

RESEARCH ARTICLE

Se-Re-Co psychosocial skills intervention for street children: Implications for interventions

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ABSTRACT

This study aimed to explore whether the Se-Re-Co psychosocial skills intervention will improve self-esteem, resilience, and coping skills for street children. Using pre- and post-experimental and control group design, 24 male and female street children were assigned to the experimental group and the control group to participate in this study. The participants completed a self-report questionnaire that measured three variables, self-esteem, resilience, and coping skills. This was done pre-testing and post-testing of both groups. The results revealed significant statistical differences between the experimental group and control group on self-esteem [$F(1,21) = 25.16, p < .000$], coping skills [$F(1,21) = 33.71, p < .000$] but no significant statistical difference in resilience [$F(1,21) = 7.44, p < .079$]. The results conclude that street children who participated in the Se-Re-Co psychosocial skills intervention reported improved self-esteem and coping skills.

Keywords: psychosocial; intervention; street children; resilience; self-esteem; coping

1. Introduction

Street children is an increasing social phenomenon with South Africa housing about two hundred and fifty thousand street children^[1]. Orphanhood and violence in the family are considered some of the factors influencing the persistent phenomenon of street children^[2]. This phenomenon is linked to adverse experiences in a child's immediate family experience^[3]. It was estimated that in South Africa by 2015 there will be 1.15 million AIDS maternal orphans^[4] predisposing them to vulnerability to experience adverse situations. These adversities include abusive family life, poverty, violence, feelings of unwantedness and being unloved^[3], and maltreatment^[5]. Furthermore, according to Mkhwanazi^[6], in South Africa in a single day, about 53 children are victims of sexual offenses and about 113 children are victims of violent crimes. This suggests that the more adverse experiences children have, the more susceptible they are to becoming street children. While on the streets, these children are further exposed to adversities, predisposing them to mental health challenges. Some unattended street children might also participate in human trafficking and be used by drug lords^[7]. This creates a vicious cycle of adversities, homelessness, mental health challenges, and criminal behavior.

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Without psychosocial support and mental health interventions, street children are at risk of a continuous cycle of adversities. In South Africa, government departments and various organizations have devised intervention programs to assist street children. The Department of Social Development during its Convention on the Rights of Children, formulated interventions for children who work and live in the streets^[8]. The model of this intervention focuses on human development (long-term approach) and service provision (short-term approach) which deals with immediate service projects that ensure safety and meet the basic needs of street children^[9]. Other NGOs working with street children such as the Street-wise program assist street children in reaching self-actualization through education and ensuring that they become self-sufficient adults^[10]. Another intervention program was The Homestead in Cape Town, which was opened in July 1982 and is a branch of the Child Welfare Society in the Western Cape^[11]. The program included interventions that were mainly aimed at life skills and the unification of children with their family members. In Durban, Mind Leap is a non-profit organization aimed at vocational training. School or workplace life and services to improve health conditions by providing street children with a sanitation program and meal program^[11].

Systematic reviews on interventions for street children and homeless youth indicate that despite limited interventions for this population to address the skills needed, the available interventions show that they can help improve the lives of street children^[12]. As much as these limited interventions seem helpful, they are deemed inconsistent in terms of the method of intervention, focus area, and population. A systematic review of interventions for homeless youth by Wang, et al^[13], indicated that a variety of interventions that seem to have better results are those that include cognitive behavior therapy and family-based therapy. Noh's^[14] systematic review delves into the psychological interventions tailored for runaway and homeless youth and those intervention methods included art therapy, CBT-based intervention, family therapy, and strengths-based interventions.

Morton^[15] argues that interventions aimed at addressing homelessness among youth require evidence-based approaches. Evidence-based approaches that are found to be effective incorporate counseling and treatment of mental health and risk behavior^[15]. DiGuseppi^[16] found that motivational enhancement therapy combined with cognitive behavior therapy was more effective in reducing substance use among a group of homeless youth than the stably housed youth. Other scholars have suggested different evidence-based approaches. Masteropieri^[17] conducted integrative group psychotherapy and spiritual visualization for homeless young adults in New York City and it showed a significant reduction in symptoms of distress and depression. In Los Angeles, the Social Enterprise Intervention model was proposed as an alternative intervention for homeless youth. It covered linkages to services, vocational and business skills, and clinical mentorship^[18]. Given the dynamic nature of the homeless population, it will not take a single approach or intervention to curb this challenge. To the author's knowledge, no study in South Africa has addressed street children's self-esteem, resilience, and coping skills for intervention purposes. The existing intervention programs were also not empirically tested. This creates a gap that this current study intends to close.

