

## EFFECT OF MINDFULNESS-BASED COGNITIVE THERAPY ON SCHOOL COUNSELORS' COMPASSION FATIGUE AND BURNOUT: A RANDOMIZED CONTROLLED TRIAL

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### Abstract

**Objective** This paper aims to elaborate the findings of research examining the effect of mindfulness-based cognitive therapy (MBCT) in the form of counseling and a psychoeducational group aimed at reducing compassion fatigue (CF) and burnout (BO) amongst school counselors in Indonesia.

**Method** The research used an experimental design with a randomized controlled trial (RCT), involving 34 subjects selected from 239 school counselors. The experiment was conducted with pre-test (T1), post-test 1 (T2), post-test 2 (T3), and follow-up (T4) measurements during the 6 months of the research. The results were then analyzed using mixed ANOVA.

**Results** The findings indicated some effects of MBCT intervention in reducing school counselors' compassion fatigue and burnout. Overall, the research succeeds in generalizing the application of MBCT to reduce school counselors' CF and BO in Indonesia.

**Conclusions** The findings of the study suggested that the MBCT intervention applied in a counseling format consistently contributes immediate-term effects, while those of the psychoeducation group tend to be temporary.

**Keywords:** Mindfulness-based cognitive therapy, compassion fatigue, burnout, school counselor

School counselors face challenges in managing their personal psychology due to job demands that necessitate emotional involvement which later may cause work stress and have the potential to cause compassion fatigue and burnout. A previous study explained that counselors who are less aware of their negative emotions can possibly experience anxiety over suppressing their emotional problems and compassion fatigue (Zhang, Zhang, Ren, & Jiang, 2023). School counselors' inability to realize the negative emotions resulting from feelings of compassion after providing counseling services can result in fatigue, which can disrupt their work performances. Other issues, such as past trauma among counselors, empathy and exposure to trauma, together with pressure from students, parents and teachers (including a high caseload of problematic students), increase the risk of experiencing compassion fatigue (Turgoose & Maddox, 2017). Stamm (2010) defined compassion fatigue as a negative aspect resulting from the provision of care, which exhibits itself in fatigue, frustration, anger and depression typical of burnout, or negative feelings driven by work-related fear and trauma. Compassion fatigue includes negative emotional, cognitive and behavioral changes (Craig & Sprang, 2010; Figley, 1995). Counselors who experience compassion

fatigue are vulnerable to worsening performance, culminating in a decline in the provision of counseling services, especially for the counselors themselves and students.

Compassion fatigue can weaken counselors' ability to empathize with students (Bride, 2007), causing them to display less adaptive emotions in responding to students when providing counseling services. The subsequent consequences of unrecognizable and unhandled compassion fatigue put counselors at risk of burnout, as a result of excessive work-related pressure and an intolerable level of emotional and mental exhaustion that appears gradually over a long period of time (Maslach, Schaufeli, & Leiter, 2001). Approximately 35.83% of school counselors in Indonesia were shown to be experiencing burnout, putting them at risk of a reduction in the quality of their mental health (Habibah, 2019). The counseling profession endeavors to facilitate students to develop optimally (Erford, 2018), but continuous exposure to burnout from interacting with students can lead to counselors being vulnerable to experiencing stress in the work environment.

In addition, school counselors are often faced with hostile situations that increase the risk of burnout. The results of research on school counselors from four cities in Indonesia indicate that the longer they work, the higher level of burnout they experience (Rangka, Ramli, & Prasetyaningtyas, 2022). School counselors play several roles in schools and often work with multiple stakeholders, such as teachers, administrators, families and communities (Mullen, Chae, Backer, & Niles, 2021). As a result of these responsibilities, they often encounter role conflicts and ambiguity with their colleagues (Butler & Constantine, 2005). Moreover, debate continues on the assignation of duties to school counselors by school stakeholders such as policymakers; for example, imposing overlapping duties, student disciplinarians, substituting for teachers, and being administrative assistants at schools (Behrend, 2016). Counselors who experience burnout may display unusual behavior during the services provided to students (Mullen & Gutierrez, 2016). A study from Regan (2013) indicated that burnout affects the quality of interaction between counselors and counselees during counseling sessions. Therefore, there is an urgent need to solve the issue of compassion fatigue and burnout experienced by school counselors in order to maintain the quality of their mental health when providing counseling services.

Mindfulness is a self-care strategy that has the potential to help reduce compassion fatigue and burnout (Burgess et al., 2017; Christopher & Maris, 2010; Dave et al., 2020; Lee, 2013; Hamilton-West, 2018; Hente et al., 2020; Perez et al., 2022). Findings on mindfulness-based intervention implementation in other settings such as nursing reveal that such treatment was effective in reducing compassion fatigue and burnout, with sustainable effects over time (Perez et al., 2022). To expand the generalization of the efficacy of mindfulness-based intervention in reducing such problems, Crane and Kuyken (2013) recommended the implementation of mindfulness-based intervention in different populations, such as school counselors. In line with Crane and Kuyken's (2013) suggestion, this research was designed to test the effectiveness of MBCT on counselors. It is hoped that the experimental findings from this research will contribute to clarifying the efficacy of MBCT in reducing compassion fatigue and burnout amongst school counselors, especially ones in Indonesia.

