

Chapter #20

UTILISING SOCIAL NETWORK ANALYSIS SKILLS TO MEET PEDIATRIC PALLIATIVE CARE NEEDS IN SOUTH AFRICA

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ABSTRACT

Integrating Pediatric Palliative Care (PPC) within the curriculum of the social services qualifications is part of new and niche development in education. To meet the needs of terminally ill children requires the best practices from the inter-disciplinary teams involved. The social service professions have a strong history in impacting communities to meet the needs of vulnerable populations. A tried and tested framework on environmental networking, that may be at risk of only being seen as part of earlier innovation, provides a practice model for meeting the partnership goal of sustainable development. Considering the risk to terminally ill children when sufficient partnerships are not in place, as required by the seventeenth sustainable development goal, a case is made for a deeper understanding of the service context and the strengthening of support structures through social network analysis and environmental modification.

Keywords: social network analysis, pediatric palliative care partnerships, environmental modification.

1. INTRODUCTION

The United Nations Children's Fund (UNICEF) supports and encourages governments to focus on five specific asks for the implementation of global partnerships for sustainable development, with children needing to be at the center (United Nations Children's Fund, n.d). While South Africa (SA) is a signatory to the United Nations Charter on the Rights of the Child, underwriting the right for children to the highest possible standard of health and access to health and medical services through article 24 (UNICEF, 1990), a concerning lack of alignment between policy and funding for Pediatric Palliative Care (PPC) exists (Gill, Hashem, Stegmann, & Aoun, 2021). The World Health Organization defines pediatric palliative care as addressing the child's physical, psychological, and social distress, with support to the family, from the start of the diagnoses of the illness (Gill et al., 2021). Such services require the expertise of a specialist multidisciplinary team, and it is questioned whether existing PPC assessments and interventions comprehensively address parents' support needs (Gill et al., 2021).

Of interest for this article is the seventeenth sustainable development goal (SDG17) that calls for strengthening the means of implementation and to build and enhance partnerships with diverse stakeholders (UNICEF, 2022). Results from a case study done with a child and youth care center (CYCC), described in more detail and within another context in Swanzen (2022), also indicated a lack of sufficient partnerships to meet the needs of terminally ill children. This lack was evident in the poor access to quality and emergency health care, without significant expenditure, for which funding models across health and

social service departments are not integrated and responsive. This raises the level of concern regarding children's rights, since an average of 75% of child-related SDG indicators in every country by 2019, either had insufficient data or showed insufficient progress to meet SDG targets by 2030 (UNICEF, n.d). Against the backdrop of grassroots challenges caused by CYCCs not receiving support for PPC, the need for social networking skills (in the context of the person-in-environment framework) to be developed as a community level solution, will be unpacked in this chapter. The environmental modification enabled through these skills will address at least three of the key asks for SDG17. Some studies like one at the Universitat Politècnica de València (Leiva-Brondo, Lajara-Camilleri, & Lull, 2022) confirms that after activities related to sustainable development goals within subjects had been performed, students' awareness and literacy of sustainability improved. Similarly, an intentional focus on and organizational endorsement of the development of social networking skills, are believed to be part of the capacities to be leveraged to strengthen PPC service delivery.

From the author's own experience, a fitting part of foundational social work knowledge base exist around environmental intervention, but from a source that has not been updated with subsequent editions for over twenty-six years. A search for literature sources incorporating the detail on this framework, for inclusion in the curriculum, was found to be limited. While the theory has been referenced in various sources, some incorporated in this writing, the limited coverage of detail on the strategies motivated the attention drawn to this valuable tool. Not only will searches on social networking cross-over to internet-based social media concepts that become relevant for marketing strategies and public trust (Sadiku, Omotoso & Musa, 2019 and Paskarina, 2023), it is also presented as social networks or maps (what) only and not the skill of social networking (how). There are some promising applications of social network analysis in health (McKinlay, McDonald, Darlow, & Perry, 2017; Fortea-Cabo & González-Teruel, 2022; and Mukinda, Van Belle, & Schneider, 2022) and social psychology (Butts, 2008). The support offered through personal networks, as well as the role children play, in the treatment of substance abuse has also been highlighted (Min et al., 2013; Tracy & Martin, 2007; Falade-Nwulia, et al., 2022).