According to Maepa^[19], street children are at risk of developing low self-esteem due to continuous periods of homelessness. Whaley^[20] among a sample of two hundred and eighty-five patients who were admitted to a state psychiatric hospital with or without a history of homelessness a notable correlation between self-esteem and homelessness emerged due to a lack of buffer provided by self-esteem^[21]. Self-esteem can be defined as a favorable and unfavorable attitude toward the self^[22]. Low self-esteem hinders children from having a healthy and well-balanced childhood. In contrast, self-esteem leads to healthy childhood development and enables children to manage complicated and stressful situations^[22]. Emler^[23] suggests that children reporting high self-esteem levels are protected from various problems as they can act

independently, tolerate frustrations, take responsibility, readily help others, and are always ready to participate in new tasks. Children with poor self-esteem tend to maltreat themselves which may lead to others maltreating them^[23]. As such, it was deemed necessary in this study to expose the participants to self-esteem-building activities.

Research argues that street children exhibit hidden resilience in non-typical pathways^[24]. Hidden resilience includes unconventional behaviors and actions used to live through daily hardships^[24]. These actions and behaviors may not be seen as resilient in some traditional settings considering that they are often seen as signs of defiance and anti-social behaviour^[24]. For instance, homeless people may feel the need to carry weapons to protect themselves. This behavior may suggest that resilience is developed and initiated in response to the environment of the street challenges. Resilience and being streetwise are developed when homeless people adjust to the social structures and cultures of the street economy^[25] as a means of survival. These survival skills as a means of coping are learned through observation and experience and may not be pro-social, although they allow homeless people to thrive on the streets^[25]. In this study, resilience is considered as the street children's ability to cope with stress and adversity, and it can be improved through resilience-building activities.

While on the streets, these children cope with the street life in many ways. The public spaces in the city have various meanings and functions for street children as they serve as their environment of work, sleep, recreation, socialization, learning and enrichment, and ultimately their home^[26]. Street children use public spaces, to claim their independent identities, identify different ways to survive, and for recreational purposes and socialization^[26]. They also engage in unconventional odd jobs, including working as a day laborer in construction sectors and doing odd chores for local businesses, flat owners, and street vendors. They may also work as car guards where they may wash the cars for a fee. Street children may be involved in pick-pocketing and other criminal activities^[27]. According to Woodhead^[28] forming social groups enables street children to cope with their lives. These networks offer support by allowing them to share resources, including finding temporary shelter, food, and physical security. They also provide a sense of companionship, closeness, and protection which are significant to their identity^[28] and surviving street life. This literature suggests that these children use both adaptive and maladaptive coping mechanisms. In the current study, the researcher was interested in coping skills training that aimed at teaching the participants adaptive coping mechanisms by increasing competency and mastery^[29].

This current study wishes to draw from previous studies of homeless youth intervention programs by focusing on the SE-RE-CO psychosocial skills intervention model which is underpinned by cognitive behavior therapy aimed at enhancing self-esteem, resilience, and coping skills. This intervention was tested for its efficacy. The study hypothesized that participation in the SE-RE-CO psychosocial skills intervention would enhance the self-esteem, resilience, and coping skills of the experimental group as opposed to those of the control group.

2. Materials and methods

Methods

Design

The study was quantitative and adopted a pre and post-test experimental and control group design to explore if the Se-Re-CO psychosocial skills intervention will improve self-esteem, resilience, and coping skills for street children. The two groups were exposed to the same experimental conditions except for the experimental intervention given to the experimental group^[30].

The experimental group was exposed to the Se-Re-CO psychosocial skills intervention while the control group was not exposed to the intervention. The purpose of this was to explore if the Se-Re-CO psychosocial skills intervention will improve self-esteem, resilience, and coping skills for street children. The experimental and control groups were then re-tested on self-esteem, resilience, and coping skills 03 months after the social skills training.

Participants

A total of 24 male and female street children aged 14 to 17 years participated in this experimental study. In the experimental group, 50% were male and 50% were female. Their ages ranged from 15-17 years with a mean age of 15.75. In the control group, 50% were male and 50% were female. Their ages ranged from 14-17 years with a mean age of 15.58. All participants had at least some primary school education. The nationality of participants was South African (54.2%) and Zimbabwean (45.8%) and 50% of them were double orphans. The average length of stay in the street was 21.88 months.

