Relational experiences of community members participating in a rural health initiative with interprofessional students

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Background. A South African faculty of health sciences created a forum for the community to voice their relational experiences with interprofessional students through visual projections. No other studies that explore such experiences using the Mmogo method could be located.

Objective. To gain an understanding of the relational experiences of community members participating in Lifestyle-groups as part of a rural health initiative with interprofessional student groups.

Methods. The Mmogo method is a qualitative, structured, observation technique. Participants constructed visual projections representing specific relationships. Thereafter, during a group discussion, participants explained the meaning of their projections. The visual data were analysed according to their literal presentation and subjective, symbolic meaning. A thematic analysis was used for the transcribed data.

Results. Thirteen of the 24 visual projections were of a quality that allowed visual analysis; all 24 members participated in the discussions. Light was identified as an overarching theme to represent the community-student interaction. Sub-themes and categories associated with light were healthier lifestyles (knowledge sharing, lifestyle transformation, improved health outcomes), solidarity (reciprocity, collaboration, person centredness, multidimensional approach) and affirmation (gratitude and acceptance).

Conclusion. Though some statements by participants related to health education as opposed to health dialogue highlighted areas requiring improvement, the findings correlated with the outcomes prescribed for students by this rural health initiative. Emotional connections in relational experiences could facilitate higher levels of self-efficacy in communities. The question is whether a stronger emphasis on health dialogue can be a catalyst for improved self-efficacy.

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Community members play a central role in engaged learning and teaching approaches that could include pedagogies such as Community-based Education (CBE), and Interprofessional Education (IPE).^[1] CBE refers to learning activities that use the community as a learning environment, in which students, facilitators, members of the community, and other stakeholders actively engage in and throughout the educational experience. [2] The community, in CBE, is therefore the anchor that grounds this learning and teaching approach. IPE 'occurs when two or more professionals learn about, from and with each other to enable effective collaboration and improve health outcomes'. [3] A South African faculty of health sciences established a rural IPE initiative that included 17 Lifestyle-group sessions per year. The aim of these sessions is to facilitate collaboration between community members diagnosed with diabetes mellitus and health professions IPE student groups (dietetic, occupational therapy, physiotherapy, medicine, nursing and optometry students). The outcomes are to share health information among participants, equip rural communities with essential competencies towards re-futuring' of healthcare, and foster accountable lifestyle practices. The two hours-a-week Lifestyle-group sessions included a variety of topics proposed by the lifestyle group members, as well as collaborative activities prepared by each IPE student group. It is therefore vital to acknowledge communities' (Lifestyle-groups) central role in this learning approach, and to determine their relational experiences with interprofessional students in a rural health initiative.

Literature related to relational experiences is primarily found in the realm of psychology, where it revolves around relationship therapy^[4] and

relational theory. [5] Sontag [6] describes relational experience as relating to the quality, purpose and intensity of relationships. Dutton and Heaphy's^[7] conceptualisation of high-quality relations focuses on three subjective relational experiences - positive regard, mutuality and vitality. Positive regard is the experience of an individual in positive relationships with other individuals, and being accepted and recognised by others.^[8,9] Individuals experience mutuality when they sense they are actively participating in a positive relationship. Mutuality refers to a change in the connection derived from mutual vulnerability, empathy and responsiveness. Relational vitality refers to feelings of positive stimulation by others and a heightened sense of positive energy. [7] Subjective relational experiences can lead to higher levels of self-efficacy; it can facilitate engagement and innovation, as individuals exhibit particular behaviours when they are cognitively vigilant and emotionally connected to others.^[10] Common-interest groups that actively involve community members as partners in their own health and have a transformative effect on those communities is a consequence of these commonalities.[11]

To facilitate participation by community members from different cultural, socio-economic and political backgrounds, Roos^[12] states that they might communicate their relational experiences better visually. Research using visual projective data collection methods, such as the Mmogo method, is intended to deepen understanding of the social, cultural and contextual aspects underlying human behaviour^[13-15] and, in the present study, relational experiences. Mmogo (a Setswana word) refers to interpersonal relatedness, togetherness, co-construction, and/or

interpersonal threads.^[15] Personal projections are the emotional experiences that can be conscious at the personal level: what people know; sensory perceptions; and what involuntarily influences people's thoughts, feelings, memories and actions.^[16] Collective-level experiences are common and unique to groups owing to heredity and socialisation.^[17] Personal and collective experiences are produced within culture and society.^[18]

