

# The creation of child-friendly spaces for nourishing rural areas: a South-African reflection

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## Introduction

In this chapter, the development of child-friendly places in the rural areas of South Africa as an essential component in overcoming poverty and inequality is investigated. This has been done by means of literature survey and practical research. The main objectives were to provide a theoretical framework through the literature study in support of the development of child-friendly places in rural areas to promote sustainable development, to determine whether a community-integrated approach also showed that child-friendly places was a community priority, to determine how this might be achieved, and to reflect on the benefits and limitations of the development of child-friendly spaces as an integral part of sustainable development. The main findings of this research pertain to the need of placing children at the centre of sustainable community development through investment in early childhood development (ECD) centres as child-friendly spaces, as well as places where sustainable development initiatives in the community could emerge.

While there is a global obligation for the creation of child-friendly spaces to enable sustainable development (Sullivan et al., 2021, p. 18), Africa's children require it more desperately than in any other part of the world. Africa's children are quintessential to its economic, demographic, social and environmental development, but there is a dearth of sustainable planning interventions that specifically incorporate a focus on children's needs (Clark et al., 2020, p. 609). This is an especially critical concern in the African context as, according to UNICEF's *Generation 2030* report (2014), Africa has the highest child dependency ratio in the world. Nearly 47 per cent of Africans are children under 18 years old, and in fifteen African countries more than half of their population comprises children under 18 years of age. In South Africa, the difference in the distribution of child population as a percentage of the total population emphasises the importance of rural interventions to improve the quality of life for children in the

countryside. The overall percentage of children in the South African population is calculated at 21 per cent (PopulationPyramid, 2019), while that of Griekwastad (the case study used in this chapter that provides a perspective of some of the requirements of rural South Africa's and Africa's children to enhance their quality life), is 44 per cent (Frith, 2011). To examine the relevance and applicability of the theoretical perspective that the development of child-friendly spaces encompassed in ECD programmes, the research for this chapter was conducted using the Griekwastad case study, which is a settlement located in the sparsely populated rural area of the Northern Cape in South Africa, with a population of approximately 7,000, of which 44 per cent are 19 years or younger (Frith, 2011). In a collaborative process where several sessions were facilitated by one of the researchers with members of the community of Griekwastad, the need for the establishment of child-friendly spaces was identified as one of the highest priorities. As a result, this research contributes to the global call in support of sustainable development planning which includes natural and open space planning to support the needs of children.

The choice of this case has been the commitment evident to the researchers through contact with the community for improving their living environment, based in, and pursued by, established community organisations and role players in Griekwastad. Exploratory talks between different faith communities from Alberton (where one of the researchers resides) and Griekwastad commenced in 2017 because of informal discussions between leaders of these faith-based organisations. It is important to note here that faith communities, particularly in the African rural areas, play a leading role as change agents (Idler et al., 2019, p. 346). When discussions commenced in Griekwastad to pursue ways in which these organisations could support development, other role players also became involved in the process, such as the traditional leader of the Griquas (King, or Kaptein, Waterboer), the local municipality and additional faith-based communities. It was evident from the beginning that one of the greatest concerns in the community was (and is) for their children and youth. One of the primary concerns of all the participants in this study was the increase of current and new environmental, social and economic challenges for children, which provides the impetus to give serious consideration to plan for and provide child-friendly public spaces to ensure our present and future generations' quality of life. Costin (2015) avers that to invest in young children through ECD programmes, such as child-friendly play spaces, the right nurturing and nutrition and so forth, is one of the best investments a country can make to address inequality, break the cycle of poverty and improve outcomes later in life. The research highlights the unique challenges, opportunities and perceptions of creating child-friendly spaces in African rural spaces where

communities do not necessarily have the support of state, but strive to improve the development of natural, safe spaces where education, cognitive development and independent mobility of children can be enhanced. This is linked to the research of Kessel (2018), who states that play-based pedagogy is the best way for young children to learn during their early years of life. The research further considered how to address the lack of child-friendly spaces in rural areas where limited infrastructure and opportunities are the status quo, and how to enhance the quality of life of rural communities by linking spatial planning approaches, innovative play-based pedagogy and nature-based solutions through participatory planning approaches.