Participants were purposively selected to form the experimental and control groups. The actual study population consisted of 57 street children, but due to the inclusion and exclusion criteria, 24 gender and age-matched children could participate in the study. A total of 24 children was selected also to allow for a group session of 12 participants in a group. Participants were randomly assigned to the experimental group and control group using a table of random numbers. The participants in both groups had to have participated in the baseline assessment of self-esteem, resilience, and coping and obtained a score that indicated poor resilience, low self-esteem, and poor coping mechanisms. This was guided by Yalom's^[31] principle of group therapy which argues that group therapy is effective with a reasonable number of participants who share similar characteristics. Participant inclusion criteria included being homeless and living on the streets, not having family contact, and relying on the center for homeless children for support. They had to be over 12 years old to participate in the study.

Measures

Rosenberg Self-esteem Scale

Self-esteem was assessed with Rosenberg Self-Esteem (RSES) scale^[32] which is a 10-item scale. The scale is a four-point Likert scale (0 to 3) and is scored by summing up the responses with the highest score being 30 suggesting high self-esteem. In previous studies of the South African population, Cronbach's alpha was .78 and .93^[33]. Cronbach's alpha of .67 was reported for this study. This low validity scale can be attributed to the small sample size while the measure has 10 items.

Connor–Davidson Resilience Scale (CD-RISC)

Resilience was measured using the CD-RISC^[34] self-report scale consisting of 25 items. Each item is rated on a five-point Likert scale (0 to 4). In this study, high levels of resilience were determined by a total score of 51 and above. A previous study in South Africa reported a Cronbach's alpha of 0.93^[35] with a Cronbach's alpha of .86 in this study.

Brief COPE

Coping skills were measured using Brief COPE^[36] 28 items of a four-point Likert scale (0-3). Carver (36) was not predictive in the scoring method for this measure. In this study, some items were reverse-scored to allow one-directional scoring and interpretation. The scores were summed up and the highest scores suggested appropriate coping skills. Previous South African studies^[37] reported a Cronbach's alpha of 0.83 and 0.92. The current study reported a Cronbach's alpha of .67.

Procedure

Ethical approval was on different levels. First, the Department of Psychology, Higher Degrees Committee, and Ethics Committee of the North-West University provided the initial ethical clearance (NWU- 00117-10-A3- Mafikeng Health). After the university's ethical approval was granted, the participating center for homeless children granted further permission for the researcher to work with the participants. The center manager was asked to sign consent forms on behalf of the minors. Detailed information about the study was then shared with the children before they could sign assent forms. It was emphasized to the participants that participation was always voluntary.

The experimental procedure Se-Re-CO psychosocial skills intervention

Researchers designed the Se-Re-CO psychosocial skills intervention to aid street children with building resilience to overcome challenges and build self-esteem. The training program was grounded in psychological theory that leans on the cognitive model used to intervene in self-esteem^[38]. The program also lends its content to the social learning theory and involves a set of questions, role-play tasks, and work for one to take home and return for further consultation and feedback. The training program was co-designed by three licensed psychologists who unanimously agreed that the training helps build self-esteem, coping skills, and resilience.

Assessment and experimental conditions

The assessment was done in two phases. The first phase involved a pre-test on the experimental group followed by interventions that exposed participants to Se-Re-CO psychosocial skills intervention. The second phase involved a series of post-tests including a post-intervention assessment exploring if the Se-Re-CO psychosocial skills intervention will improve self-esteem, resilience, and coping skills for street children. The control group did not participate in the intervention during the main phase of the experiment. They were exposed to the intervention after the final post-test for ethical reasons that allowed them access and benefit from the potentially effective intervention. The group intervention principles were adhered to. Other research uses three-, six- and twelve-month intervals to conduct post-assessment intervention assessments^[39]. This experiment was conducted during April and October 2012. The individual groups met weekly for a duration ranging between 60 to 90 minutes during the weekend. There was a total of 18 sessions completed which were facilitated by a licensed psychologist with extensive experience in the field.

Group Process

The social skills training conducted was assimilated from Yalom's^[31] group psychotherapy. The focus was based on participants' emotions, perceptions as well as personal lived experiences. The training began with a session that allowed the participants to build rapport with the therapist, which usually sets the tone for the session. This was then followed by establishing group rules. A good rapport between clients and therapists is crucial for the therapeutic process^[40].

