Mechanisms in Dynamic Interplay with Contexts in a Multigenerational Traditional Food Preparation Initiative Involving Rural South African Women

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ABSTRACT

This study describes the causal powers of mechanisms in dynamic interplay with relevant contexts (socio-cultural-historical and interpersonal) by looking at the outcome patterns of a multigenerational food initiative from a critical realist perspective. Heuristic constructs taken from psychological, interactional, and group theories implied in the multigenerational initiative are discussed. Textual data, obtained from women (n = 104) from three generations in rural South Africa in 11 focus group discussions, were analyzed thematically to present outcome patterns. Findings illustrate the transformative potential of mechanisms, their interrelatedness on different levels, and the activation of a deeper level mechanism. Broad guidelines are proposed for sustainable intergenerational initiatives.

KEYWORDS: Socio-cultural-historical and interpersonal contexts; multigenerational traditional food initiative; realist perspective; rural South Africa; women

Introduction

Various intergenerational or multigenerational initiatives have been designed and implemented globally to facilitate enabling, age-integrated social spaces (UNICEF, 2013) to deal with the impact of the "longevity revolution" (Kaplan, Sánchez, & Hoffman, 2017, p. 1). These intergenerational initiatives have for the most part been ad hoc, once off, focusing on the outcomes for individuals and mainly benefiting one of the generational groups (Hewett, Roos, & De Klerk, 2016). Scant attention has been paid to the outcomes of intergenerational initiatives in terms of 'what works, for whom, in which context and circumstances and how' (Dalkin, Greenhalgh, Jones, Cunningham, & Lhussier, 2015; Emmel, Greenhalgh, Manzano, Monaghan, & Dalkin, 2018; Westhorp, 2018). Intergenerational initiatives are usually introduced into complex, open systems that are continuously formed and reformed by dynamic, interrelated, and mutually influencing processes (Astbury, 2018). In promoting sustainable intergenerational initiatives, it is important to understand the interaction between mechanisms in terms of the underlying changes that are triggered in the particular context of implementation to be able to explain their impact or outcomes and to identify transferable theory-based knowledge and ideas to other settings (Greenhalgh et al., 2015).

Accordingly, a critical realist ontology is relevant because it enables us to go beyond the descriptive outcomes of intergenerational initiatives to explain causal powers of real social processes (Clark, MacIntyre, & Cruickshank, 2007; Emmel et al., 2018). In this article, we set out to uncover the underlying mechanisms which give rise to the outcome patterns of a

multigenerational food initiative involving unrelated women of three Setswana-speaking generations in rural South Africa. To this end, the following structure was applied: (1) describe the specific traditional food initiative; (2) make explicit the heuristic constructs taken from the psychological, interactional, and group theories in this multigenerational initiative; (3) describe the relevant socio-cultural-historical and interpersonal contexts; (4) apply a qualitative methodology to obtain outcome patterns to (5) provide a coherent explanation of how the context, mechanisms, and outcomes were linked, or not; and (6) propose how a critical realist approach could be applied in planning and implementing intergenerational initiatives.

Multigenerational traditional food preparation initiative

Intergenerational initiatives aim to create social change by enabling members from different generations, involving women in a multigenerational traditional food initiative in this instance, to make different choices in how they relate and interact with each other. The only other known intergenerational initiative involving traditional food was developed by Shazali, Shariff, Zahari, Norazmir, and Muhammad (2013). It was implemented during the national Malay festival in Malaysia to promote traditional food knowledge being passed down between related generational members, from parent to child. As far as we know, the mechanisms involved in this initiative were not reported.

The program

Two local field workers who had previously worked on a sustainable diet research project (Claasen et al., 2015) acted as local field assistants and gatekeepers to initiate contact with the women. They distributed flyers in the communities and invited potential participants by word of mouth. Women who were interested in taking part attended an information meeting in which the researchers introduced themselves and explained the event's objectives and procedure. Those who opted to participate gave their signed consent while minor participants (age 14–18 years) provided proof of parental permission and signed an adolescent consent form detailing their involvement in the activities.

