

## **Virginia Satir's Model Treatment and Enhancement of Rational Thinking among 2007/08 Post Election Violence Integrated Internally Displaced Persons in Thika Sub - County, Kenya**

Susan WambuiGitau<sup>1</sup>, Dr. Beatrice Mburugu<sup>2</sup>, Prof. Nelson –O. Jagero (PhD)<sup>3</sup>,  
Dr. Susan M. Kinyua<sup>4</sup>

<sup>1</sup>*Africa Nazarene University – Kenya, Counseling Psychology Department P.O Box 53067-00200, Nairobi*

<sup>2</sup>*Chuka University P.O Box 109, Chuka Education Department*

<sup>3</sup>*Chuka University Distance Learning Department P.O Box 109, Chuka*

<sup>4</sup>*Chuka University, Education Department P.O Box 109, Chuka*

*Corresponding Author: Susan WambuiGitau*

---

**ABSTRACT:** Kenya experienced post-election violence in 2007/2008; leaving 1,113 people dead and over 650,000 people displaced from their homes with untold traumatic suffering. The purpose of this study was to assess effectiveness of Virginia Satir's Model in trauma recovery of 2007/08 Post Election Violence Integrated Internally Displaced Persons in Thika Sub County in Kiambu County, Kenya. The study used quasi-experimental research design using Solomon's Four Non – equivalent Control Group Design. The researcher sampled 125 participants from the accessible 240 Integrated Internally Displaced Persons from Kiandutu, Kiganjo, Gachagi and Umoja slum study group villages. These IIDPs had tested positive for posttraumatic stress disorder after a baseline survey by a local non - governmental organization in Thika Sub County in 2012. The control groups were taken through regular counseling model while the experimental groups were exposed to Virginia Satir's Model. Quantitative methods of data analysis involving the use of Analysis of Variance and t-test were used to list statistical significant difference within and among means in the posttest scores for the groups. Computations were conducted using Statistical Package for Social Sciences version 21 for windows. The researcher established that Virginia Satir's Model was as an effective intervention model for enhancing rational thinking among the IIDPs in Thika Sub County.

**Key Words:** Virginia Satir's Model, Integrated Internally Displaced Persons, Rational Thinking, Post-Election Violence

---

Date of Submission: 25-01-2018

Date of acceptance: 09-02-2018

---

### **I. INTRODUCTION**

At least 100 million Africans have been victims of war, violence, sexual abuse or natural disasters or witnessed horrific acts of terror and now suffer from post-traumatic stress disorder (Shapiro, 2015). War in the African continent is a common phenomenon. Examples are many and include the M-23 in The Democratic Republic of Congo (DRC). The Al Qaeda insurgence in Mali, the military coup in the Central African Republic, the instability in South Sudan, Boko Haram in Nigeria, Al-Shabaab and African Mission defense forces in Somalia, the unrest in North Africa among other inter- ethnic and political wars in most of the countries. In all countries in Africa, war trauma leaves massive destruction to property, human resource, diseases and mass displacement of persons labored with post traumatic disorder (Nshemeriwe, Nasinyama, & Twabaze, 2013).

Kenya has experiencing rapid increase in election related wars and violence but 2007/08 was the worst in Kenya (Waki, 2008). A study that focused on a random community-based sample of 552 impoverished youth (aged 6–18 years) within an informal settlement in Nairobi, Kenya showed that Kenyan youth experienced war-like violence for a month following the contested presidential election of 2007. Six months after the violence ended, 99 (18%) had PTSD according to University of California Los Angeles Post Traumatic Stress Disorder Reaction Index (Harder, Khasakhala, Mutiso, Ndeti, & Burke, 2012). Some people suffered direct injury, bereavement, displacement (650,000 people were displaced) or loss of property while others witnessed the suffering and death of loved ones (1,133 people died) and others haunted by disturbing images in the media (Waki, 2008).