Mindfulness practices, such as focusing one's attention (for example, focusing on breathing) and feeling body sensations in conscious movements (Lutz et al., 2009) have been adapted for the workplace (Good et al., 2016). Mindfulness can also be conceptualized as formal (e.g. mindful breathing and sitting meditation) or informal (paying attention to daily activities) practices (Hassed et al., 2021). Mindful breathing practice can psychologically calm counselors (Bruns et al., 2010); biologically, one's breathing can change the pH in the respiratory tract and activate immune cells which clean up any foreign cells inhaled (Kim et al., 2021). Mindfulness can also be measured based on the quantity of practice (e.g., minutes per week, with regard to formal practice, as informal practice is harder to measure objectively) (Hassed et al., 2021). However, no research on mindfulness practice has presented data regarding the number and duration of mindfulness exercises in the counseling process (Goldberg et al., 2014). Therefore, even though the mindfulness exercises in this research are presented in two formats, counseling and psychoeducation, the number of mindfulness exercises between these was equalized so that the level of the impact of mindfulness training on compassion fatigue and burnout could be obtained. In detail, the experiment involved mindfulness training in the form of mindful breathing, sitting meditation and mindful movement.

MBCT combines the principles of the cognitive behavior therapy (CBT) approach (Beck & Beck, 2011) and mindfulness-based stress reduction (Kabat-Zinn, 2013). Mindfulness training is very effective in preventing relapses of mental health disorders, such as depression (Kuyken et al., 2003; Segal et al., 2013). Such training focuses on the nonjudgmental values of mindfulness and present-moment awareness, so that individuals become more aware of their own bodily sensations, thoughts and feelings (Teasdale et al., 2000). In the context of interventions for compassion fatigue and burnout, awareness of body sensations, thoughts and feelings without correcting, changing or avoiding them becomes input for evaluating the presence of compassion fatigue and burnout. Subsequently, MBCT interventions are oriented toward testing and challenging dysfunctional beliefs, compassion fatigue and burnout and creating new interpretations (Sipe & Eisendrath, 2012). Even though MBCT incorporates elements of cognitive therapy, its stance is distinct from the concept of CBT. MBCT puts little emphasis on changing or shifting the content of thoughts, focusing on counselors' awareness of the relationship between their thoughts and feelings to increase metacognitive awareness in dealing with students' psychological experiences. In this state, it is expected that the level of compassion fatigue and burnout experienced by counselors can be reduced. Regarding these circumstances, this research tests whether the pattern of reduction in compassion fatigue and burnout is the same as the result of implementing MBCT as suggested by Turgoose and Maddox (2017). The findings of this research are expected to clarify the similar effects of MBCT interventions in reducing compassion fatigue and burnout conditions.

As a group intervention, the mindful training is provided within and between MBCT sessions (Naude et al., 2023). It covers mindfulness practices that are informal (at home) and formal, aiming at focus and developing difficult mental and physical experiences (Segal et al.,

2013). Unfortunately, most MBCT interventions in previous research were applied in a counseling format (Chan et al., 2021; Lu & Huffman, 2017). The benefits of MBCT interventions presented in the form of psychoeducation have been less explored and require further investigation (Wong et al., 2016). Consequently, this research specifically attempts to clarify the benefits of mindfulness training implemented in a psychoeducational format.

Research on various mindful training activities (e.g. mindful breathing, sitting meditation, body scan, and mindful movement) and its frequencies is urgently needed (Silver et al., 2018). Previous MBCT research on the implementation of counseling and psychoeducational groups has not been consistent in the number of sessions, and has also faced obstacles in terms of consistent attendance (Wong et al., 2016). This undoubtedly limits the generalization of the efficacy of MBCT which delivered in the form of counseling and psychoeducation. In detail, the gap identified in previous research was filled by conducting present research focusing on the impact of MBCT counseling and psychoeducation in a structured manner, with the same amount sessions and commitment.

This research was specifically oriented towards expanding the generalization of MBCT interventions by testing their effectiveness in counseling and psychoeducational formats. Its purpose was to prove the effectiveness of MBCT in reducing compassion fatigue and burnout in school counselors. To obtain accurate causal findings on the effectiveness of the MBCT intervention, the research employed a randomized controlled trial (RCT) experimental design. The application of RCT provided high acceptability and feasibility regarding the effectiveness of MBCT in reducing compassion fatigue and burnout. In the design, the researchers measured compassion fatigue and burnout four times over a period of six months. Furthermore, the MBCT counseling intervention was given between T1 and T2, while the MBCT psychoeducation intervention was given between T2 and T3.