### Child-friendly spaces in rural areas

The planning and development of nourishing and sustainable child-friendly spaces in rural areas have unique challenges, especially when they are considered in terms of the deprivations and dire needs that planning initiatives aim to amend. 'The concept of child-friendly spaces (or environments) has been inspired by the concept of child-friendly cities' (Nordström, 2010), referring to developing better conditions for children by focusing on public spaces, planned and developed according to the specific needs of children, improving health and development skills, and their direct relationship with the natural environment (Nordström, 2010), especially since natural outdoor play spaces are rich learning environments for children of all ages (White & Stoecklin, 2013, p. 26). Rural areas in South Africa are, as in most other global rural areas, characterised by low density, often informal dwellings, a complex community composition and the diverse nature of what is considered quality open spaces that can contribute to overall quality of life. Various causative aspects contribute to this privation, of which the most obvious and critical challenge is the impoverishment experienced by communities in predominantly rural areas, specifically the more vulnerable segments of the population. Women, in particular, bear the brunt of poverty in these areas (McFerson, 2010, p. 50). The difficulties that these communities face are numerous (South Africa Department of Rural Development and Land Reform, 2010) and, in addition to those already mentioned, include the loss of essential natural resources, food insecurity, a lack of economic opportunity, the unmet need for social services, poor education, geographic isolation, decay of the social fabric (child-headed households, crime, lack of *ubuntu* or '*I am a person through other persons*' emphasising the importance of societal commitment, one of the indigenous communities' core values), unresolved restitution and land tenure issues and poor infrastructure (Powell, 2012).

Rural areas are confronted with pressing needs such as the provision of basic services, housing and infrastructure, expected to be delivered within limited budgets and timeframes. Often, green spaces (and accompanying child-friendly space) are under-prioritised in these rural contexts (Cilliers & Cornelius, 2019). Child-friendly spaces are often also mistaken to be expensive commodities, while others consider it a luxury and do not grasp the social, physical or cognitive development value of such spaces. Safety concerns are very evident in these rural areas, where safety considerations mostly refer to issues of crime, and design elements, inflated by the concern for personal safety, are critical issues concerning all communities and consequently influence the way in which communities use public spaces. The fear of crime limits a child's opportunity to play in the outdoors, which is problematic for the successful creation of child-friendly spaces within the local South African environment. Independent mobility as a core goal of child-friendly spaces is thus severely limited due to a lack of physical design elements such as fencing, lighting and visibility to protect children from external forces such as traffic, weather conditions and crime-related activities, but also because design of these spaces does not consider the importance of perceived safety (Cilliers & Cornelius, 2019). To revise the planning of child spaces in rural areas, various authors emphasise the importance of integrated planning approaches (Gibbens, 2016, p. 234). Sustainable development planning stresses the importance of community involvement and ownership of their development initiatives (Asikainen et al., 2017). As such, the involvement of community members and organisations in addressing issues such as child-friendly places in rural areas are indispensable. In an attempt to reflect on the benefits and challenges of child-friendly spaces within the South African context, this research and planning process in the Griekwastad case study was conducted as a collaborative, participatory process.

### **Empirical investigation and case study: Griekwastad, Northern Cape (South Africa)**

The confluence of rural characteristics and local circumstances referred to in the previous section are also applicable to the case study which was selected for the purposes of this research. Griekwastad is situated in a rural South African area, and in collaboration with the local community of Griekwastad, the investigation was conducted to reflect on the creation of child-friendly spaces within this rural environment. Griekwastad was selected as a case study because of its location (characterised as a rural space in South Africa) and the possibility of obtaining quality data that accurately reflects the local circumstances and the involvement of 'insiders' because of the continuous

prior involvement of one of the researchers with the specific community. The prior collaboration considerably eased the process of data collection and mutual trust. A constraint, as previously mentioned, namely of the political, socio-economic and racial divisions that sometimes create unseen boundaries and restrictions in these rural communities (Schoeman & Van Schalkwyk, 2013, p. 781), was not evident in the Griekwastad case, since faith communities existed on both sides of this divide. The faith communities in Griekwastad have for quite some time specifically and actively searched for ways to enable their congregants to better their circumstances. Through the connection of the congregants of the faith community in Alberton to the faith communities in Griekwastad, they became part of this endeavour to co-create a vision for the future of Griekwastad. During the series of interactive consultation engagements, it became evident that while one of the primary needs of this specific segment of the community was the development of child-friendly spaces and this research report on that specific part of the broader investigation, there was also a vision that this endeavour could serve as a catalyst for further community development.

#### *Case study location and contextualisation*

Griekwastad is a small rural community located in the Northern Cape, forming part of the Siyancuma Local Municipality, which also includes the communities of Douglas, Campbell, Schmidtsdrift, Bucklands, Vaallus, Plooyburg, Salt Lake, Heuningneskloof and Witput (Figure 9.1). The Siyancuma Local Municipality has a population of approximately 40,000. Griekwastad (or Griquatown, as it is also known) consists of four main

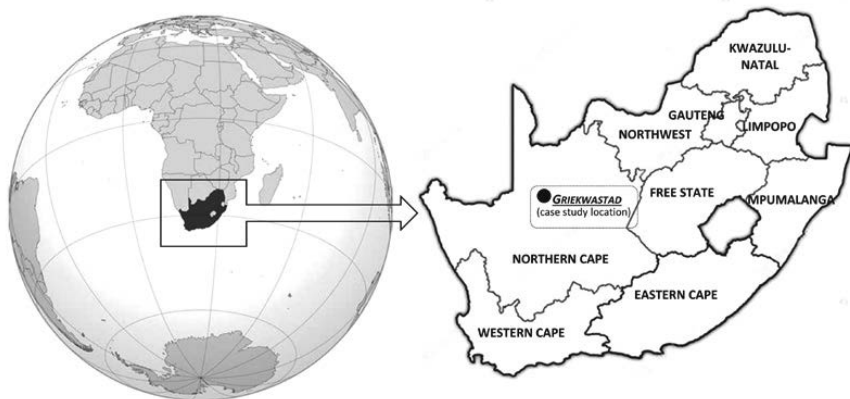


Figure 9.1 Location of Griekwastad.

areas, namely Griekwastad proper, Mathlomole, Vaalblok and Rainbow Valley. The 2011 census indicated that the combined population of these areas totalled 6,428. Griekwastad and its jurisdictional area covers 77 square kilometres, translating to a density of 83 persons per square kilometre. This renders Griekwastad a remote village in terms of the CSIR hierarchy, or a Category H settlement (CSIR, 2012, p. 11). These are villages that are often located more than 20km from larger settlements, with their catchment sizes ranging from 500 to 5,000 people. Most of the population identifies as coloured (60 per cent), with Black African about a third (33 per cent), and other population groups (white African and other) comprise the other 7 per cent. The primary first language spoken in Griekwastad is Afrikaans (95 per cent). As indicated earlier, approximately 44 per cent of the population is children under the age of 19.

As part of the investigation into the child-friendly spaces within this case study, the Voetspore van Hoop (Footprints of Hope) ECD centre was investigated. The approach followed in the Voetspore van Hoop ECD centre was also compared to other childcare centres as well as government-provided child-oriented open spaces in Griekwastad, to reflect on the wide disparities and challenges within the case study area. Using this approach, several meetings with community members in Griekwastad, including non-governmental groups such as faith organisations, were held, facilitated by one of the authors and including the administration of questionnaires. During these meetings, it became clear that the socio-economic circumstances are dire, especially regarding the needs of young children, youth and women. While the surveys indicated that there was a palpable need to provide for child-friendly spaces, the discussions also provided ways and means to integrate it in the community. The most urgent proposal from the community that was accepted to assist in these challenges was the establishment of an Early Childhood Development (ECD) Centre, as well as a community training and development centre in Griekwastad. The ECD Centre would emphasise early childhood development (with emphasis on the Griqua culture), while also involving them in the permaculture approach towards environmental management.

The establishment of the centre proceeded, supported and funded by members of the community, religious organisations (including some not located in Griekwastad), as well as some of the businesses in the surrounding rural area. As with most such projects, there were many challenges. However, the approach to involve the community in the initial planning, construction and implementation phases of the provision of child-friendly open spaces where education, environment, community, parents and peers can safely and securely provide for the quintessential needs of the children of Griekwastad significantly impacted on the viability and endurance of the

project. This has led to continued community involvement and the growth of primary and ancillary services. Early childhood development classes have been added, while vacation programmes for schoolchildren covering life skills, social development and physical activities are conducted during holidays. Food security has also been prioritised, with the permaculture garden currently (2020) providing 90 per cent of the fresh vegetable needs of the centre (which provides sixty children daily with two meals and two snacks). It has also assisted nine households in Griekwastad to establish chicken coops and permaculture gardening and provide for their family's nutritional needs.

### *Methodology and data obtained*

Ensuring a multidimensional data set to inform the research question as to whether the development of child-friendly places in the rural areas of South Africa was an essential component in overcoming poverty and inequality, a mixed-methods approach was used, which consisted of three parts, namely (1) household surveys which were analysed quantitatively to determine the composition and qualities of the communities involved in the case study; (2) child play-spaces surveys which were also analysed quantitatively so as to give an opportunity to voices not often heard in planning initiatives; and (3) qualitative interviews and planning sessions with local communities which were used to interpret and support the results of the quantitative analysis, as well as their approach towards sustainable development. The community needs were accordingly measured against current spatial planning approaches and provision of child-friendly spaces and supporting infrastructure to draw conclusions on the opportunities and gaps to enhance quality of life within these rural communities, while simultaneously prioritising the planning of child-friendly spaces within a rural context.

The facilitated collaboration sessions were held with community members from Griekwastad that overwhelmingly consisted of the Griqua community, with Afrikaans the main language spoken. These sessions were also supported by local community leaders, such as the king ('kaptein') of the Griquas, Johannes Waterboer, members of different church councils and local municipal officials. Most of the participants in the collaboration sessions were women, some of whom were young mothers but mostly grandmothers, with some men (youths and a few older men). Some informal qualitative interviews were conducted before and after these sessions to further refine the results of the research.

