also accepts submissions of data set papers.

Deposition of Sequences and Expression Data

New sequence information must be deposited to the appropriate database prior to submission of the manuscript. Accession numbers provided by the database should be included in the submitted manuscript. Manuscripts will not be published until the accession number is provided.

- *New nucleic acid sequences* must be deposited into an acceptable repository such as GenBank, EMBL, or DDBJ. Sequences should be submitted to only one database.
- *New high throughput sequencing (HTS) datasets* (RNA-seq, ChIP-Seq, degradome analysis, …) must be deposited either in the GEO database or in the NCBI's Sequence Read Archive (SRA).
- *New microarray data* must be deposited either in the GEO or the ArrayExpress databases.The "Minimal Information About a Microarray Experiment" (MIAME) guidelines published by the Microarray Gene Expression Data Society must be followed.
- *New protein sequences* obtained by protein sequencing must be submitted to UniProt (submission tool SPIN). Annotated protein structure and its reference sequence must be submitted to RCSB of Protein Data Bank.

All sequence names and the accession numbers provided by the databases must be provided in the Materials and Methods section of the article.

Deposition of Proteomics Data

Methods used to generate the proteomics data should be described in detail and we encourage authors to adhere to the "Minimum Information About a Proteomics Experiment". All generated mass spectrometry raw data must be deposited in the appropriate public database such as ProteomeXchange, PRIDE or jPOST. At the time of submission, please include all relevant information in the materials and methods section, such as repository where the data was submitted and link, data set identifier, username and password needed to access the data.

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Research and Publication Ethics

Research Ethics

Research Involving Human Subjects

Institutional Review Board Statement

When reporting on research that involves human subjects, human material, human tissues, or human data, authors must declare that the investigations were carried out following the rules of the Declaration of Helsinki of 1975, which was revised in 2013. According to point 23 of this declaration, approval from the local Institutional Review Board (IRB) or another appropriate ethics committee must be obtained before undertaking the research to confirm that the study meets national and international guidelines. As a minimum, a statement including the project identification code, date of approval, and name of the ethics committee or institutional review board must be stated in the ‘Institutional Review Board Statement’ Section of the article.

Example of an Institutional review board statement: “The study was conducted in accordance with the Declaration of Helsinki, and the protocol was approved by the Ethics Committee of XXX (Project identification code) on [date of approval].”

For non-interventional studies (e.g. surveys, questionnaires, social media research), all participants must be fully informed whether their anonymity is assured, why the research is being conducted, how their data will be used, and if there are any risks involved in participating. As with all research involving humans, ethical approval from an appropriate ethics committee must be obtained prior to conducting the study. If ethical approval is not required, authors must either provide an exemption from the ethics committee or cite the local or national legislation that indicates ethics approval is not required for this type of study. When a study has been granted exemption, the name of the ethics committee that provided this should be stated in the ‘Institutional Review Board Statement’ Section with a full explanation for the rejection of ethical approval.

Informed Consent Statement

Manuscripts reporting studies involving human participants, human data, or human tissue must include a statement of informed consent for participation in research. Verbal informed consent to participate in a study can be acceptable under some circumstances (such as in ethnographic studies). The authors must explain the rationale for using this kind of consent in the “Informed Consent Statement” Section. For verbal informed consent, a copy of the script used must be provided during the submission stage.

For all manuscripts that include identifying patient/participant information (personal details, images, or videos relating to an individual person), written informed consent for the publication of these details must be obtained from patients/participants (or their

relatives/guardians) before submitting to an MDPI journal. A blank version of the form used to obtain permission (without the patient/participant names or signature) should be provided upon submission. You may refer to our template permission form and provide an appropriate form after consulting with your affiliated institution.

For the purposes of publishing in MDPI journals, a consent, permission, or release form should include unlimited permission for publication in all formats (including print, electronic, and online), in sublicensed and reprinted versions (including translations and derived works), and in other works and products under open access license. To respect patients'/participants' and any other individuals' privacy, please do not send signed forms.

Private information identifying participants need not be included unless the identifiable materials are of relevance to the research (e.g., photographs of participants' faces that show a particular symptom). Patients'/participants' initials or other personal identifiers must not appear in any images. Patient/participant details must be anonymized as much as possible, e.g., do not mention specific age, ethnicity, or occupation where they are not relevant to the conclusions. Steps necessary to protect privacy may include de-identifying data, adding noise, or blocking portions of the database. Editors reserve the right to reject any submission that does not meet these requirements.

The Editorial Office reserves the right to request further documentation when necessary. The submitted manuscript will be scrutinized by the Editorial Office, and upon request, documentary evidence (signed consent forms and any related discussion documents from the ethics board) must be provided.

Example of an Informed Consent Statement: "Informed consent for participation was obtained from all subjects involved in the study." OR "Informed consent for participation is

not required as per local legislation [provide local legislation].” OR “Verbal informed consent was obtained from the participants. Verbal consent was obtained rather than written because [state the reason]”, OR “Informed consent for publication was obtained from all identifiable human participants.”

Requirements for Studies on Vulnerable Groups and Organ Transplants

If a study involves vulnerable groups, the manuscript will undergo an additional review by the editorial office. If requested, the author must provide documentary evidence, including blank consent forms and any related discussion documents from the ethics board or other relevant bodies. Additionally, when studies describe groups by race, ethnicity, gender, disability, disease, etc., an explanation regarding why such categorization was needed must be clearly stated in the article.

Articles describing human organ transplantation studies are subject to all policies for research involving human subjects. Additionally, the authors must specify the institution(s), clinic(s), or department(s) from which the organs or tissues were sourced. MDPI does not accept manuscripts that report data on organs and/or other materials obtained from illegal commercial activity, executed prisoners, or other unethical practices relating to organ donations. Manuscripts addressing this practice, such as editorials or reports on its secondary consequences, may be considered at the discretion of the Editor-in-Chief but require a written appeal to the editorial office before submission. For further resources on organ transplantation, MDPI follows the glossary maintained by the Organ Procurement and Transplantation Network (https://optn.transplant.hrsa.gov/patients/glossary/).

Ethical Guidelines for the Use of Animals in Research

The editors will require that the benefits potentially derived from any research causing harm to animals are significant in relation to any cost endured by animals, and that procedures followed are unlikely to cause offense to the majority of readers. Authors should particularly ensure that their research complies with the commonly-accepted '3Rs [1]':

- Replacement of animals by alternatives wherever possible,
- Reduction in number of animals used, and
- Refinement of experimental conditions and procedures to minimize the harm to animals.

Authors must include details on housing, husbandry and pain management in their manuscript.

For further guidance authors should refer to the Code of Practice for the Housing and Care of Animals Used in Scientific Procedures [2], American Association for Laboratory Animal Science [3] or European Animal Research Association [4].

If national legislation requires it, studies involving vertebrates or higher invertebrates must only be carried out after obtaining approval from the appropriate ethics committee. As a minimum, the project identification code, date of approval and name of the ethics committee or institutional review board should be stated in Section ‘Institutional Review Board Statement’. Research procedures must be carried out in accordance with national and institutional regulations. Statements on animal welfare should confirm that the study complied with all relevant legislation. Clinical studies involving animals and interventions outside of routine care require ethics committee oversight as per the American Veterinary Medical Association. If the study involved client-owned animals, informed client consent must be obtained and certified in the manuscript report of the research. Owners must be fully informed if there are any risks associated with the procedures and that the research will be

published. If available, a high standard of veterinary care must be provided. Authors are responsible for correctness of the statements provided in the manuscript.

If ethical approval is not required by national laws, authors must provide an exemption from the ethics committee, if one is available. Where a study has been granted exemption, the name of the ethics committee that provided this should be stated in Section 'Institutional Review Board Statement' with a full explanation on why the ethical approval was not required.

If no animal ethics committee is available to review applications, authors should be aware that the ethics of their research will be evaluated by reviewers and editors. Authors should provide a statement justifying the work from an ethical perspective, using the same utilitarian framework that is used by ethics committees. Authors may be asked to provide this even if they have received ethical approval.

MDPI endorses the ARRIVE guidelines (arriveguidelines.org/) for reporting experiments using live animals. Authors and reviewers must use the ARRIVE guidelines as a checklist, which can be found at https://arriveguidelines.org/sites/arrive/files/documents/ARRIVE%20Compliance%20Questionnaire.pdf. Editors reserve the right to ask for the checklist and to reject submissions that do not adhere to these guidelines, to reject submissions based on ethical or animal welfare concerns or if the procedure described does not appear to be justified by the value of the work presented.