Following the PEV 2007/08, many displaced people took refuge in camps, police stations and churches. However, a group of the displaced persons took refuge in urban centres and became officially known

as Integrated Internally Displaced Persons (IIDPs). Four years after PEV 2007/08, more than 300,000 families had been resettled in their farms, homeland or sold property they owned, bought land elsewhere and resettled. Their only hope was the introduced law - The Prevention, Protection and Assistance to Internally Displaced Persons and Affected Communities Act, 2012. However, in Thika Sub County, a total number of 640 Integrated Internally Displaced Persons (IIDPs) were recorded and about 330 have since been integrated fully into the local community with majority living in slum villages around Thika town (Community Counseling Resource Centre, 2012). Waki's Report (2008) revealed mass traumatic events but few studies show how the traumatized people received mental health intervention. Therefore, this study focused on the assessment of the effectiveness of Virginia Satir's Model treatment in the IIDPs trauma recovery of 2007/08 IIDPs in Thika Sub County. It was against this background that this study sought to assess VSM's effectiveness on enhancement of rational thinking among the IIDPs in Thika Sub County.

## **II. LITERATURE REVIEW**

Virginia Satir's Model (VSM) also referred to as Human Validation Process Model focuses on an individual as a person as well as a part of a system. VSM promotes systems change and change of old ways of solving problems by embracing new ideas and behaviors (Satir V. , 2009). Virginia Satir (VSM founder) believed a healthy family life involved an open and reciprocal sharing of affection. Unlike most therapies that advocate talking back or ignoring feelings, VSM offers exercises for viewing one's negative self-talk as a useful and productive indicator of hurting emotions, and shows clients how to take control of them in a more meaningful way. VSM treatment in this study allowed the respondents to narrate their traumatic experiences without judgment of their thoughts, emotions and behavior.

VSM therapists take clients through an insightful journey of self-discovery and transformation. People learn how to acknowledge, understand, and manage many challenges and in doing so, open up a world of possibilities for themselves (Lubin & Johnson, 2008). VSM presents innovative concepts and techniques conducive to changing one's habits of communication and to establishing open, constructive, and life-enhancing modes of contact and communication within family relationships (Solomon, 2016). A compilation of VSM's meditations and essays that illuminate and guide readers about VSM ideas on the complex interplay of mind, body, emotions, and spirit make the model suitable for trauma clients who experience a mixture of negative, thoughts emotions. VSM believes in boosting one's self - esteem as part of healing. The goal is to enhance renewed hope, broader possibilities, and positive feelings about oneself (Satir & Dengo, 2001).

Traumatized persons develop rigid thinking patterns, fear of the future and investing in future meaningful relationships, incongruent communication systems. Faulty thinking leads to faulty living but can be reversed using trauma focused cognitive behavior therapy (Yeung, Lu, Wong, & Huynh, 2016). A few studies suggest that the nature of emotional arousal which accompanies trauma alters the physical process by which the body regulates future affective stimuli in ways that are potentially detrimental to human relationships (Kane, et al., 2016). A selection of Marriage and Family Therapy (MFT) models contain strategies that promote reconnection to self and others that should be utilized with greater precision, ultimately to target the physiological symptoms of trauma-altered emotion regulation processes (Banford, Wickrama, Brown, & Ketring , 2011). People diagnosed with PTSD show persistent negative cognitions and emotions. This negativity does not help them to move forward because they see nothing positive with self, others and the environment they live in. This fourth cluster describes symptoms typical of clinical depression (Witting, Jensen, & Brown, 2016). Effective trauma intervention would reduce these negative emotions and thoughts; unlocking the survivor's potential to self-actualize (Cohen, Mannarino, Jankowski, Rosenberg, Kodya, & Wolford, 2016).

A study was conducted on newly recruited paramedics ( $n = 453$ ) who were assessed for history of mental disorders (MD) with structured clinical interviews within the first week of their paramedic training. They completed self-report measures to assess hypothesized predictors. Participants were assessed every 4 months for 2 years to identify any episodes of PTSD and MD; 386 paramedics (85.2%) participated in the follow-up interviews. In all, 32 participants (8.3%) developed an episode of PTSD and 41 (10.6%) an episode of MD during follow-up. In all but nine cases (2.3%), episodes had remitted by the next assessment 4 months later. At two years, those with episodes of PTSD or MD during follow-up reported more days off work, poorer sleep, poorer quality of life, greater burn-out; and greater weight-gain for those with PTSD. In line with theories of PTSD and depression, analyses controlling for psychiatric and trauma history identified several pre-trauma predictors like cognitive styles, coping styles and psychological traits (Yeung, Lu, Wong, & Huynh, 2016). Logistic regressions showed that rumination about memories of stressful events at the start of training uniquely predicted an episode of PTSD. Perceived resilience uniquely predicted an episode of MD (Wild, Smith, Thompson, Bear, Lommen, & Ehlers, 2016). In this study, the researcher assessed the IIDPs' negative emotions and cognitions using adapted and modified Harvard Trauma Questionnaire and thereafter tested the effectiveness of VSM's treatment on enhancement of their rational thinking.

