Exploring Therapeutic Modelling and Emotional Violence expression among Secondary School Students in the Bundibugyo District, Uganda

Julius Mwijuka[1*], Prof. Joyce Bukirwa Rebecca (PhD)[2] & Andrew Peters Yiga (PhD)[3]

[1]*Mountains of the Moon University, P. O. Box 837, Uganda;*
[2]*Muni University, P. O. Box 725, Arua, Uganda,*
[3]*Nkumba University, P. O. Box 237, Entebbe Uganda;*

ABSTRACT: *Secondary school adolescents often lack suitable avenues to express themselves, leading to emotional instability, anxiety, stress, and loss of hope. This study investigated the relationship between therapeutic modelling and emotional violence expressed by students in selected secondary schools in Bundibugyo District. Four hundred (400) S2 adolescent secondary school students from four schools in Bundibugyo District participated in this research. Data were collected using semi-structured in-session interviews, observation methods, and focus group discussions, and employed an explanatory sequential design. The analysis utilized the Wilcoxon signed test, a Non-Parametric statistical method for quantitative data, alongside thematic analysis for qualitative data. The findings revealed a significant difference in the relationship between therapeutic modelling and emotional violence expressed by students ($z = -6.732$, $p < 0.0001$). Consequently, the null hypothesis, stating that there is no significant relationship between therapeutic modelling and emotional violence expressed by students in selected secondary schools in Bundibugyo District, Western Uganda, was rejected. The most common forms of emotional violence depicted were isolation and belittlement by fellow students. This research focused solely on the emotional effects of violence, utilizing therapeutic modelling as a means of communicating anxiety, stress, and psychological torture experienced by victims of emotional violence. Furthermore, the study was limited to materials such as clay and other readily available materials used in modelling. Therapeutic modelling intervention proved effective in enhancing the expression of emotional violence aspects that victims previously found challenging to articulate verbally. The therapy facilitated relaxation and reduced anxiety stemming from emotional violence.*

Key words: Emotional, Modelling, Therapeutic, Therapy, Violence

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I. INTRODUCTION

Emotional violence against children in schools is a harsh reality affecting thousands of secondary school students not only in Uganda but also globally (Walakira & Ddumba, 2012). Despite its prevalence, emotional violence often remains overshadowed by physical, sexual, and other forms of violence. Victims of emotional violence often feel helpless and powerless, experiencing anxiety, stress, isolation, and sometimes turning to substance abuse, (Radell,Hamza, Daghustani, Perveen, & Moustafa, 2021). Equally, the researcher noted that students affected by emotional violence exhibit symptoms such as low self-image, self-esteem and confidence issues, distress, disruptive behaviour, or secrecy. Therapeutic modelling provided these students with relief from the anxiety associated with emotional violence.

The inability of students to find a reliable means of communication to express aspects of emotional violence that cannot be verbally articulated has exacerbated the plight of secondary school students in Bundibugyo District.

Art therapy has demonstrated effectiveness in reducing symptoms and enhancing overall well-being in trauma survivors throughout their lifetime (Shelly, 2022). Visual expression encourages students to convey their emotions and thoughts using various techniques, thereby alleviating symptoms resulting from violence, including aggression and anger (Kim, 2015)

This study is relevant and unique because it aimed to foster personal growth, enhance self-understanding, facilitate emotional relief, and assist individuals in finding meaning and insight, thereby alleviating overwhelming emotions or trauma, resolving conflicts and problems, enriching daily life, and promoting an increased sense of well-being.

The current study contributed to new knowledge through Formulation of an Innovative Visual Art Impression Model, the first of its kind in Bundibugyo District that works specifically on students who are victims of violence to help them to visually express what cannot be expressed verbally.

HYPOTHESIS

The hypothesis that guided the study was: There is no significant relationship between therapeutic modelling and violence expressed by students in selected secondary schools in Bundibugyo District in Western Uganda.

II. THEORETICAL REVIEW

The current study was informed by John Dewey's Expression theory. The expression theory states that artwork serves as an intentional object through which individuals express their feelings, leading to fresh insights and innovative problem-solving approaches (Mitias, 1992). In the context of students grappling with emotional violence, the theory posits that visual expression enables them to externalize the effects of emotional violence, thereby reducing anxiety, stress, and fostering hope.

Dewey's Expression Theory encompasses several key arguments:

Firstly, Dewey emphasizes that genuine expression is intrinsic to the aesthetic experience. Artistic expression isn't merely about conveying pre-formed ideas; rather, it intertwines with the ongoing process of lived experience. This aligns the aim of this study which sought to explore the relationship between therapeutic modelling and the expression of emotional violence among students in selected secondary schools in Bundibugyo District. The objective was to provide students with a platform to articulate their lived experiences as victims of emotional violence, thereby alleviating their anxiety.

Secondly, Dewey views art as a form of communication that surpasses verbal language. Through artistic expression, individuals can convey experiences, emotions, and thoughts beyond conventional linguistic boundaries. This aspect of Dewey's theory resonates with our study, where students were given the opportunity to articulate aspects of emotional violence that couldn't be easily expressed verbally. This facilitated emotional stability, reduced stress, anxiety, and restored hope among the participants.

Thirdly, Dewey emphasizes the importance of the artistic process over the mere production of a finished product. He contends that true expression unfolds during the act of creating, experimenting, and engaging in the artistic process. This aspect is pertinent to our study, as it focused on the students' articulation of their lived experiences through a process that led to the externalization of their feelings of emotional violence. This process alleviated the students stress, anxiety, and restored hope.

Finally, Dewey rejects the notion that emotion and expression are separate from intellectual engagement. Instead, he argues that emotional and intellectual aspects are intertwined in artistic expression, contributing to a holistic and meaningful experience. This aspect of Expression Theory resonates with this study objective, which aimed at examining the relationship between therapeutic modelling and the expression of emotional violence among students. Emotion and expression were intrinsically linked, as the therapeutic

articulation of the effects of emotional violence led to emotional stability, restored hope, reduced anxiety, and stress among the participants.

III. LITERATURE REVIEW

Emotional violence can have profound short and long-term effects on adolescents, impacting both their physical and mental well-being. It often leads to feelings of confusion, anxiety, shame, guilt, frequent crying, over-compliance, and powerlessness. There are alarming rates of emotional violence experienced by Ugandan youth, with significant percentages reporting such abuse during childhood (Ministry of Gender, Labour, & Social Development, 2018)

In Bundibugyo District there was a high prevalence of emotional violence, with 98% of surveyed children reporting weekly experiencing emotional abuse (Action Aid and Advocacy for Children 2012-2014). Visual art therapy emerges as a crucial intervention, allowing children to visually express and document their experiences, perceptions, feelings, and imagination. As indicated by various studies, there is effectiveness of modelling therapy in helping trauma victims become aware of their responses and emotions (Kost & Kathryn, 2019)

However, while previous research has explored the therapeutic benefits of art therapy, there remains a gap in addressing the specific needs of secondary school students who experience emotional violence. This study bridges that gap by focusing on visual art therapeutic modelling as both an expressive channel and a therapy for secondary school students in Bundibugyo District.

Art therapy allows children to express themselves (Malchiodi, 2020). Malchiodi, 2020 dwelt on children in general and was not specific on the age group. S2 secondary school students' struggles with emotional violence and therapeutic modelling remained unexplored. This study filled that void by utilizing therapeutic modelling to alleviate depression, chronic pain, low self-esteem, and anxiety resulting from emotional violence.

Furthermore, Bernard and Claudia, (2009) examine children's responses to familial violence, their focus does not extend to the specific needs of secondary school students. Similarly, Kanchiputu and Mwale, (2016) discuss the effects of domestic violence on children's learning systems but do not address emotional violence among secondary school students.

In contrast, this study delved into the unique challenges faced by secondary school students experiencing emotional violence, using visual art therapeutic modelling to provide relief and promote emotional well-being. By addressing the specific needs of S2 adolescents, this research contributes to a more comprehensive understanding of the therapeutic potential of art in mitigating the effects of emotional violence.

IV. METHODOLOGY

Research Design

The researcher employed an explanatory sequential design to utilize narrative data for explaining and interpreting numerical findings. Explanatory sequential design involves the collection and analysis of quantitative data followed by the collection and analysis of qualitative data. Qualitative data is then utilized to interpret and clarify the results obtained from the quantitative data analysis. (Creswell & Clark, 2011)

A mixed research approach was adopted in this study. The researcher collected, analysed, and integrated both quantitative and qualitative data within a single study. This mixed methods approach was chosen to ensure that the limitations inherent in quantitative methods were balanced by qualitative methods. By employing mixed methods, the researcher aimed to gain a deeper understanding of any inconsistencies observed between quantitative results and qualitative findings.

Therapeutic modellingexperiment

The study aimed to investigate the relationship between therapeutic modelling and the expression of emotional violence among secondary school students in Bundibugyo District, Western Uganda. Through art experiment sessions, the focus was on enhancing students' emotional well-being and visual communication skills to alleviate emotional distress, increase self-awareness, and promote relaxation. Therapeutic modelling, represented by visual art, was considered as an independent variable with elements such as tone, form, space, value, shape,

texture, colour, and line. Emotional violence, the dependent variable, encompassed insults, put-downs, verbal threats, constant monitoring, excessive jealousy, manipulation, humiliation, intimidation, and dismissiveness, all of which contribute to the victim feeling threatened, inferior, ashamed, or degraded.

The experiment under therapeutic sculpturing was organised in such a way that the activity described was an adaptation of techniques from Kantor's sculpting method, outlined in his work (Kantor.S, 1960). Participants were organised into control and experimental groups. Experimental group was the group that received treatment in form of therapeutic modelling. The control group was the group that did not receive the treatment, the variable that was being tested. This meant that the researcher was able to find out the effect of the treatment on the experimental group in relation to articulation of emotional violence expressed and compared results of the experimental group and control group thus determining if the treatment had an effect on the experimental group.

The pre-test experiments lasted for one and a half hours. On the pre-test day, the researcher introduced himself to the students, explained the topic and the purpose of the study as well as the expected duration of the experiment and then randomly assigned students to either the control group or the experimental group using a random sampling method, facilitated by random numbers. There were a total of 6 control groups and 6 experimental groups, each consisting of 10 members. This decision was made to ensure better control over the groups and to allow each individual ample opportunity to share insights and observations.
In the pre-test/control group, students were provided with various materials and tools such as, sticks, knives, clay and other relevant items and were instructed to model.

The post-test test experiment session lasted for one and a half hours and solely included participants from the experimental group. Six experimental groups, each comprising 10 members, were formed to ensure better control and ample opportunity for sharing insights. The treatment began with the reading of guidelines, followed by the modelling sessions.
During the modelling session, participants were given clay and basic shaping tools like spoons, knives, and small sticks. They were tasked with sculpting models representing how they felt at school, expressing their emotions and the situations encountered at School. The primary objective of the activity was to know how the victims of emotional violence could express how they were affected by emotional violence and how this helped to improve their situations in regard to their experiences with violence. Emotional violence was measured basing on indicators such as social withdrawal, low self-esteem, fear and this was reinforced by lived experiences of students as presented during in-session interviews and in-session focus group discussions. A person who is not emotionally distressed would be emotionally stable, happy, socialising with fellow students and above all not moody. The researcher used thematic analysis so as to identify, analyse, and report patterns (themes) within qualitative data. This involved systematically coding data to identify themes, which were patterns of meaning or topics that emerged from the data. Thematic analysis helped the researcher to explore and interpret the underlying experiences, perceptions, and understandings of participants in regard to violence.
The variability in the expression of emotional violence among the students was brought by the fact that in the control group, where the intervention was not introduced, students just modelled whatever they thought about, where as in the experimental group, where the intervention was introduced among students who were victims of emotional violence, there was improved expression of emotional violence which as revealed by students in focus group discussions and interviews during experiments led to relaxation, relief and above all lessened anxiety.

Population

Table 1: Samples and sampling procedures

Category of participants	Sampling procedure	Secondary Schools	Sampling procedure	Population	Sample size

Senior 2	Probability proportional to Size	Semuliki H/S	Purposive Sampling	1066	163
Senior 2	Probability proportional to Size	Bukonjo Seed School	Purposive Sampling	112	17
Senior 2	Probability proportional to Size	Bundikahungu Seed school	Purposive Sampling	487	75
Senior 2	Probability proportional to Size	St. Mary's Simbya Sec School	Purposive Sampling	947	145

Target population was estimated to be 2612 from the following schools: Semuriki High School-Izahura, with enrolment of 1066 students, Bukonjo Seed School with enrolment of 112, Bundikahungu Seed School with enrolment of 487 students, St Mary's Simbya Secondary School has a students' enrolment of 947 students. The researcher selected 400 S2 students from the target population (2612) using Probability Proportion to size (PPS) sampling method. Sample size is the number of items selected from the entire population to constitute a sample (Kothari, 2004)

The investigators used a sample size estimation formula by Slovan, (1960) since the estimatedpopulation of students was known.

$$n = \frac{N}{1 + Ne^2}$$

Where: n= Population size; N= Population size; e=Margin of error to be decided by the researcher; n=2612/1+2612(0.05^2); =2612/1+26120(0.0025)

$$n = \frac{2612}{1 + 2612\,(0.05^2)} = 399.847 = 400$$

Appr. **400** participants were selected and used in this study.

Only senior two secondary school students were recruited basing on the fact that it's a transition stage from childhood to adolescence. At this stage, adolescents are faced with many challenges that are linked to violence in addition to lacking skills of expression. Therefore, the researcher also wanted to help them express inner messages using symbols, colours, tones, lines, shapes, form and any other elements of art.

Demographic of characteristics of participants

Participants in the current study comprised of S2 students whose age ranged from 13 to 16 years old. However, there was slight variations due to factors like starting school at different ages or repeating grades. There was relatively equal distribution of male and female students in these schools, although some schools had slight imbalances. The demographic makeup reflected the ethnic diversity of Bundibugyo District, with students belonging to various ethnic groups such as the Bamba, Bakonjo, Basongora, and Babwisi. Students came from diverse socioeconomic backgrounds, including families engaged in agriculture, business, or other occupations prevalent in the region. Some Students were day scholars, commuting from nearby communities to attend school, and others boarders, residing in school dormitories during the academic term. Some students came from families practicing Christianity, Islam, or other traditional African religions, reflecting the religious diversity of Uganda. In the participating schools, English was the primary language of instruction at the schools, but students also spoke local languages such as Konjo, Rutooro, or Lunyoro in their daily lives. Students came from nuclear families, extended families, or other family structures common in Bundibugyo District in Ugandan society. All the participating were in the in rural areas and faced challenges in terms of resources such as textbooks, laboratory equipment, and other necessities.

