

**Caregiver and adolescent experiences of mental health
support provided by a hybrid parenting programme in
Mpumalanga, South Africa**

Gloria Khoza
Dr Sara Jewett (Nieuwoudt)
Prof Lucie Cluver

A research report submitted to the Faculty of Health Sciences, University of the
Witwatersrand, Johannesburg, in partial fulfilment of the requirements for the degree of
Master in Public Health.

Johannesburg, June 2025

Declaration

I, Gloria Khoza, student number 0406156J, hereby declare that this research report is my own original work, with guidance of my supervisors in the write up and analysis. This report has not been submitted in part or substance for an award at any other university.

A handwritten signature in black ink, appearing to read 'Gloria Khoza', is written over a horizontal line.

Student signature

Gloria Khoza

Student number: 0406156J

Johannesburg, 19 June 2025

Dedication

To my husband and my children who have been my biggest cheerleaders to keep reaching higher. Thank you for patience in having less of me, and for taking on additional care and housework so that I can focus on this journey as a master's student. This has been an incredible journey, and it has been more worthwhile because of each of you.

Abstract

Introduction

Adolescence is a critical period for identity formation, often influenced by socio-economic and environmental factors. Evidence suggests that risk factors impacting mental health include violence, poverty, substance abuse, and poor parental mental health. Parenting programmes that incorporate mental health and psychosocial support tools to enhance adolescent well-being are becoming increasingly recognised. Supportive environments, particularly within the home, are vital for fostering positive adolescent mental health. This study examined the experiences of parents and adolescents who participated in the hybrid version of the Sinovuyo Teens Parenting Programme (herein, Programme), which was designed to promote positive parenting among parents and primary caregivers.

Methods

This qualitative study was conducted in Mpumalanga province, involving twelve parents and six adolescent girls who completed the hybrid Programme in 2022. Semi-structured interviews were conducted with parents and adolescents individually in settings where each participant felt at ease during the interview. Recorded data was translated and transcribed, with MAXQDA employed for coding. Inductive and deductive coding were applied to align with the study objectives.

Results

The overall format of WhatsApp and in-person meetings worked for both parents and adolescents. Participants valued formats of the programme differently, with parents noting the flexibility of the programme in participating through WhatsApp, especially given competing priorities and the ability to catch up in their available time, while adolescents reported more problems with WhatsApp. Both parents and adolescents

acknowledged the benefits of the in-person sessions, where they socialised, learned from their peers, and participated in joint learning to improve parent-child relationships. Parents and adolescents self-reported positive changes, including improved communication, spending quality time together, better household budgeting, and reduced harsh discipline within the home. These enhanced adolescent emotional security, supported consistent behavioural expectations, and alleviated family stress, leading to improved mental health support.

Conclusion

This study highlights the experiences of adolescent girls regarding their exposure to the parenting programme, focusing on the changes they observed in their parents. Additionally, adolescents and parents spoke of the increased ability to communicate openly. These findings demonstrate the potential of hybrid parenting interventions in providing parents and caregivers with skills to enable a conducive environment within the home for adolescents to discuss issues affecting their daily lives with their parents. However, further research and engagement is needed for child and adolescent participation in programming to strengthen adolescent mental health support in the home.

Acknowledgments

This study would not have been possible without the persistence, dedication and unwavering support of my supervisor Dr Sara Jewett (Nieuwoudt). Thank you to my second supervisor, Professor Lucie Cluver for useful insights on research in the real world. Most importantly, I would like to acknowledge the support from Mothers2Mothers in the data collection, specifically Clever Mubuyayi, Dlalile Lekhuleni, and Nobesuthu Maseko.

TABLE OF CONTENTS

1	Introduction and literature review	1
1.1	Introduction	1
1.2	Background	1
1.2.1	Adolescent mental health.....	1
1.2.2	Parent-child relationships.....	2
1.2.3	Positive parenting support programmes.....	4
1.3	Literature review	5
1.3.1	Hybrid parenting programmes.....	6
1.3.2	Inequalities in access and use of technology	6
1.3.3	Positive adolescent outcomes from in-person group-based programmes	7
1.4	Problem statement	7
1.5	Justification.....	8
1.6	Research question.....	9
1.7	Aim	9
1.8	Objectives.....	9
2	Submittable draft manuscript: South African Medical Journal (4000 word limit)	11
2.1	Introduction.....	14
2.2	Methods.....	16
2.2.1	Study design.....	16
2.2.2	Intervention.....	16
2.2.3	Study population and sampling	17
2.2.4	Data Collection	17
2.2.5	Data Management and Analysis	18
2.2.6	Ethical Considerations	18
2.3	Results	18
2.3.1	Programme acceptance between parents and adolescents	19
2.3.2	Facilitator qualities	21
2.3.3	Joint learning, sharing and practical support	21
2.3.4	Parents perceived positive behaviour change	23
2.3.5	Adolescent perceived parental behaviour change.....	24
2.3.6	Mindfulness, reflection and taking a pause	25
2.4	Discussion	25
2.5	Limitations	28

2.6	Conclusions	28
3	Extended methods	30
3.1.1	Study design	30
3.1.2	Study setting	30
3.1.3	Reflexivity	30
3.1.4	Study population and sampling	32
3.1.5	Data Collection	32
3.1.6	Data Analysis	33
3.1.7	Ethical Considerations	33
4	Extended Results	34
4.1.1	Participant recruitment	34
4.1.2	Adolescent engagement and peer support	35
4.1.3	Parenting support workforce retention	36
5	Overall Conclusions and Recommendations	37
5.1	Conclusions	37
5.2	Recommendations	38
5.2.1	Policy recommendations	38
5.3	Interdepartmental coordination and referrals	39
5.4	Programmatic recommendations	39
5.5	Implementation science and behavioural insights	40
6	References	41
7	Appendices	46
7.1	Appendix A: Plagiarism Declaration Report	46
7.2	Appendix B: Ethics Certificate	47
7.3	Appendix C: Turnitin Report	48
7.4	Appendix D: Journal Author Guidelines: South African Medical Journal	49
7.5	Appendix E: Semi-structured Interview Guide: Adults, Parents Or Legal Guardians	53
7.6	Appendix F: Semi-structured Interview Guide: Adolescents	57

List of abbreviations

DBE: Department of Basic Education

DWYPD: Department of Women, Youth and Persons with Disabilities

NDOH: National Department of Health

NDSD: National Department of Social Development

NPAC: National Plan of Action for Children

PLH: Parenting for Lifelong Health

RCT: Randomised Controlled Trial

SADHS: South Africa Demographic and Health Survey

SAMJ: South African Medical Journal

UN: United Nations

WHO: World Health Organization

Nomenclature

Parent:

This study adopts the term “parent” to broadly refer to the primary adult caregiver responsible for a child’s daily care, guidance, and support. The respective chapters on methodology and findings specifically use the term parents. However, it is important to consider the diverse caregiving arrangements prevalent in South Africa, where many children do not reside with their biological parents due to various factors. The interchangeable use of “parent” and “caregiver” is intended to reflect the social, cultural and structural realities of caregiving in the South African context, rather than imply a narrow biological definition of parenting. This report will consistently use the terms “parents” and “caregivers” to be inclusive of the dynamic living arrangements of children.

Adolescents

This study followed UNICEF and WHO guidelines in defining the term adolescents – who are individuals aged 10 to 19 years. This period represents a crucial stage of physical, emotional, and social development, where young people make the transition from childhood to adulthood.

In this study, interviews were conducted with adolescents aged between 13 and 18 years based on their assent and availability.

1 INTRODUCTION AND LITERATURE REVIEW

1.1 Introduction

This chapter presents the situation of adolescents in South Africa as it pertains to mental health outcomes. It presents the evidence base for parenting programmes that provide parents with tools and resources to improve the parent-child relationships and improve mental health support for adolescents. This chapter also examines the existing evidence on the use of digital innovations in providing specific support to parents and caregivers. This chapter ends with the objectives of this study in Nkomazi District, Mpumalanga, South Africa.

1.2 Background

1.2.1 Adolescent mental health

Adolescence is a period for shaping and forming one's identity. This developmental period also brings behavioural, physical, and cognitive changes, which are marked by an increased prevalence of internalising and externalising problems that can be overwhelming for adolescents in their social environments (3). Whilst adolescence is a time when independence is asserted in identity formation, this period also requires nurturing environments (1).

Adolescent mental health is a public health concern if not supported adequately. The World Health Organization (WHO) defines mental health as "a state of well-being in which an individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community" (1 p23). Given the dynamic and formative nature of this developmental period,

parenting and the home environment play an important role in shaping adolescent mental health outcomes (3).

In South Africa, 10% to 20% of adolescents are estimated to have mental health disorders which poses a public health challenge that is frequently overlooked (4,5). Evidence indicates that poor mental health outcomes are linked to various risk factors, including violence, poverty, substance abuse, unemployment, and educational attainment (2–5). There are numerous consequences of not addressing mental health issues among adolescents. High rates of exposure to violence, poverty, and difficult family dynamics often result in behavioural problems, including increased suicidal ideation, aggression, and substance abuse disorders (4,6). Internalising behavioural symptoms include social isolation, withdrawal, anxiety, and depression. Evidence indicates that negative peer pressure, exposure to substances, poverty, experiences of violence and abuse, and low supervision by parents increases the risks to adolescent mental health (4). Moreover, control, conflict, and values shape the development of internalising and externalising behaviours in children and adolescents, impacting their psychological and mental well-being (6).

1.2.2 Parent-child relationships

Positive parenting has been shown to yield long-term positive outcomes for children, including better management of stressful situations like economic insecurity, enhanced physical health, increased resilience, and improved emotional regulation, ultimately leading to better overall health (1,7–9). Positive parenting, characterised by parental warmth and consistency, can lead to long-term beneficial outcomes for children, including physical health, resilience, emotional regulation, and reduced effects of stressful events (1).

The mental health of adolescents is closely related to their relationship with their parents. Parent-child relationships are influenced by the living arrangements in the

home. When characterised by open communication and positive nurturing relationships between parents and children, adolescents fare better (10). A cross-sectional study in KwaZulu Natal involving adolescents aged 10 to 17 and their caregivers revealed a link between poverty, abusive parenting, caregiver mental health issues, and heightened physical, psychological, and behavioural health challenges in adolescents (11).

Parental mental health is inextricably linked with child mental health (10). Parents who are stressed or feel unsupported may struggle to provide the nurturing support that adolescents need as they navigate the journey of self-discovery. The treatment of mental health illnesses in South Africa is low, with evidence indicating that an estimated 75% of people requiring care have not received treatment (12). Studies from high-income countries found that between 12.2% and 45.0% of people experiencing a mental health illness are parents of children under the age of 18 (12). Furthermore, research has indicated that children with parents who have mental health illnesses experience poorer relationships with them and are at a higher risk of negative social, psychological, and developmental outcomes (12).

Furthermore, active involvement of fathers plays an important role in a child's development. Increasingly, evidence has shown the positive impact that fathers' involvement in care has on child and adolescent behaviour regulation, with positive co-parenting dynamics shaping social, cognitive and emotional development (13). However, family composition in South Africa is fluid, often characterised by children predominantly living with their mothers or grandmothers as primary caregivers, high rates of father absence, and positive male involvement, influenced by various social, cultural, and economic factors within the South African context (1,13,14). Research further highlights that children who have active, positive father involvement lead to children's improved performance at school, less engagement in antisocial behaviour and are more psychologically well adjusted (15).

1.2.3 Positive parenting support programmes

Parents and caregivers who are exposed to positive parenting programmes such as Triple P (16) are better equipped to provide an enabling home environment for adolescent development and support as it relates to mental health. Positive programmes have shown perceived changes in adolescent mental health as parents and caregivers are able: create and maintain consistent routines, use non-violent forms of discipline, encouraged open communication that supports children's emotional regulation, resilience, and social behaviour (4,10,17). Evidence suggests that investments in positive parenting practices can have protective factors beyond the individual level, with positive outcomes for children, including the establishment and maintenance of healthy peer networks, school completion, family relationships, and positive parenting (4).

The Sinovuyo Teens Parenting Programme (herein, Programme) is one of several parenting programmes designed to support a child throughout their life, as part of the Parenting for Lifelong Health (PLH) initiative. PLH is a partnership involving United Nations agencies, academia, development partners, and civil society organisations (18). The Programme is a 14-week group-based initiative involving dyads of caregivers and adolescents that was developed and evaluated in South Africa. The results of the Randomised Controlled Trial (RCT) indicate positive outcomes in parenting practices, enhanced caregiver mental health, decreased substance abuse, and reduced poverty (19). This research focuses on the adapted hybrid version of this evidence-based programme that Mothers2Mothers piloted between 2021 and 2022 in Mpumalanga province.

The hybrid Programme was an adaptation of the 14-week in-person programme, combining WhatsApp and in-person sessions. The aim of this programme is to enhance parental practices and caregiver-adolescent relationships through blended delivery models (20). Facilitators from Mothers2Mothers trained as social workers support the

WhatsApp based sessions, providing parenting information, reflective prompts, and opportunities for peer engagement. A total of eight WhatsApp-based sessions offers parents and caregivers the flexibility to engage with content at their convenience, provide continuous support through regular interactions and reinforcement of key concepts, and improve accessibility via the WhatsApp platform. Complementary to this, four in-person sessions are held to reinforce lessons learned, such as communication, positive reinforcement, and emotional regulation, in an interactive manner between parents, caregivers, and their adolescents.

The COVID-19 pandemic accelerated the need for digital innovations to reach parents and caregivers. Through its engagement with PLH, South Africa became a participating country in the pilot of the COVID-19 Playful Parenting Programme—a collection of digital parenting programmes adapted from the evidence-based PLH parenting approach programmes. This programme enabled parenting support interventions to be delivered through Text, WhatsApp, Parent Application, and a hybrid model(21). These digital interventions have each undergone their individual and respective RCT in South Africa and other countries with similar contexts (19), however, little research existed to understand participant experiences of digital platforms for caregivers and adolescents in the South African context at the time of this study. This research thus focused on the hybrid Programme, where parents, caregivers and adolescents were exposed to a mix of standardized in-person and ParentText (a WhatsApp-based platform) sessions over twelve weeks.

1.3 Literature review

This section provides an overview of the key literature related to the research topic and its objectives, beginning with a brief background on the effectiveness of hybrid parenting programmes. It then offers a review of the disparities in access to and use of technology, as well as the positive outcomes for adolescents from the group-based programmes of the Programme in South Africa that underwent a Randomised

Controlled Trial. Furthermore, this chapter establishes the foundation for the study's methodological approach and the interpretation of findings in the subsequent chapters.

1.3.1 Hybrid parenting programmes

Evidence of technology's effectiveness in enhancing positive parental behaviour, self-efficacy, and understanding of mental health promotion mainly originates from the global North (17,22–24). The availability of limited evidence-based programmes such as Triple P demonstrates a gap in literature from the global South on the efficacy of culturally appropriate programmes using digital platforms while ensuring accessibility amongst the poorest and most marginalised communities (23). Evidence on hybrid parenting programmes have shown promising results. A pre-and post-test cluster analysis study conducted in Spain found that parents with children under the age of three who participated in the hybrid programme reported better satisfaction with services, improved health promotion activities, and enhanced self-regulation compared to those who took an online course alone (25). Furthermore, this research highlighted the increased acceptability of hybrid approaches, resulting in greater reflections and engagement with content, goal setting and completion of courses (25). Similarly, as already mentioned, the Programme RCT has indicated improved adolescent and caregiver well-being by reducing abuse, substance use, and financial distress, while enhancing positive parenting, caregiver mental health, and family resilience South African communities (19).

1.3.2 Inequalities in access and use of technology

The digital divide, which results in inequalities in technology access and uptake, adds further complexity within the South African context (26). Survey data shows that 64.7% of South African households have at least one member who has used or accessed the Internet, whether at school, work, or other public spaces (27). However, when analysing access to the internet at home only, this was significantly lower at 10.7%, with marked

variations highlighting inequitable access across provinces (27). This data highlights several barriers contributing to these inequalities, such as insufficient digital and online exposure, apprehension about using digital platforms, high data costs, and limited access to the technological devices necessary for connectivity (26). Additionally, diversity is evident on digital platforms, with younger individuals having greater access to the Internet, computers, and mobile devices, enabling them to navigate the Internet and various mobile applications. Although demographic factors, such as lower levels of education, gender, and lower socio-economic status, constrain access to technology, older populations across these groups are particularly disadvantaged (28).

1.3.3 Positive adolescent outcomes from in-person group-based programmes

South Africa has limited evidence-based positive parenting programmes that intentionally target parents or primary caregivers of adolescents. Evidence from the Programme, an in-person group-based programmes targeting both parent or primary caregiver and their adolescent, has shown promising results, leading to improved caregiver mental health, increased involvement in parenting, reduced substance use, and less poverty (19). Whilst no difference was found in terms of changes in adolescent mental health, the Programme, leads to positive results for adolescents, such as reduced parental physical and emotional abuse, improved monitoring and supervision, and decreased financial stress (19).

1.4 Problem statement

Hybrid platforms providing parenting support interventions represent a relatively recent development, predominantly drawing evidence from the USA and focusing on White families (23). Child and adolescent mental health issues present a significant public health concern, as mental health disorders that begin in childhood often continue into adulthood (29). Evidence suggests that parents' mental health influences their child's mental health outcomes (4,10,17,30–32). The COVID-19 pandemic intensified the

socio-economic challenges confronting parents, caregivers, and children, many of which still exist in South Africa today. With heightened mental health awareness and self-reporting, it is becoming more critical than ever to provide support to promote, restore and protect mental health (33).

Evidence-based positive parenting programmes exist in the South African context that has shown positive effects in not only improving parent-child relationships but also in addressing socio-economic stressors such as poverty, substance abuse, corporal punishment, as well as mental health, which can have negative effects on adolescent mental health and overall wellbeing (19). A qualitative study conducted in Mpumalanga found that poor parent-child communication about mental health and illness had an impact on parent-child relationships (12). Poor communication was often a result of cultural beliefs and language on the definition of mental health, stigma, beliefs on self-adequacy to raise children (1,12). A qualitative study conducted in Mpumalanga found that poor parent-child communication about mental health and illness had an impact on parent-child relationships (12). Poor communication was often a result of cultural beliefs and language on the definition of mental health, stigma, beliefs on self-adequacy to raise children (1,12).

Despite a wealth of evidence on positive parenting programmes (34), limited qualitative studies have been undertaken to understand why these programmes work from the perspectives of parents, caregivers, and adolescents exposed to the same intervention in low-resource settings that engage both the parent and adolescent together.

1.5 Justification

There is minimal evidence regarding the effectiveness of parenting programmes delivered via digital platforms in Africa, as well as insights into their applicability for different groups. The PLH Teen programme, referred to as Sinovuyo Teens in South Africa, is among the few evidence-based parenting initiatives demonstrating positive

outcomes for parents, caregivers, and adolescents, as emphasised in the RCT (19). The hybrid parenting programme, therefore, provides opportunities for researchers to build on a body of evidence of culturally appropriate positive parenting programmes.

This study addresses two gaps in the existing body of evidence and programming for adolescents. The first is to understand the experiences of caregivers and adolescents, as well as the acceptability of hybrid parenting programmes from those who have completed the programme. Secondly, this research includes the voices of adolescent children, who are often missing in parenting programme research, enabling triangulation with parental self-reporting.

This study, therefore, provides evidence that may facilitate the adaptation and scaling up of a family-strengthening intervention promoting not only the mental well-being of parents or caregivers but also that of adolescents.

1.6 Research question

How have caregivers and their adolescents experienced the hybrid parenting programmes they participated in assisted in supporting adolescent mental health experiences within Mpumalanga province?

1.7 Aim

The research aim was to explore caregiver and adolescent experiences of hybrid parenting programmes, which provided tools and support to improve adolescent (14 to 17 years) mental health outcomes in Mpumalanga, South Africa.

1.8 Objectives

The objectives for this study were:

1. To compare the acceptability of the hybrid interventions among caregivers and adolescents in promoting mental health.
2. To explore caregivers' perceived changes in their own and their child's behaviour in coping with changes among caregivers who have participated in the hybrid groups.
3. To explore adolescent (14 – 17 years) perceptions of the mental health support received by caregivers who participated in the hybrid groups.

2 SUBMISSIBLE DRAFT MANUSCRIPT: SOUTH AFRICAN MEDICAL JOURNAL (4000 WORD LIMIT)

Preamble

This chapter has been formatted according to the author guidelines for the South African Medical Journal (Appendix D). This chapter adheres to the University of Witwatersrand guidelines for research report referencing, including referencing and numbering conventions. These will be revised according to journal guidelines when submitting the manuscript to SAMJ.