Se-Re-CO psychosocial skills intervention was created to help street children improve their characteristics. Various talking points were highlighted and spoken about during every session, with every session lasting for 60-90 minutes. The sessions incorporated a role-playing session where the group would alternate between observing other participants and role-playing. Active participation was encouraged by the therapist who also asked participants questions to ensure their understanding of the process.

The sessions on self-esteem building were formulated based on the work of the cognitive model targeting self-esteem^[38]. Participants were subjected to training^[38] activities that aid with self-esteem building. The program proposed by Roth and Brooks-GUNN^[41] argued about the importance of involving young

people in decision-making processes on matters affecting them. For this to happen, they need to have a platform where their opinions can be heard. This was adopted in the resilience-building sessions.

Coping skills training are social skills that are derived from the social learning theory^[42] based on the argument that behavior is learned through reinforcements and as such individuals have the potential to acquire new behavior and skills, which allows them to redress old habits and build better coping skills^[29] and replace maladaptive coping styles with adaptive coping styles^[29]. These were the guiding points during the coping skills training sessions. Before the end of each session, a general review was conducted and was followed by a check-in on previous work that needed to be completed. The therapist took questions and cleared any misunderstandings. There was a verbal feedback process to allow for correction, improvement, and evaluation.

Statistical methods

Data were analyzed using the Statistical Package of Social Science (SPSS) software program version 22. Analysis of covariance (ANCOVA) was used to test the study hypothesis which stated that participation in the Se-Re-CO psychosocial skills intervention would enhance the self-esteem, resilience, and coping skills of the experimental group as opposed to those of the control group. ANCOVA was deemed a relevant statistical method as Bujang, Sa'at, and Sidik^[43] argue that randomized experimental studies require a small sample size. The advantage of the ANCOVA method is that it has greater experimental control by controlling and exploring the effects of the covariate. It also randomizes the control-group pre-test post-test experimental design to reduce error variance as the random assignment of subjects to groups guards against systematic errors, especially in small sample sizes. The study had a limited sample size, the 95% confidence interval was violated, and type II error risk could not be reduced. As a result, the unadjusted and adjusted mean scores were presented to show the differences between the experimental and control groups after the intervention.

3. Results

The study hypothesized that participation in the Se-Re-CO psychosocial skills intervention would enhance the self-esteem, resilience, and coping skills of the experimental group as opposed to those of the control group.

3.1. Self-esteem covariate

The analysis of the results indicates a significant impact of the SE-RE-CO intervention model for self-esteem covariate [$F(1, 21) = 25.16$, $p < .000$]. The results suggest that after the experimental process, there were differences in self-esteem scores between the experimental group and control group with the experimental group reporting high scores on self-esteem, see **Table 1** below.

Table 1. ANCOVA Table for self-esteem.

Source	SS	Df	MS	F	P	N2p
Corrected model	3.561	2	1.780	15.595	.000	.598
Pre-test SE	.186	1	.186	1.63	.216	.072
Intervention	2.872	1	2.872	25.16	.000	.545
Error	2.387	21	.114			
Total	63.000	24				

* $R^2 = .598$ ($Adjusted\ R^2 = .559$)

3.2. Resilience covariate

The analysis of the results indicates a non-significant impact of the SE-RE-CO intervention model for resilience [$F(1, 21) = 7.44$, $p < .079$]. This suggests that there were no significant differences in resilience between the experimental and control groups after the experimental process, see **Table 2** below.

Table 2. ANCOVA Table for resilience.

Source	SS	Df	MS	F	P	N2p
Corrected model	2.590	2	1.295	8.072	.003	.435
Pre-test Resilience	.548	1	.548	3.418	.10	.140
Intervention	1.194	1	1.194	7.443	.079	.262
Error	3.368	21	.160			
Total	63.000	24				

* $R^2 = .435$ (*Adjusted R Squared* = .381)

3.3. Coping covariate

Table 3 provides the statistical analysis results and reveals a significant variation in post-intervention coping scores, [$F(1, 21) = 33.71$, $p < .000$] after adjusted covariate coping. According to these results, the experimental group showed better coping skills compared to the control group when tested after the social skills training.

Table 3. ANCOVA Table for coping strategy.

