

The Effects of Mindfulness-Positive Psychology Program on the Stress and Well-Being of Call Center workers

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Abstract

Background/Objectives; This study was conducted to relieve stress and promote well-being psychology by applying a mindfulness positive psychology program to call center workers. **Methods/Statistical analysis;** The study subjects were 54 call center workers, and the duration of the study intervention was from January to February 2014. Mindfulness positive psychology program 24 subjects were used as experimental groups and 30 subjects were used as controls for 8 weeks. Analysis was performed using the SAS 9.3 version program and analyzed by χ^2 -test, t-test, ANCOVA and Fisher's exact test. **Findings;** In the experimental group to which the program was applied, the level of job stress was lower than that of the control group ($p < .001$). In the experimental group to which the program was applied, negative cognitive emotion regulation strategies decreased and positive cognitive emotion regulation strategies increased ($p < .001$). Subjective well-being, including satisfaction with life and life satisfaction expectancy, increased in the experimental group to which the program was applied ($p < .001$). The experimental group showed a significant reduction of job stress response such as somatization, depression and anger ($p < .001$). The Mindfulness-Positive Psychology program was effective in reducing the job stress of call center workers, increasing subjective well-being, and reducing stress responses. **Improvements/Applications;** Therefore, the program applied in this study is proposed as a good way to relieve the job stress of many call center workers.

Keywords: Mindfulness; Positive psychology; Stress; Well-being; Call center; Workers

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Introduction

The work environment of the call center is to deal with demanding customers by using the phone, and the call center workers complain of physical health discomfort due to work such as tension with the customer (Lin Y H *et al.*, 2009). Workers' physical discomfort is a cause of increasing the risk of various health problems, and it has been reported that workers perceived higher job stress (Lin Y H *et al.*, 2010). In addition, the work factor of the call center increases the risk of psychological health disorders, and 39.4% of call center workers complain of depression and anxiety, and about 24% of them have used psychiatric drugs in the past 12 months (Charbotel *Bet al.*, 2009). These call centers' unique job demands increase job stress and threaten the health of workers, and are sensitively related to high turnover rates (Rameshbabu *Aet al.*, 2013). It is reported that individuals experience stress or well-being according to the

state of motivation existing in their body and mind during the coping and evaluation process, and that they can maintain their physical and psychological well-being when choosing an adaptive and positive coping strategy(Kim JH., 2006). Mindfulness meditation is a self-healing process in which you learn how to cope well with stress with positive coping strategies, and its methods are based on the ability of relaxation, attention, awareness and insight, breathing meditation, orthodox meditation, Body scan, yoga meditation, walking meditation, etc(Kabat-Zinn J., 2011).Kim proposed a program that combines positive psychological intervention and mindfulness, and said that the purpose is to apply it to the stressful group and the general public, and that the effect can be enhanced when the purpose is to heal diseases, relieve stress, and promote happiness and growth(Kim JH., 2010).Therefore, this study attempted to confirm the effect on their job stress, well-being, and stress response by applying a mindfulness-positive psychology program to relieve stress for those who work in the call center.

Materials and Methods

The purpose of the study is to verify the effectiveness of the mindfulness-positive psychology program on the job stress level, cognitive emotional regulation strategy, subjective well-being and stress response of call center workers. First, the influence of the mindfulness-positive psychology program on the level of job stress of workers is investigated. Second, the influence of the mindfulness-positive psychology program on the cognitive emotional regulation strategies of call center workers is investigated. Third, the influence of the mindfulness-positive psychology program on the subjective well-being (satisfaction with life and life satisfaction expectancy) of call center workers is investigated. Fourth, the effect of the mindfulness positive psychology program on somatization, depression, and anger reflecting the stressful reactions of workers was investigated.

Mindfulness-Positive Psychology Program

The mindfulness-positive psychology program consisted of a total of 8 sessions, 100 minutes per session. Mindfulness meditation training was conducted in the first half of the session, and positive psychological intervention was applied in the second half.

Data Analysis

For ethical consideration, the research was conducted after obtaining approval from the Research Ethics Committee of University C (MC13FAS10135).The G*Power 3.12 program was calculate the number of subjects. The data collection period was from January 2014 to February 2014. The study subjects were 54 call center counseling workers belonging to company K located in Y and D districts of Seoul, and 24 call center workers in Y district were used as the experimental group and 30 call center workers in D district were used as the control group. