# The Efficacy of Drawing in Improving Emotional Well-being in Children Living with HIV in Harare, Zimbabwe

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## Abstract

*Children living with HIV (CLHIV) face significant emotional challenges that impact their development and quality of life. This study evaluated a structured drawing programme to improve emotional wellbeing in children living with HIV (CLHIV) in Harare, Zimbabwe, a group facing significant psychosocial challenges yet lacking access to validated mental health support. Grounded in Seligman's PERMA model, which frames wellbeing through positive emotion, engagement, relationships, meaning, and achievement, the research used a quasi-experimental design. A sample of 16 children (6-12 years) were allocated to an experimental group (n=8) that undertook three days of structured drawing, or a control group (n=8) receiving standard care; the Stirling Children's Wellbeing Scale (SCWS) was used for measurement. Results indicated a statistically significant improvement in the experimental group's SCWS scores (pre-test M=43.14 to post-test M=53.64, p=.004), a moderate positive correlation between drawing frequency and emotional improvement (r=.37, p=.003), and qualitative colour analysis revealing dominant use of hopeful and calming colours. Despite a small sample size, these findings indicate that structured drawing is an effective, low-cost therapeutic tool for enhancing emotional well-being in CLHIV. The study advocates for integrating artwork-based activities into psychosocial support programs and healthcare policies for vulnerable child populations in resource-limited settings.*

**Keywords**: Drawing, emotional well-being, HIV, children, artwork therapy, quasi-experimental, Zimbabwe.

## Introduction and background of the study

The human immunodeficiency virus (HIV) remains a significant global public health challenge. While advances in antiretroviral therapy (ART) have transformed HIV into a manageable chronic condition, the associated psychosocial burdens including stigma, complex family dynamics, and the stress of a lifelong illness persist, creating a critical need for accessible mental health support for children living with HIV (CLHIV) (UNAIDS, 2023).

Globally, an estimated 1.7 million children aged 0-14 were living with HIV in 2022, with sub-Saharan Africa bearing the heaviest burden, accounting for approximately 88% of this total (UNAIDS, 2023). This biomedical reality is shadowed by a severe mental health crisis. International research consistently shows that CLHIV are at a significantly higher risk for depression and anxiety, with a meta-analysis finding prevalence rates of 24.4% and 22.8%, respectively (Vreeman et al., 2017). These challenges are often compounded by recurrent illnesses, hospitalisations, and developmental variations, which can impede daily functioning and adherence to treatment (Bussard & Kleinman, 2013; Phetoe, 2012).

This problem is acutely felt in regions like sub-Saharan Africa, where a study in Uganda found over 30% of CLHIV exhibited significant psychological distress, yet fewer than 10% had access to structured mental health support due to overstretched healthcare systems (Smolinski, 2019). This underscores a vast treatment gap where psychosocial needs are often overshadowed by biomedical care. In Zimbabwe, despite remarkable progress, an estimated 72,000 children were living with HIV in 2020 (UNAIDS, 2023). The emotional well-being of these children is a pressing concern, with a Harare-based study finding that over 40% of CLHIV reported internalising symptoms like sadness and worry (Mavhu et al., 2018). The Zimbabwe National HIV and AIDS Strategic Plan (2021-2025) explicitly calls for psychosocial support, yet operationalising this into consistent, evidence-based services remains a challenge. This research was guided by the following objectives:

i) To compare emotional wellbeing levels before and after the drawing activities.

ii) To establish the relationship between drawing frequency and improvements in emotional wellbeing

iii) To explore emotional expression through colour.

## Literature review

### Drawing as a therapeutic intervention

The World Health Organisation has acknowledged the role of arts in promoting well-being and managing chronic conditions (Fancourt & Finn, 2019). Holt (2020) demonstrated that arts-on-prescription could positively influence emotional states, providing a framework for understanding how creative practices like drawing can induce positive mood changes. Furthermore, specific forms of drawing, such as mandala creation, have been studied for their

psychological benefits. The mandala, a universal symbol of wholeness, has roots in Jungian psychology, with Carl Jung (as cited in Danylova & Hoian, 2020) emphasising its role as an archetype of the self. Fincher (2002) expands on this, positing that "the act of drawing mandalas engages our innate predisposition towards circular forms", facilitating self-exploration and emotional processing.

Empirical studies support this theoretical foundation. Wiener and Battles (2002) documented the use of mandalas in a paediatric HIV clinic, finding that the process was perceived as non-threatening and enjoyable, allowing children to express themes of optimism and resilience. Their research revealed that two-thirds of participants expressed sentiments of happiness, suggesting the presence of hope and a "playful spirit" despite their health challenges. This aligns with the work of Wang and Chia (2024), who found that mandala painting had an immediate positive impact on emotional well-being, facilitated by guided visualisation and self-expression.

The analysis of colour in these artistic expressions provides further insights. Scholars like Fincher (1991) have established colour symbolism, where hues like yellow and purple often represent optimism, spirituality, and warmth. The analysis of such elements in children's artwork can offer a valuable, non-verbal window into their emotional world, revealing themes of resilience and growth (Karja, 2022; Ratcliffe, 1992). While the therapeutic potential of drawing is supported by global scholarship and its use has been documented anecdotally in Zimbabwean support groups (Mavhu et al., 2013), a critical gap remains. In Zimbabwe, drawing has primarily been utilised as a qualitative tool to understand children's experiences, rather than as a structured, empirically-evaluated intervention aimed at systematically improving emotional well-being. Therefore, while scholars such as Jung, Fincher, Wiener and Battles have laid a robust theoretical and practical foundation, there is a scarcity of local empirical evidence measuring the efficacy of structured drawing in a Zimbabwean context**.** This study sought to fill this gap by systematically evaluating the effect of a structured drawing program on the emotional well-being of CLHIV in Harare, Zimbabwe.

## Theoretical framework

Martin Seligman's PERMA model serves as a conceptual paradigm designed to facilitate individuals' exploration of their unique pathways to well-being. The acronym PERMA encapsulates five fundamental elements: Positive emotions, engagement, relationships, meaning, and achievement. According to Seligman (2012), the attainment of happiness,

fulfilment, and purpose is contingent upon the fortification of each PERMA domain. The PERMA framework has been utilised in the development of programmes aimed at cultivating emotional and cognitive competencies. Furthermore, this model serves as a valuable framework for institutional leadership and cultural transformation, empowering individuals to actualise their full potential. Kovich et al. (2023) offer illustrative examples of initiatives that resonate with the promotion of PERMA (Figure 1).

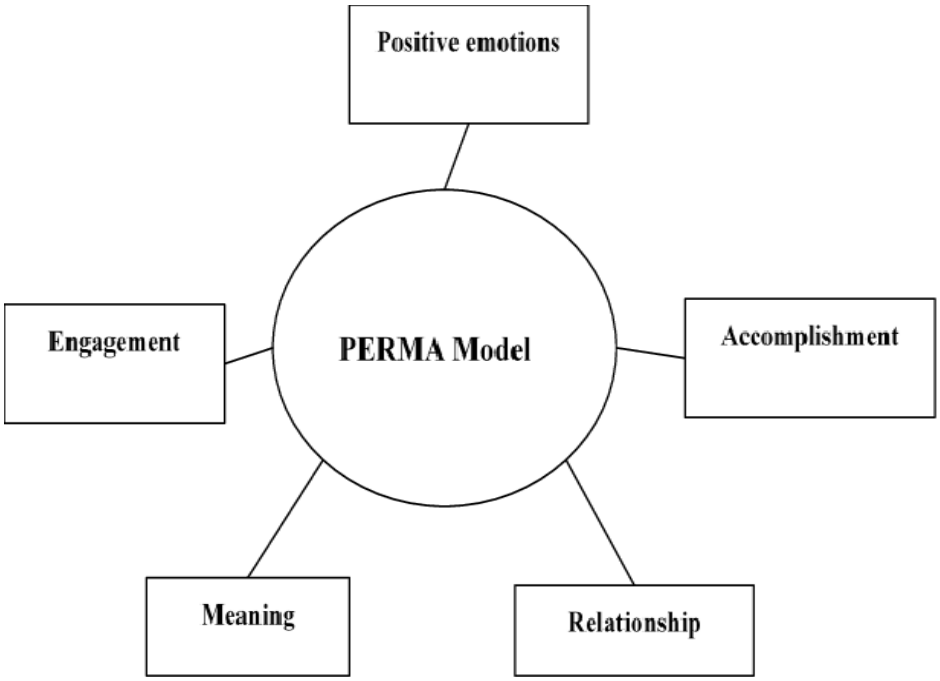


**Figure 1: Seligman's PERMA Model**

There are five core elements of psychological well-being and happiness according to Seligman's (2012) PERMA model.

