ISSN No:-2456-2165

The Effectiveness of Mindfulness Based Cognitive Behavioural Therapy (MBCBT) in the treatment of PTSD among couples at PCEA Churches, Nairobi, Kenya

[1]Sheila Wachira
PhD Student in Clinical Psychology.
Daystar University, Nairobi-Kenya.

[2]Lilian Wahome (Professor)
PhD Dissertation Supervisor
Daystar University, Nairobi, Kenya

[3]Roseline Olumbe (Dr)
PhD Dissertation Supervisor
Daystar University, Nairobi, Kenya

Abstract:- This study aimed at establishing the efficacy of Mindfulness Based Cognitive Behavioural Therapy (MBCBT) in treating PTSD symptoms among 50 paired couples (50 husbands and 50 wives) in selected PCEA churches in Nairobi County, Kenya. The couples were assigned to either an experimental group or a control group. Those in experimental group were exposed to an MBCBT intervention for a period of 10 weeks while those in the control group received no treatment for the same period. In the experimental group, moderate PTSD decreased from 14(28%) to 2(4%) % to 1(2%) at baseline, midline and endline respectively. The findings of this study showed that MBCBT had a great impact in the reduction of PTSD symptoms. It also confirmed that MBCBT also had an impact on relationship functioning among married couples. In the experimental group relationship functioning was significant at midline (p=.000). After successful completion of MBCBT at endline, more couples in the experimental group were found to be in the relationship satisfaction category (p=0.000). In the control group from baseline to midline and endline, moderate PTSD increased from 28(56%) to 32(64%) to 40(80%) respectively. This could be attributed to escalated PTSD symptoms owing to the fact that they were not exposed to the intervention. From these results MCBT was established to be additionally effective in decreasing the severity of PTSD in the experimental group.

Keywords:- *Efficacy, Posttraumatic Stress Disorder (PTSD), Mindfulness Based Cognitive Behaviour Therapy (MBCBT), Treatment*

I. INTRODUCTION & BACKGROUND TO THE STUDY

A lot of studies have found that PTSD survivors and their spouses experience problems with emotional and physical closeness (Cook, Riggs, Thompson, Coyne, & Sheikh, 2004; Yehuda, Lehrner, & Rosenbaum, 2015). Mindfulness based cognitive behavioural therapies have been viewed as efficacious in the treatment of PTSD, a number of studies show promising results. Clinical studies (Teicher & Joss, 2021) show that mindfulness-based interventions (MBI) such as Mindfulness Based Cognitive Behavioural Therapy (MBCBT) among adult survivors of trauma suggests that MBCBT can alleviate psychological symptoms like stress, anxiety, recurrent depression, substance abuse and PTSD.

Mindfulness is a concept that describes a wide-range of interventions that incorporate mindfulness concepts into a multi-component therapeutic approach. The therapeutic approach include techniques that teach individuals self-awareness, acceptance, reflection, and regulated behavioral responses; however, the techniques used are only loosely based on mindfulness meditation (Crane et al., 2017). According to Hargus et al. (2010) mindfulness based cognitive behavior therapy (MBCBT) integrates a mindfulness approach with cognitive behavioral therapy theory and practice.

The goal of cognitive behavioural couple therapy (CBCT) is to help couples alleviate the distress that comes from unresolved problems in their relationship (Dugal et al., 2018). The authors' further postulate that in the long term, MCBCT has been widely assessed in treatment outcome studies, with proven effectiveness for decreasing couple distress and disappointment.

In some previous studies (Nilas, 2020; Griffiths, 2016;) a significant association has been established between mindfulness and improved relationship satisfaction among couples. Southwick and Pietrzak (2021) advance that mindfulness can help couples improve in their relationship functioning by enabling the adaptation to traumatic incidents through enhanced personal acceptance of trauma-related experiences. Further, they suggest that mindfulness can reduce the effects of trauma-related and avoidance of trauma reminders by focusing on the present moment.

While there is potential to replicate similar studies among general populations exposed to trauma, Ajari (2020) notes that Africa`s research output on the psychological construct of MBCBT is very limited and certified trainers of the practice are almost non-existent. This is despite the fact that the practice has been shown to relieve stress, a factor whose level is high in the continent and has been associated with much common disease, illnesses and other negative outcomes such as PTSD. She argues that there is, therefore,

an overwhelming need to draw public attention towards the practice and what it can offer African healthcare systems.

A study by Lord et al., (2020) revealed a bidirectional association between posttraumatic stress disorder (PTSD) symptoms and marital satisfaction. They hypothesize that PTSD symptoms are linked to increased relationship discomfort, a higher risk of divorce, a decrease in love and intimacy, and an increase in sexual dysfunction. Other studies show evidence of higher correlations between PTSD symptoms and sexual concerns in African American women than in European American women (Gobin& Allard, 2016).

Previous research (Moser et al.2020; Tang et al., 2017) have revealed correlation between childhood trauma and adult psychopathology such as Post Trauma Stress Disorder (PTSD). Related studies by Choi et al., (2015) established an association between childhood emotional and sexual abuse and PTSD, especially in high-trauma environments such as South Africa. Other investigations indicate that childhood trauma and especially child sexual abuse (CSA) are linked with escalated aversion to danger, relational problems as well as mood related changes which eventuates in poor relationships among couples (Colman &Widom, 2004; DiLilloet al., 2009).