The usefulness of the social network analysis practice tool remains, both as origin of eco-maps used in the social service professions (Rogers, 2017) and as ecosystem metatheory contextualizing assessment of people's life situations in social and physical environmental influences (Kahan & Žiaková, 2021). Highlighted through this chapter will be how the comprehensive evaluation of partnerships as an intervention is needed to support critical PPC services in a more cost-effective manner than the high individual, medical care costs typically involved in the care provided to terminally ill children. "The person-in-environment concept is manifested in the dual aspirations of the profession to provide personal care and further social justice... The profession's dual aspirations are reflected in social work codes of ethics in different parts of the world... every social worker is obligated to work to foster change in the individual and the society" (Weiss-Gal, 2008, pp. 65–66). This forms the basis of the argument made for the inclusion of these skills in the higher education (HE) curriculum delivered to professions like social work and child and youth care work.

2. CONCEPTUAL FRAMEWORK TO ADDRESS PARTNERSHIP GOALS

While the importance of acknowledging social network analyses will become evident, the core references are becoming older, with only its application being referenced in newer literature. A risk therefore exists of the original descriptions, especially as this skill relates to building partnerships in social and health services within a community development context, to get lost. Following a search for easily available resources, the main aim of this chapter is

to provide a more recent reference for this very relevant tool, aimed at meeting the SDG partnership goal. Newer references enable more recent engagement with the framework, to consider its inclusion within the rather niche curriculum scope of pediatric palliative care (PPC).

2.1. Building Partnerships for Sustainable PPC

“Palliative care is a key facet of high-quality pediatric ... care as it addresses physical symptom burden, goals of care, advance care planning, medical decision making, and end-of-life (EOL) care” (Massie, et. al., 2021, p. 452). An important link between SDG17 and PPC therefore lies in the economics of PC and how these impacts on the quality of care required. The European Association for Palliative Care (EAPC) presses acknowledgement of the cost of EOL care, since out-of-pocket, higher medical expenditure increases the poverty trap, while sufficiently trained psychosocial professionals advocating for and identifying responsive networks are critical in the reduction of this cost (EAPC, 2022). On the economics of palliative care (PC), the EAPC (2022) emphasized the return on investment to have already shown promise and that PC enabled 85% of patients and families to spend less on medicine, which is significant if one considers that caregivers often lose their income while caring for terminally ill family members. The World Health Organization and partner organizations published a number of documents on models of care to guide wider roll out of PC services. Specific advancement in the adoption of a rural model in SA was presented by O’Brien et al. (2019) who highlighted that in 2015 the country ranked 34th in the Economists ‘Quality of Death Index’, the highest-ranking African country, and that SA launched the National Policy Framework and Strategy for Palliative Care (NPFSPC) 2017-2022. The NPFSPC prioritizes PC and training of health workers involved in PC, with emphasis on addressing issues of universal health coverage and the need to reduce suffering and promote development and dignity for all (O’Brien et al, 2019). Considering that the training of social workers and child and youth care workers, the two recognized professions delivering social services to vulnerable populations in SA, hold the knowledge base and skill in working in resource constrained communities, including their expertise in the inter-disciplinary practices of the PC team, can reduce high medical EOL cost. Strong assessment information is required to facilitate improved partnerships and the next sections aim to demonstrate the detail required for understanding the environmental context of potential partnerships.

2.2. Environmental Assessment and the ‘Key Asks’

Easing towards an understanding of social network analysis, the environment and the SDG17 asks will be touched on in this section. It is firstly worthwhile to note the allowance provided for alignment with the quintuple helix as a visualization for the collective interaction and exchange of knowledge. According to Schocair, Dias, Galina, and Amaral (2022) the *quintuple helix* includes the university as a leading sphere to generate knowledge and technology at the same industry and government level, including the influence from actors of the organized civil society, and consideration of the environment and sustainability. For the author this is further support for why HE needs to ensure that community-level practice models remain relevant within especially the curriculums preparing social service professionals. This multi-level engagement is more likely to lead to advocacy for the meeting of PPC needs in resource-restrained settings such as CYCCs.