On the day, the women were grouped according to age into three groups: 47 older women (50 years and older), 43 adult women (25–50 years) and 39 middle- and late-adolescent women (14–24 years). For practical purposes, the older women, with a mean age of 60 years, are referred to as G1s, the adult women with mean age 32 years as G2s, and the middle- and late-adolescent women, with mean age 17 years, as G3s. Altogether 129 women were assigned to nine multigenerational groups of nine to 14 members each. Every woman in each group was allocated a number between one and 14. The women were then requested to group themselves in the corresponding group numbers (1–14) to form multigenerational groups with representation from each age group. Once the multigenerational groups had been formed, each group was asked to create a menu to include four traditional dishes: a starch, a vegetable, a meat dish, and something different, which could be a nonalcoholic drink, dessert, or anything else they would describe as a traditional dish or beverage. They were told that they would have time to discuss in their smaller groups what dishes they proposed and reconvene as a larger group to share their

menus. In the larger group, duplicated dishes were removed and the women collectively considered other dishes to ensure variety.

Each group compiled a list of ingredients for their dishes to cater for nine to 14 people and decided among themselves who would buy the ingredients at a grocery store, or gather them from the wild, their own gardens, household, or livestock. On the day of preparing the traditional food, most of the women, young and old, came dressed in their traditional wear, and a local artist entertained them with traditional music. Fires were lit and the women prepared food using their own pots and cooking utensils and cooked it on open fires (Chigeza, Claasen, & Roos, 2020). When it was ready, they all had a meal together. At the end of the day, all the women were invited to reflect on their experiences which were held six days after the event. An example of one of the group's dishes is shown in the photo below.

Photo 1. A plate of traditional Batswana food

From left: A calabash used for traditional beer and a meal of leafy *marogo* as a vegetable dish, sheep's tripe and sheep's head, and steamed dumplings garnished with green peppers, presented on a traditional woven mat.

Heuristic constructs taken from theories implicit in the multigenerational initiative

Heuristic constructs taken from psychological, interactional, or group theories were used in designing and implementing this multigenerational initiative.

Heuristic constructs taken from psychological theories

The following constructs were used, namely: positive emotions, agency, familiarity, and reactivity. When people experience positive emotions, such as joy their cognitive and emotional frames of reference open up and they become more receptive to new possibilities in the social environment (Fredrickson, 2001; 2013; Warren, Donaldson, & Lee, 2018); we are all familiar with the joy we experience when preparing food and sharing it in a convivial social environment. Agency is the notion of people having influence and a free choice in affairs that directly affect their lives (Nelson & Prilleltensky, 2005). A sense of agency was introduced when generational women decided among themselves what traditional dishes they wanted to make, the ingredients required, and how the dishes would be prepared and presented. A sense of familiarity was promoted by providing them with the opportunity to choose which specific traditional food they would like to prepare. It was assumed that preparing familiar, traditional food and eating it together, to the sound of traditional music by a local artist, in this cultural context, could reduce individual women's reactivity. Reactivity refers to processes in the dorsolateral prefrontal cortex and their relation to the activation of the amygdala and to sensory reactions when people are sensing danger or uncertainty (Hogan, 2011).

Heuristic constructs taken from interactional theories

Creating context is required to provide a clear frame for meaningful relational interactions, drawing on interactional and communication theories (Roos, 2016; Vorster, Roos, & Beukes, 2013; Watzlawick, Bavelas, & Jackson, 2011). Without context, the meaning is obscured and the impact on a psychological level is confusion, with an increased risk that participants might withdraw from the interaction (Roos, 2016). A clear context was created from the recruitment stage through to obtaining informed consent and to the implementation of the food preparation activity. On the day the event took place, the context was further created by informing the women how the multigenerational groups would be formed and the specific activities they would be asked to perform in their smaller groups as well as in the larger group.

Heuristic constructs taken from group theories

Two constructs were used: introducing a shared goal to promote collaboration, and breaking down age group boundaries. When groups have a shared goal, such as preparing traditional dishes, collaboration is promoted (Allport, 1954; Genoe, Crosbie, Johnson, Sutherland, & Goldberg, 2013; Mason, Mastro, & Wirth, 2013). Preparing food and having a meal together require face-to-face interactions which serve to break down age group boundaries, limit prejudice, and provide opportunities for the different generational members to observe the generational other, up close and personal (Allport, 1954; Chigeza, De Wet, Roos, & Vorster, 2013; Sánchez, García, Díaz, & Duaigües, 2011).