1. NSW Department of Primary Industries and Animal Research Review Panel. Three Rs. Available online: https://www.dpi.nsw.gov.au/dpi/animals/animal-ethics-infolink/three-rs
2. Home Office. Animals (Scientific Procedures) Act 1986. Code of Practice for the Housing and Care of Animals Bred, Supplied or Used for Scientific Purposes.

Available online: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/388535/CoPanimalsWeb.pdf

3. American Association for Laboratory Animal Science. The Scientific Basis for Regulation of Animal Care and Use. Available online: https://www.aalas.org/about-aalas/position-papers/scientific-basis-for-regulation-of-animal-care-and-use
4. European Animal Research Association. EU regulations on animal research. Available online: https://www.eara.eu/animal-research-law

Research Involving Cell Lines

Methods sections for submissions reporting on research with cell lines should state the origin of any cell lines. For established cell lines the provenance should be stated and references must also be given to either a published paper or to a commercial source. If previously unpublished *de novo* cell lines were used, including those gifted from another laboratory, details of institutional review board or ethics committee approval must be given, and confirmation of written informed consent must be provided if the line is of human origin.

An example of Ethical Statements:

The HCT116 cell line was obtained from XXXX. The $MLH1^{+}$ cell line was provided by XXXXX, Ltd. The DLD-1 cell line was obtained from Dr. XXXX. The DR-GFP and SA-GFP reporter plasmids were obtained from Dr. XXX and the Rad51K133A expression vector was obtained from Dr. XXXX.

Research Involving Plants

Experimental research on plants (either cultivated or wild) including collection of plant material, must comply with institutional, national, or international guidelines. We recommend that authors comply with the Convention on Biological Diversity and the Convention on the Trade in Endangered Species of Wild Fauna and Flora.

For each submitted manuscript supporting genetic information and origin must be provided. For research manuscripts involving rare and non-model plants (other than, e.g., *Arabidopsis thaliana, Nicotiana benthamiana, Oryza sativa*, or many other typical model plants), voucher specimens must be deposited in an accessible herbarium or museum. Vouchers may be requested for review by future investigators to verify the identity of the material used in the study (especially if taxonomic rearrangements occur in the future). They should include details of the populations sampled on the site of collection (GPS coordinates), date of collection, and document the part(s) used in the study where appropriate. For rare, threatened or endangered species this can be waived but it is necessary for the author to describe this in the cover letter.

Editors reserve the rights to reject any submission that does not meet these requirements.

An example of Ethical Statements:

Torenia fournieri plants were used in this study. White-flowered Crown White (CrW) and violet-flowered Crown Violet (CrV) cultivars selected from 'Crown Mix' (XXX Company, City, Country) were kindly provided by Dr. XXX (XXX Institute, City, Country).

Arabidopis mutant lines (SALKxxxx, SAILxxxx,…) were kindly provided by Dr. XXX, institute, city, country).

Clinical Trials Registration

Registration

MDPI follows the International Committee of Medical Journal Editors (ICMJE) guidelines which require and recommend registration of clinical trials in a public

trials registry at or before the time of first patient enrollment as a condition of consideration for publication.

Purely observational studies do not require registration. A clinical trial not only refers to studies that take place in a hospital or involve pharmaceuticals, but also refer to all studies which involve participant randomization and group classification in the context of the intervention under assessment.

Authors are strongly encouraged to pre-register clinical trials with an international clinical trials register and cite a reference to the registration in the Methods section. Suitable databases include clinicaltrials.gov, the EU Clinical Trials Register and those listed by the World Health Organisation International Clinical Trials Registry Platform.

Approval to conduct a study from an independent local, regional, or national review body is not equivalent to prospective clinical trial registration. MDPI reserves the right to decline any paper without trial registration for further peer review. However, if the study protocol has been published before the enrolment, the registration can be waived with correct citation of the published protocol.