## **Methods**

### **Participants**

The research involved 34 subjects consisting of school counselors residing in Semarang, Indonesia. Prior to the sampling, randomization was performed, followed by the selection. They were then asked to fill out a consent form. In addition, double-blind ethics was used. The intervention was conducted twice a week and lasted for three weeks. For the MBCT protocol, that of Segal et al. (2013) was adopted.

The inclusion criteria of subjects were (a) willingness to participate in the MBCT intervention; (b) having more than 1 year of service; (c) having medium and high categories of compassion fatigue and burnout scores; and (d) residing in Semarang. On the other hand, the exclusion criteria were (a) unwillingness to complete the MBCT session; (b) less than 1 year of working experience; (c) residing outside the city of Semarang; or (d) unwillingness to fill out the

worksheet. Participants who met the inclusion criteria were fully informed about the research protocol, asked to sign an informed consent form.

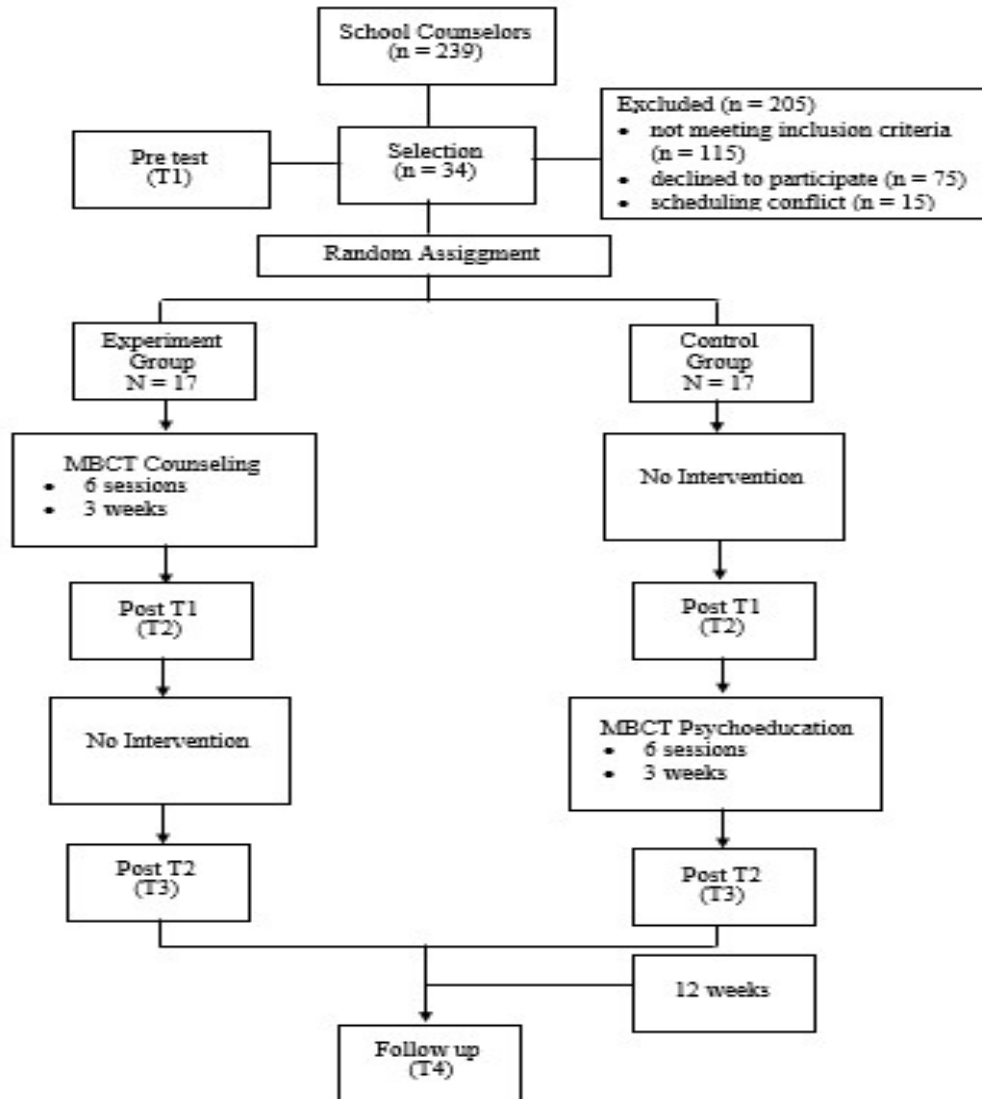
**Table 1. Demographic data of the experimental and control groups**

Variable	Intervention Group	Control Group	$\chi^2$	p
Age				
25-35	8	7	0.07	> 0.05
36-45	8	4	1.33	> 0.05
46-55	1	6	3.57	> 0.05
Gender				
Male	4	5	0.11	> 0.05
Female	13	12	0.04	> 0.05
Years of experience				
1-5 years	9	7	0.25	> 0.05
5-10 years	3	4	10.14	> 0.05
> 10 years	5	6	0.09	> 0.05

The 34 school counselors participating in the intervention had an age range of between 25-55 years, with work experience of > 10 years. They were evenly divided into two groups based on their demographic characteristics, as shown in Table 1.