Caregiver and adolescent experiences of mental health support provided by a hybrid parenting programme in Mpumalanga, South Africa

G Khoza ¹ ; S Jewett ¹; L Cluver ^{2,3}

¹ School of Public Health, University of the Witwatersrand, Johannesburg, South Africa

² Child and Family Social Work, Department of Social Policy and Intervention, University of Oxford, London, United Kingdom

³ Psychiatry and Mental Health, University of Cape Town, Cape Town, South Africa

Corresponding author: G Khoza (gkhoza@gmail.com)

Abstract (332 words)

Background. Adolescence is a critical period for identity formation, often influenced by socio-economic and environmental factors. Evidence suggests that risk factors impacting mental health include violence, poverty, substance abuse, and poor parental mental health. Parenting programmes that incorporate mental health and psychosocial support tools to enhance adolescent well-being are becoming increasingly implemented. Supportive environments, particularly within the home, are vital for fostering positive adolescent mental health.

Objectives. To explore caregiver and adolescent girls' experiences of a hybrid parenting programme, which provided tools and support to improve adolescent mental health outcomes in Mpumalanga, South Africa.

Methods. This qualitative study was conducted in Mpumalanga province, involving twelve parents and six adolescent girls who completed the hybrid Programme in 2022. Semi-structured interviews were conducted with parents and adolescents individually in settings where each participant felt at ease during the interview. Recorded data was

translated and transcribed, with MAXQDA employed for coding. Inductive and deductive coding were ultimately applied to align with the study objectives.

Results. Parents and adolescents generally accepted the overall hybrid programme format, with some nuances regarding the challenges faced by adolescents in the WhatsApp format. Parents reported appreciating the flexibility of programme participation through WhatsApp, especially considering competing priorities and the opportunity to catch up in their free time. Both parents and adolescents acknowledged the benefits of in-person sessions, such as socialising, learning from peers, and engaging in joint learning to enhance parent-child relationships. Parents and adolescents reported experiencing positive changes, including improved communication, spending quality time together, better household budgeting, and less harsh discipline within the home.

Conclusion. This study highlights the experiences of parents and adolescent girls regarding their exposure to the Programme, focusing on the changes they observed. Adolescents and parents reported improved relationships characterized by spending time, better communication and reduction in use of violence. Whilst these are components that enable better mental health support parents and caregivers can provide to their adolescents; further research using child and adolescent participation is required to enhance adolescent voices in programme design.

Keywords: adolescent, mental health, parenting support, hybrid programmes, positive parenting, caregivers, parents

2.1 Introduction

Adolescence is a time when children aged 10 to 19 assert their individuality as they form their identity. Whilst this period is marked by the need for independence, adolescents require a nurturing environment (1). This period is also characterized by behavioural, cognitive and physical changes that can be overwhelming if not adequately supported (3).

Adolescent mental health disorders are estimated at between 10 to 20% (4) in South Africa, which should be considered a public health concern (34), however, this is often neglected (36). Mental health issues in adolescence manifest as internalising or externalizing behavioural problems. Internalised behaviours can manifest as symptoms such as depression, anxiety, withdrawal, and social isolation. Consequently, these symptoms may contribute to issues like low self-esteem, diminished self-efficacy in coping with stress, underperformance in academics, and suicidal thoughts. Additionally, externalising behaviours like aggression, substance abuse, and risk-taking can arise, all of which significantly affect psychological and mental health (6).

Cultural norms and stereotypes on mental health issues and disorders compound the ability of parents and children to openly communicate their emotions within the South African context. Evidence suggests that discussing emotions and feelings, rather than coping with them, is culturally frowned upon, which leads to a lack of regulation of thoughts, emotions, opinions, and feelings. This, in turn, can have negative outcomes for children if they are not supported in expressing their feelings and emotions (6,34,37).

Furthermore, corporal punishment in the home, or harsh discipline, is an accepted social norm in South African society. Survey data from the SADHS indicates that 41% of women aged between 15 and 49 years, who have one or more children living with them under the age of 18, have beaten their child with their hand or an implement, or have

slapped or hit them (38). While violent discipline is a social norm and accepted as a method of enforcing compliance or addressing undesirable behaviour, violence and harsh discipline can have detrimental consequences, resulting in aggressive or antisocial behaviours, as well as adversely affecting the mental health of children and adolescents, which may persist into adulthood (7). Data estimates that 7.6% of children under 18 years in Mpumalanga have sought mental health services (5), emphasising the unmet need for health services.

There is a growing demand for evidence-based parenting support interventions, particularly in terms of scaling parent support. Furthermore, evidence-based parenting programmes are increasingly recognised for their multiplier effects on various child development outcomes in education, substance abuse reduction, economic resilience, and violence reduction (34).

Positive parenting interventions, such as the Gaining Health and Wellbeing from Birth to Three as well as the Sinovuyo Teens Parenting Programme (herein, Programme), that have undergone Randomised Controlled Trials (RCTs), provide evidence that programme exposure yields positive effects. These effects include strengthened parent-child relationships, improved communication, reduced substance abuse, increased resilience against economic shocks, and enhanced parental mental health (17).

The in-person Programme was designed based on social learning theory and evidence-based behaviour change techniques, creating enabling family environments (19,41). The programme uses modelling, role-play, and reinforcement to promote positive caregiver-adolescent interactions that enhance emotional regulation, communication, and trust (42). Techniques such as stress management, non-violent discipline, and collaborative problem-solving equip parents with tools to reduce conflict and encourage nurturing relationships (1,3,42). These, in turn, strengthen adolescents' self-efficacy, emotional security, and coping capacity all of which are crucial components of mental well-being—(42). Furthermore, findings from a recent systematic review provide strong

evidence that parenting and family interventions are effective in enhancing child and adolescent mental health support in low- and middle-income countries (41).

As a follow-up to the RCT, this study aimed to explore the experiences of caregivers and adolescents in the adapted hybrid version of the Programme, piloted by Mothers2Mothers between 2021 and 2022 in Mpumalanga Province.

2.2 Methods

2.2.1 Study design

We used a qualitative exploratory study design (43) to understand caregiver and adolescent experiences of the hybrid parenting programme in supporting adolescent mental health needs. The rationale for using qualitative methods was to solicit experiences from adolescents and parents who had completed the hybrid Programme in Mpumalanga province.

2.2.2 Intervention

The hybrid Programme was implemented by Mothers2Mothers in Mpumalanga province by trained social workers. This programme consisted of twelve sessions for parent and adolescent dyads, four in person and eight on a WhatsApp platform. The in-person sessions are specifically designed to enable interaction through joint communication exercises and collaborative problem-solving, utilising participatory methods such as role-plays, games, and storytelling. Each group of 10 dyads was facilitated by two social workers from Mothers2Mothers, who facilitated the sessions in person and on WhatsApp group using a set curriculum and facilitator manual as developed by Parenting for Lifelong Health.

2.2.3 Study population and sampling

The study population consisted of parents and adolescents aged 13 – 18 who had completed the Programme in 2022. Parents and adolescents who did not live together were excluded from the study. Furthermore, parents with adolescents under 13 years were excluded from the study. Adolescents were 13 years and older at the time of interview; however, they were as young as 10 years old when they were enrolled in the programme in 2022.

Purposive sampling (43) was employed to recruit participants who had completed the hybrid programme over two years after exposure to it to understand the experiences and self-reporting of behavioural changes among parents and adolescent girls. The identification and attempted recruitment of 20 dyads was supported by Mothers2Mothers staff who predominantly provide services and programmes targeting adolescent girls for the prevention of HIV in high-risk communities. The final study sample was determined by data saturation, which occurred when no new information was identified during subsequent interviews. Furthermore, the sample did not consist of dyads as the adolescents did not show up for interviews, came back late from school posing potential safety concerns in leaving late in the evenings to accommodate their school schedules.

2.2.4 Data Collection

Semi-structured interviews were conducted in Mzinti, Mpumalanga, by GK between August and October 2024, in English, isiZulu, and Swati, lasting 30 to 60 minutes each. These were recorded with the consent and assent of participants. Parental consent was also provided for adolescents who assented. A participatory approach was adopted for adolescent IDIs to build rapport and keep the adolescents engaged, which included icebreaker activities to support recall of the programme.

2.2.5 Data Management and Analysis

The audio recordings were transcribed and translated from Swati or isiZulu into English by GK or, where necessary, using a transcription agency. Quality assurance was undertaken by reading the transcripts whilst listening to the audio recordings to ensure accuracy of the transcripts. An iterative approach was employed in analyzing the data using MAXQDA. GK generated the initial codes using an inductive approach. The codebook was shared with SJ for review and input, with comments and suggestions provided in identifying themes and patterns. Codes were then reviewed deductively in alignment with research objectives and key thematic focus areas to ensure alignment. In the results and analysis, we present themes aligned with the study objectives.

2.2.6 Ethical Considerations

The study protocol was approved by the University of the Witwatersrand's Human Research Ethics Committee (Ref: M220216). Written informed consent and assent were obtained from parents and adolescents, respectively, for participation and audio recording. Additionally parental consent was obtained for adolescent girls assenting to participation. Furthermore, all participants were assured of confidentiality and anonymity, as well as protective measures to securely store data for a maximum of six years if not published. The recordings and transcripts are password protected on a computer using unique identifier numbers.

2.3 Results

These results are based on interviews with 12 biological mothers and six adolescent girls aged between 13 and 18 who completed the hybrid programme in 2022. All interviewed parents were female and reported living with their respective partners and children. They owned at least one smart device in the household. Six of the parents had

adolescent daughters who participated in this study, and in such cases, their transcripts were paired. The remaining six parent transcripts were not matched, as their adolescents did not participate.

The findings are presented in line with the study's aim to explore the experiences of parents and adolescents in the Programme, with particular attention to the hybrid modality of delivery and reported outcomes. A total of six themes are presented.

2.3.1 Programme acceptance between parents and adolescents

Although overall acceptance of the hybrid programme was evident among both parents and adolescents, the adolescents provided more cautionary feedback on certain aspects of the WhatsApp component.

Parents reported having no preference between participating in WhatsApp sessions and in-person sessions. They appreciated the flexibility that the programme design provided due to its hybrid nature. The in-person sessions allowed for socializing with other participants and enabled participation in icebreakers and games.