CONSORT Statement

MDPI requires a completed CONSORT 2010 checklist and flow diagram as a condition of submission when reporting the results of a randomized trial. Templates for these can be found here or on the CONSORT website (http://www.consort-statement.org) which also describes several CONSORT checklist extensions for different designs and types of data beyond two group parallel trials. At minimum, your article should report the content addressed by each item of the checklist.

Dual Use Research of Concern

MDPI follows the practical framework defined in Guidance for Editors: Research, Audit and Service Evaluations and introduced by the Committee on Publication Ethics (COPE). Research that could pose a significant threat, with broad potential consequences to public health or national security, should be clearly indicated in the manuscript, and potential dual-use research of concern should be explained in the cover letter upon submission. Potential areas of concern include but are not limited to biosecurity, nuclear and chemical threats, and research with a military purpose or application, etc. For these manuscripts to be considered for peer review, the benefits to the general public or public health must outweigh the risks. The authors have a responsibility to comply with relevant national and international laws.

Sex and Gender in Research

We encourage our authors to follow the 'Sex and Gender Equity in Research – SAGER – guidelines' and to include sex and gender considerations where relevant. Authors should use the terms sex (biological attribute) and gender (shaped by social and cultural circumstances) carefully in order to avoid confusing both terms. Article titles and/or abstracts should indicate clearly what sex(es) the study applies to. Authors should also describe in the background, whether sex and/or gender differences may be expected; report how sex and/or gender were accounted for in the design of the study; provide disaggregated data by sex and/or gender, where appropriate; and discuss respective results. If a sex and/or gender analysis was not conducted, the rationale should be given in the Discussion. We suggest that our authors consult the full guidelines before submission.

Borders and Territories

Potential disputes over borders and territories may have particular relevance for authors in describing their research or in an author or editor correspondence address, and should be respected. Content decisions are an editorial matter and where there is a potential or perceived dispute or complaint, the editorial team will attempt to find a resolution that satisfies parties involved.

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Publication Ethics Statement

IJERPH is a member of the Committee on Publication Ethics (COPE). We fully adhere to its Code of Conduct and to its Best Practice Guidelines.

The editors of this journal enforce a rigorous peer review process together with strict ethical policies and standards to ensure to add high quality scientific works to the field of scholarly publication. Unfortunately, cases of plagiarism, data falsification, image manipulation, inappropriate authorship credit, and the like, do arise. The editors of *IJERPH* take such publishing ethics issues very seriously and are trained to proceed in such cases with a zero tolerance policy.

Authors wishing to publish their papers in *IJERPH* must abide to the following:

- Any facts that might be perceived as a possible conflict of interest of the author(s) must be disclosed in the paper prior to submission.
- Authors should accurately present their research findings and include an objective discussion of the significance of their findings.
- Data and methods used in the research need to be presented in sufficient detail in the paper, so that other researchers can replicate the work.
- Raw data should preferably be publicly deposited by the authors before submission of their manuscript. Authors need to at least have the raw data readily available for presentation to the referees and the editors of the journal, if requested. Authors need

to ensure appropriate measures are taken so that raw data is retained in full for a reasonable time after publication.

- Simultaneous submission of manuscripts to more than one journal is not tolerated.
- The journal accepts exact translations of previously published work. All submissions of translations must conform with our policies on translations.
- If errors and inaccuracies are found by the authors after publication of their paper, they need to be promptly communicated to the editors of this journal so that appropriate actions can be taken. Please refer to our policy regarding Updating Published Papers.
- Your manuscript should not contain any information that has already been published. If you include already published figures or images, please obtain the necessary permission from the copyright holder to publish under the CC-BY license. For further information, see the Rights and Permissions page.
- Plagiarism, data fabrication and image manipulation are not tolerated.
    - Plagiarism is not acceptable in *IJERPH* submissions.
      Plagiarism includes copying text, ideas, images, or data from another source, even from your own publications, without giving any credit to the original source.

      Reuse of text that is copied from another source must be between quotes and the original source must be cited. If a study's design or the manuscript's structure or language has been inspired by previous works, these works must be explicitly cited.

      All MDPI submissions are checked for plagiarism using the industry standard software iThenticate. If plagiarism is detected during the peer review process, the manuscript may be rejected. If plagiarism is detected after publication, an investigation will take place and action taken in accordance with our policies.