During these sessions, various challenges were discussed, specifically the need to 'get children off the street' and to have some form of economic development. This stems from one of the main concerns raised by the

participants, namely the problem of substance abuse such as glue-sniffing and alcohol abuse by children. This situation is exacerbated through the exploitation by drug and alcohol dealers, who specifically assemble packages that contain both a drug/alcohol allocation with a food packet that should last a month, based upon the value of the welfare subsidies provided by government (either childcare or pensions). There are even places that sell teaspoons already filled with glue, specifically targeting children. One of the primary solutions proposed was the provision of good-quality child-friendly places where children could engage in activities other than drug abuse or illegal activities due to boredom. However, some of the problems in terms of the existing child-friendly open spaces included that they are either part of formal education areas (schools) or fenced-in spaces that are locked (refer to the Mathlomole play space, Figure 9.2) and only available at specific times (if at all). This, to some extent, is due to safety and maintenance concerns, as these spaces are often vandalised.

There was also some indication from the participants in the community engagements that political concerns influenced the decisions of where to



*Rainbow Valley primary school play space*



*Mathlomole play space*



*Locked park between Vaalblok and Riemvasmaak, two informal settlements next to Griekwastad.*



**Figure 9.2** Collage of play spaces in Griekwastad. Clockwise from the top left: Rainbow Valley primary school play space; Mathlomole play space; locked park between Vaalblok and Riemvasmaak; two informal settlements next to Griekwastad.



plan for parks and what times parks would be open to the public. Another solution proffered was to encourage a self-sustainable lifestyle, to ensure food security and provide food for your own family. The main concern with this solution was the lack of knowledge and proper equipment. Although people viewed chicken farming as a possibility, it was very difficult to engage in, as there was a lack of shelter for chickens to protect them from predators.

To provide some perspective with respect to the discussions held with the community, a socio-economic questionnaire was distributed to gain some sense of the current circumstances in Griekwastad. With respect to the adult questionnaire respondents (sixty-three responses), 12.7 per cent of participants described their household as consisting of parents and children only, whereas 38.1 per cent stated that more family members resided with them in the house. Single parents accounted for 11.1 per cent, and 9.5 per cent were grandparents raising their grandchildren. A significant percentage of the respondents had low education levels, with 6.3 per cent having no education at all, 14.3 per cent some primary education and 33.3 per cent some secondary education. Respondents who stated that they did not have a formal income made up 36.5 per cent, 40.9 per cent reported their household income was below R26,000 per year, and 70.5 per cent indicated their income was below R36,400 per year. It was evident that the females in the household were primarily the income generators, but in some cases (11.1 per cent) children generated income. This 'income', however, may refer to the child support grant. The child support grant is a South African government-issued non-contributory social security grant introduced in 1998 that supplements the income of poor households with children up to the age of 14 years, thereby providing for basic needs and promoting the well-being of the child (Child Welfare South Africa, 2011). Apart from this, 14.3 per cent specifically stated the child support grant as a source of income. The main source of income is thus basically pension and child allowances from the state, plus whatever salary mothers earn elsewhere, most often in surrounding areas and towns such as Kimberley (the capital of Northern Cape and approximately 168km from Griekwastad), Douglas, Campbell, Prieska and Groblershoop (all between 50km and 120km from Griekwastad). Most of the respondents live in a duplex house (34.9 per cent), informal structure (33.3 per cent) or free-standing house (28.6 per cent). No formal sanitation was reported in 4.8 per cent of cases, and 9.5 per cent had no waste removal services available. Most residents (52.4 per cent) stated they did not feel safe in their neighbourhood, although 81 per cent indicated they are happy to live in Griekwastad. Two-thirds of respondents (67.2 per cent) indicated they were not satisfied with the cleaning of public streets and 74.6 per cent were not satisfied with the transport (taxi) loading areas.

A high number (86.2 per cent) stated they were unsatisfied with the sports fields and 83.1 per cent were unsatisfied with the play spaces.

One of the critical issues raised from the collaboration sessions and adult questionnaires was that of child-friendly places, and therefore the decision was made to conduct a questionnaire with some of the children of Griekwastad, to enhance participatory design approaches by including these children in the design process in terms of an 'informant role' as proposed in previous research by DeSmet et al. (2016) and Paracha et al. (2019) linking to the vision of 'research with rather than on children'.

The survey was conducted in Griekwastad during July 2017, with the full consent and approval of parents and caregivers. The purpose of the questionnaire was to acquire some understanding of how and where children spend their 'play' time. An investigation was also conducted to determine the places where children spent their time, outside of home and school. The surveys were conducted with 141 children between the ages of 2 and 17, with younger children assisted by their siblings. As approximately 44 per cent of the inhabitants are children under the age of 19 and the population is roughly 6,500, the sample size of 141 children is about 5 per cent of the child population. The survey was conducted anonymously and voluntarily, in line with ethical guidelines. The questionnaire was created in an age-appropriate manner, heavily supported by images for better interpretation. The survey consisted of five illustrated questions that were explained to the children. The participants were asked to choose an image from different play spaces where they currently play the most. The images ranged from a yard in a residential property to a street, a park, a school area and an open area, and provided the option to select 'other' if need be (Figure 9.3).