Further, Dugal et al., (2018) contend that mindfulness-based interventions (MBIs) can be integrated into the cognitive behavioural therapy (CBT) treatment to enhance acceptance and increase marital satisfaction among couples who have experienced childhood trauma. According to Liebman et al. (2021) recovering from trauma can happen in a relational context which builds a case to explore the use of an intervention such as MBCBT in strengthening couples' relationships.

II. METHODOLOGY

The study applied an experimental research design in testing the effectiveness of MBCBT towards reducing the symptoms of PTSD among couples. This design was utilized because the researchers ought to establish if there was a causal relationship between MBCBT and PTSD variables. Quasi-experiments were used to test the intervention by comparing respondents in an experimental and a control group. The two Churches in Nairobi County, Kenya were selected through purposive sampling owing to the fact that they have the desired characteristics and couples who are faced with relationship problems as a result of PTSD. The target population was married couples aged 22-50 years from the two selected churches of the Presbyterian Church of East Africa (PCEA from Nairobi County, Kenya.

Inclusion criteria was couples who had mild and above symptoms of PTSD, Couple Satisfaction Index (CSI) <104.5 which indicates a low threshold for relationship disappointment. Participants recruited into the study were also assessed for childhood trauma using the Child Trauma Questionnaire (CTQ). Childhood traumatic experience at the scale of low trauma exposure and above was an eligible for inclusion criteria in the current study. On the other hand, respondents who met the above eligibility criteria but were actively undergoing through psychotherapy treatment at the time of screening were excluded to avoid confounding the study.

Couples who met the inclusion criteria were recruited into the study. PCEA Umoja was assigned the experimental group while PCEA Ruai was assigned to the control group through purposive sampling. A total of 50 heterogenous couples (N=50) of whom 25 pairs were assigned to the experimental group while the other 25 pairs were assigned to the control group. The two churches had similar demographic, geographical and situational characteristics such as religion, income, education, marital status and psychiatric diagnosis evaluated through psychometric tools such as the Child Trauma Questionnaire (CTQ) used at baseline level; The Posttraumatic Stress Disorder Checklist (PCL-5).

The researcher used both researcher-generated questionnaire and standardized psychological assessment tools. The study used four main instruments: a researcher-developed socio- demographic questionnaire (SDQ) used at baseline level, Child Trauma Questionnaire (CTQ) used at baseline level; The Posttraumatic Stress Disorder Checklist (PCL-5) and Couple Satisfaction Index (CSI) both used at level one (baseline), level two (midline) and level three (end line).

The Posttraumatic Stress Disorder Checklist (PCL-5) is a widely used DSM-correspondent self-report measure of PTSD symptoms (Blevins et al., 2015). The PCL-5 was recently revised to reflect DSM-5 changes to the PTSD criteria. The PTSD checklist specific for DSM 5 (PCL-5) contains 20 items and has a score range of 20–85. Results of a study by Ghazali and Chen (2018) showed the PCL-5 has great inner consistency ($\alpha = .91$), test-retest dependability ($r = .61$) and simultaneous, joined, and discriminant legitimacy with the Harvard Trauma Survey ($r = .69$) and the Patient Health Questionnaire for Depression ($r = .56$). Research on the PCL-5 suggested scores of 31 to 33 were optimally efficient for diagnosing PTSD (Bovin et al., 2016), while validation studies recommended a variety of cut-off scores ranging between 28 and 37 (Ashbaugh et al., 2016; Blevins et al., 2015).

The Couples Satisfaction Index (CSI) is a self-report measure to assess marital satisfaction. The concept of couples' satisfaction is one's subjective evaluation of marital relationship and the level of perceived happiness from this relationship. The CSI is a psychometrically optimized, self-report questionnaire (Funk & Rogge, 2007) that measures relationship satisfaction. CSI is psychometrically sound (Mayer et al.,2012) with strong psychometric properties (test-retest reliability = 0.817; Cronbach's alpha = 0.879). In 2018 these results were replicated in a large multi-country sample (Cronbach's αlpha= 0.92).

The CSI has 32-item, on relationship satisfaction. One global item uses a 7-point scale: "Please indicate the degree of happiness, all things considered, of your relationship", from 0 = extremely unhappy to 6 = perfect. However, the other 31 items utilize a variety of response anchors, all with 6-point scale. To score the CSI, the responses across all the items are summed up. CSI-32 scores can go from 0 to 161. Higher scores show more elevated levels of relationship fulfilment. CSI-32 scores falling beneath 104.5 suggest remarkable relationship disappointment.

A Norwegian version of the CTQ short version was administered to score childhood traumatic incidents (Bernstein et al., 2003; Aas et al., 2014). The Childhood Trauma Questionnaire also demonstrated good test-retest reliability over a 2- to 6-month interval (intra-class correlation = 0.88) as documented by Bernstein et al., (1994, 2003). This 28-item self-report questionnaire (Bernstein et al., 2003) gives scores on five subscales of trauma; (Emotional abuse (EA), physical abuse (PA), sexual abuse (SA), physical neglect (PN), and emotional neglect (EN) on a Likert scale format, ranging from never true to very often true (Bernstein et al., 2003). The Childhood Trauma Questionnaire also demonstrated good test-retest reliability over a 2- to 6 month interval (intra-class correlation = 0.88).

➢ *Ethical Issues*

The screening and recruitment exercise commenced immediately after the researcher obtained ethical clearance from Daystar University Institutional Scientific Review Committee (DU-ISERC), a letter from the School of Applied Human Sciences (SAHSS) and a permit from National Commission for Science, Technology, and Innovation (NACOSTI) to embark on the study and data collection. Participation in the study was voluntary. The couples who participated in the study were informed of what the research entailed, the risk, freedom to discontinue or withdraw whenever they deemed fit, and that participation was voluntary with no repercussion. Only the participants who consented to participate and who met certain inclusion criteria were included in the study.

III. RESULTS

The efficacy of MBCBT was sought by comparing the PCL-5 scores from baseline to midline to endline in both in both experimental and control groups in the study. A paired samples t-test was conducted to determine if there were any changes in the means of PCL-5 scores from baseline to midline, midline to endline and baseline to endline in the control and experimental groups. Findings are presented in Table 1.

Table 1 Paired Samples t-test for the PCL-5 Scores at Baseline, Midline and End line in the Control and Experimental Groups.

Group	**Experimental**						**Control**					
Timeline Pairs	**Pair 1**		**Pair 2**		**Pair 3**		**Pair 1**		**Pair 2**		**Pair 3**	
	Base-Mid		**Mid-End**		**Base-End**		**Base-Mid**		**Mid-End**		**Base-End**	
Mean	23.08	11.72	11.72	6.16	23.08	6.16	32.1	35.92	35.92	41.42	32.1	41.42
N	50	50	50	50	50	50	50	50	50	50	50	50
Std. Dev	14.30	10.93	10.93	6.84	14.30	6.85	14.3	13.47	13.47	11.56	14.45	11.56

The results show shows the paired samples statistics depicting comparison of means of PCL-5 from baseline to midline, midline to end line and baseline to end line in the experimental and control groups. In the experimental group, baseline to midline there was a decline in means from 23.08 to 11.72, midline to endline from 11.72 to 6.16 and baseline to end line the decline was large from 23.08 to 6.16.

In the control group there was no notable decline in means from baseline to midline but rather, the means increased from 32.1 to 35.92 and similarly from midline to end line, the means increased from 35.92 to 41.42. For the control group, the overall mean change from baseline to end line was 32.1 to 41.42. These results deduce that PTSD symptoms among couples in the experimental group decreased as a result of the intervention.

Among the control group, the increase on means that PTSD symptoms escalated because no intervention was provided. Further, the control group did not benefit from positive coping skills inculcated to the experimental group during MBCBT therapy. In addition, other underlying factors such as marital distress and lack of a good support system.

Table 2 The Paired Samples Test of PTSD Prevalence

Group			**Paired Differences**					**t**	**df**	**P**
			Mean	**S. D**	**S.E**	**95% C.I**				
						Lower	**Upper**			
Experimental	Pair 1	Base – Mid	11.36	9.83	1.39	8.57	14.15	8.17	49	.000
	Pair 2	Mid – End	5.56	4.69	.66	4.23	6.89	8.389	49	.000
	Pair 3	Base – End	16.92	10.74	1.52	13.87	19.97	11.14	49	.000
Control	Pair 1	Base – Mid	-3.82	8.95	1.27	-6.36	-1.28	-3.02	49	.004
	Pair 2	Mid – End	-5.50	8.35	1.18	-7.87	-3.13	-4.66	49	.000
	Pair 3	Base – End	-9.32	4.40	.622	-10.57	-8.07	-14.98	49	.000

Table 2presents the statistical significance of the mean change at different timelines. The findings show that in the experimental group from baseline to midline, the mean decreased by 11.36. When the t-tests analysis was carried

ISSN No:-2456-2165

out, the change was statistically significant (p=0.000). Similarly, from midline to endline the mean declined by 5.56 which was statistically significant (p=0.000). The overall mean decline from baseline to endline was 16.92 which was also statistically significant (p=0.000).The findings thus indicate that the MBCBT intervention was efficacious in the experimental group as the PTSD means declined at mid line and end line.

In the control group, the mean increased by 3.82 which was statistically significant (p=0.004), midline to endline the mean increased by 5.50 which was statistically significant (p=0.000). The greatest increase was from baseline to endline (9.32) and this was statistically significant (p=0.000).

The greatest decline in means was therefore for the experimental group from baseline to endline confirming that the intervention worked. The study also compared the means from baseline to midline to endline.

Figure 1 shows the comparison of means from baseline to midline to end line for the experimental and control groups.

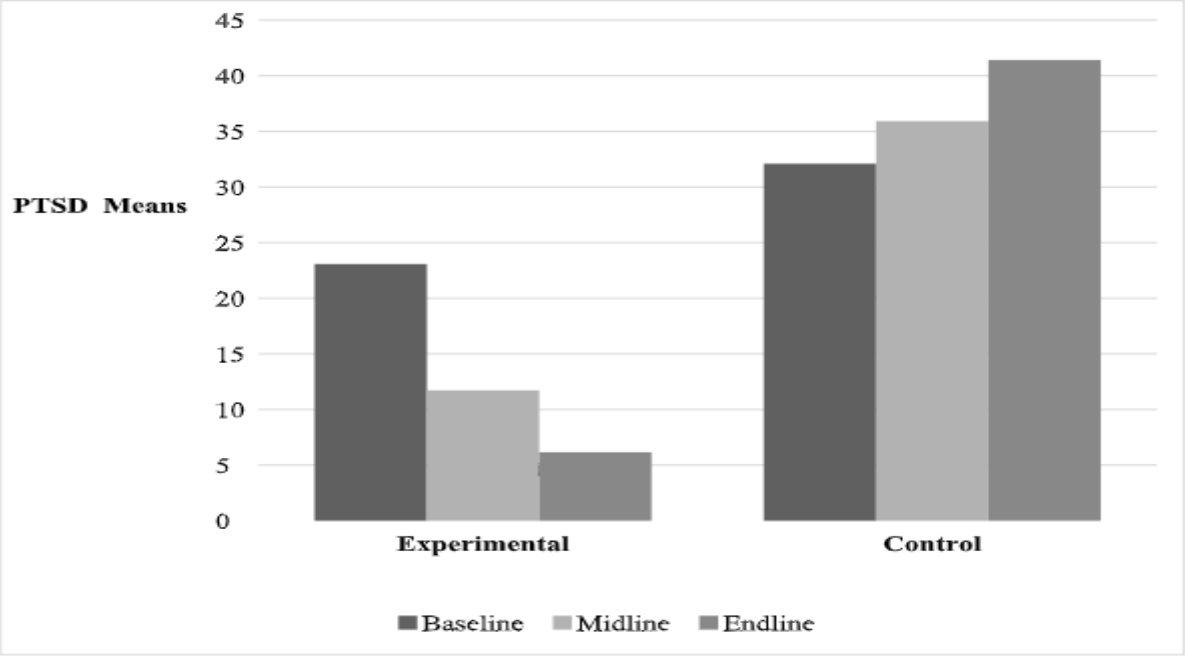

Fig 1 Comparison of PTSD Means at Baseline, Midline and Endline for Experimental and the Control Groups.

Table 3 Gender Differences in Alleviation of Symptoms of PTSD from Baseline to End Line.

Gender	Group		Baseline	Midline	End line	ANOVA
Husbands	Experimental	Mean	22.44	11.56	5.84	.038
		N	25	25	25	
		Std. Deviation	13.66	11.92	7.22	
	Control	Mean	31.32	33.32	40.04	.000
		N	25	25	25	
		Std. Deviation	15.63	14.52	12.48	
	Total	Mean	26.88	22.44	22.94	.000
		N	50	50	50	
		Std. Deviation	15.21	17.14	20.01	
Wives	Experimental	Mean	23.72	11.88	6.48	.028
		N	25	25	25	
		Std. Deviation	15.16	10.09	6.60	
	Control	Mean	32.88	38.52	42.80	.000
		N	25	25	25	
		Std. Deviation	13.45	12.07	10.63	
	Total	Mean	28.30	25.20	24.64	.000
		N	50	50	50	
		Std. Deviation	14.92	17.39	20.33	

Table 3 presents gender comparisons in PTSD means at the different timelines to evaluate the spouse differences in alleviation of symptoms of PTSD from baseline to end line. Data from the study was subjected to ANOVA statistical test to analyse the difference between the means

of two or more groups to determine if the results are significant.

In the experimental group, husbands' means at baseline midline and endline were 22.44, 11.56 and 5.84 (p=0.038) for wives it was 23.72, 11.88 and 6.48 (p=0.000) showing that even though wives at higher means (severity) of PTSD compared to husbands, they responded better (p=0.000) than husbands (p=0.038) in the recovery. In the control group, husbands' means were 26.88, 22.44 and 22.94 (p=.000) while wives' means were 32.88, 38.52 and 42.80(p=.028) for the baseline to midline to endline means. The findings indicate that husbands had escalated symptoms (p=0.000) in terms of PTSD symptomatology compared to the wives (p=0.028).

Table 4 ANOVA for Relationship Functioning between Control and Experimental at Baseline, Midline and End line

Timeline	N		Tests	Sum of Squares	Df	Mean Square	F	Sig.
	Control	Experimental						
Baseline	50	50	Between Groups	12.960	1	12.960	.012	.913
			Within Groups	106890.680	98	1090.721		
			Total	106903.640	99			
Midline	50	50	Between Groups	37056.250	1	37056.25	52.84	.000
			Within Groups	68724.500	98	701.270		
			Total	105780.750	99			
Endline	50	50	Between Groups	34.810	1	34.810	69.08	.000
			Within Groups	49.380	98	.504		
			Total	84.190	99			

The efficacy of MBCBT was additionally assessed based on the Couple Satisfaction Index (CSI) to compare the relationship functioning among married couples from baseline to midline to end line. An ANOVA statistical test was conducted to compare the CSI totals from baseline to midline to endline and findings are as shown in Table 4.4. The results indicate that at baseline there was no statistically significant difference between the experimental and the control group (p=.913) in terms of relationship functioning and PTSD symptoms. However, at both midline (p=.000) and end line (p=0.000) indicated a statistically significant association showing that the relationship functioning in the experimental group had changed. Reduced PTSD scores and higher relationship satisfaction levels were documented in the experimental group and this is attributed to the efficacy of the intervention.

The scatter plots between PTSD and relationship functioning further revealed the efficacy of the intervention as shown in Figure 2 for the experimental group.