Virginia Satir's Model (VSM) treatment uses reconstruction and reframing of faulty systems of thoughts and behavior for a better productive future for all (Banford, Wickrama, Brown, & Ketring, 2011). Loss and subsequent psycho trauma lives many a people hopeless and depressed in their states (Sebit, 2013). This model can be applied to help reframe a system's painful past, develop a sense of worth, instill hope, unearth hidden potentials and resources, foster effective communication, mobilize community resources, involve the participants in own healing and enhance self-actualization to a fulfilling future (Saul, 2014). In this study the researcher adapted and modified VSM's model and applied it in counseling the IIDPs. IIDPs were taken through the VSM counseling just like Virginia Satir did with groups and families in conflict. An assessment on the effectiveness of VSM on enhancing the rational thinking of IIDPs was carried out and results analyzed.

### III. METHODOLOGY

#### 3.1 Research Design

Solomon's Four Non-equivalent Control Group Design partially eliminates the initial difference between the experimental and control groups (Martyn, 2009). This design is also considered rigorous enough for experimental and quasi-experimental studies (Thayer & Martha, 2009). This is because it provides effective and efficient tools for determining cause and effect relationship and also provides adequate control of other variables that may interfere with the validity of the study (Abbott & McKinney, 2013). How Solomon Four Non-equivalent Group Designs was used in the study is shown in Figure 3.

Group	Pre-test	Treatment	Post-test
Experimental Group 1	O <sub>1</sub>	X (Kiandutu)	O <sub>2</sub>
Control Group 2	O <sub>3</sub>	- (Kiganjo)	O <sub>4</sub>
Experimental Group 3	-	X (Gachagi)	O <sub>5</sub>
Control Group 4	-	- (Umoja)	O <sub>6</sub>

Source: Shuttle Worth (2009)

Figure 3. Solomon Four Non-equivalent Control -Group Design

#### 3.3 Population of the Study

The participants composed of survivors of PEV 2007/08 Integrated Internally Displaced Persons aged 18 years and above because the study used Harvard Trauma Questionnaire that is suitable for adults. These IIDPs were the ones who neither went back to the eviction site nor to their ancestral homes after the 2007/2008 political violence. The recorded IIDPs population stood at 640 but the researcher targeted the accessible population of 240 IIDPs who tested positive for PTSD during a baseline survey carried out by a local not for profit organization (Community Counseling Resource Centre, 2012). This background informed the researcher's decision to carry out an experimental study on assessment of effectiveness of VSM on trauma recovery of IIDPs living in Thika Sub County. A sample of 125 IIDPs from this baseline survey population was randomly selected.

#### 3.4 Sampling Procedures and Sample Size

The researcher used pretest on two groups, treatment for two groups and posttest on all groups. The actual sample size of the study is shown in Table 1.

Table 1

Sample Size

Village	Number of Respondents
Kiandutu	32
Kiganjo	34
Gachagi	30
Umoja	29
Total	125

#### 3.4 Data Analysis

Inferential statistics was used to analyze, interpret and support decisions based on the results (Nassiuma, 2000). In this study, data was analyzed using both descriptive and inferential statistics. Descriptive data was analyzed using means, standard deviation and percentages so as to meaningfully describe the distribution of the measurements. Quantitative methods of data analysis involving the use of Analysis of Variance (ANOVA) and t-test was used to list statistical significant difference within and among means in the

posttest scores for the groups exposed to VSM and those exposed to regular counseling model respectively (Kothari, 2004).