Research that involve communities, conventionally uses questionnaires, interviews and focus groups. A study associated with relational experiences used interviews and semi-structured guides to assess community perspectives of their student engagement.^[19] Community members were included in developing the interventions. Language barriers, community protocols and community fatigue influenced the student-community interaction. Another example of research incorporating relational experiences was a study undertaken by Van Schalkwyk and Marais.[20] Their research endeavoured to describe educators' relational experiences with learners with fetal alcohol spectrum disorder. Thematic analysis of semi-structured interviews and focus group data revealed that relational experiences are determined by educators' practical knowledge of the effects of limited intellectual abilities and impaired social functioning (community characteristics) in the learning environment (socio-economic factors). In both these studies, the authors allude to but do not extrapolate the characteristics of high-quality relational experiences.

It was challenging to contextualise and define relational experiences in reference to a community-based interprofessional education initiative in a rural, primary healthcare environment, as no such studies were found. In the present study, the researchers investigated the relational experiences of community members participating in a rural health initiative with interprofessional student groups using visual projections. The findings of the study could enhance the faculty's understanding of relational experiences and of the quality of engagement between Lifestyle-group members and IPE student groups. This understanding of relational experiences could furthermore assist this faculty of health sciences to improve collaboration between Lifestyle-group members and IPE student groups.

Purpose

To gain an understanding of the relational experiences of community members participating in Lifestyle-groups as part of a rural health initiative with interprofessional student groups.

Methods

The meta-theoretical paradigm informing the Mmogo method is constructionistic and interpretivistic, and adopts an onto-epistemological approach where '...the object and the measuring agencies (in this study referring to the visual projections) emerge from, rather than precede, the intraaction (with students) that produces them.' [12,21] It is proposed as a qualitative research methodology [16] for a narrative inquiry design. Lifestyle-group members, constructing visual projections that signify a specific relationship, followed by the members elaborating on their representations during a facilitated group discussion, achieved this. The co-researchers additionally used open-ended questions such as 'From where did the light come?' and 'Are there others that agrees with him?' to further prompt discussion. [12] The visual projections are created using malleable clay, beads of different sizes and colours, and dried twigs. [22]

In the present study, the unit of analysis included members of two Lifestyle-groups in two rural towns (N=50), of whom 24 volunteered to

participate in the study. A co-researcher (a Lifestyle-group facilitator) informed the Lifestyle-groups about the research during their weekly meeting using information and informed consent forms available in English, Afrikaans and SeSotho (regional language). Members who volunteered provided verbal and written consent for the discussion to be audio-recorded and their visual projections to be digitally photographed.

Data collection

The Health Sciences Research Ethics Committee approved the study (HSD2019/1786). Two co-researchers conducted the sessions that were primarily conducted in the language of preference (Afrikaans), while an interpreter translated to SeSotho when necessary. The session started with an introduction, orientation and expectations related to the study. The participants' rights were clarified and the rules of engagement were negotiated. Participants were informed of their right to withdraw from the study at any time, without negative consequences. A co-researcher posed a research question: 'Create a picture using the clay and beads that displays your relationship with the students of health sciences'.

Participants were given one hour to construct the visual projections. On completion, participants explained the meaning of their visual projections, which was enriched through group discussion. Interaction with other participants allowed time for shared experiences. A number was allocated to the visual projections and photographs were taken.

Data analysis

Two sources of data were obtained: visual data (photos), and textual data, consisting of verbatim transcriptions of recorded discussions, [14] which were translated to English. The researchers analysed the 24 visual projections according to the specific projection created and its relevance to the research question, the literal presentation and subjective, symbolic meaning. This analysis, guided by the participant group discussions and the quality of the projections, resulted in only 13 projections being included for the visual data analysis. The assumption underlying this procedure is that the visual projections are expressions of something not yet consciously recognised or conceptually formulated. [23] The researchers verified the verbatim transcripts. The textual data extrapolated from the verbatim transcripts of the 24 participants was explored using thematic analysis. [24]