Demographic Statistics

In the first instance, the majority of students (65%) were males. The mean age and standard deviation were 13.7±0.91with minimum and maximum age of 13-16 years of age.

Table 2: Demographic data of the participants.

Variable		n (%)	Mean	Std. Dev	Median	Min	Max
Sex	Male	39 (65)					
	Female	21 (35)					
Age	13	33 (55)	13.7	0.91	13	13	16
	14	15 (25)					
	15	9 (15)					
	16	3 (5)					

The models were run to detect the impact of gender and age on sexualviolence, but all were found not be statistically significant, thus there is no relationship between age and sexual violence.

Sampling Strategy
The study was guided by sampling methods such as purposive sampling, simple random sampling and probability proportion to size sampling methods. The purposive sampling method was used to select Budibugyo District because Bundibugyo District being one of the Districts mostly affected by violence, the researcher thought would give the most reliable information. Four secondary schools were purposively selected because they lie almost on the border of Congo and Uganda and, therefore, have had more experience of war and other vices associated with violence.

Simple random sampling was used to select schools in Bundibugyo District because everybody would be represented.

Probability proportional to size (PPS) was used to select the number of S2 students from four schools. This sampling method was used because the schools had unequal or varying number of students.

Methods of Data Collection
A semi-structured interview was used to collect data in this study because the researchers wanted to find out students' lived experiences, behaviour and understanding concerning how they were affected by emotional violence. The observation method was used in experiments in which both control and experimental groups of respondents were chosen from sample secondary school students who were pretested so as to measure the dependent variable before intervention in experimental groups and after. The observation method was used with the aid of an artistic expression observation score tool for recording the observed expressions or indicators that were exhibited during art activities. Similarly, focus group discussion method was used to gather information from S2 adolescents so as to specifically discuss emotional violence as topic of interest.

Validity of Data Collection Instruments
The instrument was judged to be valid if the Content Validity Index (CVI) was higher than the recommended value of 0.70. In this research, the content validity index of the instruments were 0.75, 0.825, 0.7 above 0.70, as indicated in the table below. It was therefore valid.

Table 3: Validity test results

ITEMS	Number of items rated as relevant	Content Validity Index
Therapeutic Modelling	28	0.7

Data Analysis
Quantitative Data Analysis
A Wilcoxon signed-rank test, a non-parametric statistical method, was employed to analyse the data. This test aimed to establish the relationship between therapeutic modelling and the expression of emotional violence, as measured by pre-test and post-test observations on a Likert scale. The objective was to determine if there

existed difference in the mean levels of therapeutic modelling and emotional violence expressed before and after students received visual art therapeutic treatment.

In accordance with the Wilcoxon signed-rank test, if the calculated z-score falls outside the range of -1.96 to 1.96, the null hypothesis is rejected. In this case, the z-score was calculated as -6.732 (z = -6.732, p < 0.0001), leading to the rejection of the null hypothesis that stated: There is no significant relationship between therapeutic modelling and violence expressed by students in selected secondary schools in Bundibugyo District, Western Uganda.

The significant difference in mean levels and the established relationship between therapeutic modelling and the expression of emotional violence suggest that students effectively utilized therapeutic modelling to express aspects of emotional violence such as trauma, stress, anxiety, and depression, which may have been challenging to articulate verbally. This utilization of therapeutic modelling provided relief to students who were victims of emotional violence, alleviating symptoms of depression, anxiety, chronic pain, and low self-esteem resulting from their experiences.

Table 4: Wilcoxon signed-rank test

Sign	Obs	Sum Ranks	Expected
Positive	1	1	915
Negative	59	1829	915
Zero	0	0	0
All	60	1830	1830
Unadjusted variance	18452.5		
Adjustment for ties	-20.38		
Adjustment for zeros	0		
Adjusted variance 18432.13			
z = -6.732			
Prob > |z| = 0.0000			

Qualitative Data Analysis

Qualitative data was analysed using thematic analysis. Thematic analysis is a research method used to identify and interpret patterns or themes in a data set; it often leads to new insights and understanding (Boyatzis, 1998; Elliott, 2018; Thomas, 2006).

The researcher conducted thematic analysis focusing on the themes emerging from the data about the relationship between therapeutic modelling and expression of emotional violence by S2 students in selected Secondary schools of Bundibugyo District.