I enjoyed when we go out together and go meet with other parents, because there we'd find that there were games of some sort. It became fun I'd feel like we would always have that time to go and play with them. (Parent 3)

Unlike in-person sessions, parents appreciated the additional benefits of WhatsApp, which allowed them to save content from the sessions and revisit it when needed to address specific challenges discussed on the platform.

I did not see anything bad with using WhatsApp because we worked well together, because sometimes when I was sitting by myself just would go back to

the voice notes and listen to them again. I would listen to the advice we were given on how to face certain challenges and what to do when you have a problem. (Parent 11)

Additionally, WhatsApp provided flexibility within the demanding context of work, travel and competing priorities. A parent highlighted the benefits of WhatsApp sessions:

I felt relieved, because WhatsApp makes things more flexible, makes things easier, because you just login to your WhatsApp and everything is happening there. You are engaging with other parents, just on your phone. You do not have to go out, you do not have to leave home, everything happens on the phone. (Parent 12)

Unlike parents, adolescents indicated a clear preference for the in-person sessions, as these provided the opportunity to meet other children and socialize. *“I also got meet with other children.” (Adolescent 2)*

Also, in support of in-person modalities, they highlighted the issue of accessibility due to the shared use of cellphones in their households. As explained by one participant, *“other children don’t have phones.” (Adolescent 1)*

Adolescents highlighted additional challenges of the WhatsApp sessions that were not raised by their parents. For instance, there were disruptions due to their parents' phones ringing during the session or their parents not being home to jointly complete the session, which required them to catch up later. An adolescent explained:

Most of the time we couldn’t log in, like the both of us because she’d be at work, and I’ll be home. You see? Then when she comes back, we must now scroll down and read from the start what was being discussed. (Adolescent 6)

Beyond the disruptions due to parents having other commitments, the issue of data was raised: “the only bad thing was that sometimes I would feel bad because parents struggled to get data.” (Adolescent 4)

2.3.2 Facilitator qualities

An important and recurring theme that came out was the positive role that facilitators played in the lives of beneficiaries who participated in the programme. Although the role of the facilitators seemed time-bound and aligned with programme implementation, some parents highlighted that the support provided by the Mothers2Mothers facilitators was limited to programme implementation. *“It was nice, we enjoyed the sessions. They treated us well. When they left, we were sad we wished that they could always stay.” (Parent 4)*

An interesting finding in this study is the role that the professional training of the facilitators (social workers) played in building trust and facilitating support-seeking behaviours.

We are sharing a lot because when they introduce us in first place they told us they are also qualified social workers and they also give us counselling so if I take out my secrets to her, when she comes to me she knows my character. (Parent 5)

2.3.3 Joint learning, sharing and practical support

In the short period of time in interacting with parents, the facilitators provided a safe space for sharing experiences and jointly devising solutions. A freedom of expression

was implied in how parents spoke about the programme, as exemplified in the following quote:

I knew very well that whatever I say in this group chat, they will assist me because they will come with their experiences and reality about their children. I was motivated, because we communicate with each other and we give each other our opinions, we can talk to each other and advice one another so it motivated me to learn more. (Parent 4)

An essential aspect of the programme design was having both parents and adolescents attend the programme together. The programme provided parents and adolescents with practical skills, such as sessions that enabled them to budget and save. This proved to be a popular session, that was referred to in multiple interviews.

I actually enjoyed the one regarding budgeting, because I didn't see the need in this. I didn't believe on these things of keeping money when it's there. So, once we started drafting and doing mind maps, it actually made sense that okay if I get a thousand rand, I will use two hundred for groceries, leave the rest for the month, or maybe keep a hundred rand for emergency. (Parent 5)

Furthermore, parents and adolescents had the opportunity to spend time together, and the importance of setting aside time for learning and strengthening the parent-child relationship is illustrated: *"It is that we had time to be with mom [and] both of us learn."* (Adolescent 1)

I was taught how to have a relationship with my child, so I can have a conversation with her, and they taught me how to treat my child. We work together now, we clean together and laugh, we wash dishes together and have conversations as mother and daughter. (Parent 3)

As highlighted above, not only did parents report spending quality time together through everyday chores, but another skill learned through the groups and encouraged was the importance of play. “I arrived and found that there are things I did not think. My child needs to play.” (Parent 3)

Through shared participation as highlighted above, parents and adolescents developed stronger communication skills, practical coping strategies related to budgeting, and mutual understanding—thereby fostering more supportive relationships beyond the duration of the programme. These insights emphasize that the programme created a protective environment that can alleviate stressors and enhance collaborative problem-solving within the household, as well as strengthening emotional wellbeing.

2.3.4 Parents perceived positive behaviour change

Improved communication was a recurrent theme amongst parents, a core skill and resource that could be used to actively engage with their children. Parents emphasized the importance of discussing feelings and emotions and communicating them openly. One parent reported that:

Okay. Before the programme, it was not easy. I did not share my feelings with the children here at home. Now I can call them and tell them that I have this kind of problem. Or when they open the fridge and not find something I can tell them that this month it is a bit hard, please be patient with me. They understand now when I communicate with them. (Parent 2)

Parents reported perceived improvements in their relationships with their adolescents. Some parents reported that their exposure to the programme led to perceived changes in the overall home environment, including improved communication.

Things are better now. She is also able to talk to me now and tell me if she has any issue. She also speaks to her father and tells him “Today, this and that happened at school.” We sit her down and talk to her about anything, I never knew that we should involve our children when making decisions. (Parent 4)

Prominent feedback and self-reported perceived changes amongst parent involved changes from using violent and harsh discipline to positive open communication with their children.

They gave me a nickname. They called me Batista [World Wrestling Entertainment character]. One day I entered the house, and they said, “here comes Batista”...But now they say I have grown. I am no longer Batista... I could not play with my child. I could not even sit down with them and talk. Since I attended the sessions, it helped me a lot because I can now spend time with [my children] as girls. (Parent 1)

Some parents reported that open conversations about budgeting and finances with their children enabled them to better manage their children's expectations regarding money and resulted in an improved understanding of the household's economic situation. Beyond the practical skills in budgeting and savings, the programme taught parents and adolescents how to improve communication with each other and the importance of sitting down to have conversations to resolve issues.

These sessions help a lot. They teach communication between the child and the parent, to interact with the child, you should stay with a child, and [they should not be] scared of you. You should be the parent, and also a friend, so that when the child has a specific problem, they are able to communicate. (Parent 12)

2.3.5 Adolescent perceived parental behaviour change

Adolescents also reported on improved parent-child relationships, often with a focus on improved communication dynamics because of the programme.

We can talk about everything we face at home. She can share her problems with me, and I can also share mine with her. So, we are open towards each other.
(Adolescent 4)

It's good. Because we mostly understand each other. I can sit down with her if there's something bothering me. I'd tell her, then she'd come up with a way to fix it. (Adolescent 6)

2.3.6 Mindfulness, reflection and taking a pause

In addition to communication dynamics, parents highlighted how the programme's inclusion of mindfulness exercises and checking in on emotions at the beginning and end of each session provided them with the skills to better manage their mental health.

So, when the lessons arrived, they made me realize, I am destroying my kids. When they introduced the breath in, breathe out I felt myself getting calm. I practice it a lot. It helps me manage my anger. (Parent 5)

You must be calm before you go confront the child, because if you just go angry, you can't talk to the child, because they won't hear you also. You talk to your child calmly, so they listen. We want them to listen to us, respect us, and love us. What I want from the child, I must also give to them, these sessions were guiding us along those lines. (Parent 12)

2.4 Discussion

This study found a high overall acceptability of the programme among participants, although adolescents expressed concerns regarding the logistics of the WhatsApp component that need to be addressed. Both parents and adolescents confirmed that key aspects of their relationships had changed, specifically in terms of reduced harsh discipline, improved communication, spending quality time together, household budgeting and engaging in play. Regarding mental health support, parents noted the skills they had acquired from practising mindfulness exercises, while adolescents highlighted their ability to discuss the issues they face with their parents. Furthermore, this study has highlighted what other research has found on the value of peer social networks amongst parents and adolescents, as these facilitate mutual learning, strengthening relationships for future support and emotional wellbeing (29,36). Furthermore, the facilitators and other programme participants provided an additional sense of community and a safety net for collaborative learning and sharing, thereby enhancing parent-child relationships.

A key strength of this study is that it builds on an RCT that has already established the effectiveness of the programme. What this study adds are specific implementation considerations related to the hybrid nature of delivery and the dual perspectives of parents and adolescents. While this study provides rich data on the positive impact of the programme in improving parent-child relationships, it was not possible to triangulate the data between the matched dyads regarding perceived increased support from parents and caregivers, as the adolescents did not share explicit examples of mental health support provided beyond the activities they learned from the programme that resulted in spending time with their parents and communication.

This study contributes to the growing body of knowledge on hybrid parenting programmes in their ability to provide parents with the tools to support adolescent mental health. This research has demonstrated the acceptability of the programme design for delivering the hybrid Sinovuyo Teens programme, whilst building on existing research. Parents highlighted the benefits of both the in-person and WhatsApp-based

components, as well as the hybrid format's ability to enable observational learning, social support, and the adoption of positive behaviour (33,35,39), thereby improving overall parent-child relationships and fostering a foundation for effective communication. Whilst this study was unable to provide explicit examples of the improved mental health support that adolescents received after exposure to the programme from their parents, insights have been gained into the important foundations of communication about feelings, experiences, and spending time together that potentially facilitate improved adolescent mental health support that can be provided by parents and caregivers (12). This is indicative of the programme being able to create meaningful mental health support within the home.

This research also highlights essential policy considerations for a dedicated parenting workforce comprised of community workers, social service professionals and allied professionals with the necessary skills and competencies to provide additional support to parents and adolescents. Parents highlighted the additional support they received from facilitators who were qualified social workers, emphasizing the qualities and competencies of the workforce are an important consideration in the implementation of parenting programmes underpinned with behaviour change.

Furthermore, responses from parents show that parenting support interventions alone may not be sufficient, and that additional support may be required from the workforce in addressing the unmet need for adolescent mental health support within the home. Further research and insights are needed to understand the workforce competencies required for positive parenting programmes to be effective, enabling parents and caregivers to be better equipped to provide mental health support in the home.

The RCT conducted on the Programme (19) was reinforced by this qualitative study, which highlighted the programme's positive effects, including reduced harsh punishment, more positive parenting, lower parenting stress, and increased social support. Parents and adolescents who participated in the hybrid programme self-

reported similar positive effects, confirming not only the acceptability of the hybrid intervention but also indicating its potential to deliver comparable benefits. However, a limitation exists in the impact on adolescent mental health support, necessitating further research into programming for adolescents.