Forty-five per cent indicated their current play space is within a yard, followed by 30 per cent stating it is in a park. When the same images were presented and participants were asked where they would prefer to play, 43.3 per cent indicated the park as preferred play space, followed by 30.5 per cent indicating the school area and 16.3 per cent their yard. The results from the surveys overwhelmingly indicated that the children preferred to play in a (public) park and with other children.

The data obtained from the community survey and child survey were statistically analysed based on Cramer's V-test and descriptive statistics to further inform the results. Cramer's V-test identified the effect size and practical significance thereof (a large effect or practical significant association  $V \sim 0.5$ ; a medium effect or practical visible significant association  $V \sim 0.3$ ; and a small effect or practical non-significant association  $V \sim 0.1$ ). For the purposes of this chapter, the p-values are reported for the sake of completeness, but are not interpreted, since a convenience sample was used instead of a random sample, as further elaborated on in the following section.



Figure 9.3 Children survey.

## Discussion and interpretation of data

### *Challenges and opportunities identified from the child's-perspective*

A clear disjoint was evident between 'current play spaces' and 'preferred play spaces', with most children (N=64) indicating their current play space to be (1) Erf – private spaces such as a yard inside residential property (which in these rural environments are very small), followed by (2) the school yard, and most children (N=43) indicated the park to be their preferred play space (Figure 9.4).

When data were regrouped into age categories of 2–6 years, 7–12 years and 13+ years, the results in favour of the park remained the same across all age groups. The Cramer's V-test indicated  $V=0.189$ , implying a practical non-significant association or small effect (Figure 9.5).

Cross-tabulations provided insight on the specific needs of the participants relating to where they currently play and where they would ultimately prefer to play. A statistically significant association was evident ( $p=0.002$ ) and medium effect ( $V=0.259$ ) in terms of practical significance. Of the children who said that they mainly play in the private space (yard inside residential property), 53.1 per cent indicated that they would prefer to play in a park, while 88.9 per cent of children who indicated

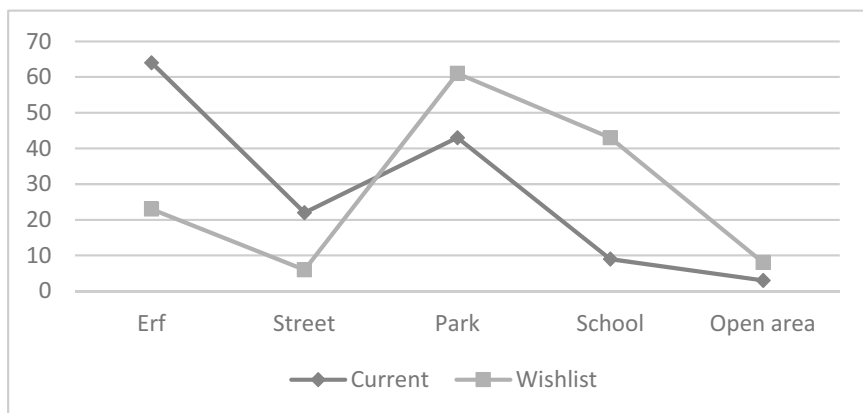


Figure 9.4 Current versus preferred play space.

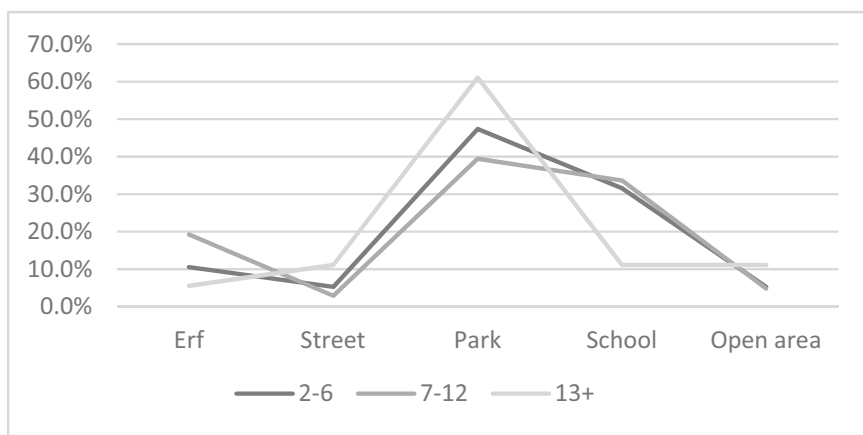


Figure 9.5 Preferred play space indicated per age category.

their current play space to be the school yard also opted for the park as preferred play space. The needs of children for public play spaces were further emphasised by most of them stating that they prefer to play with other children (72.3 per cent) in comparison to 22 per cent who stated they play with their own toys or 5.7 per cent who stated they play with natural elements such as soil, stones or water. Cross-tabulations with the age categories illustrated an increase in interaction with other children as age increases, but a decrease in play with natural elements and toys as age increases ( $V=0.154$ , implying a practical non-significant association or small effect of such). From these results it became evident that there is a great opportunity to create child-friendly spaces within the public domain, following a participatory design approach.