Table 5: Modelling expressing emotional violence

Themes relating to Emotional Violence	Frequency of Occurrence as reflected by students during in session interviews and Focus Group Discussions of Clay Models Expressing Emotional violence.	Percentages (%)
Isolation	25	42
Humiliating	02	3
Threatening	04	7
Ridiculing	02	3
Criticising	02	3
Frightening	25	42

The initial phase of the thematic analysis process involved the transcription of data and familiarizing oneself with it. The researcher then selected quotes that brought the data to life and pertinently represented diverse viewpoints and patterns pertinent to the research objective which was: To examine the relationship between

therapeutic modelling and emotional violence expressed by students in selected secondary schools in Bundibugyo District.

The researcher then coded, by systematically identifying and labelling patterns or themes within qualitative data. This process involved scrutinizing the data, line by line, to identify recurring ideas, concepts, or topics that emerged from the dataset. Coding involved;

The researcher beginning to identify specific pieces of data that seemed relevant to the research objectives. These included phrases, sentences, or paragraphs that captured important ideas or concepts like Isolation, Humiliating, Threatening, Ridiculing, Criticising, and Frightening.

The codes were then organised into a hierarchical structure, with broader themes encompassing more specific sub-themes or codes, which helped in systematic categorization of data making sense of it. The researcher continuously reviewed and refined the coding scheme as more data analysis was done. After the coding scheme was established, the researcher systematically applied it to the entire dataset, assigning relevant codes to each piece of data.

After coding the entire dataset, the researcher examined the coded data to identify predominant themes or patterns that emerged across the dataset.

Identified themes:
Theme 1: Social Exclusion and Isolation
Theme 2: Verbal Abuse
Theme 3: Intimidation and Threats
The researcher further reviewed and refined themes to ensure that each theme captured a distinct aspect of emotional violence and there was no overlap between themes.
The findings in qualitative researcher were finally based on the following themes**:**
 Theme 1: Social Exclusion and Isolation
Theme 3: Intimidation and Threats

Data interpretation:
Students were able to derive sculptural models depicting isolation and Fright.
Clay modelling provided victims with a non-verbal outlet to express their emotions, including feelings of isolation and fright. Through sculpting, victims externalized their inner turmoil and experienced emotional release, promoting catharsis and emotional relief.
Engaging in clay modelling empowered victims by giving them control over their creative process. They shaped and manipulated the clay to represent their experiences and emotions, reclaiming a sense of agency that may have been lost due to emotional violence.
Victims externalized their emotions by transforming abstract feelings into tangible clay sculptures. By objectifying their experiences of emotional violence, victims gained perspective and distanced themselves from the intensity of their emotions, facilitating reflection and insight.
Implications
In summary modelling in sculpture as a therapeutic intervention for victims of emotional violence helped secondary school students who had been victims of emotional violence to creatively articulate aspects of emotional violence they could not articulate verbally thus, they were able to relax, lessen anxiety and become emotionally stable.
Qualitative data in form of models and excerpts from the interviews and focus group discussions:
The results presented bellow were extracted from the in session interviews, focus group discussion and observations. The students gave their lived experiences by modelling, explaining and in some cases indicating in their work how they were affected.

Plate 1: Modelling depicting Fright

Plate 2: Modelling, depicting isolation.

These are some of the expressions as presented by students:

"I felt like killing myself when he called me a monkey because iam very black, I even went and hid behind the classes and remained alone for some time"

"As soon as I arrived in the new school, the big girls started saying that I didn't have a future and that I was too ugly and they didn't know why I was studying"

"You poor rat, what are you doing here'' the big girl in S4 roared and "this scared me and made me hate school for some time. The thought of being called a poor rat kept in my mind for a long time". She adds "This model

shows how I felt throughout. It reminds me of what happened that time. I now feel relaxed because I have been able to express how I felt."

"They powered water on my bed and told everyone that I wet my bed and this was done several times. I felt angry and could not trust anybody. I felt small and isolated"

"I felt lonely when ADF killed all my parents and I had nowhere to go and remained at school"

"I cannot repeat the words they used to abuse me because they were filthy"

"The two boys didn't beat me but what they told me made me cry the night"

These results were informed by the explanatory sequential design in which qualitative data was used in the subsequent interpretation and clarification of the results from the quantitative data analysis. The models presented bellow represent frequency of occurrence of emotional violence as reflected by students in therapeutic Modelling experiments in which emotional violence was expressed. Art therapy helps children to visually express and record experiences, perceptions, feelings and imagination (Carthy, 2013).

PRESENTATION OF QUANTITATIVE RESULTS

Table 6: Post-test Comparison of control and experimental groups on the use of patterns in therapeutic modelling to express emotional violence

Indicator	1-Post-Test Cont			2-Post-test Exp		
Use of Patterns	Rate	No. of Stds	%	Rate	No. of Stds	%
	1	-	-	1.	02	03
	2	09	15	2.	12	20
	3	19	32	3.	25	42
	4	22	37	4.	20	33
	5	10	17	5.	01	02

Table 7: Control and Experimental group pre-test.