2.5 Limitations

Future studies should consider having younger researchers engaging with children and young people to enable greater trust and openness to sharing information on the impact of the programme. Additionally, given the limitations of the study and the factors that may have contributed to a lack of rich data from adolescents, further research and investment are required to enhance child and adolescent participation in programme design and research aimed at improving adolescent mental health outcomes through parenting support interventions. Furthermore, due to the researchers positioning, social desirability may have impacted getting true and authentic experiences from parents and adolescents of the programme and the perceived positive changes reported. This potential bias highlights the importance of interpreting self-reported data with caution and triangulating findings where possible.

This research also starts to highlight the important role that the workforce plays in delivering evidence-based parenting programmes. This study, however, has limited insights into understanding the criteria and the competencies required to optimize group dynamics and individual outcomes. Further research is required to determine what works best in terms of the workforce that enables sustainable programming, which can be scaled beyond social development focusing on child protection into mental health strategies.

2.6 Conclusions

The hybrid Programme builds on the existing body of knowledge in understanding how improving parental skills and capacity for emotional regulation, positive discipline, and improved communication can have positive results for children, specifically adolescents. The results from this study provide promising evidence of the utility of the hybrid programme for parental support in improving stress and mental health among parents.

However, the sustainability of the programme, considering South Africa's inequalities in access to data and information, as well as the complexities surrounding the workforce and child and adolescent participation, requires further research to enhance programme results. Furthermore, feasibility studies are necessary to understand how evidence-based parenting support programmes, such as the hybrid Programme, can be regarded as an additional preventative measure for promoting adolescent mental health. It's also crucial to consider the digital divide, while recognising the benefits of scaling hybrid interventions within resource constrained settings.

3 EXTENDED METHODS

This extended methods section provides details that could not be included in the paper in accordance with the SAMJ author guidelines. This section is written in alignment with the WITS guidelines, but paraphrases what has already been fully explained in the methods chapter to ensure better coherence and flow.

3.1.1 Study design

As described previous, this was a qualitative exploratory study (43) designed to understand caregiver and adolescent experiences of the hybrid parenting programmes in supporting adolescent mental health needs.

3.1.2 Study setting

The hybrid programme was tested across two districts by Mothers2Mothers, namely Nkomazi and Mbombela. According to the SADHS data, Mpumalanga province has 25% of women and men aged 15-49 who are HIV positive, with 18% of adolescent girls aged 15-19 who have begun childbearing, placing the province as one of the highest prevalence of teenage pregnancy and HIV/AIDS rates in the country (38). However, GK focused only on the Nkomazi district, and specifically in Mzinti, a traditional settlement in Mpumalanga Province, close to the borders of Mozambique and eSwatini. The locality has a total population of 11,412 people with over 36% being children under the age of 14 years. Access to the internet is low, with 69% with no access, and 22% being able to access internet from their cellphone (44).

3.1.3 Reflexivity

GK is a Programme Officer responsible for the implementation of evidence-based prevention and early intervention programmes for a UN agency has influenced her interest in what works in efforts to scale up evidence-based programmes to reduced violence against children. As a parent of adolescent boys, how to support her children in the stage of norming and forming and ensuring their mental health wellbeing is also important to me. Throughout this research process, GK noted power dynamics that may come into play when conducting interviews and made deliberate attempts to engage and socialize with the participants prior to data collection. Furthermore, working closely with the Mothers2Mothers facilitators and their presence aided in building rapport and trust. GK positionality as an employee with the United Nations system may have influenced social desirability on the families that the Mothers2Mothers facilitators would have identified to participate in the study. Furthermore, GK's background of being a student from Johannesburg conducting research on a programme that participants had been a part of may have resulted in social desirability bias, especially amongst parents wanting to portray the adoption and maintenance of perceived positive changes. GK maintained transparency in presenting the findings rather than previous experiences of the impact of parenting programmes. Dedicated time was spent in capturing the authentic voices without interpreting what GK thought was implied. In conducting the interviews, GK kept notes on participant body language, and expressions which provided insights on her personal perspectives and biases that may influence the data analysis.

GK's supervisors and co-authors are academics from the University of Witwatersrand and the University of Oxford, respectively. Both are also parents to children across different developmental milestones. GK's engagements with them have informed her ability to navigate the complexities involved in the areas of convergence between public health and my professional work. Their distinct approaches have enabled a balance between policy-informed programming and evidence-based research, allowing for a more practical and pragmatic approach in undertaking this study.

3.1.4 Study population and sampling

The study population consisted of biological mothers or legal guardians and adolescents aged 13–18 years who had completed the hybrid Programme in 2022. The participants had completed the hybrid Programme in Mpumalanga, which was implemented by Mothers2Mothers, a non-profit organisation. Parents or legal guardians and their adolescents who do not live together were excluded from the study.

Purposive sampling (43) was employed to recruit participants who had completed the hybrid programme at least two years post-exposure to understand their experiences and self-reported reports on behavioural changes among parents and adolescent girls. Mothers2Mothers facilitators who had implemented the hybrid parenting programme supported with recruitment and setting up appointments with 20 dyads. This mode of recruitment was most helpful as participants had established a rapport and trusting relationship with the facilitators. Participants were able to select the setting of their semi-structured interviews to ensure comfort and privacy.

The final sample was established based on data saturation among parents. Considering the dyadic design of the programme, the objective was to capture paired perspectives from both mothers and adolescent girls. Once it was determined that no new themes emerged from the parent interviews, further interviews with adolescents were not conducted, as this would have constrained the capacity to compare and interpret experiences as well as perceived behaviour changes within parent–adolescent pair. This was already constrained by having six adolescents participate in the interviews as planned.

3.1.5 Data Collection

Semi-structured were conducted between August and October 2024 in English, Zulu, and Swati, lasting between 30 and 60 minutes each. These recordings were made with the consent and assent of the participants. GK conducted IDIs to gain insights into their experiences. Furthermore, GK employed a participatory approach for adolescent IDIs to foster rapport and maintain their engagement. Specifically, GK integrated some ice-breaker activities to support the recall of the programme.

3.1.6 Data Analysis

The audio recordings were transcribed and translated from Swati or Zulu into English, where necessary using a transcription agency. Quality assurance was undertaken by reading the transcripts whilst listening to the audio recordings to ensure the accuracy of the transcripts. An iterative approach was employed in analysing the data using MAXQDA. The initial codes were generated by using inductive coding. The codebook was shared with my primary supervisor for review and input, with comments and suggestions provided to help identify themes and patterns. Codes were then reviewed deductively in alignment with research objectives and key thematic focus areas to ensure alignment. In the results and analysis, this report focused on themes aligned with the objectives of this study.

3.1.7 Ethical Considerations

The study protocol was approved by the University of the Witwatersrand Ethics Committee (Reference Number: M220216). Written informed consent and assent were obtained from parents and adolescents, respectively, for participation and audio recording. Furthermore, all participants were assured of confidentiality and anonymity, as well as the protective measures in securely storing data for a maximum of six years if not published. The recordings and transcripts were password-protected on a computer using unique identifier numbers.

4 EXTENDED RESULTS

This extended results section provides details that could not be included in the paper in accordance with the SAMJ author guidelines. This section presents additional findings from participants that extend beyond the scope but are critical to note, especially in relation to issues such as recruitment, gender equity, adolescent peer support and the parent workforce.

4.1.1 Participant recruitment

The recruitment and targeting of participants came up, especially working with families where children live in difficult conditions with substance abuse and violence. Exposure to the programme has enabled adolescents to aid in identifying some of the limitations of recruitment which may miss those who need the programme most, as it was perceived amongst some adolescents that the recruitment aimed at speaking to the parents and enrolling them onto the programme, rather than engaging with the adolescent children.

I think when they do home visits, they should interview the kids who have challenges, like those who are being abused and kids growing up in toxic families, they should have one-on-one sessions with those families, because sometimes kids can't vent out at home, their parents may always be drunk, so it will help if they intervene. (Adolescent 5)

Programme limitations were brought up by a parent as it related to the targeting of adolescent girls over adolescent boys, and the need for support in parenting a boy child.

Why don't pay as much attention to boys? Because we have boys here at ours homes and we're struggling. There are things we just don't understand when they start happening. So if they can also have their group, where they can be taught. That would be very great. (Parent 7)

4.1.2 Adolescent engagement and peer support

In line with the need for adolescent participation and engagement, an adolescent highlighted the necessity for increased peer support to be provided to young people while expanding and strengthening positive social networks for parents.

For them to attend by themselves without any parents because children, even though we can say they talk about anything, it won't be the same as when they talk with their peers. Why don't you create that opportunity? You can carry on and encourage other girls on how they need to behave themselves and I wish that also you could be in all areas. Don't give up because it works for us it teaches what right. (Adolescent 2)

Another interesting insight was provided by an adolescent on how the programme positively impacts participants, but also has the potential to alienate and lose previous social networks and peers who have not been exposed to the programme, and exhibit undesirable behaviours.

My former friends still continue to do things the way they did, but one of them does well at school. She has the mentality of studying, and her family is well off, but the things she does don't sit well with me. Even if I try advising her, it's like I'm wasting my time because she has her friends. (Adolescent 4)

4.1.3 Parenting support workforce retention

Furthermore, the retention and continuity of facilitators throughout the 12-week implementation period were highlighted by a parent.

It annoys me because we cannot be calling someone and talking to her and next thing, she says she is no longer working there and cannot be talking because they signed a confidential contract so can they refer me... Don't refer! So please can they fix that. (Parent 5)

However, the above statement from a parent also highlights the risk of dependency that parents and adolescents may develop on the additional support that a facilitator provides for families with extra individual needs.

5 OVERALL CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

This study adds to a growing literature on positive parenting programmes that show promising results in enhancing parent-child relationships by fostering warm, nurturing care and promoting positive discipline, which ultimately supports children's wellbeing (1,3,19,45). Specifically, this study has shown the promising role of the hybrid Programme in reducing household violence, improving parental mental wellness and stress management, and enhancing parent-child communication, which contributes to a more positive home environment. Insights from this research suggest that structured, evidence-based parenting support interventions can help shift behaviours in the home, enhancing adolescent wellbeing. While specific improvements in adolescent mental health were not explicitly found in this study, the reported improvements by adolescents of their parents' behaviour and communication are important contributing factors in providing mental health support and preventing mental health illnesses such as anxiety, depression, and behavioural issues.