Key asks for SDG17 are to build, strengthen, and expand partnerships; broker meaningful multi-stakeholder coalitions and alliances; engage with the United Nations system as key partner; enhance North-South, South-South, horizontal and triangular cooperation; and leverage and pool resources, capacities, technology and data (UNICEF,

n.d). It is evident why expertise in being able to analyze the environment towards networking is critical. Universally needed environmental resources include: adequate social support systems; access to health and day care services and recreational facilities; mobility to socialize; utilize resources and exercise rights as citizens; adequate housing; police and fire protection; sufficient nutritional intake; predictable living arrangements with caring others; opportunities for education; self-fulfillment and employment; and access to legal resources and religious organizations (Hepworth & Larsen, 1993). Needs-driven assessment remains one of the key drivers for relevant service delivery in the social service sector and parallel to this should be an understanding of the context of the lived settings of clients.

The environment is defined as having physical, cultural and social spaces, and are described as follows (Kemp, Whittaker, & Tracy, 1997): the *physical* environment comprises of the natural world and the built world; the *social* environment comprises the network of human relations at various levels of organization; and the *cultural* space is influenced by both the physical and social environments, and incorporates values, norms, knowledge, and beliefs. Adding the multidimensional entities of the *perceived* environment (individual and collective systems of meaning and belief); the *institutional and organization*, and *socio-political* environments, a comprehensive foundation is set for environmental assessment (Kemp et al., 1997). Environment assessment (EA) is defined as “an ongoing process in which client and worker, in partnership, gather and critically analyze information on the client or client system, in transaction with multiple levels of the environment, including strengths, resources, potentialities and opportunities, as well as risks, challenges, and issues of concerns, and with the attention to the meaning of these environmental experiences for the client” (Kemp et al., 1997, p. 85). The understanding of the potential for both growth and stress within the person’s social network; the functions of network resources with their obstacles to being used, are essential parts of an environmental assessment (Tracy & Brown, 2017). Table 1 provides a summary of various EA tools and methods. The horizontal headings indicate the types of environments and vertical are the client system types. More detailed descriptions on these can be consulted in the original sources referenced.

Table 1.
Environmental Assessment tools and methods.

Client system	Perceived	Physical	Social / Interactional	Institutional / Organizational	Social-political / Cultural
<i>Individual</i>	Perceived support network inventory Multi-dimensional scale of perceived social support Socio-political control scale	Assessment of universal resources EA Index PIE system Life-space representations	Social Network Map Ecomap Community Interaction Checklist PIE system Matrices	Ecomap Nurturing / Sustaining Environment PIE system Map recovery capital & social identity	Culturalgram Power analysis Concentric circles
<i>Family</i>	Family support scale Narrative techniques	Family access to basic resources Family resource scale	Ecomap Inventory of social support Genogram	Ecomap Family Empowerment scale	Cultural Genogram Power analysis

<i>Group</i>	Ethnographic interviewing Participant observation	Participant observation Life-course changes	Sociogram Socio-environmental context of group	Context diagram of environmental transactions Force field analysis	Power analysis Nurturing / Sustaining Environment
<i>Neighborhood</i>	Organizational history of neighborhood Participant observation Concentric circles	Physical description of neighborhood Community profiling	Nomothetic ecomapping Community profiling	Capacity inventory Inventory of local associations Community inventory	Framework for conceptualizing community Power analysis

Adapted from Kemp et al., (1997, p. 122) and Tracy & Brown (2017)

Social ecology is both a cause and a solution to many problems, and professions like social work takes both a micro (helping clients make individual changes) and macro (helping communities through formal and informal services) approach to practice (Tracy & Whittaker, 2015). An ecological approach implies the building of supportive and nurturing environments through environmental helping, as well as the improvement of the person’s life skills (Tracy & Brown, 2017). Considering that the top five needs of parents with children with life-limiting diseases are: having time for yourself in the day; practical help in the home; knowing what to expect in the future when caring for your child; financial, legal or work issues; and knowing who to contact if you are concerned about your child (Aoun et.al., 2020), it is evident why the variety of environmentally based assessment tools, as categorized in Table 1, are needed.

2.3. Social Network Analysis Skills

A social network refers to a set of individuals and the ties among them (Tracy & Brown, 2017). Sub-fields within social networks are the study of whole networks (patterns of relations in a geographically bound group, and personal social networks (the relations around a specific person (Tracy & Brown, 2017). With social network analysis (SNA) central concerns are defined as the creation, maintenance, transformation and dissolution of social structures (Doreian, 2001). Without information on where social actors are located, there is no network analyses (Doreian, 2001). At the start of the 21st century it was indicated that the roots of social network analysis used then, stemmed from sociometric analyses that depict group dynamics, the study of informal relations within large organizations by sociologist, and anthropologists’ study of small communities (Tracy & Whittaker, 2015).