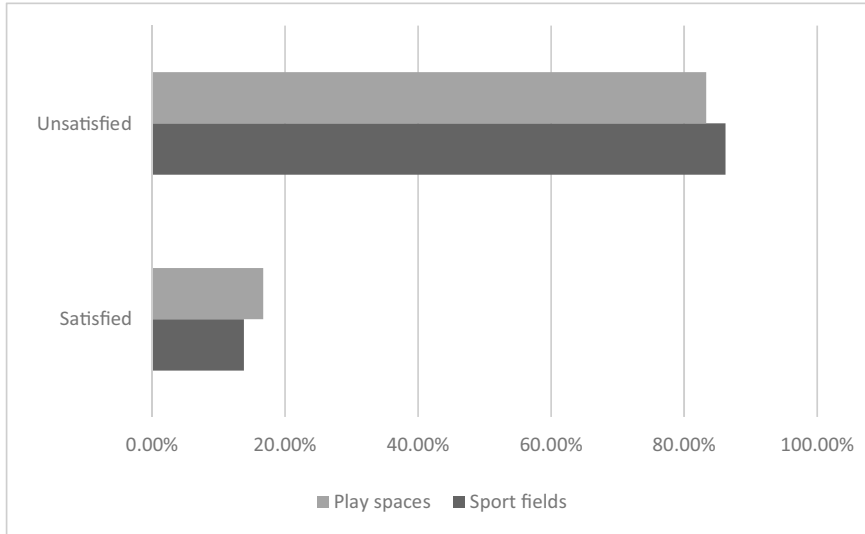


Figure 9.6 Perceptions linked to public parks and open spaces.

Table 9.1 T-test of income and perception of child spaces.

Income sampling	N	Mean	Std deviation	Std error mean	Effect size
Child-friendliness	R0-500	18	2.39	0.916	0.48
	R501+	25	2.88	1.013	
Play spaces	R0-500	15	3.33	0.900	0.22
	R501+	26	3.12	0.993	

### *Challenges and opportunities identified from the adults' perspective*

The community survey illustrated that adults and parents were not equally optimistic about the public spaces in the area, despite the child survey identifying it as a clear preference. The survey indicated that 86.2 per cent (N=58, mean 3.21 and standard deviation of 0.811) of rural residents were not satisfied with the current open and green spaces in their neighbourhood and 83.3 per cent (N=59, mean of 3.23 and standard deviation of 0.858) raised concerns and indicated that such spaces were insufficient for child play (Figure 9.6).

A T-test was conducted to determine the statistical difference between the means of the results of income per household and satisfaction with the child-friendliness of the neighbourhood, as well as their satisfaction with

specific play areas. Respondents earning less than R500 per month were more satisfied with the child-friendliness of the area in comparison to respondents earning more than R500 per month. The effect size ( $p=0.48$ ) illustrated a medium practical visible difference between the mean as well as the effect size. Both groups (earning less than R500pm and more than R500pm) indicated that they were unsatisfied with the play spaces, with a mean of 3.33 and 3.12 respectively. Table 9.1 illustrates the t-test of income and perception of child-spaces as employed in this research.

Rural community members in Griekwastad furthermore indicated that they prefer budgets to be allocated to the development of green spaces and, especially, child-friendly spaces, even if this implies reducing the current budget allocated for basic services and infrastructure. The rural community members included in the survey emphasised (and prioritised) the need for children from rural areas to have well-planned and maintained green spaces. It became clear that the socio-economic circumstances are dire, especially regarding the needs of young children, youth and women. While the surveys indicated that there was a palpable need to provide for child-friendly spaces (mostly indicated in the additional comments section), the discussions also provided ways and means to integrate it in the community. The most urgent proposal from the community that was accepted to assist in challenges such as ‘getting the children off the street’, substance abuse and an absence of safe child-friendly places, was the establishment of better Early Childhood Development (ECD) Centres as well as a community training and development centre in Griekwastad. The involvement of the community throughout the project lifecycle was identified as a crucial consideration in terms of the viability and success of the project.

### **Conclusions drawn from the theoretical and empirical investigations**

This singular case study provided qualitative and quantitative evidence of some of the challenges and opportunities pertaining to the planning of child-friendly spaces in a rural context. Most of the qualitative evidence was obtained during exploratory discussions, formal planning sessions, the comments section of questionnaires and the informal discussions that took place during the project’s progress. While several findings might be context-based and case-study specific, it still holds value for consideration within a broader planning framework, sensitising authorities and planners about these cultural and spatial variables that should inform the planning process to a greater extent, especially in the quest to create nourishing and sustainable rural environments in Africa.