Trustworthiness

In the current study, the principles of trustworthiness – namely credibility, transferability, dependability and confirmability – were adhered to during collection, analysis and presentation of findings. A reliable and valid qualitative research methodology ensured trustworthiness. Co-researchers addressed possible bias through applying a non-judgmental, respectful and non-partial approach towards participants during the research process. The group discussion allowed the participants' voices to be heard, and the co-researchers could clarify and explore uncertainties. Making use of investigator triangulation contributed to a reduction in bias. [25]

Results

Thirteen visual projections from two rural towns referred to as T and S were selected, based on their quality and alignment with the purpose of the study. Findings from the visual data were correlated with the participants' feedback on their created projections. The thematic analysis of participant narratives revealed an overarching theme, namely light, and

three sub-themes, namely healthier lifestyles, solidarity and affirmation. Integration of the visual and textual data presented the different categories associated with the overarching theme and sub-themes, as shown in Fig. 1.

Overarching theme

The golden thread throughout the findings articulated into 'light' as the overarching theme. The overall positive feedback from participants regarding their engagement with students were expressed in a variety of visual projections, where all pointed to the experience as enlightening. The literal presentation and subjective, symbolic meanings of two visual projections in Table 1, for example, support this finding (T2, T5). Light was not only visualised, but also verbalised: 'We received the light' (T15), 'and presented in other forms ... If you look at the different colours, there is green and bling (symbolising students) ... but here is black beads. Here is a problem.' (T11)

Participant S3 unpacked light further, by creating a visual projection of the source of light: cosmic elements. The engagement with different students (cosmic elements) was seen as a source of change and growth (light).

The theory of causality infers Newton's third law of motion, simplified as cause and effect. [26] The presence of interprofessional student groups in the two rural towns and their involvement in the Lifestyle-groups affected a variety of interconnected aspects of the community members' lives. These aspects are illustrated by three sub-themes associated with light, namely healthier lifestyle, solidarity and affirmation.

Sub-theme 1: Healthier lifestyle

The literal presentation and subjective, symbolic meaning of the first sub-theme is presented in Table 2.

Three other visual projections substantiate the identified sub-theme:

- Community mobilisation, through a collaborative gardening project, motivated members to become self-reliant and to adhere to a healthier lifestyle. (T6)
- A lifestyle change was triggered through engagement with students. (T7)
- The heart represents the passion and love that was ignited through interaction with students. The beads and the texture represents the change that happened. (T9)

of change and growth (light). change that happened. (T9) Overarching theme Light Healthier Sub-themes Solidarity **Affirmation** lifestyles Knowledge Reciprocity Gratitude sharing Lifestyle Collaboration Acceptance transformation Categories Improved Personhealth outcomes centredness Self-reliance Interprofressional approach

Fig. 1. Thematic analysis of the visual and textual data.

A healthier lifestyle was experienced by participants owing to the influence of collaborating with students in a variety of initiatives that enriched their individual and collective lives. The categories under healthier lifestyle include knowledge sharing, lifestyle transformation, improved health outcomes and self-reliance.

A statement that was categorised as knowledge sharing was that 'what they teach us individually, they must also teach other people in the community.' (T9). Participants T2 and T15 provided group input and stated: 'We didn't know how to control this thing [diabetes mellitus], we ate any old way, we ate everything, and anything, any time.'

The statement 'So that we can know how we must live, how we should eat and how we should be.' (T2) and echoed by T3 and T7, relates to lifestyle transformation. This was reiterated by the group input: 'They brought changes to our lives.' (T14, T15).

Improved health outcomes were declared by five participants (T2, T3, T4, T7, T9), using statements such as 'Now I feel that it's right. Now I know exactly how to manage it [diabetes mellitus]. Like high blood pressure, foods you eat that are not right.' (T2). This sentiment was also reflected by group input: 'Yes, now we know how to manage the thing in the right way.' (T4, T6, T14, T15).

The category of self-reliance was expressed through similar statements:

But we can only build the path, and the people in the community must then help each other. So, ... when the students are no longer around, that those who remain behind in the community, that we still help each other. (T6, T9, S3).

Feedback from the group discussion was: 'Then we understand, and then we can achieve a great deal.' (S4).