### Procedure

The research procedures were performed within two weeks to select and ensure the participants met the inclusion criteria for levels of compassion fatigue, burnout and mindfulness. Both the participants and the experimenters were blind to the hypothesis. Following the selection of the subjects, MBCT was given by the experimenters to the counselors over six meetings with a time allotment of 2 x 40 minutes per session. The data were collected for four times measurement. Details of the MBCT procedure are shown in Figure 1.



**Figure 1. MBCT study procedures**

As presented in Figure 1 presents the procedure applied to the school counsellors, from screening to follow-up. Of the 239 participants assessed for screening, 115 (48.11%) did not meet the inclusion criteria, 75 (31.38%) people refused to participate, and 15 (6.28%) had a scheduling conflict. Based on this selection, 34 (14.23%) people met the criteria and became the samples. They were then assigned randomly to the MBCT group (n = 17) and the psychoeducational group (n = 17). A summary of the MBCT session is given in Table 2.

	Activities	
Session Schedule	MBCT Counseling	MBCT Psychoeducation

Pre Session	Introduced alternately by all participants and experimenters, then filling in the compassion fatigue, burnout, and mindfulness instruments.	Introductions by all participants and experimenters, then filling in the compassion fatigue, burnout, and mindfulness instruments.
Session 1 (Group Building):  Awareness and Automatic Pilot	Train awareness and automatic pilot members of the experimental group. Group members practice focusing on the present experience.  Technique: mindful breathing.	Train awareness and automatic pilot members of the control group. Group members practice focusing on the present experience.  Technique: mindful breathing.
Session 2  (Assessment 1):  Living in Our Heads	Group members asked to identify situations with interpretations that lead to emotions, body sensations, compassion fatigue, and burnout behaviors.  Techniques: sitting meditation.	Sharing experiences about compassion fatigue and burnout as well as checking the mood of group members.  Techniques: sitting meditation.
Session 3  (Purpose):  Gathering the Scattered Mind	Group members set goals related to reducing compassion fatigue and burnout, identify problems, and set expectations (goal setting).  Techniques: cognitive restructuring and Socratic questions.	Group members set goals and set expectations (goal setting) after the MBCT exercise.  Technique: cognitive restructuring.
Session 4  (Learning cognitive models and conceptualization):  Recognizing Aversion and	Group members took a broader perspective concerning compassion fatigue and burnout, can bring these experiences without judging or trying to make them different,	Group members were open to experiences related to compassion fatigue and burnout and practiced developing alternative thoughts.

Allowing/Letting Be	and develop new alternative thoughts.  Techniques: sitting meditation, mindful breathing, and cognitive restructuring.	Techniques: sitting meditation and mindful breathing, and cognitive restructuring.
Session 5 (Modifying and implementing Automatic Thought):	Began to modify and implement a reduction in compassion fatigue and burnout using the new automatic thought.	Exercise makes a plan for the implementation of a new automatic thought.  Technique: working with the difficulty of meditation and mindful breathing, and cognitive restructuring.
Thoughts are not Facts and Taking care of Self	Technique: working with the difficulty of meditation, mindful breathing, and cognitive restructuring.	
Session 6 (Planning):	Group members can maintain balance in life.	Group members accept the experience themselves.
Maintaining and Extending New Learning	Technique: practice mindfulness in daily activity.	Technique: practice mindfulness in daily activity.

## Measures

### Freidburg Mindfulness Inventory

The Freidburg Mindfulness Inventory (FMI) was used to determine the level of mindfulness of the school counselors. The inventory comprises 14 items with two dimensions, namely presence (six items) and acceptance (eight items) (Walach et al., 2006). The FMI uses a 4-point Likert scale with response options ranging from 1 (rarely) to 4 (almost always). It aims to measure the general factor of conscientiousness (Belzer et al., 2013). Following the tests, FMI showed adequate reliability, with Cronbach's  $\alpha$  0.84 and McDonall's  $\omega$  0.87.

### Compassion Fatigue Scale

The Compassion Fatigue-Short Scale is a 13-item questionnaire consisting of two subscales: (1) a secondary trauma scale with five items, and (2) a job burnout scale with eight items (Adams et al., 2006). In using this scale, the respondents were asked to rate the frequency of how often each item applied to themselves on a 10-point Likert scale ranging from 1 (never) to 10



(very often). In this research, the CF-Short Scale was initially translated into Indonesian by a professional translator and then translated back into English by another translator. The differences between the English and Indonesian versions were evaluated by professional experts. In terms of tests, this scale achieved a Cronbach CF's  $\alpha$  coefficient of 0.92 and McDonalls'  $\omega$  coefficient of 0.92, indicating adequate internal reliability.