Stemming from writings of Ferdinand Tönnies, Max Weber, and Georg Simmel, a sociological framework was developed to view subjectively meaningful interactions in terms of large-scale social structures and the social relations among individuals in these structures (Crossleya, Prellb, & Scott, 2009). Jacob Moreno’s work from 1934 was combined with the insights of Gestalt psychology and field theory to the early use of ‘sociometry’, where he charted the classroom friendship connections as graphical patterns of points and lines, inventing the term ‘sociogram’ to refer to these graphs (Crossleya et al., 2009).

Believing that ecological system theory alone does not offer a sufficient remedy, Kemp et al. (1997) expanded to social networks (the structure and number of a person’s social relationships) and social support (exchanges within the network). Social support can occur through natural helping networks or can be professionally designed or mobilized, noting that more social network resources does not necessarily imply more social support (Kemp et al., 1997). “Accurate, multidimensional, and textured information on neighborhood environments is an essential foundation for practice that incorporates a community

perspective” (Kemp et al., 1997, p. 76). To analyze the personal social network, compositional and structural network qualities need to be considered (Tracy & Brown, 2017). Table 2 offers a summary of these variables.

*Table 2.
Personal social network elements guiding assessment.*

Compositional network qualities		Structural network qualities	
Variable	Description	Variable	Description
<i>Size</i>	Total number of people in the network	<i>Density</i>	The percentage of ties that exist out of all possible ties
<i>Relationship type</i>	E.g. Friends, family, professionals	<i>Components</i>	Members who are connected directly or indirectly
<i>Frequency of contact</i>	How often members interact	<i>Multiplexity</i>	Relationships that serve more than one function
<i>Duration</i>	How long members know each other	<i>Centrality measures</i>	Network activity and information flow
<i>Reciprocity</i>	Amount of give and take between members		

Summarized from Tracy & Brown (2017)

Structural links of the network differs from the resources or support exchanged within the network, with social support referring to the ways in which people offer assistance to one another, be it offering advice, encouragement or concrete assistance (Tracy & Brown, 2017). A social support network is instead a set of relationships that provide nurturance and reinforcement for coping with life, inferring that some social networks may not be supportive (Tracy & Brown, 2017). According to Israel (1985, p 67) “it is the quality (meaning, intensity, mutual sharing), not the quantity (size, frequency of interaction), of social relationships that is most strongly associated with physical and psychological well-being”. According to Kemp et al. (1997) the social network analysis starts with these guiding questions to clients:

- The types of support perceived to be available?
- The extent to which network relationships are reciprocal?
- The extent to which network members are critical to the client?
- The closeness, frequency of contact and the length of relationships?

The answers are used to populate the social network grid in Table 3 as one example of how the analysis can be presented visually. The top 15 people in a network is captured, so the grid will normally have 15 lines.

*Table 3.
Social network grid.*

Respondent	Area of life	Concrete support	Emotional support	Information / advice	Critical	Directions of help	Closeness	How often seen	How long known
	Household Other family Work/school Organizations Other friends Neighbors Professionals Others	1. Hardly ever 2. Sometimes 3 Almost always	1. Hardly ever 2. Sometimes 3 Almost always	1. Hardly ever 2. Sometimes 3 Almost always	1. Hardly ever 2. Sometimes 3 Almost always	1. Goes both ways 2. You to them 3 Them to you	1. Not very close 2. Sort of close 3 Very close	0. Not see 1. Few times p/y 2. Monthly 3 Weekly 4. Daily	1. Less than 1yr 2. 1-5 yrs 3 More than 5 yrs
1									
2									
3									
To 15									

Tracy and Whittaker (1990 in Kemp et al., 1997, p 111)

In addition to the specific variables derived from the grid, assessment information from the other tools in Table 1, will assist the worker to understand culturally specific patterns of giving help; identify sources to aid in the maintenance of intervention gains; understand family system boundaries; pinpoint sources for conflict within the personal network; appreciate the client's perception; and encourage the client to actively restructure the immediate social environment (Kemp et al., 1997). Later research on measuring social networks, extracted information on network size (number of members in the network), composition, and quality – with changes noted along three timelines: a baseline measurement and then six months and twelve months later (Henwood et al, 2015 in Tracy & Whittaker, 2015). Items identified in the measuring of social networks within drug use reduction programs included questions on who respondents approached in the last 6 months for help and who provided help in the same period, as well as network density (number of connections between members) and network size (Falade-Nwulia, et al., 2022). Through this thorough assessment of networks, the way will be paved for effective intervention within the environment.