**The applicability of the PERMA model as a theoretical framework**

This framework provides a robust structure for analysing the factors that contribute to emotional wellbeing, a critical consideration for children living with HIV, who often face significant mental and emotional challenges (Tugade & Fredrickson, 2004). Considering the imperative to augment well-being within this demographic, the PERMA model presents a salient theoretical perspective for evaluating the therapeutic efficacy of drawing interventions (Siedlecki et al., 2014).

Drawing serves as a therapeutic tool that directly fosters emotional expression, aligning with the positive emotion component of PERMA. Furthermore, the relationships element of PERMA is particularly salient in group drawing activities. These settings facilitate crucial

social connections with peers, enhance feelings of belonging, and mitigate the isolation frequently experienced by children living with HIV (Buhrmester et al., 2011). Perceived social support, cultivated through these interactions, plays a vital role in bolstering emotional wellbeing, acting as a buffer against stigma and promoting resilience (Cacioppo, 2011; Thousand Oaks et al., 2003). Drawing sessions have also demonstrated a positive impact on body image, particularly among young girls (Swami, 2016). The potential for HIV to affect developmental milestones can lead to body image concerns as young girls enter adolescence and become more aware of physical differences, negatively affecting their emotional wellbeing. Drawing offers a pathway toward self-acceptance and improved emotional wellbeing in this context.

Moreover, drawing provides children with a medium to express complex emotions related to their HIV status, emotions they might lack the vocabulary or confidence to articulate verbally. These creative activities have the potential to reduce feelings of anxiety (Butler, 2011) and enhance cognitive coping strategies, which are fundamental to emotional wellbeing and originate in brain function (Carlson et al., 2011). The PERMA framework thus supports the integration of drawing into psychosocial support programs, recognising its capacity to enhance emotional wellbeing within a non-judgmental environment where the meaning of the drawing is subjective and personal to each child (Butler, 2011).

The act of creating artwork empowers individuals to express complex emotions and discover personal meaning, aligning with PERMA's emphasis on purpose (Uusiautti et al., 2017). Meaning, in this context, can be derived from the child's engagement in drawing, offering a sense of purpose and connection to an activity that transcends their immediate challenges. The achievement component of the PERMA model holds relevance, as artistic creation entails the pursuit of objectives for the purpose of attainment. Such achievement frequently demands perseverance and resilience, qualities that are particularly salient for children living with HIV, who may encounter cognitive challenges due to treatment and the potential deterioration of the central nervous system (Seligman, 2011).

**The therapeutic potential of drawing and the PERMA framework**

In response to this gap, there is growing global interest in low-cost, non-pharmacological interventions like drawing therapy. This study is grounded in Martin Seligman's (2011) PERMA model of well-being, which posits that flourishing is built on five pillars: positive emotion, engagement, relationships, meaning, and achievement. Structured drawing is a

powerful vehicle for cultivating these elements. Drawing can induce a state of deep engagement or "flow," providing a cognitive respite from distress (Holt, 2020). The creation of symbolic artwork, such as mandalas, helps children externalise complex feelings and derive personal meaning from their experiences (Fincher, 2002). For instance, the documented use of mandalas in paediatric HIV clinics allowed children to express themes of optimism, directly fostering positive emotion and a sense of accomplishment (Wiener & Battles, 2002). Furthermore, group-based drawing activities can strengthen relationships and mitigate the isolation often experienced by CLHIV (Campbell et al., 2016).

While drawing has been used anecdotally in Zimbabwean support groups and as a qualitative research tool to understand children's experiences (Mavhu et al., 2013), its application has been primarily diagnostic. There is a critical shortage of local empirical evidence evaluating its efficacy as a structured therapeutic intervention designed to systematically improve emotional well-being through the mechanisms outlined by the PERMA model.

## Methodology

### Research design

This study employed a quasi-experimental design using a pre-test/ post-test structure with a non-equivalent control group to compare emotional development outcomes between children who participated in drawing activities and those who did not, a methodology appropriate for artwork therapy research with children living with HIV since random assignment is not ethically and practically feasible (Waithaka, 2024). Consistent with Kirk's (2009) assertion that quasi-experimental approaches help determine the impact of therapeutic activities, this design enabled an examination of changes in emotional wellbeing scores across baseline and post-intervention assessments over three days, thereby strengthening the understanding of the relationship between drawing frequency and emotional wellbeing. Furthermore, the approach acknowledged the practical constraints of real-world settings, enabled the integration of qualitative insights into the children's subjective experiences, and ultimately contributed meaningful evidence on the therapeutic value of drawing in addressing the emotional needs of this vulnerable group**.**

### Selection criteria

The participants in this study comprised children aged 6 to 12 years enrolled in local community schools in Waterfalls, selected based on criteria including appropriate age, documented parental or guardian consent, and no prior engagement in structured drawing-

based emotional interventions. From a broader population of 362 children living with HIV, 16 were conveniently selected and subsequently purposively allocated to either the experimental or control group.

**Data collection tool**

The Stirling Children's Wellbeing Scale was employed as the primary data collection instrument, selected for its established validity and reliability in measuring wellbeing. Its design emphasises positive psychological constructs, aligning with contemporary approaches to wellbeing research and meeting benchmark criteria for standardised measures. The scale comprises various dimensions of wellbeing, facilitating a comprehensive assessment of emotional states through age-appropriate questions suitable for children aged 8 to 15. This enhances comprehension and promotes accurate responses. Furthermore, its availability in both paper and electronic formats improves accessibility, accommodating young children and those with reading difficulties to ensure broader participation. The instrument's suitability for capturing a comprehensive range of emotional experiences justified its use for assessing the therapeutic impact of drawing activities within this specific age group (Liddle & Carter, 2015**).**

**Data collection procedure**

This study employed a multi-phase data collection process to evaluate the impact of the drawing intervention. The experimental group participated in structured drawing sessions delivered once daily across three consecutive days. The control group continued with standard care, receiving no drawing activities, which allowed for a robust comparative assessment of emotional outcomes (Campbell, 2020). Emotional well-being was measured using the Stirling Children's Wellbeing Scale (SCWS), with data collected at three key points: pre-intervention (baseline), immediately post-intervention, and during a follow-up assessment. This longitudinal approach enabled the tracking of changes over time. To ensure data quality, collectors received comprehensive training to standardise the administration of the scale, and both paper and electronic formats were utilised to facilitate participation and improve accuracy.

**Structured drawing intervention**

The therapeutic modality was designed to strengthen emotional well-being through creative expression, with activities intentionally aligned to the children' s lived experiences. Each session was structured to facilitate specific components of Seligman's PERMA model.

**Draw a person – Emotional expression and meaning**

This exercise facilitated emotional expression, self-reflection, and the derivation of personal meaning through drawing a human figure. By externalising their internal states, children experienced positive emotion through creative engagement. The subsequent reflective discussions helped them link their drawings to personal feelings and experiences, thereby deepening insight and validating their emotional expression (Banati & Idele, 2021; Mohammadhosseini & Schmid, 2025).

**Image identification and colour explanation**

This activity was designed to strengthen Engagement through recognition, memory, and decision-making. The process of painting and then verbally explaining their colour choices enabled symbolic emotional expression, further enhancing positive emotion. Successfully completing a piece of artwork fostered a sense of achievement, while peer discussions improved emotional vocabulary and confidence in self-expression (Banati & Idele, 2021; Mohammadhosseini & Schmid, 2025).

## Ethical considerations

Research permissions were secured from the relevant committees and boards following the receipt of a letter from the Department of Applied Psychology. This letter outlined the purpose of the study and confirmed the department's support for the research. Additionally, a letter from the Medical Council of the Republic of Zimbabwe (MCRZ) was obtained to ensure compliance with local ethical standards and regulations regarding research involving children.

## Data analysis

**Quantitative data (SCWS Scores)**

Data were analysed following SCWS scoring procedures (Lin et al., 2024; Bresolin et al., 2024). Within-group changes in emotional well-being (Objective 1, Hypothesis 1) were examined using paired-samples t-tests to assess whether pre-test and post-test mean scores differed significantly for the experimental and control groups. This method is suitable for related samples measured across time, evaluates whether observed shifts reflect genuine intervention effects rather than random fluctuation. Between-group differences in improvement were examined by the independent-samples t-test by comparing mean difference scores of pre-test and post-test emotional scores for experimental and control groups (Xu et al., 2019). To address Objective 2 (Hypothesis 2), the association between drawing frequency across the three intervention days and corresponding changes in emotional well-being Pearson correlation

coefficient was used. All statistical procedures were executed using the Statistical Package for Social Sciences (SPSS) version 25, ensuring rigorous and standardised analytical practices across the dataset.

**Qualitative data (artwork and observations)**

Children's drawings were analysed thematically, focusing on colour choice, recurring symbols, and overall expressive content related to emotions (Objective 3, Hypothesis 3). Observational notes were used to contextualise the artwork and provide richer descriptions of the children's experiences during the intervention. A simple frequency count of dominant colours used was conducted.

## Results

This section presents a detailed analysis of the study's findings, structured meticulously around the three principal research objectives: The results are presented in a comprehensive and structured manner, with detailed analyses and interpretations to address each objective. To enhance clarity and engagement, visual representations such as charts and graphs are incorporated, providing a vivid depiction of the data. The findings not only highlight the quantitative outcomes but also weave in qualitative insights, offering a holistic understanding of how drawing activities influenced the emotional well-being of the participants.

**Exploring emotional well-being before and after drawing activities**

***Drawing activities***

The first objective of the study sought to compare emotional well-being levels before and after the drawing activities. To this end, emotional well-being scores for the pre-intervention and post-intervention were quantified according to the SCWS scoring procedures for both the control and experimental group (Lin et al., 2024). For the within subjects design, repeated measures t-test was employed to examine the effect of drawing activities on emotional well-being, while the independent samples t-test was tested the between subjects design. The results revealed compelling insights into the impact of drawing activities on participants' emotional states and are depicted in Tables 1 and 2.

**Table 1: Effects of artwork therapy on emotional wellbeing of children with HIV (Paired samples t-Test)**

| Group | Mean | Standard deviation | Standard error | t-statistic | df | p-value |
|---|---|---|---|---|---|---|
| Experimental pre-test | 43.14 | 10.36 | 3.65 | 4.18 | 7 | .004 |
| Experimental pre-test | 53.64 | 7.86 | 2.78 | | | |
| Control pre-test | 57.39 | 4.21 | 1.49 | .14 | 7 | .892 |
| Control post-test | 53.51 | 3.67 | 1.30 | | | |

Table 1 summarises paired-samples t-test results assessing the effects of artwork therapy on the emotional well-being of children with HIV. In the experimental group, post-test scores (M = 53.64, SD = 7.86) were significantly higher than pre-test scores (M = 43.14, SD = 10.36), t(7) = 4.18, p = .004, indicating marked improvement after the drawing intervention. Conversely, the control group showed a slight, non-significant decline from pre-test (M = 57.39, SD = 4.21) to post-test (M = 53.51, SD = 3.67), t(7) = 0.14, p = .892, indicating stable emotional well-being and underscoring the unique effect of the drawing intervention.

**Table 2: Effects of artwork therapy on emotional wellbeing of children with HIV (Between subjects design)**

| Group | Mean | Standard deviation | Levene's Test for equality of variances | F | Sig | T | df | Sig (2-tailed) |
|---|---|---|---|---|---|---|---|---|
| Experimental (n=8) | 9.25 | 4.23 | Equal variances assumed | 3.06 | .102 | 2.31 | 14 | .037 |
| Control (n=8) | 5.38 | 2.13 | Equal variances not assumed | | | 2.31 | 10.34 | .043 |

Table 2 shows the results of the independent samples t-test employed to examine the effectiveness of artwork therapy on emotional wellbeing of children with HIV. There was a significant difference in levels of emotional wellbeing scores for artwork therapy (M=9.25, SD=4.23) and no artwork therapy (M=5.38, SD=2.13) conditions; t(14)=2.31, p=04<0.04. These results suggest that artwork therapy really does have an effect on emotional wellbeing of children with HIV. Specifically, the results imply that children living with HIV involved in drawing are more likely to have higher emotional wellbeing than those who do not.

### Linking participation to emotional gains

**Table 3: Relationship between frequency of participation in artwork activity and emotional wellbeing (n=8)**

| Variable 1 | Variable 2 | R | P |
|---|---|---|---|
| Drawing frequency | Emotional well-being | .37 | .003 |

Table 3 shows the Pearson correlation results examining the relationship between drawing participation frequency and changes in emotional well-being in the experimental group. Results indicated a moderate positive, and significant correlation, r (8) = 0.37, p = .003, suggesting that higher engagement in the intervention was associated with moderate improvements in emotional well-being. These findings provide moderate support for the effectiveness of structured artwork-based interventions in enhancing emotional outcomes among children living with HIV. The strength of the correlation further implies that participation intensity may be a key factor in optimising therapeutic benefit, suggesting the potential of such interventions as targeted psychosocial tools.

### Observational insights: Themes of positivity and resilience

Participants who engaged in drawing activities more frequently demonstrated heightened emotional well-being, particularly on Day 3 of the experiment. During this phase, participants showed increased engagement with themes of positivity, support, and aspirations. For example, one participant created a series of drawings depicting a "journey of hope", which symbolised their emotional growth and resilience over the course of the intervention. This qualitative observation aligns with the quantitative findings, further validating the positive impact of frequent drawing activities. Figure 2 below supports the findings.

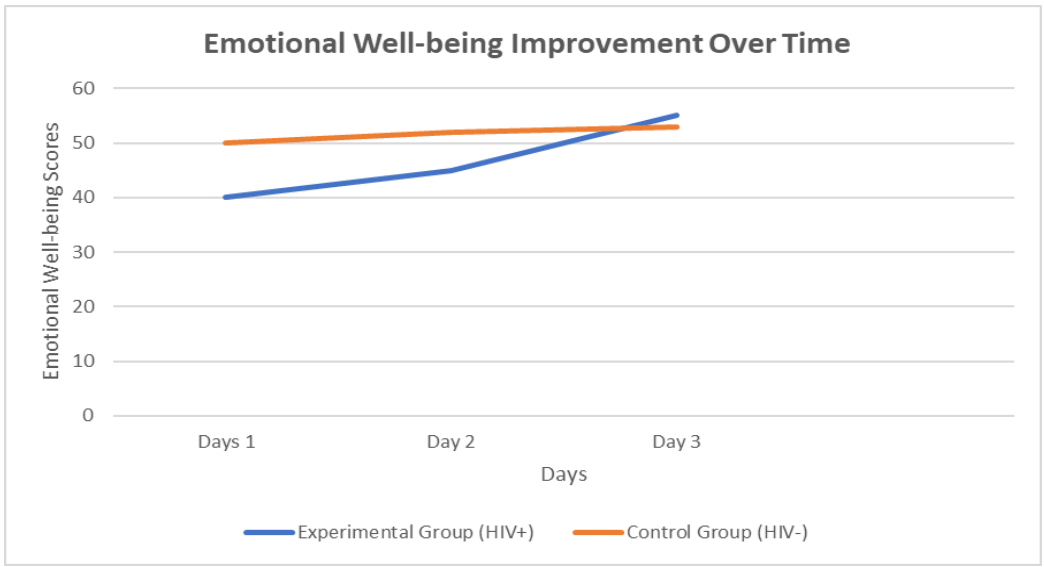


**Figure 2: Results of emotional well-being improvement over time**

**Exploring emotional expression through colour in artwork**

The outcomes of this investigation furnished compelling evidence that substantiated the efficacy of drawing interventions in augmenting emotional well-being within a cohort of children aged 6 to 12.

This objective was addressed through qualitative analysis of the artwork created by participants during the drawing activities. The findings revealed significant insights into how colours were used to express emotions and how these expressions correlated with improvements in well-being. Key findings were as follows:

**Emotional expression through colours**

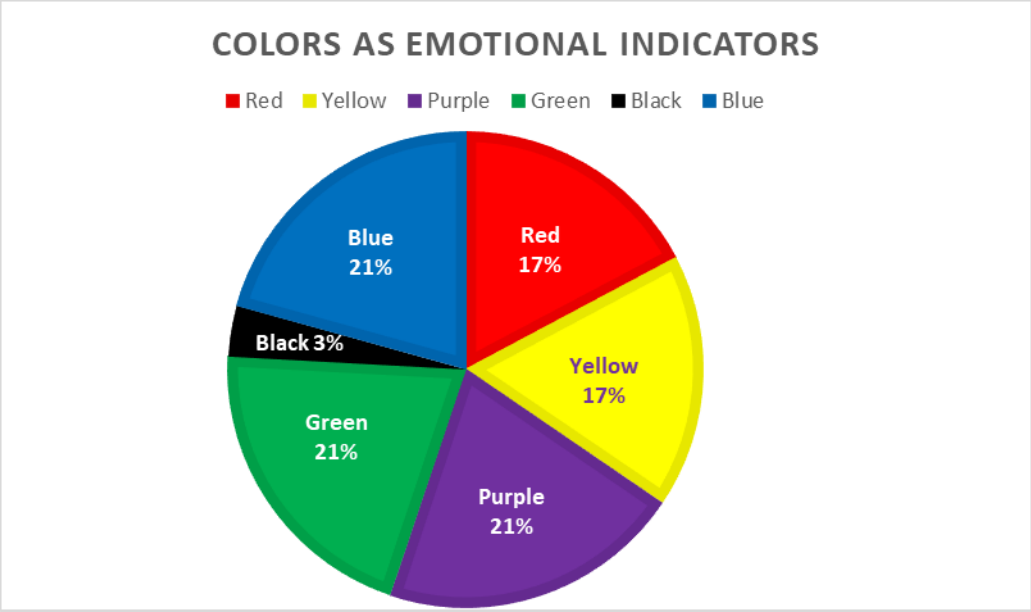


**Figure 3: Colour usage in participants' artwork**

A significant majority of participants (75%) linked purple to imagination and future aspirations, while an equal proportion tied green to growth and renewal, reflecting a shared emphasis on hope and healing. Similarly, 75% associated blue with calmness and emotional stability, underscoring a collective yearning for peace. Though fewer in number (62.5%), red and yellow revealed duality symbolizing resilience amid anger or frustration, and joy intertwined with optimism. A small subset (12.5%) acknowledged darker emotions through black yet framed them as contrasts to strength rather than defeat. Together, these responses highlight a community prioritising growth and hope while candidly navigating adversity.

**Figure 3 & 4: The use of the colour blue and yellow as dominant colours**

Figures 3 and 4 show the dominant use of blue and yellow conveys meaningful emotional symbolism. In artwork therapy, blue often reflects calmness, introspection, and a search for emotional stability; although it may indicate sadness, its pairing with brighter tones typically signals adaptive rather than distressed emotional processing. Yellow, linked to warmth,

optimism, and renewed energy, introduces a counterbalancing element that suggests resilience and emerging positive affect.

Together, these colours indicate a child managing complex emotions while simultaneously expressing hope and recovery. Their interplay corresponds with the post-intervention improvement in emotional well-being, suggesting a therapeutic shift toward greater emotional integration and positivity.


**Figure 5 & 6: depicting all colours blue, black, yellow, green, red, purple from all eight participants**

Figures 5 and 6 reveal consistent use of a full colour spectrum: blue, black, yellow, green, red, and purple across all eight participants. In artwork therapy, the use of multiple colours is often interpreted as evidence of emotional complexity, psychological variability, and a broad affective range rather than a singular dominant emotional state. This multicolour expression can indicate that children are processing diverse emotions simultaneously, reflecting both their internal struggles and their emerging coping capacities.

## Discussion of findings

This study set out to systematically evaluate the effect of a structured drawing program on the emotional well-being of children living with HIV (CLHIV) in Harare, Zimbabwe. The findings

provide compelling evidence that such an intervention is not only feasible, but also effective in fostering significant improvements in emotional well-being. The discussion that follows interprets these results in relation to the study's objectives, the underlying PERMA theoretical framework, and the existing body of literature.

**The efficacy of structured drawing in enhancing emotional well-being**

The primary objective of this study was to compare emotional well-being levels before and after the drawing activities. The results were unequivocal: participants in the experimental group exhibited a statistically significant increase in their SCWS scores following the intervention ($p = .004$), while the control group showed no such improvement. This finding robustly confirms the study's first hypothesis and underscores the therapeutic potential of structured drawing.

This outcome aligns with global scholarship on arts-based interventions. The significant improvement echoes the work of Wiener and Battles (2002), who found that mandala drawing in a paediatric HIV clinic allowed children to express optimism and happiness. Furthermore, it substantiates the World Health Organisation's (as cited in Fancourt & Finn, 2019) position on the value of arts in managing chronic conditions. The increase in well-being scores can be interpreted through the PERMA lens as an enhancement in positive emotion. The drawing activities provided a non-threatening outlet for joy, creativity, and fun, directly countering the feelings of sadness and worry previously documented in CLHIV in Harare (Mavhu et al., 2018).

Crucially, this study moves beyond anecdotal or qualitative use of drawing in Zimbabwe. It provides the local, empirical evidence that was identified as a critical gap in the literature, demonstrating that drawing can be a structured, measurable intervention rather than merely a diagnostic tool.