### **Counselor Burnout Inventory**

The Counselor Burnout Inventory (CBI) is an instrument with 20 items and functions to measure professional counselor burnout in relation to five dimensions, namely exhaustion, incompetence, negative work environment, devaluing clients, and deterioration in personal life (Lee et al., 2007). The inventory is measured on a 5-point Likert-type scale (1 = never true, 5 = always true). In this research, the inventory was also initially translated into Indonesian by a professional translator and then translated back into English by another translator. The differences between the English and Indonesian versions were also evaluated by professional experts. After the tests, the CBI had strong reliability, with an internal consistency of Cronbach's  $\alpha$  of 0.93 and McDonall's  $\omega$  0.93.

### **Data Analysis**

The data analysis in this research was performed using SPSS 28 software. In addition, the sociodemographic differences between the groups were assessed using the  $\chi^2$  test and t test. A randomized controlled trial (RCT) experimental design with measurements from pre-intervention (T1) to post-intervention (T2) and changes from pre-intervention (T3) to 3-month follow-up (T4) was employed. RCT trials can identify various components of variation using mixed models, while the approach to be used depends greatly on the objectives of the research, from establishing differences between treatments, to predicting what effect will occur in a particular patient (Kim, Cheung, & Hampson, 2021). Finally, the differences between the two MBCT interventions and the psychoeducation group were analyzed using the Mixed MANOVA test. Significance was set at a p value of  $\leq 0.05$ .

## **Results**

### **Feasibility and acceptability of the intervention**

Participants' thoughts on the MBCT interventions, covering the practices of mindful breathing, sitting meditation, and mindful movement, were recorded and reported twice. From the reports, 82.4% strongly agreed with the statement "I learn what I need to encounter my problems effectively"; 88.2% strongly agreed with the statement "I attain better understanding about ways to tolerate feelings, thoughts, and body sensations"; and 85.3% strongly agreed with the statement "I feel MBCT has helped me reduce compassion fatigue and burnout."

Prior to testing the effect of MBCT on compassion fatigue and burnout, the increase in mindfulness in the MBCT and psychoeducational groups was compared to observe any changes occurring in the two conditions. The detailed data of this comparison can be seen in Table 3.

**Table 3. Repeated Measures ANOVA analysis comparing changes in T1, T2, and T3 in mindfulness**

Group		T1	T2	T3	F <sub>time</sub>	p
MBCT Counseling	M	2.59	3.07	3.14	16.78	< 0.01
	SD	0.44	0.39	0.37		
MBCT Psychoeducation	M	2.71	2.55	3.32	19.99	< 0.01
	SD	0.34	0.41	0.49		
Group	Time	MD	SE	p		
MBCT Counseling	T1-T2	-6.77	1.72	< 0.01**		
	T1-T3	-7.71	1.69	< 0.01**		
	T2-T3	-.94	0.20	< 0.01**		
MBCT Psychoeducation	T1-T2	2.18	1.49	> 0.05		
	T1-T3	-8.59	2.09	< 0.01**		
	T2-T3	-10.77	1.77	< 0.01**		

The results of the repeated measures ANOVA analysis showed that mindful training increased the mindfulness of the subjects in both the MBCT counseling intervention,  $F(1.06, 16.94) = 16.78, p < .01$ , and the psychoeducational intervention,  $F(2, 32) = 19.99, p < .01$ . It was confirmed that in MBCT counseling there was an increase in mindfulness between T1-T2,  $p < .01$ , while the MBCT psychoeducation experienced an increase in mindfulness between T2-T3,  $p < .01$ . All increases in mindfulness occurred after the intervention was given.

Regarding the above analyses, the increase in mindfulness took place following the post intervention and follow-up, while previously no difference was found in the psychoeducational group. The participants in both the MBCT and psychoeducational saw their mindfulness increase. Since both groups experienced some increases, the Mixed MANOVA test was conducted to compare the effects of MBCT in both groups. The detailed data are presented in Table 3.

### Short term changes in CF and BO

During the intervention process, the participants were invited to practice mindfulness guided by the experimenters as group leaders to focus on increasing awareness without judging body sensations, thoughts or feelings. All the participants were assisted in a disclosed and accepting response mode, in which they intentionally experienced and felt discomfort in developing a "decentered" perspective on their thoughts and feelings, viewed as passing events in the mind. They were also invited to a follow-up after three months to assess the level of compassion fatigue and burnout using the same instruments.