#### IV. RESULTS AND DISCUSSION

##### V.

**Table 2**

Post - Test Means of Respective Villages

Posttest Scores			
Residence Village	Mean	N	Std. Deviation
Kiandutu	64.06	32	11.856
Kiganjo	38.90	31	13.878
Gachagi	61.90	30	11.716
Umoja	35.11	27	13.194
Total	50.50	120	18.101

The analysis of post-test results from respondents from across the four villages of study in Table 2 shows that the experimental village groups, Kiandutu and Gachagi had a higher mean (64.06 and 61.90) respectively. The control village groups Kiganjo and Umoja had relatively low means (38.90 and 35.11). Kiganjo village respondents had taken the pre-test but did not go through the VSM treatment. Gachagi respondents did not take the pre-test but received VSM treatment with a posttest score mean (61.90) with Gachagi while Kiandutu respondents had the pre-test with posttest score mean (64.05). This shows that the pre-test did not have significant effect on the treatment process. The high mean scores from Kiandutu and Gachagi show that VSM treatment was effective in trauma recovery of the respondents than the regular counseling received by Kiganjo and Umoja (control groups) with lower mean scores (38.90 and 35.11). The standard deviation measures the deviation of the data from the mean, in each of the four locations. Standard deviations for Kiandutu, Kiganjo, Gachagi and Umoja were 11.856, 13.878, 11.716 and 13.194 respectively. Gachagi had the highest standard deviation while Kiganjo had the lowest. The four locations had a combined mean of 50.50 and a combined standard deviation of 18.101.

The results of the effectiveness of VSM treatment on post-traumatic stress as indicated in reduction of PTSD symptoms, enhancement of personal responsibility, rational thinking and coping mechanisms were presented in Table 3.

**Table 3**

ANOVA of the Post Test Scores for IIDPs

	Sum of Squares	Df	Mean Square	F	P Value
Between Groups	20348.040	3	6782.680	42.201	.000
Within Groups	18643.951	116	160.724		
Total	38991.992	119			

Results in Table 3 reveal that the differences in post-traumatic stress in the four groups were significant ( $F(3,119) = 42.20, P < 0.05$ ). To determine where the differences existed in the different groups; Least Significant Difference (LSD) post hoc comparisons was used.

Table 4 shows the results of Least Significant Difference (LSD) post hoc comparisons.

**Table 4**

Least Significant Difference Post Hoc Comparison

(I) Residence Village	(J) Residence Village	Mean Difference (I-J)	Std. Error	Sig.
Kiandutu	Kiganjo	25.15927*	3.195	.000
	Gachagi	2.16250	3.222	.503

	Umoja	28.95139*	3.313	.000
	Kiandutu	-25.15927*	3.195	.000
Kiganjo	Gachagi	-22.99677*	3.247	.000
	Umoja	3.79211	3.337	.258
	Kiandutu	-2.16250	3.222	.503
Gachagi	Kiganjo	22.99677*	3.247	.000
	Umoja	26.78889*	3.363	.000
	Kiandutu	-28.95139*	3.313	.000
Umoja	Kiganjo	-3.79211	3.337	.258
	Gachagi	-26.78889*	3.363	.000

The mean difference represents the difference in the means in column I and J. The standard error represents the error in the mean difference. The “sig” represents the respective p-values. Table 4 results show that the pairs of VSM-posttest mean scores of group 1 and 2, 1 and 4, 2 and 3 and 3 and 4 were statistically different at 0.05  $\alpha$  level. However, the mean scores for experimental group 1 (Kiandutu Village) and 3 (Gachagi Village) and control group 1 (Kiganjo Village) and 4 (Umoja Village) were not statistically significant. In the view of these findings, analysis of scores based on objectives was necessary. The results are presented in Table 5.

**Table 5**  
ANOVA of Rational Thinking Scores for IIDPs

	Sum of Squares	Df	Mean Square	F	P Value.
Between Groups	2569.255	3	856.418	15.737	.000
Within Groups	6476.062	119	54.421		
Total	9045.317	122			

The results in Table 5 show that the mean scores of respondents on rational thinking were statistically significant  $F(3,119) = 15.74$ ,  $P = 0.00$ . This implies that experimental groups 1 and 3 had higher rational thinking scores than control groups 2 and 4. Therefore, the findings showed that VSM treatment was effective in enhancement of IIDPs rational thinking. To establish where the difference existed, LSD post hoc analysis was conducted. Table 6 presents the post hoc comparisons.