This study emphasizes the importance of evidence-based parenting programmes aimed at both parents and adolescent children in improving adolescent mental health; however, it is important to recognize that parenting starts at conception (46). Research shows a strong link between parental mental health and child well-being, suggesting that providing mental health support to parents early in pregnancy fosters better bonding and secure attachments, which are essential for optimal emotional and cognitive development in children (3,4,46). Therefore, parenting programmes should adapt in line with children's development throughout their life course. Understanding and addressing the mental health needs of parents throughout their child's development is crucial for creating nurturing, supportive environments that promote optimal physical and mental well-being for children from early childhood to adolescence and beyond.

5.2 Recommendations

5.2.1 Policy recommendations

Parenting programmes have provided promising evidence of their efficacy in violence prevention as well as supporting the mental health of parents and children (3,46). Fortunately, South Africa has an enabling policy environment that recognises the importance of parenting support. However, effective implementation of these policies must be a priority. The National Strategic Plan on Gender Based Violence and Femicide, the National Adolescent and Youth Health Policy and the White Paper on Families, highlight the parenting support in reducing violence against children and promoting gender equitable care (47), promote health and wellbeing of youth (48) and strengthening responsible parenting and caregiving (49) further demonstrate this commitment at policy level in strengthening youth services and family support. Furthermore, the National Plan of Action for Children should ensure that children's voices are considered in documenting the types of support children need to thrive within the home environment and what is required specifically within parenting support to effectively respond to their changing needs to receive responsive care and support from their parents and caregivers.

Effective interdepartmental coordination is essential for the successful implementation of parenting support throughout a child's life course (50). An interdepartmental coordination mechanism is required to oversee parenting support initiatives across various government sectors, including the Department of Social Development (DSD), the Department of Health (DOH), the Department of Basic Education (DBE), and the Department of Women, Youth, and Persons with Disabilities (DWYPD). The establishment of an interdepartmental coordination mechanism will provide alignment between policy and programme implementation, improve resource allocation (51) – especially in the context of shrinking fiscal environment (52), and the scaling up of evidence-based hybrid parenting interventions.

Given the prominence of parenting support within the policy landscape, a key consideration should be conducting a feasibility study to establish a dedicated workforce focused on parenting and family strengthening through hybrid service delivery. This workforce could be integrated into existing community health and social development service delivery mechanisms, allowing parents and caregivers to receive continuous support from professionals.

5.3 Interdepartmental coordination and referrals

Parenting support should not be provided in isolation of a package of services provided by the state. Evidence has shown that mental health is shaped by socio-economic factors as well such as violence, substance abuse and poverty leading to internalizing and externalizing behaviours (5,6). Strengthened referral pathways between and within government departments are necessary to enable adolescents and families to receive comprehensive support, including mental health services, educational support, social grants and violence prevention interventions.

A collaborative effort among DSD, DoH, DWYPD, and the DBE can effectively address the diverse needs of adolescents through digital platforms is required. This approach will foster better service integration, more efficient referral processes, and strengthened collaboration across sectors.

5.4 Programmatic recommendations

Programmes designed for low-resource environments, such as the hybrid Programme, has shown encouraging results in enhancing behaviours among both parents and adolescents. It is crucial to expand and adapt these interventions to make them

accessible and culturally sensitive to appeal to diverse communities. A key focus should be on scaling up these parenting support initiatives to reach the most at-risk families. This can be achieved by utilising current community service delivery systems, such as clinics, schools, community development centres, and NGOs. Integrating parenting support into existing service delivery mechanisms can enhance their reach and impact, contributing positively to adolescent health and well-being.

With the increased reliance on digital platforms, hybrid models that combine in-person and digital support should be explored to improve accessibility, particularly for families in rural and marginalised communities. Further feasibility studies are required to understand what works best at scale within resource limited settings.

5.5 Implementation science and behavioural insights

Integrating implementation science is crucial for effectively scaling parenting support and achieving improved evidence on what works. The Programme offers valuable insights through its delivery model within the social development sector, ensuring fidelity in programme implementation and cultural relevance (19).

This study demonstrates that the design of the hybrid Programme aligns with social and behaviour change strategies specifically targeting barriers to behaviour and providing tools and resources to motivate both parents and adolescents towards positive actions that foster warm, caring, and nurturing home environments.

Furthermore, it is increasingly necessary for parenting programmes to show measurable and enduring changes over time. Thus, parenting programmes should intentionally apply behaviour change principles to deepen our understanding of effective strategies,

ultimately leading to long-term improvements in the mental health of both parents and adolescents.

6 REFERENCES

1. Berry L, Mathews S, Reis R, Crone M. Mental health effects on adolescent parents of young children: reflections on outcomes of an adolescent parenting programme in South Africa. *Vulnerable Child Youth Stud.* 2022 Jan 2;17(1):38–54.
2. Mental health: strengthening our response [Internet]. [cited 2021 Apr 13]. Available from: <https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response>
3. Naicker S, Berry L, Drysdale R, Makusha T, Richter L. South African Child Gauge 2021/2022: Families: Foundations for child and adolescent mental health and well-being. Cape Town: Children's Institute; 2022.
4. Shung-King M, Lake L, Hendricks M. South African Child Gauge 2019. Children's Institute, University of Cape Town; 2019.
5. Statistics South Africa. Profiling health challenges faced by adolescents (10-19 years) in South Africa. Pretoria, South Africa: Statistics South Africa; 2022. Report No.: 03-09–15.
6. Georgiou SN, Symeou M. Parenting Practices and the Development of Internalizing/ Externalizing Problems in Adolescence [Internet]. IntechOpen; 2018 [cited 2021 May 8]. Available from: <https://www.intechopen.com/books/parenting-empirical-advances-and-intervention-resources/parenting-practices-and-the-development-of-internalizing-externalizing-problems-in-adolescence>
7. McKee L, Roland E, Coffelt N, Olson AL, Forehand R, Massari C, et al. Harsh Discipline and Child Problem Behaviors: The Roles of Positive Parenting and Gender. *J Fam Violence.* 2007 May 1;22(4):187–96.
8. Chen Y, Haines J, Charlton BM, VanderWeele TJ. Positive parenting improves multiple aspects of health and well-being in young adulthood. *Nat Hum Behav.* 2019 Jul 1;3(7):684–91.
9. Lachman J, Cluver L, Boyes M, Kuo C, Casale M. Positive parenting for positive parents: HIV/AIDS, poverty, caregiver depression, child behavior and parenting in South Africa. *AIDS Care.* 2014 Mar;26(3):304–13.
10. Sherr L, Macedo A, Cluver LD, Meinck F, Skeen S, Hensels IS, et al. Parenting, the other oldest profession in the world – a cross-sectional study of parenting and child

- outcomes in South Africa and Malawi. *Health Psychol Behav Med*. 2017;5(1):145–65.
11. Meinck F, Cluver LD, Orkin FM, Kuo C, Sharma AD, Hensels IS, et al. Pathways From Family Disadvantage via Abusive Parenting and Caregiver Mental Health to Adolescent Health Risks in South Africa. *J Adolesc Health*. 2017 Jan 1;60(1):57–64.
 12. Dean L, Buechner H, Moffett B, Maritze M, Dalton LJ, Hanna JR, et al. Obstacles and facilitators to communicating with children about their parents' mental illness: a qualitative study in a sub-district of Mpumalanga, South Africa. *BMC Psychiatry*. 2023 Jan 27;23(1):78.
 13. Osborne A, Ahinkorah BO. The paternal influence on early childhood development in Africa: implications for child and adolescent mental health. *Child Adolesc Psychiatry Ment Health*. 2024 Dec 6;18(1):156.
 14. Hall K, Richter L, Mokomane Z, Lake L. South African Child Gauge 2018 [Internet]. Cape Town: Children's Institute; 2018. (Children, Families and the State). Available from: https://ci.uct.ac.za/sites/default/files/content_migration/health_uct_ac_za/533/files/South%20African%20Child%20Gauge%202018%20-%20Nov%2020.pdf
 15. Flouri E, Buchanan A. The role of father involvement in children's later mental health. *J Adolesc*. 2003 Feb 1;26(1):63–78.
 16. Nowak C, Heinrichs N. A Comprehensive Meta-Analysis of Triple P-Positive Parenting Program Using Hierarchical Linear Modeling: Effectiveness and Moderating Variables. *Clin Child Fam Psychol Rev*. 2008 Sep 1;11(3):114–44.
 17. Brown SM, Doom JR, Lechuga-Peña S, Watamura SE, Koppels T. Stress and parenting during the global COVID-19 pandemic. *Child Abuse Negl*. 2020 Dec 1;110:104699.
 18. Parenting for Lifelong Health [Internet]. [cited 2021 Apr 18]. Available from: <https://www.who.int/teams/social-determinants-of-health/parenting-for-lifelong-health>
 19. Cluver LD, Meinck F, Steinert JI, Shenderovich Y, Doubt J, Herrero Romero R, et al. Parenting for Lifelong Health: a pragmatic cluster randomised controlled trial of a non-commercialised parenting programme for adolescents and their families in South Africa. *BMJ Glob Health*. 2018 Jan;3(1):e000539.
 20. Lachman J. Good Clinical Practice Network. 2024. PLH for Teens - Hybrid Delivery. Available from: <https://ichgcp.net/clinical-trials-registry/nct05071924>
 21. Parenting for Lifelong Health. COVID 19 parenting. [cited 2021 Apr 30]. Covid 19 Parenting. Available from: <https://www.covid19parenting.com/digitalparenting>