**Table 4. The results of Mixed MANOVA between the MBCT counseling and psychoeducational on CF and BO in T1, T2, T3, and T4**

Group	Compassion Fatigue				F <sub>1</sub>	F <sub>2</sub>	Burnout				F <sub>1</sub>	F <sub>2</sub>
	T1	T2	T3	T4			T1	T2	T3	T4		
Intervention	M	5.6	5.1	4.9	4.76	4.17*	3.0	2.5	2.4	2.1	7.48*	15.89**
	D	2	9	4			7	9	4	8		
	S	1.2	1.0	0.9	0.64		0.5	0.5	0.4	0.2		
Control	M	5.4	5.6	4.9	4.87	5.73*	2.9	3.0	2.7	2.8	*	0.72
	D	0	4	1			5	7	7	9		
	S	0.7	1.3	1.0	0.84		0.3	0.4	0.5	0.5		
	D	1	4	3		8	4	0	1			
F <sub>group</sub>		0.16					5.69*					
F <sub>time x group</sub>		2.46					14.13**					

CF: Compassion Fatigue, BO: Burnout, F<sub>1</sub>= F<sub>time</sub> Mixed Manova, F<sub>2</sub>= F<sub>time</sub> Repeated Anova, T1=pre test, T2=post test1, T3=post test2, T4=follow up, \*p < 0.05, \*\*p < 0.01

According to the results of the mixed MANOVA analysis, the differences were found in the levels of CF and BO between the measurement times, CF: F (3, 93) = 5.73, p < 0.01; BO: F (1.88, 58.22) = 7.48, p < 0.01. Since the MBCT counseling intervention was given at T1-T2, while that of the MBCT psychoeducation was at T2-T3, there were differences in the pattern of reduction in CF and BO. In Table 4, it can be seen that the decrease in CF and BO in the MBCT counseling occurred between T1-T2, p < 0.01, while in the MBCT psychoeducation the decrease in CF and

BO occurred between T2-T3,  $p < 0.05$ . This confirms that both the MBCT counseling and MBCT psychoeducation have short term impact on reducing CF and BO.

### Intervention effects at follow-up

The effects of the MBCT counseling and psychoeducation on the school counselors' CF and BO were assessed during the pretest (T1), posttest 1 (T2), posttest 2 (T3), and follow-up (T4), as presented in Table 4. The mixed MANOVA analysis aimed to prove the extent to which the effects of MBCT on reducing CF and BO could be maintained at the 3-month follow-up.

**Table 5. Comparison of the effect of time on CF and BO between the experimental and control groups**

Variabel	Time	MBCT			Psychoeducational Group		
		MD	SE	p	MD	SE	p
CF	T1-T2	5.59	1.26	<0.01**	-3.18	2.93	> 0.05
	T1-T3	8.82	1.35	< 0.01**	6.29	2.78	> 0.05
	T1-T4	11.06	3.02	< 0.05*	7.18	2.64	> 0.05
	T2-T3	3.24	0.96	< 0.05*	9.47	2.48	< 0.05*
	T2-T4	5.47	2.33	> 0.05	10.35	3.25	< 0.05*
	T3-T4	2.24	1.94	> 0.05	0.88	2.33	> 0.05
BO	T1-T2	9.59	1.27	< 0.01**	-1.71	0.67	> 0.05
	T1-T3	12.77	1.36	< 0.01**	3.47	1.47	> 0.05
	T1-T4	17.88	2.31	< 0.01**	2.65	1.69	> 0.05
	T2-T3	3.18	0.94	< 0.05*	5.18	1.49	< 0.05*
	T2-T4	8.29	2.54	< 0.05*	4.35	1.60	> 0.05
	T3-T4	5.12	1.87	> 0.05	-0.82	1.25	> 0.05

CF: compassion fatigue, BO: burnout, T1=pre test, T2=post test1, T3=post test2, T4=follow up, \* $p < 0.05$ , \*\* $p < 0.01$

According to the results of the MANOVA analysis, there were significant decreases in CF,  $F(1.32, 19.93) = 4.17$ ,  $p < 0.05$ , and BO,  $F(1.62, 24.23) = 15.89$ ,  $p < 0.01$ , from MBCT counseling