Conceptual discussion of mechanisms

Mechanisms are those underlying entities, processes, social structures within and between people, communities, or introduced by intergenerational initiatives, which are triggered in a

particular context and cause change or generate outcome patterns (Greenhalgh et al., 2015; Hawkins, 2014; Westhorp, 2018). For this multigenerational traditional food preparation initiative, the focus was on enabling generational women to make and sustain different choices in how they relate and interact with the generational other. The focus was thus on the construct mechanisms of reasoning and resources on an individual and a group level (Westhorp, 2018). On an individual level, changing reasoning implies a change in values, beliefs, attitudes, or logic when an individual interacts with the generational other (Greenhalgh et al., 2015). On a group level, decision-making is shaped by the socio-cultural environment, guiding social norms, and other social forces, such as 'group think' whereby group consensus always outweighs individual reasoning (Westhorp, 2018). Reasoning on an individual and group level functions in combination with resources, or their lack. Resources include, for example, information, skills, financial resources, social support, and so on. The combination of internal individual and group forces produces particular outcomes in dynamic interplay with particular contexts (socio-cultural-historical and interpersonal), which is known as a mechanism (Goicolea, Coe, Hurtig, & Sebastian, 2012; Greenhalgh et al., 2015).

Contexts

The rural, socio-cultural-historical and interpersonal contexts shape, enable, or disable the outcomes of any intergenerational initiative (Clark, Lissel, & Davis, 2008; Westhorp, 2018). Any aspect of a particular context can trigger different change mechanisms for individuals (Greenhalgh et al., 2015). Context is also not limited to the physical location but includes any characteristic of the generational members; the interrelationships between the different role players; and the institutional arrangement in which the initiative is embedded (Pawson, 2018). Two contexts will be described, namely the socio-cultural-historical and the interpersonal.

Socio-cultural-historical context

Formal and informal intergenerational interactions are formed and informed by broader contextual influences, such as poverty, HIV and Aids, and migration (Aboderin & Hoffman, 2015). In South Africa, specifically, forced relocations during apartheid in the 1960s, impacted negatively on their relational interactions with younger people, according to indigenous Setswana-speaking older people (Roos, Kolobe, & Keating, 2014).

The multigenerational traditional food preparation initiative was implemented in two rural South African communities, Valspan and Sekhing, which form part of the Vaalharts region in the Northern Cape and the North-West Province, respectively. The mostly Setswana-speaking communities are, like most rural African communities, organized around the notion of holism: a deep spiritual connectedness between the living and the 'living dead,' and around multigenerational households, with an implicit care contract to provide upward and downward physical, instrumental, and emotional care (Aboderin, 2006; Chilisa, 2012; Mbiti, 1969). Daily activities are organized in terms of socializing rituals, such as preparing food on open communal fires and a downward intergenerational transmission of knowledge. Valspan and Sekhing communities have high unemployment and vulnerable health and food security statuses, and rely on tangible and intangible care from

multigenerational households arranged around the older recipients of a means-tested old-age pension (Claasen et al., 2015; Coetzee, 2011; Hoffman, 2014; Makiwane, 2007).

Interpersonal context

Research on intergenerational relational experiences in rural South Africa are reportedly strained: older people are dissatisfied with younger people's caring for and about them, and treating them disrespectfully (Aboderin & Hoffman, 2015; Roos, 2016; Roos, Silvestre, & De Jager, 2017), while younger people expressed negative perceptions in anticipation of unpleasant relational interactions, frustrating contact, and a breakdown of relations with older people (Roos & Robertson, 2019). The impact of ineffective intergenerational contact is particularly profound in this and other rural settings in South Africa because it contributes to older people's vulnerability, compromised reciprocal care for generational members, and relational wellbeing in general (Roos et al., 2017).

From an interactional perspective, indications are that the dissatisfaction of generational members can be attributed to a rigid definition of the relationship between older and all younger people and ineffective relational qualities. People invariably define their relationship with each other based on their shared relational history (Smith-Acuňa, 2011); and in every interaction (Vorster, 2011). Watzlawick et al. (2011) identified a symmetrical relationship, which is a struggle for control in the relationship; a complementary-defined relationship, with one participant in leading and the other in a following position; and a parallel-defined relationship, between equals. Research confirmed that a rigid definition of a complementary-defined relationship, with older people in the leading and all younger people adopting a submissive position, contributed to the tension between generational groups, despite younger people's increasing autonomy or their advanced technological knowledge (see Roos, 2016; Roos & Robertson, 2019).