3. ENVIRONMENTAL MODIFICATION

A classical source defined environment, for the purpose of social service interventions, as: (a) social structures, such as social class system and ethnicity; (b) social conditions, such as unemployment and discrimination; (c) social systems, like economic, health, and educational networks; and (d) specific neighborhood or community resources, like schools, churches, day-care centers, job training programs (Grinnell, Kyte, & Bostwick, 1981). It further classified the environment as primary or secondary, proximal or distal, natural or manmade, internal or external, and physical or social (Grinnell et al., 1981). These classifications have some similarities to the social network intervention types discussed later in this section. Searches of later sources on environmental modification or – intervention, deliver a different slant to its meaning, leading to another foundational source on this concept being at risk of getting lost in the huge influx of publications on environmentalism, as well as social development theory and approaches in SA since the later 1990s and early 2000s.

With social networking being the start of environmental intervention, person-environment practice forms the foundation through purporting the following building blocks (Kemp et al., 1997, p.4-6): *partnership* between clients and professionals, meeting on common ground as a unified team; *mutuality* where an open atmosphere is created for communication about sensitive concerns, built on mutual respect and trust; *reciprocity* in the helper-principle where giving and receiving help go both ways among all key players; *social assets* is where the assessment begins with looking at what is going wrong (deficits) and also what is going right (strengths); being alert to *resilience* as protective factors and mechanisms that blunt the effects of known risk factors and permit individuals and families to overcome extraordinary difficult life situations; *optimization* as the goal to always create conditions within which each individual client, family or neighborhood reaches the upper limit of its developmental potential; *natural helping* draws on the ability of clients and communities to aid themselves through rituals, spiritual practice, celebration and reflection; *social integration* involves working with 'private troubles' of clients in the context of raising public concern about the critical integrating function of individuals, families and neighborhoods in maintaining social order and promoting public safety, and thereby removing risk and change the environment; *coherence* describe processes through which the individuals, families and groups discern a sense of meaning beyond the struggles of day-to-day existence; and the fostering of *hope* that things can change for the better and that the power for change resides

within. From the social network analysis, a deeper understanding of the person within their environment will be obtained. Bronfenbrenner’s basic concept that an individual’s social field increases concomitantly with his or her overall development, highlights the value of the transactional space for increasing personal competencies to deal with environmental blocks (Kemp et al., 1997). Integrating the above building blocks then become principles directing environmental modification strategies.

To ground the environmental and social network interventions described next, it is pertinent to take note of key principles for implementation. In short these include the use of linking (identify, engage, assess, refer to and maintain resources); capitalizing on strengths; and striving for a collaborative worker-client relationship with shared power (Tracy & Brown, 2017).

3.1. Environmental Intervention Strategies

Environmental intervention (EI) is “both action in the environment and the process of transforming individual and collective perspectives through critical analysis of the impact of environmental conditions” (Kemp et al., 1997, p. 136). Core practice activities include gaining access to, developing and enhancing resources and services, including social networks that support, educate and empower clients and communities, and working to change toxic and oppressive environmental conditions (Kemp et al., 1997). The eventual goal is twofold: to create an environment that nurtures and support growth and change, and to enhance individuals and groups’ abilities to act in the environment on their own behalf (Kemp et al., 1997). EI should be based on ecologically valid assessment of the influences on current functioning and are therefore applied at several levels of the environment (Kemp et al., 1997). When resilience, protective factors and environmental risks are added to the mix towards the comprehensive social networking analysis previously described, it will incorporate individual attributes, family or interpersonal factors, and community or neighborhood factors (Kemp et al., 1997). Table 4 summarizes the interventions per type of environment and across the various client groups. Detail on each fall outside the scope of this chapter but can assist with further exploring of environmental intervention options.