*Specific challenges pertaining to child-friendly spaces within the rural context*

The Griekwastad case study confirmed yet again that green spaces (and associated child-friendly spaces in this regard) are often under-prioritised in the rural context. The recognition that children's well-being and environmental issues are inextricably linked is often deemed of little consequence when the provision of housing, water and electricity in rural areas is deemed of the utmost importance. This is especially true in impoverished communities, where there is an even greater need for quality child-friendly spaces that can ensure their current and future quality of life. Despite misconceptions that these rural communities need more pressing infrastructure or services, and open spaces are not a priority to them, the case study indicated the contrary, with most local community members identifying open spaces and associated child-friendly spaces as one of the most pressing priorities. Literature supports the notion that child-friendly spaces are a critical infrastructure need in support of social, physical and cognitive development, and this is even more true in the lower socio-economic status (SES) communities in South Africa.

The Griekwastad case study further confirmed the findings of previous research indicating that the fear of crime and concern for personal safety was one of the main concerns of these SES societies. This is evident in the vandalism of unfenced playgrounds, fenced play areas that are not used and the number of children indicating that they would rather play in parks than elsewhere being the highest (see Figure 9.4) but are prohibited from doing so as these areas are seen as unsafe. These are critical issues concerning all communities in South Africa and have a direct influence on the way in which communities use public spaces. The research of Adams et al. (2019), which contextualises nature as the 'dangerous other', was also evident in the Griekwastad case study, where parents and adults residing in this rural environment raised concerns about the safety of the open spaces and identified safety concerns as the primary reason why they won't allow children to play in these spaces. The safety concerns are directly affecting the quality of life of these children and local communities.

The lack of well-planned and designed child-friendly spaces within this rural environment, along with safety concerns, has a further negative impact on independent mobility. The findings of the Griekwastad case study align with the findings of the SAHRC and the UNICEF 2016 report which show that large numbers of children are not allowed to walk to school or play outside owing to fear of crime and threats to children's safety. The spaces in Griekwastad where children currently play cannot be considered child-friendly, especially since no physical design elements support these spaces,

such as fencing, lighting and infrastructure to protect children from traffic, weather conditions and crime-related activities. Safety and perceived safety are not considered in the provision of open spaces, let alone child-friendly spaces within this rural environment, having a severe impact on the quality of life of these local communities and children. Access to public spaces and play spaces are often restricted, as illustrated in the Griekwastad case study, which further inhibits independent mobility within these areas. The planning of public goods is failing within these rural contexts and comprehensive community engagement approaches are needed to contextualise the actual needs of rural communities, as well as the public goods relating to child-friendly spaces in a sustainable rural livelihood development approach (as stated earlier).

*Specific opportunities pertaining to child-friendly spaces within the rural context*

The rural context (and natural environment) can be a very valuable community asset and public good if planned accordingly. Spatial planning approaches, in concert with other relevant disciplines, should in this sense capitalise on the natural characteristics of the rural spaces themselves to support the enhancement of the quality of life in rural Africa by enabling the appropriate provision of child-friendly spaces. The research highlights the unique challenges and opportunities of planning child-friendly spaces in rural spaces and emphasises that in concert with community and faith-based organisations in rural areas, quality child-friendly spaces can be provided, specifically ECD centres, where education, cognitive development and independent mobility of children can be enhanced. The annual report for the Voetspoore van Hoop ECD indicated a growth in the number of children that are included in the centre, as well as additional community projects stemming from this initiative such as enabling food security and providing vocational training.

The provision of child-friendly spaces within this (natural) rural context would also relate to further opportunities relevant to play-based pedagogy. Since play is the best way for young children to learn during their early years of life (Kessel, 2018), these child-friendly spaces should be framed as critical social infrastructure, essential for the healthy development of children for their physical, social and cognitive development. In the Griekwastad case study, examples of such lessons include a permaculture garden and chicken coop on the open-space terrain which forms part of the ECD, where children learn to practically implement lessons learnt in the classroom. These spaces should not be underestimated, but rather prioritised because of the service they provide to the host communities in terms of a sense of



well-being, improvement of interpersonal abilities, establishment of creating thinking, and enhanced opportunities in terms of exploring and problem-solving skills. The limited development opportunities in these rural areas are even more reason to substantiate the urgent need for child-friendly spaces with age-appropriate facilities, and the impact of these child-friendly spaces (as critical infrastructure) will see an even bigger impact in the rural environments than what is currently documented in urban areas.

Integrated planning approaches provide another unique opportunity to enhance successful community development within the rural context (Gibbens, 2016, p. 234). Sustainable development planning stresses the importance of community involvement and ownership of their development initiatives. As such, the inclusion of community members and organisations in addressing issues such as child-friendly places in rural areas is indispensable. Small rural communities also are further challenged in terms of political, socio-economic and racial divisions that create unseen boundaries and which commonly lead to restrictions in these communities (Schoeman & Van Schalkwyk, 2013, p. 781). Although participatory planning is the ideal theoretical point of departure, much is needed to realise this in the practical rural spaces of South Africa, but this holds great opportunity for the rural environment.