Relational qualities are observable behavior, consisting of actions and reactions between interacting people, which manifest on a continuum from effective to ineffective (see Roos, 2016, 2018; Roos & Du Toit, 2014; Vorster et al., 2013). In this particular context, research indicated that ineffective relational qualities, such as judgment (lack of empathy), conditional acceptance, and lack of perspective-taking are likely to elicit rejection from a participating person, or escalating, sometimes ineffective, attempts to address their psychological needs or social goals (Roos et al., 2017; Roos & Wheeler, 2016).

Method

Ethical approval to obtain reflections from the women who participated in the multigenerational traditional food preparation initiative was obtained from the North-West University's Health Research Ethics Committee (NWU-00040-13-A1). A qualitative descriptive research design was applied to obtain "data-near" reflections from the women to present the outcome patterns of this multigenerational initiative (Sandelowski, 2010, p. 78). It was acknowledged that the women might well recall selectively their perceptions and emotions before participating in the traditional food event (Levine, 2015). However, informed by a critical realist perspective, the aim was to identify which mechanisms in dynamic interplay with the socio-cultural-historical and interpersonal contexts provoked

certain outcome patterns, rather than to report on the impact or outcomes of the specific initiative.

Participants and data collection

Six days after the multigenerational initiative, a convenience sample of 104 (80.6% of the women who participated in the original activity) presented themselves at local community halls to participate in focus group discussions (FGDs): 34 G1s, 38 G2s, and 32 G3s. In total 11 FGDs were conducted: three G3s (one in Valspan and two in Sekhing), four G2s (two groups per community), and four G1s (two groups per community). The FGDs were conducted with age-specific generational groups to obtain their specific perspectives (Barbour, 2007). Each group consisted of eight to 10 women per group.

The FGDs lasted between 60 and 90 min and were conducted by two researchers trained in qualitative data collection, with the assistance of a Setswana-speaking translator. They asked: By reflecting back on the preparation of traditional food with women from other generations, what stood out for you? What did you experience, specifically in relation to your interaction with women from other generations? What did you find meaningful in the interaction, and why? Thinking about your perceptions of the other generations *before* the event, how do you think about them now, *after* the event, and why? The FGDs were audio-recorded, transcribed verbatim in Setswana and translated into English by a bilingual research assistant.

Data analysis and trustworthiness

The textual data were analyzed thematically according to Clarke and Braun (2013). The researchers familiarized themselves with the data by reading and re-reading the transcriptions. They assigned codes to formulate themes and subthemes, which are presented in Table 1. Trustworthiness was ensured by applying the guidelines proposed by Lincoln and Guba (1985). Prolonged engagement with the data collection site was achieved because the researchers had been working in the Vaalharts communities since 2012 and this continuity contributed to a trusting relationship established between participants and researchers. Perspectives from three different generational groups provided a diverse representation of views (crystallization) as well as analysis of the data by three researchers independently. Member checking by the presentation of research findings and discussions with field workers and participants from the communities during feedback meetings added to the study's trustworthiness.

Table 1. Outcome patterns of the multigenerational traditional food preparation initiative

Before the multigenerational traditional food preparation initiative	Psychological level: negative perceptions and emotions Interactional level
After the multigenerational traditional food preparation initiative	Psychological level: positive perceptions and emotions Interactional level • Changed relational definition • Effective relational qualities • Unconditional acceptance • Adopting a circular approach • Transparent (visible) generational presentation Group level

Findings

The outcome patterns presented in Table 1 will be used to explain what worked well or less well – or not at all for the women in this particular context. The different generational groups are indicated as G1, G2, or G3 followed by a participant number, e.g. #1, #2 and so on, to ensure transparent reporting of findings.

Before *the multigenerational traditional food preparation initiative*

Women from all three generational groups expressed outcomes on a psychological and interactional level but not on a group level. All three generational groups reported negative perceptions and emotions, ranging from extremely uncomfortable to unhappy.

Psychological level: negative perceptions and emotions

G1s' perceptions of G2s were initially that they *"very stubborn and difficult to work with as they are full of themselves and* [do] *not accept or listen to us older people"* (G1#3). In relation to G3s, G1s perceived them as *"bad mannered* [children] *who don't speak with respect to their parents"* (G1#6). G2s perceived G1s as rigid: *"I knew them to be very firm in the way they do things"* (G2 #6), and in relation to G3s, the G2s perceived them as *"young people* [who] *do not have good manners and are not responsible at all"* (G2 #4). G3s expected that the G1s and G2s *"were going to treat us badly and bully us, because they always want to be respected"* (G3 #6).