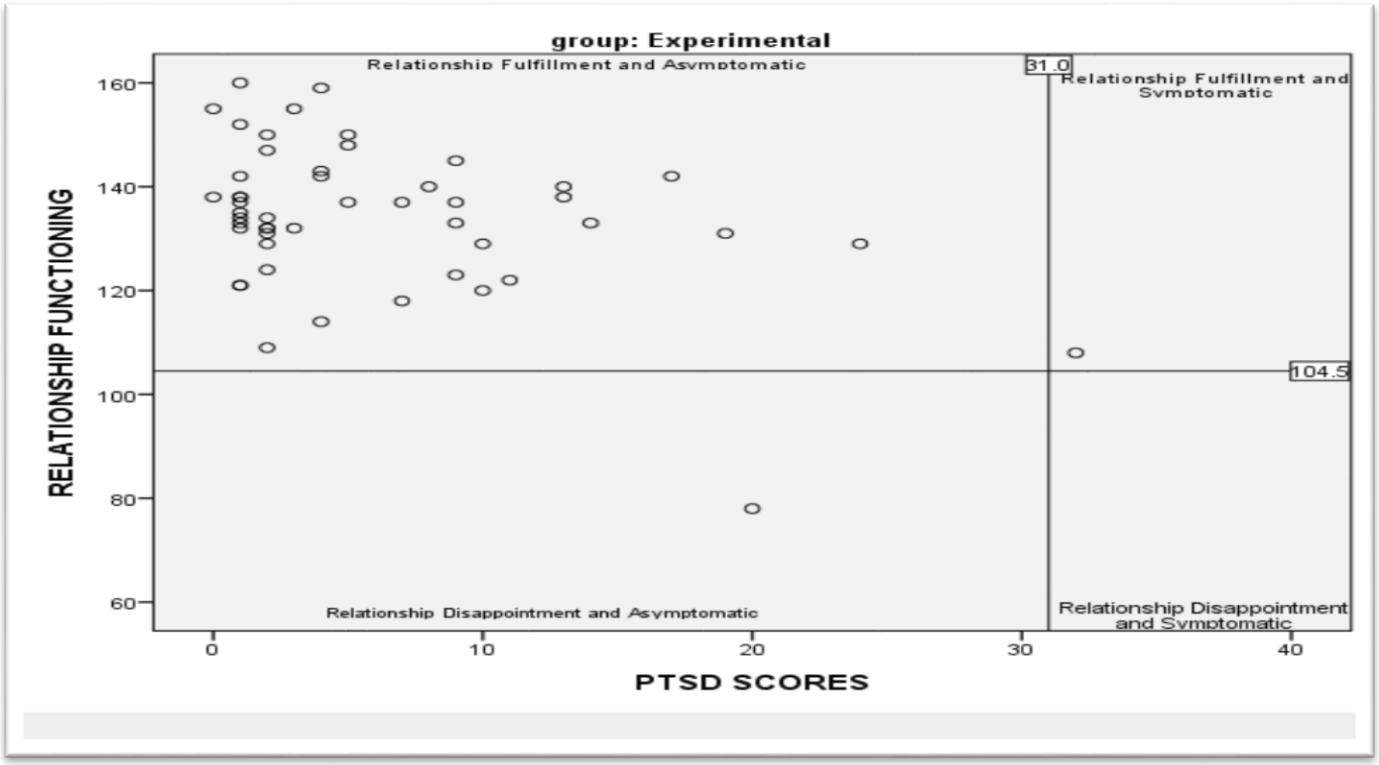

Fig 2 Experimental Group

ISSN No:-2456-2165

Figure 2 shows that most of the respondents were in the relationship fulfilment category and they did not have symptomatic PTSD showing that they had recovered in terms of relationship functioning after PTSD symptoms were treated using the intervention. The findings confirm that the intervention was successful among the experimental group.