Indicator	1-Pre-Test Cont			2-Pretest Exp		
Use of Patterns	Rate	No. of Stds	%	Rate	Number	%
	1	51	85	1.	52	87
	2	07	12	2.	08	13
	3	02	03	3.	-	-
	4	-	-	4.	-	-
	5	-	-	5.	-	-

The findings revealed that, in the experimental post-test group in the **Table 6** after introduction of the intervention, 3% of the participants in rate 1 used Patterns. 20 % of the participants in score 2 used patterns in modelling expressing emotional violence expressed. 42% of the participants in rate 3 used patterns to articulate emotional violence. 33% of the participants in rate 4 used patterns in modelling expressing emotional violence whereas 2 % out of the 60 participants rate 5 used patterns in modelling expressing emotional violence expressed. Introduction of the intervention in experiment post-test group led to improved artistic expression using patterns in modelling. This expressed emotional violence since 42% participants appeared in the third highest score 3 out of the 60 total number of participants who used patterns. Where as in the control and experimental group pre-test, in *table 6,* where the intervention was not introduced, data revealed that in Experimental group pre-test in **Table 7,** where the intervention was not introduced and 87% participants scored in the lowest rate 1 out of the 60 participants who used patterns in modelling expressing emotional violence in the pre-test experimental group and 85% scored in the lowest rate 1.

"There is no relationship between therapeutic modelling and emotional violence expressed by students in selected secondary schools in Bundibugyo District, Western Uganda." The study revealed that there is indeed a statistically significant relationship between therapeutic modelling and emotional violence expressed by

students in these schools. This revelation was supported by a Wilcoxon signed-rank test, which revealed a significant difference in means, indicating a relationship between therapeutic modelling and the expression of emotional violence among students who received the intervention in selected secondary schools in Bundibugyo District.

Descriptive Statistics

Table 8: Testability of the Innovative Visual Art Impression Model (IVAIM) to reflect practical implications of using therapeutic modelling among adolescent secondary school students who were victims of emotional violence to mitigate emotional violence

Therapeutic modelling and mitigation of emotional violence	1	2	3	4	5	Mean	StD
Therapeutic modelling led to:	Very much	Much	Likely	Unlikely	Not all		
Lessened anxiety	12 (20%)	24 (40%)	16 (27%)	0	0	10	9
Restored confidence	30 (50%	14 (23%)	10 (17%)	06 (10%)	0	12	10
Restored hope	27 (45%)	25 (42%	07 (12%)	01 (1%)	0	12	12
Emotional stability	34 (57%)	17 (28%)	05 (8%)	03 (5%)	01 (1%)	12	12
Relaxation	22 (37%)	31 (52%)	02 (3%)	01 (1%)	0	11	13

To validate the effectiveness of the innovative visual artistic impression model, it was implemented in several secondary schools within Bundibugyo District. The findings, summarized in Table 8, demonstrate notable outcomes:

Among the student participants, 20% reported a significant reduction in anxiety levels, while 40% experienced a considerable decrease in anxiety. Additionally, 27% are believed to have experienced reduced anxiety following the implementation of therapeutic modelling, employing techniques such as lines, shapes, form, size, and space to express emotional distress.

Regarding confidence restoration, 50% of the students expressed a substantial increase, with 23% reporting a notable gain in confidence. Conversely, 17% mentioned they were likely to have gained confidence, while 10% indicated otherwise due to their engagement in therapeutic modelling techniques.

A significant portion of participants (45%) reported a marked restoration of hope for a violence-free future, with an additional 42% expressing a substantial increase in hope. Moreover, 12% are thought to have experienced restored hope, while only 1% expressed doubt regarding this outcome.

Emotional stability saw significant improvement, with 57% reporting a substantial increase, and 28% indicating a notable enhancement. Only a small percentage (8%) are believed to have experienced emotional stability, while 5% expressed doubts, and 1% reported no change.
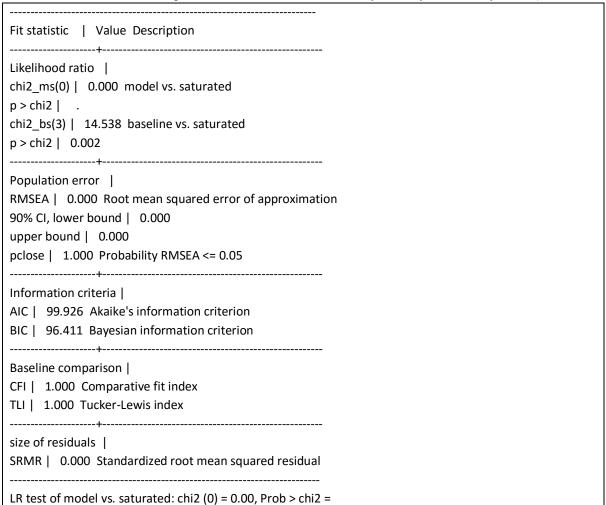
Participants also experienced relaxation, with 37% reporting a significant increase, and 52% indicating a notable improvement. Only a negligible percentage 3% are believed to have experienced relaxation, while 1% expressed doubts regarding this outcome.