All three generational groups expressed negative emotions based on their subjective experiences in relation to the anticipated interactions with the generational other. The G1s expressed unhappiness in relation to G2s: *"I was not happy when we were asked to mix with other groups as I knew them* (G2s and G3s) *to be stubborn"* (G1#3). The G1s were also unhappy to be interacting with G3s and did not feel equipped for the interaction, which they expected to be troublesome. For example, G1#5 said: *"When I saw the young ones* (G3s), *I said 'here comes trouble.' I felt weak. I was thinking this is a joke."* The G2s also expressed negative emotions in relation both to G1s and G3s. In relation to the G1s, G2s voiced unhappiness because they perceived the former to be rigid: *"I was not happy at all when I was told we were going to prepare the traditional food together with the older*

people" (G2 #6). In relation to the G3s, G2#4 explained that her *"spirit was down when we were mixed with other generations, especially the young ones*." G3s expressed discomfort in relation both to G1s and G2s which is supported by G3#6: *"I was not okay with the idea of working with other older generations."* Some G3 participants even expressed fear of working with G1s and G2s *"I was afraid that the older generations were going to bully us"* (G3#10).

Interactional level

All generational members confirmed a complementary-defined relationship, with G1s in a leading and G2s and G3s in a submissive position. G1s prescribed how the generational members should cook traditional food. This is confirmed by G2#8: *"Older people were just giving us instructions on what to cook and how to cook."* If G1s were not leading the group, G2s adopted the leading position and G3s had to comply with instructions from both older generations. G3s found their submissive position overwhelming: *"The instructions were just too much* [because] *both the older generations* (G1s and G2s) *were just telling us what to do"* (G3#10). The rigid relational definition contributed to ineffective intergenerational interactions, reported by G2#8, who commented that the generational members *"didn't get along at the beginning."*

After *the multigenerational traditional food preparation initiative*

Outcome patterns identified after participation in the initiative emerged on all three levels: psychological, interactional, and group.

Psychological level: positive perceptions and emotions

All generational groups reported positive perceptions. The G1s said that *"the young generation had respect for elders, they were not disrespectful"* (G1#7). In relation to G3s, the G2s also experienced being loved: *"Even the younger ones* (G3s), *those children are full of love"* (G2 #1). G3#1 expressed her positive perceptions: *"I realized that both the older groups* (G1s and G2s) *have strong love for us and they showed and taught with love."*

All three groups reported to be happy and some admitted to being pleasantly surprised after participating in the multigenerational food preparing activities and eating together. Here G1#3 said: *"It was a happy day for me. I wish I could have stayed for ever."* G2#10 commented: *"I was happy because these days we mostly tend to forget our culture and concentrate on the modern ways of cooking. Everything taught us to love our culture."* G3#9 said that she *"enjoyed working and chatting with* [the] *old people."* The same participant said that the manner in which G1s and G2s interacted and related to the younger people surprised her: *"We were surprised that both older groups would listen to us. We enjoyed working together."*

Interactional level

The women described a changed relational definition and effective relational qualities.

Changed relational definition

All generational groups described a parallel-defined relationship in which the controlling position in the relationship alternate. G1#5 confirmed this: *"We corrected each other – the teenagers would also correct us."* Some of the older women noted that they had also learned from the younger people: *"I am an older person, but I realized that this was a learning curve. I learned a lot from other generations about traditional food"* (G1# 8). According to G2#7, the change in relational definition was observed when the older people realized that the younger G2s and G3s also knew about traditional food preparation and showed skill in the presentation of the dishes: *"After the older people noticed that we the middle-aged and young ones know something about traditional food, especially garnishing the food to make it look nice, there was no leader any more, we were all working as one team."* A parallel-defined relationship is typical of a relationship between friends. In this regard, G3#3 remarked: *"I realized that we can be friends with anyone even if we are not of the same age,"* and G3#4 confirmed effective intergenerational interactions: *"We interacted very well. I made friends with other older and middle generations and exchanged phone numbers."*

However, some outcome patterns indicated a systemic resistance to changing the complementary-defined relational definition from older women in a leading position to a parallel-defined relationship between equals. Although all generational groups described the changed relational definition and resulting impact by expressing positive perceptions and emotions, all confirmed that the older generation was responsible for the downward transmission of knowledge to the younger people, and not the other way around, irrespective of the interpersonal context in which relational interactions were taking place. G1#6 said: *"We as older generation, we are letting the young ones down as we are not passing the information to them."* The downward intergenerational transmission of knowledge is important to preserve it: *"I really think we should continue because if we leave all this knowledge will be lost"* (G1#9). Knowledge passed down the generations benefits the community as a whole. G2s confirmed their acceptance of a submissive position in relation to the older people for *"teaching our young ones about our culture and traditional food"* (G2 #10), and G3s too believed that they should be taught by the older people: *"If you work together with the older generation you learn more which reminds us not to forget about our traditional food"* (G3 #10).