**Table 6**  
Post Hoc Comparisons for Rational Thinking Scores for IIDPs

(I) residence Village	(J) residence Village	Mean Difference (I-J)	Std. Error	P Value
	Kiganjo	6.89522*	1.81694	.000
Kiandutu	Gachagi	-3.74792*	1.87475	.048
	Umoja	6.97801*	1.92775	.000
	Kiandutu	-6.89522*	1.81694	.000
Kiganjo	Gachagi	-10.64314*	1.84787	.000
	Umoja	.08279	1.90163	.965
	Kiandutu	3.74792*	1.87475	.048
Gachagi	Kiganjo	10.64314*	1.84787	.000
	Umoja	10.72593*	1.95694	.000
	Kiandutu	-6.97801*	1.92775	.000
Umoja	Kiganjo	-.08279	1.90163	.965
	Gachagi	-10.72593*	1.95694	.000

Table 6 shows the results of Least Significant Difference (LSD) post hoc comparisons. The result shows that the pairs of VSM-posttest mean scores of group 1 and 2, 1 and 4, 2 and 3 and 3 and 4 were statistically different at 0.05  $\alpha$  level. However, the mean scores for experimental group 1 and 3 and control group 1 and 4 were not statistically significant. In the view of these findings the null hypothesis that stated that there was no statistical significant effectiveness of Virginia Satir's Model on enhancement of Integrated Internally Displaced Persons rational thinking was rejected. Therefore, VSM was effective on enhancing IIDPs rational thinking.

## VI. CONCLUSION AND RECOMMENDATION

The study results showed that, there was statistical significant effectiveness of Virginia Satir's Model on enhancing of Integrated Internally Displaced Persons rational thinking. VSM showed significant effectiveness on IIDPs rational thinking in post test scores. VSM is therefore an effective intervention model for enhancing rational thinking among the IIDPs. The study findings revealed VSM as an effective trauma intervention model for enhancing rational thinking among the IIDPs. The researcher recommends VSM for trauma interventions for displaced traumatized populations with distorted rational thinking. Other populations recommended for this model's intervention include security officers, victims and survivors of all forms of violence and disasters. VSM may also be tested on children because this study focused on adults only.

## REFERENCES

- [1]. Abbott, M. L., & McKinney, J. (2013, January 11). *Understanding and applying research design*. Retrieved May 20, 2017, from Onlinelibrary.wiley.com: <http://www.onlinelibrary.wiley.com/doi/10.1002/9781118647325.fmatter/pdf>
- [2]. Banford, A., Wickrama, T., Brown, M., & Ketring, S. (2011). The Relationship between physical health problems and couple violence and conflict in survivors of the 2004 Tsunami: Mediation by marital satisfaction. *International Journal of Mass Emergencies and Disasters*, 29(2), 149 -170.
- [3]. Campbell, D. T., & Stanley, J. C. (2015). *Experimental and quasi - experimental designs for research*. USA: Ravenio Books.
- [4]. Carlson, E. B., Palmier, P. A., Field, N. P., Dalenberg, C. J., Macia, K. S., & Spain, D. A. (2016, May 04). Contributions of risk and protective factors to prediction of psychological symptoms after traumatic experiences. *Compr Psychiatry*, 106 - 115.
- [5]. Cohen, J. A., Mannarino, A. P., Jankowski, K., Rosenberg, S., Kodya, S., & Wolford, G. L. (2016). Trauma focused- cognitive behavioral therapy for adjudicated teens in residential treatment facilities. *Child Maltreat*, 21(2), 156 - 166.
- [6]. Community Counseling Resource Centre. (2012). *A baseline survey on report on psychological issues among IIDPs living in Thika Sub County*. Thika: Author.
- [7]. Corcoran, J., & Pillai, V. (2009). A review of the research on solution - focused therapy. *The British Journal of Social Work*, 39(2), 234 - 242.
- [8]. Evans, P., Turner, S., & Trotter, C. (2012). *The effectiveness of family and relationship therapy : A review of the literature*. Melbourne: PACFA.
- [9]. Harder, V. S., Khasakhala, L. I., Mutiso, V., Ndeti, D., & Burke, H. M. (2012, February 01). Multiple traumas, postelection violence. *Journal of traumatic stress*, 25(1), 64-70.
- [10]. Jordan, C. E., Campbell, R., & Follingstad, D. (2010). Violence and women's mental health: The impact of physical, sexual and psychological aggression. *Annual Review of Clinical Psychology*, 6(1), 607- 628.
- [11]. Kamau, J. N., Githii, S. K., & Njau, M. M. (2014). *Research methods: Design of a research project*. Nairobi: Multiface Solutions Ltd.
- [12]. Kamau, J. N., Githii, S. K., & Njau, M. M. (2014). *Research methods: Design of a research project*. Nairobi: Multiface Solutions.
- [13]. Kane, J. C., Murray, L. K., Cohen, J., Dorsey, S., Skavenski, W. S., Henderson, J. G., et al. (2016, October). Moderators of treatment response to trauma - focused cognitive behavioral therapy among youth in Zambia. *Journal of Family Psychology*, 57(10), 1194-1202.
- [14]. Kothari, R. (2004). *Research methodology: Methods and techniques* (2nd ed.). New Delhi: New International Publishers.
- [15]. Kumari, P. (2013). Significance of Solomon four group pretest-posttest method. *Journal of Agriculture and Veterinary Science*, 5(2), 51 -58.
- [16]. Lubin, H., & Johnson, D. R. (2008). *Trauma - centred group therapy for women: A clinicians manual*. New Jersey: Harworth Press.
- [17]. Martyn, S. (2009). *pretest-posttest-designs*. Retrieved December 10, 2015, from Explorable.com/pretest-posttest-designs: <http://www.explorable.com/solomon-four-design>
- [18]. Nassiuma, D. K. (2000). *Survey sampling: Theory and methods*. Nairobi: University of Nairobi Press.