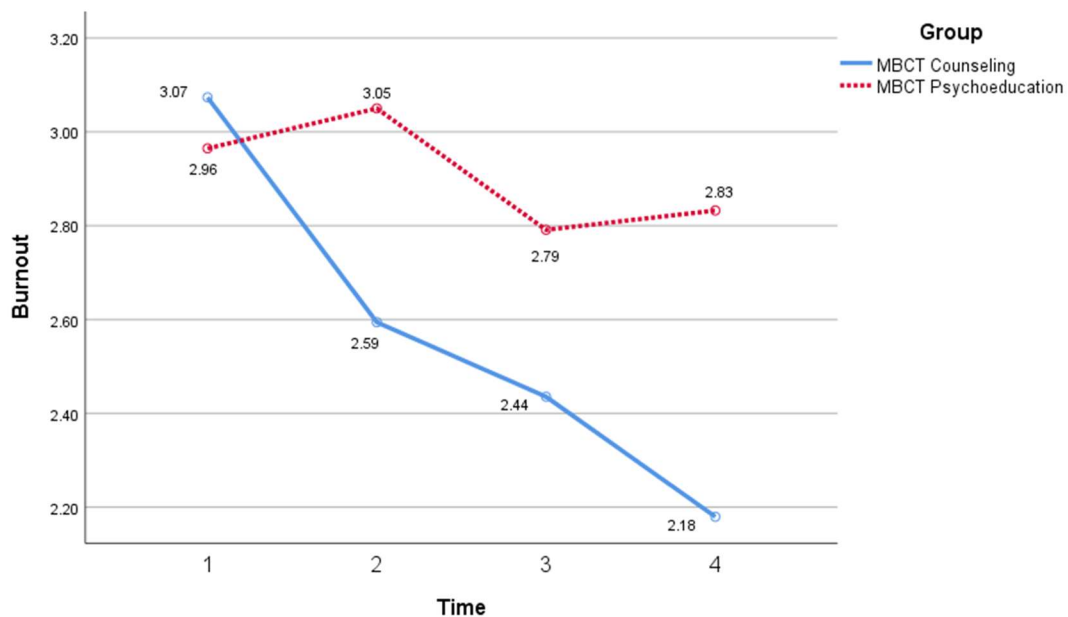
group. However, no significant decrease of CF and BO were found in the MBCT psychoeducation group, CF:  $F(3, 45) = 2.45, p > 0.05$ ; BO:  $F(1.93, 28.86) = 0.72, p > 0.05$ . In addition, there was a significant interaction effect of time measurement and group intervention on BO,  $F(1, 31) = 5.69, p < 0.05$ , but no such effect on CF,  $F(1, 31) = 0.16, p > 0.05$ .

In the follow-up to the MBCT counseling, it was found that the decrease in CF occurring between T1-T4 was ( $p < 0.05$ ); between T2-T3 it was ( $p < 0.05$ ), but there were no significant decrease of CF between T2-T4 ( $p > 0.05$ ) and between T3-T4 ( $p > 0.05$ ). This findings proved that the effect of MBCT counseling on CF was stable until follow up (T4). Moreover, on the MBCT counseling group found that the decrease in BO occurring between T1-T4 was ( $p < 0.01$ ); between T2-T3 ( $p < 0.05$ ); between T2 -T4 ( $p < 0.05$ ); while between T3-T4 ( $p > 0.05$ ) the decrease remained stable.

On other hand, there were decrease in CF between T2-T3 ( $p < 0,05$ ) and T3-T4 ( $p < 0.05$ ) but there were no significant decrease of CF between T1-T2, T1-T3, T1-T4, and T3-T4 from MBCT psychoeducation. In addition, the significant decrease in BO only occurred between T2-T3 ( $p < 0.05$ ), while there no significant decrease of BO in other time measurement from MBCT psychoeducation.

These mixed MANOVA analysis results confirm that MBCT counseling contributed an immediate effect in reducing CF and BO, while in the MBCT psychoeducation it gave a temporary effect. The findings also demonstrated that there was no significant interaction between time and group on CF,  $F(2.48, 93) = 2.46, p > 0.05$ ). However, there was a significant interaction between time and group on BO,  $F(1.88, 58.22) = 14.13, p < 0.01$ .

On MBCT counseling, there were changes in the mean of BO at T1 ( $3.07 \pm 0.55$ ), T2 ( $2.59 \pm 0.57$ ), T3 ( $2.44 \pm 0.47$ ), and T4 ( $2.18 \pm 0.29$ ). On the other hand, in the psychoeducational group there were changes in the mean of BO at T1 ( $2.96 \pm 0.38$ ), T2 ( $3.05 \pm 0.44$ ), T3 ( $2.79 \pm 0.50$ ), and T4 ( $2.83 \pm 0.51$ ). Figure 2 presents an explanation of the changes in the burnout mean comparison in the MBCT counseling group and MBCT psychoeducation groups.



**Figure 2. Comparison of changes in the average burnout scores of the MBCT intervention and psychoeducational groups**

The changes in the mean of the burnout scores in the MBCT counseling and MBCT psychoeducation, as presented in Figure 2, demonstrated that the MBCT counseling group had the highest benefit in decreasing of BO at T4 (after 3-months intervention) than other group and time measurement. This finding also convinced that the impact of MBCT counseling was stronger in decreasing BO than MBCT psychoeducation for the school counselors.