Knowledge sharing contributed to a lifestyle transformation that promoted self-reliance. Participating in the lifestyle groups promoted particular behaviours, as members were cognitively vigilant and emotionally connected to others.^[10]

Sub-theme 2: Solidarity

The literal presentation and subjective, symbolic meaning of solidarity is presented in Table 3.

The sub-theme of solidarity is justified by the visual projections created by five participants (T3, T11, T15, S3, S5).

Table 1. Visual projection of light (T2, T5)

Image



Literal presentation Candle holder, candle, wash-basin

Subjective, symbolic meaning Important different elements necessary to create light. Students are co-creators of light.

Participants' feedback

Now, the candle is the *light* ... that I feel here in the community. Here, I received much light, as I learnt many things ... I was in the dark, and received light.



Pot with candle, flat surface

The candle represents the co-created light. The candle holder extends above the candle, so that light can endure and flourish.

What I made here is a bottle and a candle (light). We may not use a candle holder, as the candle could fall. The candle can't fall from the bottle.

Table 2. Visual projection of the road to a healthier lifestyle (T15)

Image



Literal presentation

Four human figures walking along a road; Subjective, symbolic meaning

The road to a healthier lifestyle is created through the community house with an individual being open and accepting and valuing the collaborative relationship with the students.

Participants' feedback

I've built my little house and here I'm sitting. Here come the students. I welcome them into my home. They examine me and we have a lovely chat.

Table 3. Visual projection of solidarity (S2)

Image



Literal presentation

Ten human figures (students); the community (middle) Subjective, symbolic meaning Solidarity is displayed through the holding of hands and an interconnectedness with the community (the sticks).

Participants' feedback

My picture here shows us there in S [town name] with our students... who always come to visit us. These other things are our people who are always present. We stand close together so that we can always do things together.

The interpretation of the visual projections as solidarity were justified by participant feedback:

The twigs that are bound together at the top represents a common course or collaboration. This collaborative structure also provides a safe environment. (T3).

The shapes that form a circle represent the different students coming together around the community. The way in which the shapes are connected is multidimensional, indicating collaboration and the different aspect [of the rural initiative]. (T11).

Similarly, the visual projections of T15, S3 and S5 can also be associated with solidarity – a deeper inter-relational experience. This high-quality relation is a consequence of acceptance and recognition by others in a positive relationship.^[7]

The categories under solidarity are reciprocity, collaboration, person centredness and an interprofessional approach. Reciprocity, which describes the equal mutualistic nature of the relational experiences, is clear from the statement: 'Where we can calmly learn from one another.' (S3).

Use of the word 'we' and 'everyone' in the next two individual statements could be interpreted collaboration: 'We built that house for the flowers, we built the greenhouse together [referring to a Lifestyle-group activity] (T3). 'Everyone helped, and so on. (S2). This was infused by the group input: 'The hands holding hands, and we, who share everything.' (S5) The reciprocity and collaboration can be attributed to actively involving all participant in the activities and learning process.

The feedback by participant T11 indicates person centredness: 'Here in the centre, this is the patient.' Where there was group input: 'As we are sitting here, we are all good, and they [students] are all good too, because they are bringing us good outcomes.' was added by T3 and S4.

Participants also experienced an interprofessional approach to healthcare evident in the statement: 'There are different shapes. It's not only one type of student. Here is a student who's a doctor, here's a physiotherapy, and then here is one that checks the eyes. And each one of them sees another aspect.' (T11). The group concurred: 'Every student has his part with us, because they examine everything.' (T6, T14).

The interprofessional and community-driven approach to the Lifestyle-group activities aligns with the concept of doing with instead of doing for. Lifestyle-group participants experienced mutuality when they felt like active participants in a positive relationship.^[7]

Sub-theme 3: Affirmation

The literal presentation and subjective, symbolic meaning of affirmation is presented in Table 4.

Gratitude for the collaboration with and acceptance of students into the community were the two categories under the sub-theme of affirmation. Multiple feedback related to gratitude was provided by individual participants: 'Thank you very much for helping me.' (T3, T4, T11, T15, S3, S5). 'We are glad that you are there, and we wish they could stay, they should not abandon us. They mean something.' (S2). The group input ('They helped me so much.') (T4) indicates similar feelings.