Effective relational qualities

Three relational qualities associated with effective relational interactions were identified, namely: unconditional acceptance, adopting a circular approach, and a transparent (visible) *generational presentation.*

Unconditional acceptance

This refers to the notion of accepting the generational other without judgment or conditionally. G2s were surprised that they had observed (and experienced) the G1s as accepting: "*I have never seen such humility and love displayed by the older people* [as] *on that day. They shared their knowledge of traditional food in a loving manner and* [were] *not*

being harsh to us" (G2#9). G3s confirmed that they had experienced the relational interactions with the two older generations as unconditionally accepting and without feeling judged. This they ascribed to their experience of G1s, who *"were kind. The middle-aged generation* (G2) *were also good to us."* G3#5 confirmed that even though they as younger women did not know how to prepare traditional food, the older generations were friendly: *"We did not know much about the traditional food. The two older generations were teaching us in a friendly manner. We respected each other, no matter what age."*

Adopting a circular approach

This quality refers to acknowledging that every generational member has an impact on the interaction with another (Vorster et al., 2013). The women noticed that the way in which they related and interacted with individual women from other generations had an impact on the responses they elicited from the generational other. For example, G1#3 said: *"I learned that if you talk to the young generation in a sensible way, they will respect you"* (G1#3). Another older woman (G1#6) confirmed this observation by saying: *"I realized that if you want children to respect you, you must respect them first."* G2s made the same observation, confirmed by G2#: *"Those children* (G3s) *are full of love; if you talk to them nicely they will respect you."* The impact of a respectful interaction was observed in the reaction of a member of another generation as illustrated in the following quote: *"I saw that respect changes everything"* (G2# 1).

Transparent (visible) generational presentation

It has been shown that the more transparently people present themselves, the more visible they become to others, which again contributes to a space conducive to relating to and interacting with members of another generational group (Roos, 2018; Vorster et al., 2013). One of the older women (G1#3) observed: *"We came here not knowing each other but on Saturday we became one big family. Everyone was free to do anything. It seems as if we have known each other for a long time."* G2s emphasized the enjoyable relationships that had developed once people got to know one another. This was confirmed by G2# 8, who said: *"We had fun! It feels as if we knew each other for a long time. We were able to engage and interact as different generations."* The G3s compared the experience with being treated like a family member. *"It was as if we knew each other for long. The older people and middle generation treated us as their own children"* (G3#1). *"I just wish we could work together for a longer time"* (G3#9).

Group level

The generational groups expressed an awareness of shared cultural and gender identities as Batswana women. G1#6 explained that *"this project* (multigenerational traditional food preparation initiative) *has united us – the young and old. We are proud to belong to the Batswana tradition."* G1#7 noted that even though the different generational groups were from the same community, they did not know one another well but that the multigenerational activity contributed to changing this: *"I realized … unity is power … we are one."* G2#4 confirmed that a deeper connection, underpinned by the values of *ubuntu* (being there because of and for the other) (Mbiti, 1969), enabled conflict-free interactions:

"This activity was an eye opener. We feel the spirit of ubuntu. It has never happened in this community before. There was no disagreement, and everyone was sharing ideas." A younger women confirmed this: *"I noticed that working with other generations is very fruitful especially the older generation"* (G3# 2).

Discussion of mechanisms in dynamic interplay with context

Primary data from participating generational women were juxtaposed with heuristic constructs taken from psychological, interactional, and group theories to offer an interpretive lens for the outcome patterns of a multigenerational food initiative. All three generational groups reported, as outcome patterns, positive perceptions, and emotions (positive psychological impact), effective relational qualities (interactional level), and a shared identity as Batswana women (group level) after participating in a multigenerational initiative. This suggests that the heuristic constructs taken from theories used in designing the initiative triggered mechanisms of reasoning on individual and group levels, which manifested on an observable interactional level. This outcome pattern also illustrates how a mechanism can be transformed into another pathway during the course of an intergenerational initiative (Westhorp, 2018).