Structural equation modelling (SEM) was employed to analyse the structural relationships between the measured variables, such as therapeutic modelling and emotional violence expression, and latent constructs. SEM is commonly utilized by scientists in both experimental and observational research to examine complex relationships within a given framework.

Evaluation of Models via Model Fit

Root Mean Square Error of Approximation (RMSEA) Fit index where a value of zero indicates the best fit. Standardized Root Mean Squared Residual (SRMR). The SRMR is a popular absolute fit indicator. 0.08 or smaller as a makes a good fit (Hu & Bentler, 1999) While. 0.1 or smaller as a can also be a good fit (Kline, 2011)

Table 9: The Chi-square test for the model for St Mary's Simbya Secondary School)

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--------------------------------------------------------------------------
Fit statistic   |  Value  Description
--------------------+-------------------------------------------------
Likelihood ratio   |
chi2_ms(0) |   0.000  model vs. saturated
p > chi2 |    .
chi2_bs(3) |   14.538  baseline vs. saturated
p > chi2 |   0.002
--------------------+-------------------------------------------------
Population error   |
RMSEA |   0.000  Root mean squared error of approximation
90% CI, lower bound |   0.000
upper bound |   0.000
pclose |   1.000  Probability RMSEA <= 0.05
--------------------+-------------------------------------------------
Information criteria |
AIC |   99.926  Akaike's information criterion
BIC |   96.411  Bayesian information criterion
--------------------+-------------------------------------------------
Baseline comparison |
CFI |   1.000  Comparative fit index
TLI |   1.000  Tucker-Lewis index
--------------------+-------------------------------------------------
size of residuals   |
SRMR |   0.000  Standardized root mean squared residual
--------------------------------------------------------------------------
LR test of model vs. saturated: chi2 (0) = 0.00, Prob > chi2 =
```

Root Mean Square Error of Approximation (RMSEA) Fit index where a value is zero indicates the best fit. Since **Root Mean Square Error of Approximation** (RMSEA) value fit index was 0.000, the IVAIM Model was found to be fit for the purpose and can be used to relieve violence among secondary school children in Bundibugyo District.

V.   DISCUSSION

Initially, the discussion focuses on therapeutic modelling and the expression of emotional violence by students in selected secondary schools within Bundibugyo District. The efficacy of the intervention on the experimental group was tested, comparing the results of post-test and pre-test experimental groups with those of pre-test control groups to determine whether introducing the intervention would improve the expression of emotional violence and provide therapeutic benefits to victims.

The results revealed that in the Experimental group post-test (Table 6), after the introduction of the intervention, 42% of participants scored in the third highest rate, while 33% scored in the fourth highest rate out of a total of 60 participants who used patterns in modelling to express emotional violence. Only 2% scored in the highest rate, indicating improved artistic expression using patterns in modelling to express emotional violence. This contrasted with the experimental group pre-test (*Table 7*), where the absence of intervention

resulted in 87% of participants scoring in the lowest rate, indicating mere artistic expressions unrelated to their feelings about violence. Furthermore, the application of the innovative visual art impression model (IVAIM) demonstrated significant benefits, with students experiencing reduced anxiety, stress, increased hope, and emotional stability. Visual art therapy enhances self-expression, self-awareness, self-acceptance, and confidence among victims of emotional violence (Kyung, 2011). The role of visual expression in reducing symptoms of violence is vital (Kim, 2015).

Quantitative data analysis followed an explanatory sequential design, incorporating qualitative data to elaborate on quantitative results. The use of student models helped elucidate the findings, showing that the experimental group, which received treatment, significantly improved their expression of emotional violence compared to the control group. The benefits of visual art therapy in building awareness, coping with anxiety and depression, and boosting self-confidence cannot be underrated (Mollaoğlu, Mollaoğlu & Yanmış, 2022)

Qualitative analysis of student models further illustrated the impact of therapeutic modelling. For instance, Plate 1 depicted a frightened boy, externalizing feelings caused by emotional violence and gaining hope. *Plate 2*, titled "Isolation," portrayed the feelings of isolation and trauma experienced by a victim, leading to relaxation and reduced stress and anxiety. Visual art therapy had short-term impacts on victims, including increased attention and reduced fear, with medium-term effects such as decreased anxiety and isolation. Long-term benefits included improved academic performance, health, focus, and discipline among victims.

The study suggests that therapeutic modelling could benefit students in other geographical areas who struggle to articulate the effects of emotional violence verbally. Overall, therapeutic modelling has the potential to alleviate the impact of emotional violence and enhance the well-being of affected students.

VI.   CONCLUSION

Based on the findings discussed in the study, the following conclusions have been drawn:

Prior to the intervention (pre-test), students struggled to effectively express themselves through modelling. However, following the application of the intervention, students exhibited noticeable improvement in their ability to express emotional violence through modelling. This suggests that the therapeutic modelling intervention greatly enhanced the capacity of students who were victims of emotional violence to articulate their experiences, leading to reduced anxiety, stress, restored confidence, and improved emotional stability among secondary school students.