- [19]. Nshemeriwe, S., Nasinyama, S., & Twabaze, A. (2013, June). Prevalence of gender based violence among refugees in Urban Kampala, Uganda. (M. Seggane, Ed.) *African Journal of Traumatic Stress*, 3(1), 2-6.
- [20]. Satir, V. (2009). *Your many faces: The first step to being loved*. USA: Ten Speed Press.
- [21]. Satir, V., & Dengo, M. (2001). *Self esteem*. USA: Ten Speed Press.
- [22]. Saul, J. (2014). *Collective trauma, collective healing: Promoting community resilience in the aftermath of disaster*. New York: Routledge.
- [23]. Sebit, M. B. (2013). The role of mental health professionals and non-professionals in post - traumatic stress disorder publicity. *African Journal of Traumatic Stress*, 3(1), 13 -17.
- [24]. Shapiro, D. (2015, July 1). PTSD in Africa: Treating the after - effects of severe trauma using transcendental meditation. *Straight Talk Africa broadcast*. (S. Sali, Interviewer) Voice of America.
- [25]. Solomon, G. (2016). Evidence of the use of imagery in time-limited art psychotherapy, emotional change and cognitive restructuring. In R. Hughes, *Time-limited art psychotherapy: Developments in theory and practice* (pp. 153 -180). New York : Routledge.
- [26]. Thayer, W. M., & Martha, S. T. (2009). The use of Solomon four- group design in nursing research. *SOJNR*, 9(1).
- [27]. Waki. (2008). *The commission of inquiry into the Post Election Violence*. Nairobi: CIPEV.
- [28]. Wild, J., Smith, K. V., Thompson, E., Bear, F., Lommen, M. J., & Ehlers, A. (2016, September). A prospective study of pre-trauma risk factors for post traumatic stress disorder and depression. *Psycho Med*, 46(12), 2571- 2581.
- [29]. Witting, A. B., Jensen, J., & Brown, M. (2016, 06 18). *Evaluating the Utility of MFT models in the treatment of trauma: Implications for effect regulation*. Retrieved 05 24, 2017, from researchgate.net: <http://www.10.1007/s10591-016-9387-5>
- [30]. Yeung, N. Y., Lu, Q., Wong, C. Y., & Huynh, H. C. (2016). The roles of needs satisfaction, cognitive appraisals, and coping strategies in promoting posttraumatic stress growth: A stress and coping perspective. *Psychological Trauma Theory: Theory, Research, Practice, and Policy*, 8(3), 284 - 292.