22. Lee SJ, Ward KP, Chang OD, Downing KM. Parenting activities and the transition to home-based education during the COVID-19 pandemic. *Child Youth Serv Rev.* 2021 Mar 1;122:105585.
23. Corralejo SM, Domenech Rodríguez MM. Technology in Parenting Programs: A Systematic Review of Existing Interventions. *J Child Fam Stud.* 2018 Sep 1;27(9):2717–31.
24. Schiano DJ, Burg C, Smith AN, Moore F. Parenting Digital Youth: How Now? In: *Proceedings of the 2016 CHI Conference Extended Abstracts on Human Factors in Computing Systems [Internet].* New York, NY, USA: Association for Computing Machinery; 2016 [cited 2021 Apr 30]. p. 3181–9. (CHI EA '16). Available from: <https://doi.org/10.1145/2851581.2892481>
25. Callejas E, Byrne S, Rodrigo MJ. Feasibility and effectiveness of 'gaining Health & wellbeing from birth to three' positive parenting programme. *Psychosoc Interv.* 2020 Dec 21;30(1):35–45.
26. Bornman E. Information society and digital divide in South Africa: results of longitudinal surveys. *Inf Commun Soc.* 2016 Feb 1;19(2):264–78.
27. Statistics South Africa. General Household Survey [Internet]. 2018 [cited 2021 Sep 23]. Available from: <https://www.statssa.gov.za/publications/P0318/P03182018.pdf>
28. Phindela N. NGO Pulse. 2020 [cited 2021 May 2]. Levels of Digital Divide in South Africa. Available from: <http://www.ngopulse.org/article/2020/08/28/levels-digital-divide-south-africa>
29. Flisher AJ, Dawes A, Kafaar Z, Lund C, Sorsdahl K, Myers B, et al. Child and adolescent mental health in South Africa. *J Child Adolesc Ment Health.* 2012 Oct;24(2):149–61.
30. Jonathan P, Sara AC. *Human Growth and Development in Children and Young People: Theoretical and Practice Perspectives.* Policy Press; 2020. 465 p.
31. Melchior M, van der Waerden J. Parental influences on children's mental health: the bad and the good sides of it. *Eur Child Adolesc Psychiatry.* 2016 Aug 1;25(8):805–7.
32. Achtergarde S, Postert C, Wessing I, Romer G, Müller JM. Parenting and Child Mental Health: Influences of Parent Personality, Child Temperament, and Their Interaction. *Fam J.* 2015 Apr 1;23(2):167–79.
33. Cluver L, Lachman JM, Sherr L, Wessels I, Krug E, Rakotomalala S, et al. Parenting in a time of COVID-19. *The Lancet.* 2020 Apr 11;395(10231):e64.
34. *Parenting Programmes to Reduce Violence against Children and Women. What gender-transformative programmes look like.* UNICEF Innocenti, Florence: UNICEF

Innocenti - Global Office of Research and Foresight, Prevention Collaborative and Equimundo,; 2023. (Brief 2).

35. Das-Munshi J, Lund C, Mathews C, Clark C, Rethon C, Stansfeld S. Mental Health Inequalities in Adolescents Growing Up in Post-Apartheid South Africa: Cross-Sectional Survey, SHaW Study. Seedat S, editor. PLOS ONE. 2016 May 3;11(5):e0154478.
36. CG 2019: Child and adolescent health | Children's Institute [Internet]. [cited 2021 May 8]. Available from: <http://www.ci.uct.ac.za/cg-2019-child-and-adolescent-health>
37. Evidence Review: Parenting and Caregiver Support Programmes to Prevent and Respond to Violence in the Home. The Prevention Collaborative; 2019.
38. National Department of Health (NDOH), Statistics South Africa (Stats SA), South African Medical Research Council (SAMRC), ICF. South Africa Demographic and Health Survey. Pretoria, South African and Rockland, Maryland, USA: National Department of Health (NDOH), Statistics South Africa (Stats SA), South African Medical Research Council (SAMRC), and ICF; 2019.
39. Janowski R, Green O, Shenderovich Y, Stern D, Clements L, Wamoyi J, et al. Optimising engagement in a digital parenting intervention to prevent violence against adolescents in Tanzania: protocol for a cluster randomised factorial trial. BMC Public Health. 2023 Jun 23;23(1):1224.
40. Klapwijk J, Melendez-Torres GJ, Ornellas A, Wambura M, Chetty AN, Baerecke L, et al. A hybrid digital parenting programme to prevent abuse of adolescents in Tanzania: statistical analysis plan for a pragmatic cluster randomised controlled trial. Trials. 2024 Jul 3;25(1):446.
41. Bosqui T, Mayya A, Farah S, Shaito Z, Jordans MJD, Pedersen G, et al. Parenting and family interventions in lower and middle-income countries for child and adolescent mental health: A systematic review. Compr Psychiatry [Internet]. 2024;132. Available from: <https://www.sciencedirect.com/science/article/pii/S0010440X24000348>
42. Doubt J, Bray R, Loening-Voysey H, Cluver L, Byrne J, Nzima D, et al. "It Has Changed": Understanding Change in a Parenting Program in South Africa. Ann Glob Health. 2017;83(5):767–76.
43. Chun Tie Y, Birks M, Francis K. Grounded theory research: A design framework for novice researchers. SAGE Open Med [Internet]. 2019 Jan 2 [cited 2021 Apr 18];7. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6318722/>
44. Statistics South Africa. Statistics by place [Internet]. Statistics South Africa; Available from: https://www.statssa.gov.za/?page_id=4286&id=11771

45. Coetzer J, Bold A, van der Mark E. Exploring mental health interventions for youth in Southern Africa: A rapid review. *Acta Psychol (Amst)* [Internet]. 2022 Sep;229. Available from: <https://www.sciencedirect.com/science/article/pii/S0001691822002141>
46. Slemming W, Biersteker L, Lake L. South African Child Gauge 2024. Cape Town: Children's Institute; 2024.
47. Department of Women, Youth and Persons with Disabilities. National Strategic Plan on Gender Based Violence and Femicide. Department of Women, Youth and Persons with Disabilities; 2020.
48. Hodes R, Cluver L, Barron P, Dlamini N, Madisha L, Mazibuko N, et al. National Adolescent and Youth Health Policy 2017. 2017.
49. Department of Social Development. Revised White Paper on Families in South Africa. Department of Social Development; 2021.
50. Bray R, Dawes A. Parenting, Family Care and Adolescent in East and Southern Africa: An evidence-focused literature review. Florence: UNICEF Office of Research Innocenti; 2016.
51. Leite J, Buainain A. Organizational Coordination in Public Policy Implementation: Practical Dimensions and Conceptual Elements. *Cent Eur J Public Policy*. 2013 Jan 1;7:136–59.
52. Chitiga-Mabugu M, Henseler M, Maisonnave H, Mabugu RE. Financing the Basic income support in South Africa under fiscal constraints. *World Dev Perspect*. 2025 Mar 1;37:100657.

7 APPENDICES

7.1 Appendix A: Plagiarism Declaration Report



PLAGIARISM DECLARATION TO BE SIGNED BY ALL HIGHER DEGREE STUDENTS

SENATE PLAGIARISM POLICY: APPENDIX ONE

I, Gloria Khoza (Student number: 0406156J) am a student registered for the degree of Masters in Public Health in the academic year 2024.

I hereby declare the following:

1. I am aware that plagiarism (the use of someone else's work without their permission and/or without acknowledging the original source) is wrong.
2. I confirm that the work submitted for assessment for the above degree is my own unaided work except where I have explicitly indicated otherwise.
3. I have followed the required conventions in referencing the thoughts and ideas of others.
4. I understand that the University of the Witwatersrand may take disciplinary action against me if there is a belief that this is not my own unaided work or that I have failed to acknowledge the source of the ideas or words in my writing.
5. I have included as an appendix a report from "Turnitin" (or other approved plagiarism detection) software indicating the level of plagiarism in my research document.

Signature:  _____ Date: 19 June 2025

7.2 Appendix B: Ethics Certificate



R49 Ms G Khoza

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL) CLEARANCE CERTIFICATE NO. M220216

NAME:
(Principal Investigator)

Ms G Khoza

DEGREE: MPH

DEPARTMENT:

School of Public Health
Faculty of Health Sciences

TITLE:

Caregiver and adolescent experiences of mental health support provided by a hybrid parenting programme in Mpumalanga, South Africa

DATE CONSIDERED:

25 February 2022

DECISION:

Approved unconditionally

CONDITIONS:

NOTE:

If contact information regarding student study participants is required, please contact the Registrar's office <Nicoleen.Potgieter@wits.ac.za>

SUPERVISORS:

Dr S Nieuwoudt and Professor L Cluver

APPROVED BY:

Professor P Ruff, Chairperson, HREC (Medical)

DATE OF APPROVAL: 18 July 2024

EXPIRY DATE: 17 July 2029

This Clearance Certificate is valid for 5 years from the date of approval. An extension may be applied for.

DECLARATION OF INVESTIGATORS

To be completed in duplicate and **ONE COPY** returned to the Research Office secretariat on the 3rd floor, Phillip Tobias Building, Parktown, University of the Witwatersrand, Johannesburg.

I/we fully understand the conditions under which I am/we are authorized to carry out the above-mentioned research and I/we undertake to ensure compliance with these conditions. Should any departure be contemplated from the research protocol as approved, I/we undertake to submit details to the Committee. **I agree to submit a yearly progress report** in the format available at <https://wits.ac.za/research/researcher-support/research-ethics/ethics-committees/>. This report is due annually, for the duration of the Clearance Certificate, beginning on the first anniversary of Date of Approval above. Unreported changes to the study may invalidate the clearance given by the HREC (Medical).


Signature of Principal Investigator

19 July 2024
Date

7.3 Appendix C: Turnitin Report

Sara Jewett Nicomede

Research report_tracked changes_19 June_clean_turnitin-1.docx

ORIGINALITY REPORT

3%

SIMILARITY INDEX

3%

INTERNET SOURCES

1%

PUBLICATIONS

%

STUDENT PAPERS

PRIMARY SOURCES

1

www.frontiersin.org

Internet Source

<1%

2

pmc.ncbi.nlm.nih.gov

Internet Source

<1%

3

Lizette Berry, Shanaaz Mathews, Ria Reis, Mathilde Crone. "Mental health effects on adolescent parents of young children: reflections on outcomes of an adolescent parenting programme in South Africa", Vulnerable Children and Youth Studies, 2021

Publication

<1%

4

mail.fortunejournals.com

Internet Source

<1%

5

opus.lib.uts.edu.au

Internet Source

<1%

6

allafrica.com

Internet Source

<1%

7

www.davidpublisher.com

Internet Source

<1%

8

hdl.handle.net

Internet Source

<1%

www.coursehero.com

7.4 Appendix D: Journal Author Guidelines: South African Medical Journal

Research articles

Guideline word limit: 4 000 words

Research articles describe the background, methods, results and conclusions of an original research study. The article should contain the following sections: introduction, methods, results, discussion and conclusion, and should include a structured abstract (see below). The introduction should be concise – no more than three paragraphs – on the background to the research question and must include references to other relevant published studies that clearly lay out the rationale for conducting the study. Some common reasons for conducting a study are to fill a gap in the literature, a logical extension of previous work, or to answer an important clinical question. If other papers related to the same study have been published previously, please make sure to refer to them specifically. Describe the study methods in as much detail as possible so that others would be able to replicate the study should they need to. Results should describe the study sample as well as the findings from the study itself, but all interpretation of findings must be kept in the discussion section, which should consider primary outcomes first before any secondary or tertiary findings or post-hoc analyses. The conclusion should briefly summarise the main message of the paper and provide recommendations for further study.