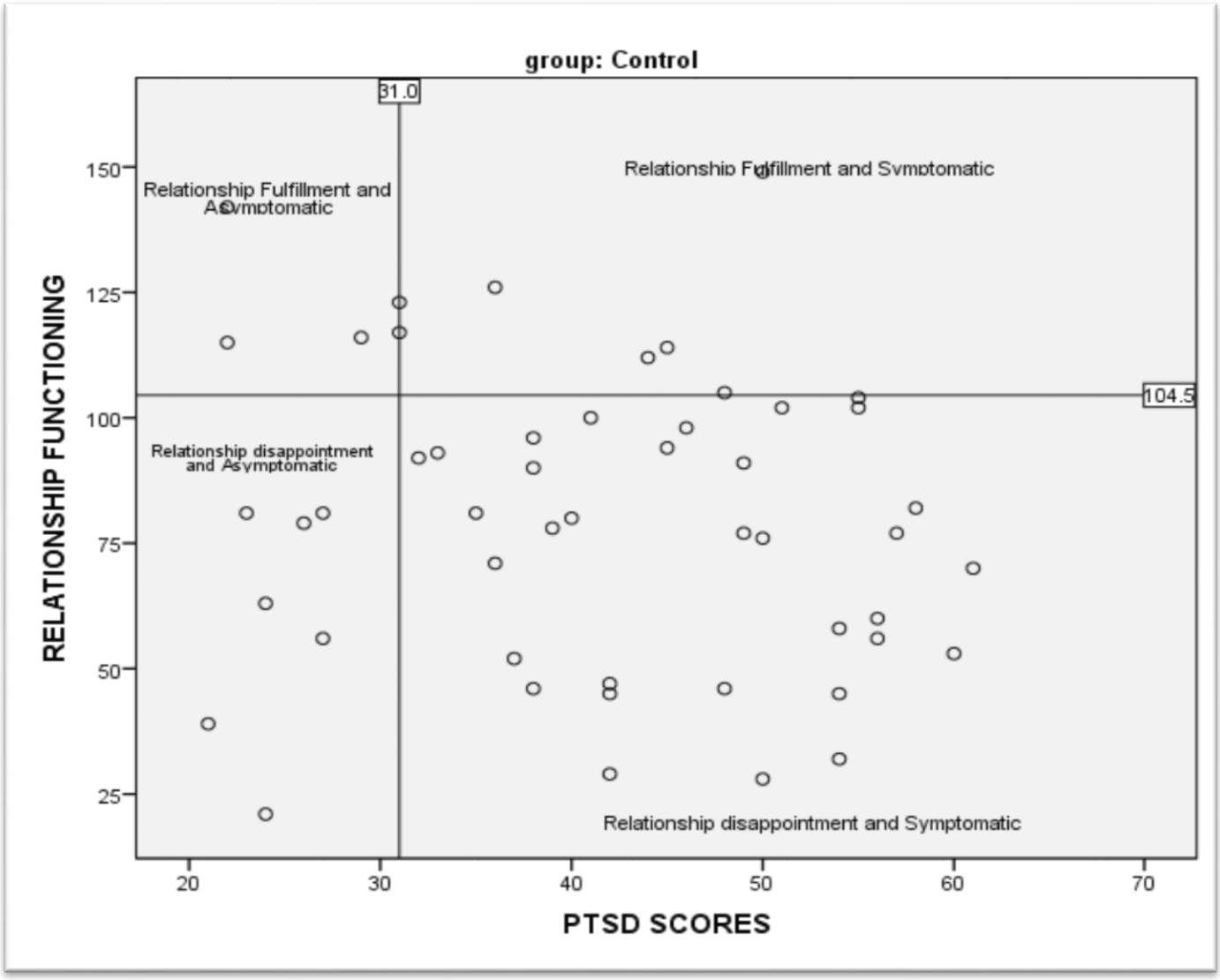

Fig 3 The Scatter Plot for Relationship functioning and PTSD in the Control Group at Endline

Figure 3depicts the relationship functioning at endline and PTSD scores at end line in the control group. The data revealed that most of the respondents were in the relationship disappointment category as they had escalated PTSD symptoms. Further, showing that they had reduced relationship functioning evidenced by CSI scores of (<104.5).

Table 5 Comparisons of the Frequencies of PTSD Severity at Baseline, Midline and Endline.

Group	Severity Status	Baseline	Midline	Endline
		Frequency (%)	Frequency (%)	Frequency (%)
Control	No PTSD	0(0%)	0(0%)	0(0%)
	Mild	22(44%)	18(36%)	10(20%)
	Moderate	28(56%)	32(64%)	40(80%)
	Total	50(100%)	50(100%)	50(100%)
Experimental	No PTSD	0(0%)	0(0%)	2(4%)
	Mild	36(72%)	48(96%)	47(94%)
	Moderate	14(28%)	2(4%)	1(2%)
	Total	50(100%)	50(100%)	50(100%)

Table 5 highlights the frequencies of severity of PTSD compared across both groups.

ISSN No:-2456-2165

In the control group from baseline to midline and endline, moderate PTSD increased from 28(56%) to 32(64%) to 40(80%) respectively. In the experimental group, moderate PTSD decreased from 14(28%) to 2(4%) % to 1(2%) at baseline, midline and endline respectively. From these results MCBT was established to be additionally effective in decreasing the severity of PTSD in the experimental group. The findings are further demonstrated in figures 4.