*Table 4.
Interventions per environmental type and across client groups.*

<i>Client system</i>	Perceived	Physical	Social / Interactional	Institutional / Organizational	Social-political / Cultural
<i>Individual</i>	Interview for client strengths. Empowerment. Critical reflection / dialogue	Brokerage & concrete services	Network facilitation. Skills training.	Service coordination / case management	Mediation. Advocacy.
<i>Family</i>	Use of narrative. Empowerment. Critical dialogue	Home-based interventions. Family development programs. Concrete services	Family education & support. Support groups & programs.	Consultation with larger systems. Family group conferencing.	Social action / advocacy groups.
<i>Group</i>	Empowerment group.	Therapeutic milieu.	Mutual aid / self-help / support groups.	Program development.	Social action groups.

<i>Neighborhood</i>	Community capacity awareness. Empowerment.	Locality development. Investment.	Community building. Natural helpers.	Social planning. Program development. Community liaison.	Grassroots groups.
<i>Overall goal</i>	Interventions designed to transform perceptions of the environment	Intervention in the natural & build worlds.	Interventions to mobilize social support.	Interventions to mobilize services.	Interventions for social & political change.

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3.2. Social Network Interventions

Social network interventions are typically directed toward either structural changes (increase or decrease size or composition of the social network) or functional changes (developing skills) in the network relationships (Kemp et al., 1997). It involves the following major strategies towards environmental modification, as summarized from Kemp et al. (1997, p. 141-157) and Tracy & Brown (2017, p. 488-489):

- *Natural helpers* are people to whom others naturally turn to for advice and support, consisting of gatekeepers, key informants, and indigenous helpers. The aim of the intervention will be to develop a consultative relationship between key helpers and social service workers, aimed at preventative or early intervention services. This is particularly useful for hard-to-reach clients and rural, cross-cultural settings.
- *Network facilitation* mobilizes the social network as a resource to supplement existing support. It should be individually tailored through the identification of potential network members and identification of their strengths and gaps. It is essential to determine the barriers for achieving change goals. Skills training of the network may be required, and even skills like the client asking for help. Lasting informal networks are mutual and reciprocal. Volunteer linking can assist to increase the network and family group decision-making to create a plan for meeting needs. Network meetings that ensure communication to avoid duplication of effort, are integral to this form of intervention.
- *Mutual aid or self-help groups* mobilize relationships among people who share common tasks, goals, or problems. Such groups also create more opportunities for members to learn from each other, engage in helping roles, and serve as vehicles for advocating for the disenfranchised.
- *Social network or social support skills training* teaches people ways of establishing and maintaining supportive interactions with others. Using cognitive behavioral interventions to achieve personal goals, encompasses the following implementation steps: to identify the new skill; instruct, model and practice the skill; plan opportunities for generalizing the acquired skills; implement a step-by-step social network improvement plan; coordinate, consult and train with network members; and monitor and evaluate the plan. The aim is to have a skilled support system and the person equipped to use the support system effectively.

“Social network interventions need to be grounded in the principles of culturally competent practice, including respect and appreciation for differential values, beliefs, and behaviors regarding help-giving and help-seeking” (Kemp et al., 1997, p. 158). It should not be assumed that more is better, or that the network you see is the one experienced by the client or that all members of the client system have the same needs (Kemp et al., 1997).

4. BENEFITS OF APPLYING SOCIAL NETWORK INTERVENTION

Unlike a mere capturing of online social engagement, the approach discussed in this chapter acknowledges the importance of the required environmental intervention that should follow a targeted assessment. In 1968 already, Allen Barton criticized the effect of mainstream research in social science – that for its reliance on empirical survey and random sampling, became a ‘sociological meatgrinder’ that tears the individual from their social context, ‘and guaranteeing that nobody in the study interacts with anyone else in it’ (Freeman, 2004, p.1). He argued that if our aim is to understand people’s behavior beyond merely recording it, ‘we want to know about primary groups, neighborhoods, organizations, social circles, and communities; about interaction, communication, role expectations, and social control’ (Freeman, 2004, p.1). “In recent decades, research based on SNA has been increasingly used in health, including areas such as disease transmission, health behavior, organizational networks, social capital, and social support” (Fernández-Peña, Ovalle-Perandones, Marqués-Sánchez, Ortego-Maté & Serrano-Fuentes, 2022, p. 2). The SNA is therefore not only a more operational practice tool, but also serves a key function in the merge between social and health science research.