Source	SS	Df	MS	F	P	N2p
Corrected model	3.880	2	1.940	19.608	.000	.651
Pre-test Coping	.505	1	.505	5.107	.035	.196
Intervention	3.336	1	3.336	33.71	.000	.616
Error	2.078	21	.099			
Total	57.000	24				

* $R^2 = .651$ (*Adjusted R Squared* = .618)

3.4. Group means

Table 4 indicates that the mean scores on self-esteem were high in the experimental group ($M = 1.92$) compared to the control group ($M = 1.17$) when the two groups were tested after the social skills training that was offered to the experimental group. A similar observation was seen on coping skills where the control group ($M = 1.83$) showed improved coping skills than the experimental group ($M = 1.08$) when tested after the social skills training program. Even though there was no significant statistical difference, an improved resilience was also seen in the experimental group ($M = 1.83$) compared to the control group ($M = 1.25$) when the two groups were tested post the intervention program. Overall, the study results suggest that the study hypothesis is partially accepted.

Table 4. Table of means between the experimental and control group on self-esteem, resilience, and coping.

Variables	Groups	Unadjusted mean	Adjusted mean
Self-esteem	Experimental group	1.92	1.897
	Control group	1.17	1.187
Resilience	Experimental group	1.83	1.779
	Control group	1.25	1.305
Coping	Experimental group	1.83	1.831
Total	Control group	1.08	1.085

4. Discussion

This current study wished to draw from previous studies of homeless youth intervention programs using cognitive behavior therapy-based intervention aimed to improve self-esteem, resilience, and coping skills. The study hypothesized that participation in the Se-Re-CO psychosocial skills intervention would enhance the self-esteem, resilience, and coping skills of the experimental group as opposed to those of the control group. The Se-Re-CO psychosocial skills intervention was designed with the specific aim to help street children enhance self-esteem, resilience, and coping skills which are regarded as important components of adaptive functioning. The study results suggest that after pre-test and post-test on the study variables (self-esteem, resilience, and coping skills), the experimental group reported significant changes to the control group. The results revealed a significant statistical difference between the pre-and post-test scores on self-esteem and coping skills. Resilience proved to be uniform across those who had partaken in the training and those who did not.

The study results found a significant statistical difference between the experimental group and the control group on self-esteem, with the experimental group reporting higher scores on self-esteem after the training. The current study results are consistent with Grocott and Hunter^[44] findings which revealed that children who undergo the 10-day voyage programme prove to have higher self-esteem. Other researchers conducted various other research to test for self-esteem and other traits, one such case being Sobhi-Gharamaleki and Rajabi^[45] who asserted that empowering young people with mental disorders with life skills, improved their self-esteem. Experimental interventions such as art therapy and bibliocounselling proved to be effective in improving self-esteem^[46] upon evaluation of pre and post-training scores. Contrary to the current study results, research conducted by Babakhani^[47] showed that social skills training did not improve self-esteem effectively. Another study argued the effectiveness of group counseling in enhancing resilience and self-esteem using Art Therapy and Rational Emotive Behaviour Therapy^[48].

Although resilience had improved among the experimental compared to the control group, it was not statistically significant. These findings have been consistent with that of Obradovic^[49] who showed that street children exhibit resilience when pre and post-test results were compared despite their continuous exposure to harsh living conditions. According to the social-ecological theory of resilience, resilience is a dynamic process that is shaped by the interconnectedness between an individual and the environment^[50] and depends upon individual characteristics^[51]. Resilience is a developmental process^[52] that differs across places and contexts^[52]. This demonstrates that resilience is a dynamic process suggesting that resilience intervention should also be dynamic. Masten and colleagues^[53] further argue that the time factor is also an important consideration for resilience intervention as it takes a long time for children with a history of adversity to adapt to certain contexts. In the current study, participants had a history of adversity, and the intervention was short-term. This could explain why resilience did not show significant statistical differences in the two

groups as the children's effective interaction with the environment can be determined over an extended period^[54].

Contrary to the findings of the current study, Olowokere and Okanlawon^[55] found a statistical difference between pre and post-test results of resilience for children who participated in psychological resilience-building training. Other research reported the effectiveness of group counseling^[48] and individual therapy^[56] in enhancing resilience. This is mainly because resilience encompasses both risk factors such as trauma and protective factors such as social support. As such, in this study, Se-Re-CO psychosocial skills intervention can be regarded as a protective factor for street children.