    - Image files must not be manipulated or adjusted in any way that could lead to misinterpretation of the information provided by the original image.

> Irregular manipulation includes: 1) introduction, enhancement, moving, or removing features from the original image; 2) grouping of images that should obviously be presented separately (e.g., from different parts of the same gel, or from different gels); or 3) modifying the contrast, brightness or color balance to obscure, eliminate or enhance some information.
>
> If irregular image manipulation is identified and confirmed during the peer review process, we may reject the manuscript. If irregular image manipulation is identified and confirmed after publication, we may correct or retract the paper.

Our in-house editors will investigate any allegations of publication misconduct and may contact the authors' institutions or funders if necessary. If evidence of misconduct is found, appropriate action will be taken to correct or retract the publication. Authors are expected to comply with the best ethical publication practices when publishing with MDPI.

Citation Policy

Authors should ensure that where material is taken from other sources (including their own published writing) the source is clearly cited and that where appropriate permission is obtained.

Authors should not engage in excessive self-citation of their own work.

Authors should not copy references from other publications if they have not read the cited work.

Authors should not preferentially cite their own or their friends', peers', or institution's publications.

Authors should not cite advertisements or advertorial material.

In accordance with COPE guidelines, we expect that "original wording taken directly from publications by other researchers should appear in quotation marks with the appropriate citations." This condition also applies to an author's own work. COPE have produced a discussion document on citation manipulation with recommendations for best practice.

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Reviewer Suggestions

During the submission process, please suggest three potential reviewers with the appropriate expertise to review the manuscript. The editors will not necessarily approach these referees. Please provide detailed contact information (address, homepage, phone, e-mail address). The proposed referees should neither be current collaborators of the co-authors nor have published with any of the co-authors of the manuscript within the last three years. Proposed reviewers should be from different institutions to the authors. You may identify appropriate Editorial Board members of the journal as potential reviewers. You may suggest reviewers from among the authors that you frequently cite in your paper. For detailed information regarding the qualifications and responsibilities of the reviewers, please visit https://www.mdpi.com/reviewers.

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Extensive English Editing

It is the authors' responsibility to submit their work in correct English. The APC includes only minor English editing, conducted by native English speakers. The APC does not include extensive English editing. If extensive editing is required, your paper could be returned to you at the English editing stage of the publication process. This could delay the publication of your work. You may have your work reviewed by an experienced English-speaking colleague or use a paid language-editing service before submitting your paper for publication. We offer rapid English editing, completed in 1 day, here: Author Services.

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Preprints and Conference Papers

IJERPH accepts submissions that have previously been made available as preprints provided that they have not undergone peer review. A preprint is a draft version of a paper made available online before submission to a journal.

MDPI operates *Preprints*, a preprint server to which submitted papers can be uploaded directly after completing journal submission. Note that *Preprints* operates independently of the journal and posting a preprint does not affect the peer review process. Check the *Preprints* instructions for authors for further information.

Expanded and high-quality conference papers can be considered as articles if they fulfill the following requirements: (1) the paper should be expanded to the size of a research article; (2) the conference paper should be cited and noted on the first page of the paper; (3) if the authors do not hold the copyright of the published conference paper, authors should seek the appropriate permission from the copyright holder; (4) authors are asked to disclose that it is

conference paper in their cover letter and include a statement on what has been changed compared to the original conference paper.

Unpublished conference papers that do not meet the above conditions are recommended to be submitted to the Proceedings Series journals.

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Authorship

MDPI follows the International Committee of Medical Journal Editors (ICMJE) guidelines which state that, in order to qualify for authorship of a manuscript, the following criteria should be observed:

- Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND
- Drafting the work or reviewing it critically for important intellectual content; AND
- Final approval of the version to be published; AND
- Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Those who contributed to the work but do not qualify for authorship should be listed in the acknowledgments. More detailed guidance on authorship is given by the International Committee of Medical Journal Editors (ICMJE).

Any change to the author list should be approved by all authors including any who have been removed from the list. The corresponding author should act as a point of contact between the editor and the other authors and should keep co-authors informed and involve them in major decisions about the publication. We reserve the right to request confirmation that all authors meet the authorship conditions.

For more details about authorship please check MDPI ethics website.