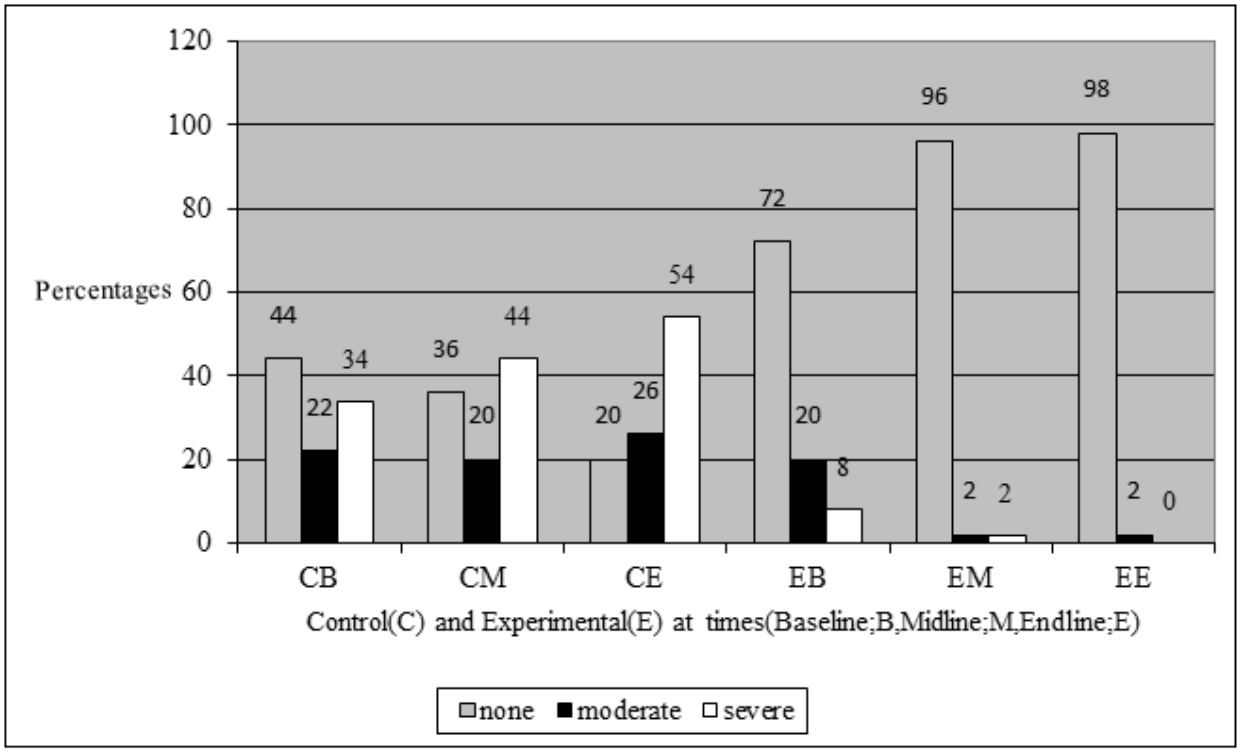

Fig 4 Severity of PTSD in the Control and Experimental Groups at Different Timelines

The study concluded that the intervention was effective in the experimental group as the PTSD means declined at midline and at end line. The mean decreased by 11.36 (baseline to midline) which was statistically significant (p=0.000), 5.56 (midline to endline) which was statistically significant (p=0.000) and 16.92 (baseline to end line) which was statistically significant (p=0.000).

IV. DISCUSSION

The current study investigated the effectiveness of MBCBT in the treatment of PTSD among couples in selected Churches in Nairobi. This study applied MBCBT intervention which included mindfulness meditation and mindfulness practices. The therapy was applied to the experimental group, while the control group was not subjected to any treatment. Monitoring of PTSD symptoms was carried out after 10 weeks at midline and after four weeks later at endline.

The findings indicated that the intervention was efficacious (in the experimental group) as the PTSD means declined at mid line and at end line. The mean decreased by 11.36 (baseline to midline) which was statistically significant (p=0.000), 5.56 (midline to endline) which was statistically significant (p=0.000) and 16.92 (baseline to end line) which was statistically significant (p=0.000).

The findings agree with earlier reviewed studies suggesting that MBCBT can be effective adjunct or alternative treatments for individuals with PTSD (Boyd, Lanius, Margaret et al; 2018). Southwick and Pietrzak (2021) observed that mindfulness can help couples improve in their relationship functioning. Dugal et al., (2018) documented MCBCT as widely assessed in treatment outcome studies, with proven effectiveness for decreasing couple distress and disappointment.

In the control group, the mean increased by 3.82 which was statistically significant (p=0.004), from midline to endline the mean increased by 5.50 which was statistically significant (p=0.000) and the greatest increase was from baseline to endline (9.32) and this was statistically significant (p=0.000). This seems to agree with findings by Campbell and Renshaw (2018), associating PTSD with impairments in relationship functioning. PTSD symptoms seemed to escalate in the control group.

In the experimental group, husbands' means at baseline midline and endline were 22.44, 11.56 and 5.84 (p=0.038) for wives it was 23.72, 11.88 and 6.48 (p=0.000) showing that even though wives at higher means (severity) of PTSD compared to husbands, they responded better (p=0.000) than husbands (p=0.038) in the recovery. This is reflected in other studies (Zuiden, Engel,Karchoud et al; 2022), indicating that recovering trajectory is more prevalent in women, while men more often showed a delayed onset of their symptoms.

The scatter plot between relationship functioning at endline and PTSD scores at end line in the experimental group showed that most of the respondents in the relationship fulfilment category did not have symptomatic PTSD indicating that they had recovered in terms of relationship functioning and PTSD. This concurs with several reviews documented on the efficacious working of MBCBT to produce satisfactory results (Grabovac et al., 2011; Howell & Buro, 2011; Jankowski & Holas, 2014; Shapiro et al., 2011; Zelazo & Lyons, 2012).These findings agree with Dugal et al. (2018) that mindfulness can be integrated into the cognitive behavioural therapy CBT treatment to enhance acceptance and increase marriage satisfaction among couples who have experienced childhood trauma.

Similar to the current study, a study undertaken by Kumar (2020) in India investigated the correlation between MBCBT and relationship satisfaction among couples. From the findings of this study, individuals who practice mindfulness were better at maintaining relationships, leading to increased relationship satisfaction among young couples. A similar study in In Iran by Molajafar et al., (2015) examined the effects of mindfulness and emotion regulation training in reducing marital disputes. The Iranian research documented that when the baseline and end-line marital conflicts scores of married persons in the experimental group were compared to the control group, the results showed that the marital conflicts scores of married people in the control groups were significantly lower. These outcomes are consistent with the current study and indicate that MBCBT is a viable intervention that can be administered to alleviate marital distress. Results from the control group indicated that those respondents with severe PTSD increased from 34% to 44% to 52% at baseline, midline and end line also reported lower levels of relationship fulfilment.