The mechanisms on the psychological, interactional, and group levels are also interrelated, which would imply that multiple outcomes are possible in the dynamic interplay between mechanisms within specific contexts (Dalkin et al., 2015). One example illustrates this: the generational women all reported a positive impact (psychological level) after participating in the multigenerational food initiative. The women learned (psychological mechanism) that, in this particular context, a different relational definition (interactional level) was required. The initial consensus among all generational women, before taking part in the multigenerational initiative, that the relational definition in relation to the older women should be a complementary-defined relationship, changed to a parallel-defined relational definition, with women of all ages alternating in adopting a leading position during their interactions when together they prepared, served, and ate their traditional food. The positive psychological impact and changed relational definition enabled them to change their reasoning about how to relate and interact with the generational other. Outcome patterns typical of effective relational qualities emerged, such as unconditional acceptance, transparent (visible) generational presentation, and a circular approach (interactional level). Unconditional acceptance of generational members conveys a deep respect for the worth of another and is likely to elicit a corresponding response (Truax & Carkhuff, 1967; Vorster, 2011). Transparency is the process whereby the women became more and more transparent or visible to one another. Interactional theories propose that the more visible people are, the easier it is to relate to and interact with them (Roos, 2018). In this socio-cultural history of intergenerational relations, adopting a circular approach is particularly promising. Previous research highlighted generational groups' tendency to view the relationship with the generational other from a linear, self-informed perspective. Rigid application of this relational quality may limit generational members to adopting the generational other's perspective. When generational members are able to visit the other generational groups' perspective, two promising outcomes are possible. First, there is a greater potential for generational members to engage on a deeper level and to deal with hard-to-discuss topics while remaining engaged when negative emotions arise from the

interactions (Harrell, 2018). Second, if generational members can talk about their interaction on a meta-reflective, circular level they may discover more levels of connection. Both the psychological and interactional level mechanisms contributed to the outcome patterns reported as a shared group identity as Batswana women, thereby extending age-only group identities (group level).

Apart from the "first level mechanisms" (Williams, 2018, p. 37) described above, a deeper level mechanism was activated by the changed relational definition. This activation could have compromised the sustainability of the multigenerational food initiative. In this particular socio-cultural research context, all older people, including the 'living dead,' always function on a higher social hierarchy than any younger person (Mbiti, 1969). Social hierarchies developed and are sustained though historically transmitted intergenerational socializing norms. Additionally, older people in this context have financial resources from means-tested state pensions. In this context, the socializing norm also operated as a mechanism in the outcome patterns of this particular multigenerational traditional food preparation initiative (Westhorp, 2018). The multigenerational initiative introduced dissonance in how the social hierarchy is organized in this particular context, thereby forcing the system to implement measures to maintain homeostasis.

Broad guidelines for sustainable intergenerational initiatives

Mechanisms (and their causal powers) are already implied in the compilation and delivery method of every intergenerational initiative. When program designers are aware that the causal powers of mechanisms in dynamic interplay with relevant context mechanisms produce certain outcome patterns, they will conclude that it is highly unlikely that the same intervention will have similar outcomes in different contexts. At best, intergenerational initiatives can provide transferable knowledge or ideas about what worked well in a particular context. To plan and implement sustainable intergenerational initiatives would require consideration of appropriate theories implicit in the proposed intergenerational initiative, and an understanding of possible mechanisms in the socio-cultural-historical and interpersonal contexts that may provoke a particular outcome. This approach questions the usefulness of a copy-and-paste approach to subsequent effective intergenerational initiatives. What worked well in one context may not be applicable to the next.

Conclusion

For future research, it would be interesting to revisit the untapped potential of effective intergenerational initiatives and to add a causal explanation of why the particular social intervention worked in a particular context. It is also recommended to capture outcome patterns of intergenerational initiatives in a particular context longitudinally. It may be concluded that, from a critical realist perspective, outcome patterns of any intergenerational initiatives should always be reported in terms of the complex interplay between mechanisms and contexts. Causal explanations of changes on an individual generational level or in the intergenerational interacting system as a whole can be proposed when using reasoning and resources as mechanisms. Adopting a critical realist perspective makes it possible to explain deeper causal powers that shape outcome patterns, with

implications for the sustainability of intergenerational initiatives within relevant broader macro- and micro-contexts.

Additional information

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