Environmental interventions may allow for more effective use of professional time, while extending professional interventions over longer time periods than usual, as well as booster shots of EI at set intervals, which can extend the duration of change and prevent relapse (Kemp et al., 1997). Around the mid-1990s an Inter-ministerial committee on youth-at-risk in SA, issued recommendations for the urgent change of the social welfare structure of the time; mainly focusing on the change from case-based social service delivery to community-based service delivery (IMC, 1996). Social network research has used exchange theory; rational choice theory, social capital theory; and dynamic network theory; as well as drawing from structural network theory that links network structural properties (such as density) and the positions held by people within the network who exhibit certain behaviors (Tracy & Whittaker, 2015). In the health sector SNA studies have been used to show the relationship between the characteristics of the social network and different health-related outcomes such as “health behaviors, satisfaction with social support in chronic illness, quality of care and patient safety, the influence of social networks on HIV prevention and treatment outcomes, behavior change and risk of disease transmission, or performance in health care organizations and health care providers” (Fernández-Peña et al., 2022, p. 2).

The above shows support for the benefit of SNA in both social and health services. Another critical rationale for the adoption of community-friendly frameworks relates to poverty reduction. According to Maksum, Nugroho, Puspitosari, Susanti, and Prastivi (2023) poverty alleviation depends on policymakers who prioritize community needs, and where policies are not aligned with community needs, they are deemed ineffective and a waste of resources. With centrally determined policies there is limited public involvement in decision-making, thereby reducing the chance to satisfy the communities’ demands (Maksum et al., 2023). Using citizen participation only as a form of tokenism, will not lead to impactful environmental change. The process of SNA ensures relevant engagement of the social actors about their social contexts’ capacity to meet their needs. More insights can be gained from

studying the impact of disrupted emotional bonds in childhood, which may produce insecure attachment. “Compromised attachment has a profound impact on developing capacities for regulating negative affect and mobilizing others as support in times of need by limiting an individual’s ability to relate to others and to participate in satisfying social interactions, which in turn, contributes to the development of a compromised personal network later in life” (Tracy & Whittaker, 2015, p. 646). During stressful periods, the social network can be seen as a ‘social fund’ that people could draw upon when they need to cope, although stressful life events disrupt social support resources (Tracy & Whittaker, 2015). “Families with seriously ill children face complex challenges including stress on siblings, physical and mental health issues, financial and work problems, relationship issues, social isolation and high distress” (Gill et al., 2021, p. 77). With these complex challenges a family caring for a terminally ill child experience, it is likely that their interaction style is affected. This in turn will affect their ability to access supportive networks, making it significantly more important that professionals delivering services to this vulnerable population are well equipped to facilitate the development of supportive networks.

5. CONCLUSION

Community work in SA is influenced by the sustainable livelihoods model. While its nature cannot be covered in this chapter, this is another approach that requires the skills discussed in this paper, as is also the case for the different set of guidelines for community profiling. The various applications of an environmentally focused approach demonstrated previously, is easier adopted to practice through the practical strategies linked to social network analysis and environmental intervention. The inclusion of this within the HE curriculum aimed at the professions delivering a service to terminally ill children, is therefore supported. Although more detail on the strategies discussed cannot be covered, a case was made for the importance of not losing the roots of analyzing and intervening in complex environmental matters. Environment intervention is more than community work with impoverished communities. The individual’s interaction with their environment is one of the strongest predictors of their quality of life. This link becomes even more critical when it comes to terminally ill children and their families trying to navigate EOL needs, especially with consideration of the poverty trap these needs can cause. More extensive classification systems like the Person-in-Environment systems, exist to more comprehensively describe the environmental systems, but the social networking approach is an easy adoptable process to ensure the interaction with, especially the social environment, is captured adequately. Significant development on understanding interventions within the client’s environment has been made, and acknowledging the rich social sciences history in this regard will ensure that practitioners are not perceived as only capable of limited environmental assessment and impact. Core to the benefits of allowing participation of the community networks in assessment and intervention, is the meeting of partnership goals towards ensuring sustainable services that increase the quality of life of terminally ill children and their families. The key asks of SDG17 being met through social network interventions include the strengthening and expanding of partnerships; brokering meaningful multi-stakeholder coalitions; and leveraging resources and capacities.

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R. Swanzen

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ABBREVIATIONS

CYCC	Child and Youth Care Center
EOL	End of Life
HE	Higher Education
PPC	Pediatric Palliative Care
SA	South Africa
SDG	Sustainable Development Goal
SNA	Social Network Analysis
UNICEF	United Nations Children's Fund

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