The second objective was to establish the relationship between drawing frequency and improvements in emotional well-being. The results revealed a moderate positive correlation ($r = 0.37$, $p = .003$), indicating that children who participated more frequently in the drawing sessions experienced greater improvements in their emotional well-being.

This "dose-response" relationship strengthens the argument for a causal link between the intervention and the outcome. It suggests that the benefits of artwork-based therapy are not merely a one-time novelty effect, but can be cumulative. This finding is consistent with the engagement pillar of the PERMA model. Repeated engagement in the drawing activities

likely facilitated a deeper state of "flow" (Holt, 2020), providing a sustained cognitive respite from the stresses of their chronic illness. The observational data from Day 3, where children engaged with more complex themes of hope and resilience, supports this, indicating that repeated practice built confidence and allowed for deeper emotional exploration. This aligns with Seligman's (2011) view that sustained engagement in absorbing activities is a cornerstone of well-being.

The third objective sought to explore emotional expression through colour. The qualitative analysis of the artwork provided profound insights that complemented the quantitative data. The dominant use of colours like blue (calmness), yellow (joy, optimism), green (growth, renewal), and purple (imagination, aspiration) paints a picture of children actively processing their experiences and striving toward positive emotional states.

The symbolism of these colours strongly resonates with existing colour theory (Fincher, 1991) and the study's framework. The use of yellow and purple directly reflects the "optimism" and "spirituality" noted by Wiener and Battles (2002), while the pursuit of calmness (blue) and growth (green) speaks to a search for emotional stability and personal meaning amidst life's challenges. The fact that 75% of participants associated these colours with positive concepts is a powerful testament to the intervention's success in fostering hope.

Even the use of black by a minority of participants, when framed as a "contrast to strength", is significant. It demonstrates that the intervention did not simply enforce false positivity but created a safe container for acknowledging difficult emotions. This process of externalising and reframing negative feelings is a core mechanism of artwork therapy (Malchiodi, 2014) and contributes to the achievement of emotional mastery and resilience.

## Practical applications

The findings hold significant implications for policy and practice in Zimbabwe and similar contexts. Within education, integrating structured drawing into school curricula could enhance emotional resilience among children with HIV, aligning with Education 5.0’s emphasis on innovation and holistic development. In healthcare, clinics and support groups could adopt artwork therapy as a routine psychosocial intervention, complementing antiretroviral therapy (ART) to address both physical and emotional health. Beyond institutional settings, community-driven artwork programmes such as collaborative murals or storytelling workshops could reduce stigma and strengthen social support networks, particularly in marginalised populations. These low-cost, scalable strategies not only align with national educational

frameworks, but also empower communities to address HIV-related challenges through culturally resonant, creative approaches.

## Limitations

This investigation recognises several methodological constraints that may impinge upon the generalisability of its findings:

- The restricted sample size, coupled with its focus on a specific demographic, may limit the applicability of the results to broader populations.
- The geographically constrained scope of the study may not adequately represent the heterogeneous experiences of children diagnosed with HIV across diverse contexts.

## Recommendations for future research

- Conduct an in-depth exploration of the dynamics inherent in drawing interventions and their subsequent impact on children's emotional well-being.
- Investigate the attitudes of parents and caregivers regarding artwork-based interventions and their perceived efficacy.
- Execute longitudinal investigations to assess the sustained effects of drawing interventions on the emotional health of children diagnosed with HIV.
- Augment the sample size to encompass diverse populations and varied cultural contexts within Zimbabwe to achieve a comprehensive understanding.
- Evaluate the influence of parental and educator training in the implementation of artwork therapy to optimise child benefits.

## Conclusion

This study underscores the transformative potential of structured drawing sessions as a low-cost, scalable intervention to enhance emotional well-being in children living with HIV. By bridging theoretical rigour (PERMA model) with practical relevance (Education 5.0), it offers a blueprint for integrating creativity into holistic care frameworks. While limitations necessitate cautious interpretation, the findings advocate for policy shifts toward artwork-based psychosocial support, emphasising that emotional resilience is not a luxury but a necessity for vulnerable populations. In a world where HIV remains intertwined with stigma and inequality, creativity emerges not merely as an outlet but as a lifeline a tool for healing, hope, and reclaiming agency.

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