### **Recommendation to enhance rural quality of life**

Child-friendly spaces could enhance the quality of life of rural communities, but would most probably be reliant on (1) an integrated approach to ensure continuous support and expansion of the concept of child-friendly spaces and (2) embedding these spaces as a catalyst for broader sustainable community development. This proposed approach should provide the necessary impetus and continuance of child-friendly spaces that contribute to an increased quality of life in the sustainable rural livelihood development approach.

#### *Integrated approaches to be prioritised*

The case study evidenced that the provision of child-friendly spaces in a rural context (based on the case study research and supporting literature) and as part of an interdependent and interconnected community system would not only improve the quality of life for children in these areas, but also that of the community, both short and long term, ensuring the achievement of sustainable development (considering, for instance, that this project was conceived in 2017 and still exists and is expanding in the area of meeting

the needs of children as well as that of the community at large). Context-based planning is central to the successful implementation of child-friendly spaces and should first be supported by adequate policies and legislative frameworks in aid of community development. This research identified 'safety' as the primary denominator impacting on the concept of child-friendly spaces (and public open spaces), linking to previous research that indicated that to be the case for most parts of Africa. Child-friendly spaces should be planned according to (community) use-values to enhance the context and significance thereof within the African environment. The research also considered how the lack of child-friendly spaces in rural areas where limited infrastructure and opportunities are available could be addressed, thereby enhancing the quality of life of rural communities by linking spatial planning approaches, innovative play-based pedagogy and nature-based solutions. However, it is within these guiding principles that context-based planning should be prioritised, to address actual community needs, where child-friendly spaces were identified as a (community-preferred) necessity for social well-being, but also to enhance functionality of these spaces.

*Contextualise child-friendly spaces as catalyst  
for quality of life in rural areas*

To embed child-friendly spaces as an integral part of decision-making and spatial planning, the multiple benefits thereof (for both communities and authorities) should be better articulated. More extensive research that draws on more case studies should be considered in an attempt to guide decision-making authorities away from misconceptions relating to the need for child-friendly spaces (which is currently mostly undervalued). Child-friendly spaces should, rather, be extensively valued and quantified in terms of the broader social, environmental and economic benefits that they can provide to communities and authorities, especially in the African context. The opportunities of rural environments to support the development of child-friendly spaces far outweigh the challenges associated with them and should, as a result, be prioritised in local and national policy and legislative frameworks and driven from a community perspective to ensure context-based, sustainable (quality) living spaces. The planning literature base should be expanded to include the value of child-friendly spaces in the broader African context, along with the application of sound scientific knowledge to set a standard for the planning and design of such, in the quest of enhancing overall sustainability in cities and regions across Africa. In conclusion, Table 9.2 captures a summary of the findings of this research in reflecting on the creation of child-friendly spaces for nourishing and sustainable rural environments in Africa.

Table 9.2 Recommendations to enhance quality of life within rural spaces.

	Conclusions	Evidence from case study	Proposed way forward
<b>Interventions</b>	Misconceptions about the need for open space (and play spaces) in rural areas should be addressed.	Local community members identified play spaces as crucial need, with higher priority than other basic services.	Extensive research to capture use-value of open spaces and child-friendly spaces within the rural context to inform decision-making.
	Lack of quality open spaces for play should be addressed through spatial planning approaches.	The disjoint between current play spaces and preferred play spaces inform the community need and current lack.	Child-friendly spaces should be defined and contextualised as critical social infrastructure and basic public good, crucial for development and quality of life.
	Safety considerations should guide open-space planning within the rural context.	Community stated concerns about safety as primary reason for restricting children’s use of current open spaces.	Unique design considerations which have focused on safety as primary objective should inform the planning of child-friendly spaces.
<b>Integrated approaches</b>	Context-based planning should be mandatory and supported by a legislative and policy framework.	Community need was not aligned with the services and infrastructure being provided within the case study.	Participatory design approaches to be emphasised as part of broader spatial planning, especially within rural environments.
	Nature-based solutions should form a more integral part of spatial planning thinking and land-use management.	No specific evidence was seen for nature being integrated as part of the design of play spaces although children identified parks as preferred play space.	Spatial planning to be aligned with innovative play-based pedagogy and more extensive nature-based solutions to optimise natural play spaces.
<b>Catalyst for change</b>	Child-friendly spaces should be introduced as catalyst to change status quo and enhance quality of life in rural areas.	The need for child-friendly spaces was voiced by both adults and children, recognising the value and necessity thereof for quality of life.	Specific design guidelines should be developed to create safe spaces, educational spaces, which support independent mobility in the rural context.

The litany of challenges facing the creation of child-friendly places, as enumerated in the previous sections, should not be seen as an impediment, however, but rather as advocating for the creation of sustainable living environments where the safety in child-friendly spaces solicits freedom of movement and unhampered participation in activities included in these areas (SACN, 2016, p. 14). This is especially vital in rural spaces such as Griekwastad, where the primary caregivers view this as a fundamental necessity for children.

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