## Discussion

This study was conducted to increase the generalization of an MBCT intervention by testing its effectiveness in counseling and psychoeducational formats given to counselors in Indonesia. The findings confirm that the MBCT counseling and MBCT psychoeducation were effective in reducing CF and BO. The significant reduction in CF and BO after MBCT intervention is in line with the results of various previous studies (Duarte & Gouveia, 2016; Hamilton-West, 2018; Hashemi et al., 2019; Hente et al., 2020; Perez et al., 2022; Silver et al., 2018). Therefore, this research has succeeded in generalizing the application of MBCT to reduce CF and BO for school counselors in Indonesia. This expanded generalization is important, considering that school counselors are at risk of experiencing burnout due to the consequences of their work, which often causes emotional exhaustion (Hamelin, et al., 2023).

The research also found that the MBCT counseling given over 6 meetings in the form of counseling (between T1-T2) and in the MBCT psychoeducation (between T2-T3) was effective in reducing CF and BO. Interestingly, the results of the 3-month follow-up on CF and BO showed

differences in the effects of MBCT presented in the form of counseling and psychoeducation. The MBCT presented in the form of counseling consistently reduced CF and BO at the time of the T3 and T4 measurements. However, the MBCT psychoeducation contributed no decrease in CF or BO levels at follow-up (T4). In fact, the CF and BO levels at T4 were no different from before the MBCT psychoeducation intervention (T1 and T2). The effects of MBCT psychoeducation seemingly tended to be temporary, while that presented in a counseling format had effects that tended to be consistent in the immediate term. Overall, the findings have succeeded in clarifying the issue of the effectiveness of the MBCT intervention presented in counseling and psychoeducational formats (Wong et al., 2016).

During the 3-weeks intervention of the MBCT counseling and psychoeducation, the school counselors were given daily homework exercises, including mindfulness exercises guided through audio instructions, followed by mindful breathing, sitting meditation, and mindful movement. Mindfulness exercises contributed to increasing awareness of the participants' feelings, moment-to-moment thoughts and body sensations, along with exercises designed to be integrated with the application of mindfulness skills in daily activities. All the homework exercises were recorded for review to ensure commitment to implementing the program. The research was structured around clear session-to-session manual protocol descriptions; monitoring of experimenter compliance with the protocol; and school counselors' compliance with homework (Schroevers & Fleer, 2019). After the interventions, the MBCT counseling was compared with the MBCT psychoeducation in session meetings, and time and attention, with counselors having to obey the agenda at each session the same number of times. The decrease in CF and BO was due to the different consistency of mindful practice between the counseling MBCT and psychoeducation MBCT groups; the counseling MBCT group tended to be more consistent in practicing mindfulness compared to the psychoeducational MBCT group. This seems to be due to the subjects from the MBCT counseling group understanding the relevance of mindful practice to reduce their CF and BO. However, subjects from the psychoeducational MBCT group understood the benefits of mindful training for efforts to reduce CF and BO but did not appreciate its relevance to the CF and BO conditions they experienced. This finding is in line with the result of previous research from Baker (2016) who explained that individuals experience a significant positive impact after implementing mindful activities. Therefore, MBCT emphasizes self-acceptance, and encourages viewing CF and BO thoughts as simple ones, not reflections of reality (Rodrigues et al., 2017).

The findings of the research confirmed the influence of the consistent mindful exercises on reducing the CF and BO of the school counselors, such as mindful breathing and sitting meditation. This corresponds to previous research discussing the effects of sitting meditation on reducing school counselors' burnout level at the workplace (Mohammed et al., 2018). It means that the mindful exercises could help counselors recognize and realize their needed personal qualities, including empathy and compassion, in the counseling process. Similarly, Siegel (2009) argues that mindfulness can facilitate self-adjustment, which later can increase people's capacity to adjust themselves to others. In the same way, the findings of this research emphasize the importance of

encouraging the commitment to practice mindful exercises for the MBCT psychoeducational to reduce CF and BO. Therefore, this research recommends mindful exercises for school counselors who are facing burnout. Furthermore, the MBCT psychoeducation has potential to be implemented to school counselors for preventing them experienced CF and BO.

### Limitations and Future Research

This research has numerous limitations, particularly in terms of sample size. First, the small size reduced the meaningful analysis of the interaction effects, so the generalizability of the results was limited by this. Second, the school counselors' preferences were not measured for the experimental group assignment prior to randomization.

Further investigations are required to modify the application of MBCT in a psychoeducational format and to determine suitable mindfulness exercises which have greater effects on school counselors' CF and BO reduction. Moreover, self-compassion factors could be included in the analysis of future research. This is because researchers have assumed that self-compassion creates opportunities to self-improvement as an intrapsychic reaction after negative emotions (Neff, 2003). Ultimately, the positive impact of self-compassion can not only improve the personal welfare of counselors, but also be related to concern for the well-being of the recipients of counseling services.

MBCT intervention trains school counselors to accept their own thoughts as past mental events and releases their patterns of thought and automatic thoughts. In this research, the difference effect of MBCT in counseling and psychoeducational formats was successfully demonstrated in reducing CF and BO. Therefore, it enriches the provision of counseling services to help professionals, such as school counselors (Chan et al., 2021).

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