Editorial Independence

Lack of Interference with Editorial Decisions

Editorial independence is of utmost importance and MDPI does not interfere with editorial decisions. All articles published by MDPI are peer reviewed and assessed by our independent editorial boards, and MDPI staff are not involved in decisions to accept manuscripts. When making an editorial decision, we expect the academic editor to make their decision based only upon:

- The suitability of selected reviewers;
- Adequacy of reviewer comments and author response;
- Overall scientific quality of the paper.

In all of our journals, in every aspect of operation, MDPI policies are informed by the mission to make science and research findings open and accessible as widely and rapidly as possible.

Editors and Editorial Staff as Authors

Editorial staff or editors shall not be involved in processing their own academic work. Submissions authored by editorial staff/editors will be assigned to at least two independent outside reviewers. Decisions will be made by other Editorial Board Members who do not have a conflict of interest with the author. Journal staff are not involved in the processing of their own work submitted to any MDPI journals.

Conflicts of Interest

According to The International Committee of Medical Journal Editors, “Authors should avoid entering into agreements with study sponsors, both for-profit and non-profit, that interfere with authors’ access to all of the study’s data or that interfere with their ability to analyze and interpret the data and to prepare and publish manuscripts independently when and where they choose.”

All authors must disclose all relationships or interests that could inappropriately influence or bias their work. Examples of potential conflicts of interest include but are not limited to financial interests (such as membership, employment, consultancies, stocks/shares ownership, honoraria, grants or other funding, paid expert testimonies and patent-licensing arrangements) and non-financial interests (such as personal or professional relationships, affiliations, personal beliefs).

Authors can disclose potential conflicts of interest via the online submission system during the submission process. Declarations regarding conflicts of interest can also be collected via the MDPI disclosure form. The corresponding author must include a summary statement in the manuscript in a separate section “Conflicts of Interest” placed just before the reference list. The statement should reflect all the collected potential conflicts of interest disclosures in the form.

See below for examples of disclosures:

Conflicts of Interest: Author A has received research grants from Company A. Author B has received a speaker honorarium from Company X and owns stocks in Company Y. Author C has been involved as a consultant and expert witness in Company Z. Author D is the inventor of patent X.

If no conflicts exist, the authors should state:

Conflicts of Interest: The authors declare no conflicts of interest.

IJERPH will not consider manuscripts for publication that report tobacco research funded, in whole or in part, by a tobacco company or tobacco industry organization or affiliate. For non-tobacco related research funded by the tobacco industry or research funded by the e-cigarette industry and pharmaceutical industry, authors should disclose any potential conflicts of interest based on The New International Journal of Environmental Research and Public Health (IJERPH) Policy Concerning Tobacco Company Funding.

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Editorial Procedures and Peer Review

Pre-check

Immediately after submission, the journal's Managing Editor will perform the technical pre-check to assess:

- Overall suitability of the manuscript to the journal/section/Special Issue;
- Manuscript adherence to high-quality research and ethical standards;
- Standards of rigor to qualify for further review.

The academic editor (i.e., the Editor-in-Chief in the case of regular submissions, the Guest Editor in the case of Special Issue submissions, or an Editorial Board member in the case of a conflict of interest and of regular submissions if the Editor-in-Chief allows) will be notified of the submission and invited to perform an editorial pre-check. During the editorial pre-check phase, the academic editor will assess the suitability of the submission with respect to the scope of the journal, as well as the overall scientific soundness of the manuscript, including the relevance of the references and the correctness of the applied methodology.

Academic editors can decide to reject the manuscript, request revisions before peer review, or continue with the peer review process and recommend suitable reviewers.

Peer Review

Once a manuscript passes the initial checks, it will be assigned to at least two independent experts for peer review. A single-blind review is applied, where authors' identities are known to reviewers. Peer review comments are confidential and will only be disclosed with the express agreement of the reviewer.