The conclusion was further supported by the quantitative results observed in the Experimental post-test group (*Table 6*), where the introduction of the intervention led to enhanced artistic expression using patterns in modelling emotional violence.

Aligned with the objective of this study, which aimed to explore the relationship between therapeutic modelling and emotional violence expressed by students in selected secondary schools in Bundibugyo District, therapeutic modelling was utilized both as an expressive outlet and a form of therapy for secondary school students who had experienced emotional violence. Therapeutic modelling provided the students who had been victims of emotional violence with relief from the anxiety associated with emotional violence.

The outcomes of this study aimed to foster personal growth, enhance self-understanding, facilitate emotional healing, and assist individuals in finding meaning and insight, thereby alleviating overwhelming emotions or trauma, resolving conflicts and problems, enriching daily life, and promoting an increased sense of well-being.

Children's involvement in selecting and leading art activities that are beneficial to them, assisting them in finding meaning in the creative process, and facilitating the sharing of their artistic experiences with a therapist were integral aspects of this approach. Additionally, therapeutic modelling expedited the communication of emotional violence, thereby streamlining assessment and intervention processes. It was hypothesized that therapeutic modelling would facilitate children's verbal reports of emotional violence events by reducing anxiety, promoting comfort, enhancing memory retrieval, organizing narratives, and encouraging the disclosure of more detailed information than in purely verbal interviews.

Qualitatively, the conclusion was as follows:

Modelling in sculpture as a therapeutic intervention for victims of emotional violence helped secondary school students who had been victims of emotional violence to creatively articulate aspects of emotional violence they could not articulate verbally.

The excerpts presented on page 13 were reflection of the externalisation of the lived experiences of students also depicted through therapeutic modelling as indicated in sample plates 1 and 2 which led to the conclusion that: Therapeutic modelling led to relaxation, lessened anxiety, lessened, relief from stress and above all restored hope among students who had been victims of emotional violence in secondary schools of Bundibugyo District.

Areas for Further Investigation

Based on the findings of the study, several suggestions for future research have been proposed:

Involvement of All Teachers: Further research is warranted to explore effective strategies for involving and engaging all teachers in the effort to combat violence in schools. This could include investigating training programs or interventions aimed at equipping teachers with the necessary skills and resources to address violence effectively within educational settings.

Expansion of Research Scope: While the current study focused on secondary school students in S2, future research could expand its scope to investigate how violence affects students in upper secondary levels. Understanding the shades of violence and its impact on older students could provide valuable insights for developing targeted interventions and support systems.

Exploration of Alternative Therapies: Research exploring alternative forms of therapy beyond visual art therapy in higher education institutions could contribute to strengthening the role of therapeutic interventions in combating violence in secondary schools. Investigating the efficacy of various therapeutic modalities could provide educators and policymakers with a broader range of tools to address violence effectively.

By addressing these areas in future research endeavours, scholars can contribute to enhancing our understanding of violence in educational settings and developing more comprehensive strategies for prevention and intervention.

Policy Suggestions

The current study proposes the integration of the Innovative Visual Art Impression Model into the design, implementation, and evaluation of policies and programs aimed at preventing emotional violence among secondary school children.

Moreover, the study urges the utilization of its findings to provide evidence-based information to the Ministry of Gender, Labour, and Social Development. This would facilitate the restructuring of approaches to addressing violence, incorporating visual art therapy and artistic expression as therapeutic tools for victims, enabling them to articulate their experiences non-verbally.

Ethics Clearance

Clarke International University Ethical Committee (CIU). Clearance was sought from Clarke International University Ethical Committee. CIU- REC. This committee was formed and accredited by Uganda National Council of Science and Technology and is one of the bodies responsible for the review of research protocols involving human subjects by both local and International organizations.

Uganda National Council for Science and Technology (UNCST). Approval was also sought from Uganda National Council for Science and Technology (UNCST) registration number - SS825ES, a government of Uganda Agency established to facilitate and coordinate the development and implementation of policies and strategies for integrating Science and Technologyinto National development process.

Competing Interests

As authors of this paper, we declare that there are no competing interests that exist.

VII.   References

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