Se-Re-CO psychosocial skills intervention model conducted on non-street and street children revealed that street children reported having increased coping skills when their scores were compared after the intervention. The results of the current study findings align with those of Grey and Berry^[29] who argued the effectiveness of a coping skills training program aimed at increasing competency and mastery among children. Jafari and colleagues^[57] reported an increase in coping skills among individuals with substance dependency when compared with those who did not partake in the training. Lazarus and Folkman's^[58] stress and coping theory argue about the significant role played by the environment in shaping the individual's coping processes when they encounter stressful events. This can be attested to in this study as children who experienced a positive and supportive environment through social skills training have reported appropriate coping skills.

The findings of this study provide compelling evidence that Se-Re-CO psychosocial skills intervention is an intervention to improve the coping skills of street children. Street children were exposed to the use of adaptive coping skills as opposed to maladaptive coping skills when dealing with their stressors. The findings of this study align with the research conducted by Clarke^[59] which emphasized the importance of children developing adaptive coping strategies to deal with stressful events. This process involves learning adaptive coping skills and converting deviant behavior into pro-social outlets^[60]. The Se-Re-CO psychosocial skills intervention is supported by the ecological theory, which sets out to empower children and adolescents to make sound decisions and reduce situations that allow for deviant behavior^[61,62]. According to this theory, children exist within nested systems of multiple levels and need to be empowered with skills needed to overcome various challenges. The interaction between self-esteem, resilience, coping mechanisms, and other systems produces various outcomes that can be beneficial for street children. Children who have high self-esteem^[21], resilience^[50], and appropriate coping skills interact well with the environment around them leading to appropriate responses during challenging circumstances.

As much as the results of this Se-Re-CO psychosocial skills intervention are promising concerning evidence-based cognitive behavior therapy interventions as previously mentioned by other scholars^[15,16], generalisability will be treated with caution. This program has not been tested in a different setting of street children or other vulnerable children. There was no follow-up training with the participants, and as such duplication of this model should be done with caution. Although the intervention time frame is in line with other evidence-based interventions, the groups of children that participated in this study had a previous history of adversities and that was not controlled for in this study.

5. Conclusion

This study concludes that Se-Re-CO psychosocial skills intervention are necessary tool to be provided for homeless and street children. Street children in the experimental group reported improved self-esteem than those in the experimental group. Resilience was not statistically significant between the two groups.

This could indicate that street children are long resilient. They survive harsh street conditions and many of them are on the street for long periods. They cope with street life using many strategies. They visit centers for homeless people. They support each other through their gangs. Those who were in the experimental group reported better coping skills. They showed less maladaptive coping mechanisms and more adaptive coping mechanisms. They used less of substances and drugs to cope with their challenges. They used more resource-seeking, prayer, and supporting each other.

It is recommended that children raised in adverse environments be recommended for social skills training interventions. At-risk children are to be recommended for individual therapy before adopting maladaptive coping mechanisms. Close supportive relationships are established between the centers housing homeless children and government departments for early assessment and intervention of children in need of help. Homeless children are exposed to technical skills training to empower them with employment opportunities. This study implies that due to the simplicity of this model, and not requiring professional training on the part of the facilitator, this model can be adopted and applied in different settings that house vulnerable children as a guide for psychosocial skills intervention programs. This model can be used by community home-based carers, non-government organizations carers, and caregivers at welfare centers caring for vulnerable children.

This study is not without limitations. The pre-test and post-test experimental design where the post-testing was done after 03 months denies the opportunity to explore the efficacy of SE-RE-CO psychosocial skills intervention over a long period. The sampling of participants was purposive hence participants who completed the survey might not entirely reflect those who did not. Sample size using Ancova- resulted in large variances and small statistical power due to poor external validity, generalisability and applicability of the findings and implications are limited. The small sample size limits generalizing the results to other groups of street children and poses higher risks of bias of intervention. Other participants did not attend the full sessions as they missed other sessions. It can be argued that for those participants who missed the sessions, their results would have improved affecting the overall outcomes of the psychosocial skills intervention. Participants came from South Africa and Zimbabwe with two social and cultural backgrounds which has a potential effect on the application of the intervention as a standardized program.

The program was for children between the ages of 8 and 17. There were no variations in the developmental phase of the participants and some studies indicate that homelessness can start as early as age. Other extraneous factors were not controlled, that is those participants who relied on the sole in the center for food and those who sought food and other needs for themselves. Regardless of these limitations, this study has several strengths. The method allows for a rigorous experimental process. Future research should be longitudinal allowing for follow-up assessments.

Author contributions

M.P.M. designed and conceptualized the study, collected the data, and wrote the manuscript.

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Conflict of interest

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