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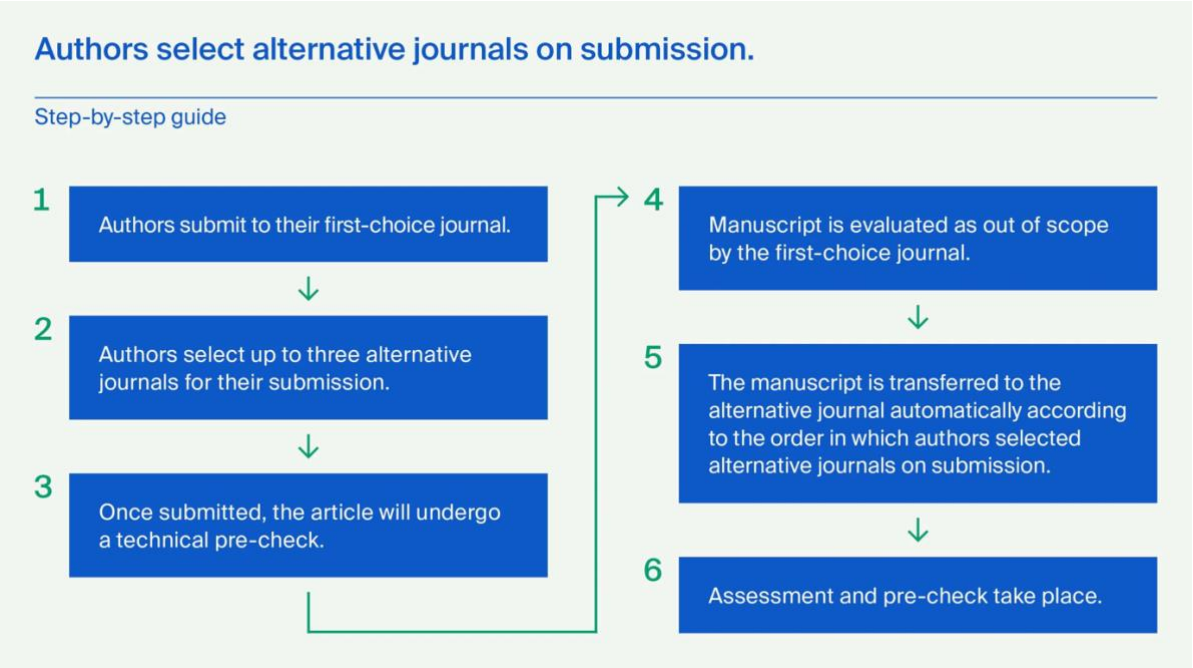
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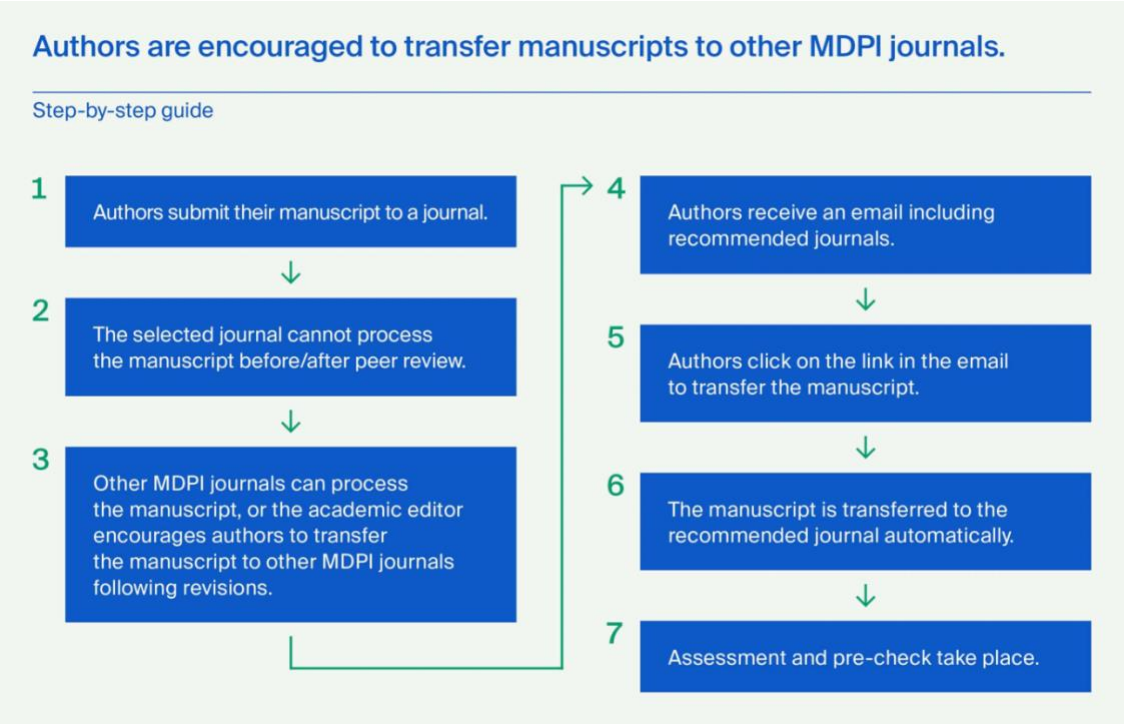
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Appendix F