These outcomes are consistent with the evidence adduced by Brito (2020) indicating that PTSD can complicate relationships in a variety of ways; such as lack of interest in sexual activity, experiencing traumatization during sexual activity, feeling an increased dependency on a partner, experience excessive anger, thereby escalating discontent in the relationship. Lord et al. (2020) found out that there is a bidirectional association between PTSD symptoms and intimate relationship functioning. They hypothesize that PTSD symptoms are linked to increased relationship discomfort, a higher risk of divorce, a decrease in love and intimacy, and an increase in sexual dysfunction. Untreated, childhood trauma has well-established associations to poorer marital functioning (Fitzgerald & Games; 2021).

To this regard, this study established the effectiveness of MBCBT in treating PTSD among couples at the same time leading to higher levels of relationship fulfilment. The study documented that reducing PTSD symptoms in the experimental group through MBCBT also improved relationship functioning. Therefore, psychologists and clinicians should explore more ways of enhancing couple therapy by acquiring MBCBT competencies. Given the dearth of documentation on the use of MBCBT therapy to treat PTSD among couples especially in Kenya, it is expected that this study will arouse new interest from clinicians on the need to explore MBCBT therapy as one of the interventions that can be used successfully with couple therapy. Family therapy needs to deliver sustainable therapy outcomes. From the current study, MBCBT proved successful with group therapy sessions while the individual benefits were also retained. From the literature reviewed, MBCBT should be tested in various settings that include PTSD and other comorbidities.

REFERENCES

[1]. Chaghazardi FK, Mami S, Kaikhavani S. (2015). Effectiveness of mindfulness-based cognitive therapy on marital adjustment.*JAppl Environ Biol Sci.*5:86–8.

[2]. Fredman, S. J., Le, Y., Marshall, A. D., Brick, T. R., &Feinberg, M. E. (2017). A dyadic perspective on PTSD symptoms' associations with couple functioning and parenting stress in first-time parents. *Couple and Family Psychology: Research and Practice, 6*(2), 117–132.

[3]. Ghazali, S. R., & Chen, Y. Y. (2018). Reliability, concurrent validity, and cutoff score of PTSD Checklist (PCL-5) for the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition among Malaysian adolescents.Traumatology, 24(4), 280–287.

[4]. Kappen, G., Karremans, J. C., Burk, W. J., &Buyukcan-Tetik, A. (2018). On theAssociation Between Mindfulness and Romantic Relationship Satisfaction: the Role of Partner Acceptance. Mindfulness, 9(5), 1543–1556.

[5]. Lord, K. A., Suvak, M. K., Holmes, S., Shields, N., Lane, J., Sijercic, I., Wagner, A. C., Stirman, S. W., & Monson, C. M. (2020). Bidirectional Relationships Between Posttraumatic Stress Disorder and Social Functioning During Cognitive Processing Therapy. *Behavior therapy*, *51*(3), 447–460

[6]. Michael Fitzgerald & Heath Grames (2021): Childhood Maltreatment and Mindfulness: Implications for Older Adult's Marital Outcomes, Journal of Couple & Relationship Therapy

[7]. Molajafar, H & Mousavi, S &Lotfi, R &Ghasemnejad, Seyedeh& Falah, Mariam. (2015). Comparing the effectiveness of mindfulness and emotion regulation training in reduction of marital conflicts. Journal of medicine and life. 8. 111-116.

[8]. Moser, Dominik &Suardi, Francesca & Schechter, Daniel. (2020). PTSD During Childhood, Childhood Trauma, Childhood Maltreatment and How They Relate to Adult PTSD. 8_11.

[9]. Nilas, C. Self-Reported Trait Mindfulness and Couples' Relationship Satisfaction: a Meta-Analysis. Mindfulness 11, 835–848 (2020)

[10]. Podea DM, Wild KJ (2015). Mindfulness - new research and treatment directions in Post-Traumatic Stress Disorder: A Fresh Look at Anxiety Disorders, In: Federico Durbano (Ed.)

[11]. Polusny, M. A., Erbes, C. R., Thuras, P., Moran, A., Lamberty, G. J., Collins, R. C., Rodman, J. L., & Lim, K. O. (2015). Mindfulness-Based Stress Reduction for Posttraumatic Stress Disorder Among Veterans: A Randomized Clinical Trial. *JAMA*, *314*(5), 456–465.
[12]. Roychowdhury D (2017). Mindfulness-Based CBT for Treatment of PTSD. J PsycholClinPsychiatry 7(2): 00429.
[13]. Tickell, A., Ball, S., Bernard, P. *et al.* (2020). The Effectiveness of Mindfulness-Based Cognitive Therapy (MBCT) in Real-World Healthcare Services. *Mindfulness* 11, 279–290
[14]. Zuiden, M., Engel, S., Karchoud, J. F., Wise, T. J., Sijbrandij, M., Mouthaan, J., Olff, M., & van de Schoot, R. (2022). Sex-differential PTSD symptom trajectories across one year following suspected serious injury. European journal of psychotraumatology, 13(1), 2031593.