Acceptance of students into the community was expressed though feedback such as: 'I welcome them into my home. They examine me and we have a lovely chat.' (T15, S4). Input from the group included: 'But now, the students helped us to have a chat when they came to our homes.' (T6).

The categories above indicate a strong sense of community receptiveness and appreciation of the contribution made by the interprofessional students. The involvement of interprofessional students in the Lifestyle-groups affected a variety of interconnected spheres, as discussed. However, the researchers also found evidence of a persistent, paternalistic view of university involvement in communities. Community members may not have realised the implication of the words:

And to tell us what we must do. (T14).

Then come the students and they taught us. (S1).

The student tells me what I should stress about, and what I shouldn't stress about. (S3).

The statements above by participants seem to contradict this rural health initiative's collaborative, person-centred approach. The affirming nature of the relationship does, however, incorporate relational vitality, as the interactions provide evidence of positive stimulation and an increased sense of positive energy among members.^[7]

The above findings as supported by the literature presented are further elaborated on and must be read in conjunction with the discussion below.

Discussion

The impetus for this study was the desire to gain an understanding of the relational experiences of Lifestyle-group members participating in a rural health initiative with interprofessional student groups Relational experiences are measured by determining how the purpose, intensity and quality of relationships contribute to achieving specific outcomes and, in the context of this study, health-related outcomes. An important outcome achieved in this study was a resonant understanding among participants of the value of Lifestyle-groups. Light as an overarching theme can be extrapolated throughout the feedback not only in relation to the visual projections and corroborating verbal input from discussions where the sub-themes can be seen as quintessential thereof, but also as a radiating

Table 4. Visual projection of affirmation (S5)
Image

Building with individual; vehicle (student transport); pet

Subjective, symbolic meaning

Community values and appreciation
of engagement and collaboration with
students.

Participants' feedback
This is here, at the clinic. This is me, here. They take us there, to the clinic, or they come to us. I like the student; here you can see how I'm smiling.

source of energy necessary for life. The combination of different colours making up light could represent the collaboration associated with IPE. Findings of this study aligned with some of the intended rural IPE initiative's outcomes, as is evident in the sub-theme of healthier lifestyle, and its categories of knowledge sharing, lifestyle transformation, self-reliance and improved health outcomes.

The sub-theme of solidarity, which refers to a readiness to act or respond to a 'stranger', reflects the intensity of the relational experience between students and community members. In the context of a rural health initiative, the participants' visual projections illustrate the achievement of emotional, cognitive and/or imaginative readiness.[27] The present study also found that solidarity calls for a certain generosity of perception, which manifests in the categories of person centredness and interprofessional approach. Community members and students have the 'will to find the other unthreatening in his or her otherness and to acknowledge the legitimacy of the call of the other upon me'.[27] This 'will' and 'acknowledgment' is evident in the feedback that reports on collaboration and reciprocity. The categories of gratitude and acceptance under the sub-theme of affirmation describe the quality of achievement of the Lifestyle-groups' intended goals.

During the group discussions were instances where Lifestyle-group members stated, 'Then come the students and they taught us.' (S1) which indicates health education (one-way communication; telling; doing for). A key component of this rural health initiative was collaboration and promoting health dialogue (two-way conversation; discussion; doing with) with lifestyle group members. Without health dialogue, very little or no input from Lifestyle-group members may place them in a subservient and passive role in their relationship with students.

Including community members in the assessment, development and execution of health interventions helps to build a foundation for developing the interactive community partnerships that are at the core of CBE. [28,29] Integrating the community in this way assists in building trusting relationships and enables academics to improve their understanding of the various community nuances. Integration also allows academics to gain insight into the needs and opinions of the community and, furthermore, serves as a guide to adapt interventions to accommodate unique community identities.

Conclusion

The Lifestyle-group members' visual projections and discussions illustrate sincere relational experiences of community members. These relational experiences can be described as of high quality displaying positive regard, mutuality and relational vitality.^[7] The projections of relational experiences are consequences of intertwining the community's and students' quests for improved health outcomes. The findings endorse the premise of the initiative, though some comments indicate areas requiring improved practices; e.g., health dialogue instead of health education. It is anticipated that promoting sincere high-quality relational experiences and associated engagement, and true reciprocal relations in the Lifestyle-groups, will facilitate the development of higher levels of health dialogue and self-efficacy.

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