Select figures and tables for your paper carefully and sparingly. Use only those figures that provided added value to the paper, over and above what is written in the text. Do not replicate data in tables and in text.

Structured abstract

This should be 250-400 words, with the following recommended headings:

Background: why the study is being done and how it relates to other published work.

Objectives: what the study intends to find out

Methods: must include study design, number of participants, description of the intervention, primary and secondary outcomes, any specific analyses that were done on the data.

Results: first sentence must be brief population and sample description; outline the results according to the methods described. Primary outcomes must be described first, even if they are not the most significant findings of the study.

Conclusion: must be supported by the data, include recommendations for further study/actions.

Please ensure that the structured abstract is complete, accurate and clear and has been approved by all authors.

Do not include any references in the abstracts.

[Here](#) is an example of a good abstract.

Main article

All articles are to include the following main sections: Introduction/Background, Methods, Results, Discussion, Conclusions.

The following are additional heading or section options that may appear within these:

Objectives (within Introduction/Background): a clear statement of the main aim of the study and the major hypothesis tested or research question posed

Design (within Methods): including factors such as prospective, randomisation, blinding, placebo control, case control, crossover, criterion standards for diagnostic tests, etc.

Setting (within Methods): level of care, e.g. primary, secondary, number of participating centres.

Participants (instead of patients or subjects; within Methods): numbers entering and completing the study, sex, age and any other biological, behavioural, social or

cultural factors (e.g. smoking status, socioeconomic group, educational attainment, co-existing disease indicators, etc) that may have an impact on the study results. Clearly define how participants were enrolled and describe selection and exclusion criteria.

Interventions (within Methods): what, how, when and for how long. Typically for randomised controlled trials, crossover trials, and before and after studies.

Main outcome measures (within Methods): those as planned in the protocol, and those ultimately measured. Explain differences, if any.

Results

Start with description of the population and sample. Include key characteristics of comparison groups.

Main results with (for quantitative studies) 95% confidence intervals and, where appropriate, the exact level of statistical significance and the number need to treat/harm. Whenever possible, state absolute rather than relative risks.

Do not replicate data in tables and in text.

If presenting mean and standard deviations, specify this clearly. Our house style is to present this as follows:

E.g.: The mean (SD) birth weight was 2 500 (1 210) g. Do not use the $\pm$ symbol for mean (SD).

Leave interpretation to the Discussion section. The Results section should just report the findings as per the Methods section.

Discussion

Please ensure that the discussion is concise and follows this overall structure – sub-headings are not needed:

- Statement of principal findings
- Strengths and weaknesses of the study
- Contribution to the body of knowledge
- Strengths and weaknesses in relation to other studies

- The meaning of the study – e.g. what this study means to clinicians and policymakers
- Unanswered questions and recommendations for future research
- Conclusions

This may be the only section readers look at, therefore write it carefully. Include primary conclusions and their implications, suggesting areas for further research if appropriate. Do not go beyond the data in the article.

7.5 Appendix E: Semi-structured Interview Guide: Adults, Parents Or Legal Guardians

TITLE:

Caregiver and adolescent experiences of mental health support provided by a hybrid parenting programme in the Soweto, South Africa

Introduction

I am Gloria Khoza. I will be interviewing you today about your experiences of the hybrid COVID-19 Playful Parenting Programme you and your child participated in. You have been identified as a participant in this research as you have completed the entire hybrid programme with your adolescent.

Questions:

Section 1: General questions

Please tell me a bit about yourself

Probe: Tell me about your family, whom you live with

Probe: Tell me about the community that you come from

How did you find out about this programme?

Probe: How were you and your child recruited to participate in the programme?

Probe: Where did you find out about this programme?

What interested you in participating in the programme?

Probe: What appealed to you the most to agree to attend the sessions when you first heard about the programme?

Section 2: Acceptability of technology

What did you think when you heard that this programme would take place using WhatsApp?

Probe: What were some of your concerns about using WhatsApp to getting support?

Probe: What were some of the challenges and positives of using WhatsApp in the programme?

Probe: What was your actual experience using WhatsApp compared with your expectations?

What were your thoughts were when you found out that some sessions will take place in person?

Probe: What were some of your concerns about the in-person session?

Probe: What were some of the benefits you of using WhatsApp?

Probe: What was your actual experience of in person sessions compared with your expectations?

Which of the two formats did you preferred the most and why?

What did you think about the combination of the two formats?

Section 3: Perceived changes in coping with changes

How has COVID-19 changed some important aspects of your life

Probe: How has COVID-19 impacted your family financially?

Probe: How has COVID-19 impacted your child's school performance?

Probe: How has COVID-19 impacted how you relate to your family, friends, and colleagues?

How did you try to cope with these changes before being part of the parenting programme?

Probe: What were some of the specific activities you did to help you cope with the changes?

What were some of the feelings and emotions you went through when you became aware of COVID-19

Probe: Did your family talk about COVID-19 and some of the fears it brings

Probe: Please expand on some of the emotions and feelings and how you dealt with them.

Could you tell me how you communicated with you about their feelings and emotions?

Probe: What kind of things does your child talk to you about?

Probe: What are some of the issues that your child is comfortable talking to you about?

Probe: What are some of the conversations that stood out for you?

Could you tell me about some of the behavioural and communication changes you saw in your child after COVID-19 and before starting the parenting programme?

Section 4: Adolescent mental health support

How has your relationship with your child has been since being part of the programme?

Probe: What aspects of the programme did you enjoy the most?

Probe: What skills did you learn that are important for you and your child, if any?

How can the programme be improved?

Probe: How was the enrolment process?

Probe: What were your thoughts on the facilitator?

Probe: What could be done better over the duration of the programme?

Closeout

Could you tell me any differences you have seen in yourself after going through this parenting programme?

Probe: Please give me some examples of some of the changes in your behaviour.

Probe: What are some of the comments you have received from your child and family after being part of the parenting programme?

What are some of the reasons you would recommend or not recommend this programme to other families?

Is there something else you would like to share about the programme that I may not have asked?

We have come to the end of this interview. Thank you for your time and for being open to sharing with me. I will be sharing with you a list of contact details that you may use should you need any assistance or to talk to someone.

Thank you and take care.

7.6 Appendix F: Semi-structured Interview Guide: Adolescents

TITLE

Caregiver and adolescent experiences of mental health support provided by a hybrid parenting programme in the Soweto, South Africa

Introduction

I am Gloria Khoza. I will be interviewing you today about your experiences of the hybrid COVID-19 Playful Parenting Programme that you participated in with a caregiver. You have been identified as a participant in this research as you have completed the entire hybrid programme with your parent or caregiver.

Questions:

Section 1: General questions

Please tell me how you found out about this programme.

Probe: How were you and your parent or caregiver recruited into the programme?

Probe: Where did you find out about this programme?

Activity:

Before starting with the formalities, let's play a game to get to know each other a little bit. This game is called "two truths and one lie". We will each have a turn where we tell two truthful things about ourselves and one lie. When we are done, we need to guess which is the lie.

I will start.

I grew up in a big family with six brothers and sisters. For the first 10 years of my life I lived in America. I have two children aged 10 and 13 years.

Adolescent to guess the lie. Then take their turn.

Please tell me why you were interested in participating in the programme?

Probe: What appealed to you the most to agree to attend the sessions when you first heard about the programme?

Section 2: Acceptability of technology

Would you please tell me what you thought when you heard that this programme would take place using WhatsApp?

Probe: What were some of the challenges and positives of using WhatsApp in the programme?

Please tell me what your thoughts were when you found out that some sessions will take place in person?

Would you please let me know the format you preferred most and why you liked this?

Section 3: Perceived changes in coping with changes

Activity 2:

Before we move to the next few questions, I'd like for us to play an emoji game. For this game, we need to use only emoji's to tell a story about our day so far. We will have two minutes each to do this. Once we are done, we need to show each other our emoji's, and guess the story.

Note: If the interview takes place in-person and adolescent does not have a phone, the researcher should provide pencil and paper.

Could you please tell me how COVID-19 has changed some important aspects of your life

Probe: How has COVID-19 impacted your school performance?

Probe: How has COVID-19 impacted how you relate to your family and friends?

Probe: How has COVID-19 impacted your family financially?

Could you please tell me how you managed to cope with these changes before being part of the parenting programme?

Probe: What were some of the specific activities you did to help you cope with the changes?

Could you tell me of some of the feelings and emotions you went through when you became aware of COVID -19

Probe: Did your family talk about COVID-19 and some of the fears it brings

Probe: Please expand on some of the emotions and feelings and how you dealt with the fears related to COVID-19.

Could you talk about some of the feelings and emotions you have experienced and shared with your parent/caregiver?

Probe: What are some of the issues that you and your parent/caregivers are most comfortable talking to you about?

Probe: What are some of the conversations that stood out for you?

Section 4: Adolescent mental health support

If you are comfortable, could you provide examples of some of the issues you struggle with recently?

Probe: How often do you experience some of these problems?

Probe: How has your parent/caregiver reacted to your issues or problems?

What are some things you think help your parent/caregiver to support you, if at all?

Probe: What aspects of the programme did you enjoy the most?

Probe: What skills did you learn that were important to support you?

Could you please describe how your relationship with your caregiver has been since being part of the programme?

Closeout

Could you tell me any differences you have seen in yourself after going through this parenting programme?

Probe: Please give me some examples of some of the changes in your behaviour.

Probe: What are some of the comments you have received from your parent/caregiver and your family after being part of the parenting programme?

Where can the programme be improved?

Probe: How was the enrolment process?

Probe: What were your thoughts on the facilitator?

Probe: What could be done better over the duration of the programme

Is there something else you would like to share about the programme that I may not have asked?

We have come to the end of this interview. Thank you for your time and for being open to sharing with me.

Activity 3:

I'd like for us to do a check-out with our feelings and emotions. This is the same exercise that was done during the parenting group. I will start:

I am feeling _____, and I am feeling it in my _____. I am checking out

Now your turn.

Note: be aware of the response, and use the distress protocol for questions in this section

I will be sharing with you a list of contact details that you may use should you need any assistance or to talk to someone.

Thank you and take care.