Table 3

Glossary of Relational Qualities

Relational Quality	Description
Empathy	Empathy operates both cognitively and emotionally. On a cognitive level, it involves understanding another person's internal experiences. Emotionally, it reflects the capacity to deeply understand and resonate with another's feelings, experiencing them "as if" from their perspective.
Congruence	Congruence arises when a person's verbal and nonverbal communication is authentic, consistent, and mutually reinforcing, with alignment among their thoughts, feelings, and actions. Contextual congruence involves behavior that aligns appropriately with the situation. Positional congruence pertains to maintaining alignment with the relational dynamic, treating both parties as equals in a parallel relationship or adopting the suitable "one-up" or "one-down" position in a complementary relationship.
Unconditional positive regard (UPR)	Unconditional Positive Regard (UPR) is rooted in the understanding that every individual engages with others through the lens of their underlying values, or the absence of such values. Unconditional acceptance involves embracing all aspects of a person's experiences without making value judgements.
Confirmation	Confirmation involves recognising, affirming and validating the rights, opinions, status, dignity, and emotions of another person.
Transparency/visibility/clarity	Transparency encompasses openness, clarity, and visibility, involving a willingness to share thoughts, feelings, and opinions while being authentic and vulnerable. Visibility implies revealing more of oneself through personal disclosure, fostering trust and demonstrating authenticity. It also entails presenting oneself in a clear and understandable way, ensuring that verbal and nonverbal messages are coherent and easily interpreted. In contrast, a lack of transparency or vague communication can leave the recipient feeling uncertain or confused.
Effective /ineffective expression of needs	The effective expression of needs involves the ability to recognise, articulate, and communicate those needs clearly and concretely, creating a conducive impact. Conversely, ineffective expression often manifests as unclear or vague communication and may even take the form of silence.
Emotional closeness/distance	Emotional closeness or distance refers to the noticeable level of emotional connection between individuals. This dynamic depends on the context of the interaction and can shift based on each person's efforts to create or maintain distance. Closeness involves affiliation and connection, with available opportunities for individuals to build understanding and share mutual feelings. However, if one party is excessively close or distant inappropriately, it can undermine mutual trust.
Degree of interpersonal flexibility/rigidity	The level of interpersonal flexibility or rigidity reflects how much a person can adapt and shift in their interactions with others. Someone with a flexible interpersonal approach can adjustt to varying relational needs and contexts, demonstrating openness to the subjective experiences of others. In contrast, a person with a rigid approach resists new information and clings firmly to their own fixed ideas of interaction, disregarding the internal contexts and experiences of others.
Adequacy of problem-solving skills	Adequate problem-solving involves addressing interpersonal challenges by accurately identifying their underlying causes and implementing effective and workable solutions. It involves a consideration of the impact on others.
Defining the relationship: move for control (while not a relational quality, mediates how relational qualities are expressed)	Defining a relationship in terms of control dynamics involves understanding how individuals navigate and assert control within their interactions. These dynamics can be classified as parallel, complementary, or symmetrical. In a parallel relationship, both parties are equals, alternating control during interactions. In a complementary relationship, one person assumes a one-up position while the other takes a one-down role. In a symmetrical relationship, there is a continuous escalation as both individuals vie for control.

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Appendix G

DECLARATION BY THE LANGUAGE EDITOR

I hereby declare that I have provided language editing consultation for the thesis

A conceptual framework to promote effective relational outcomes within a residential intergenerational caring context in South Africa

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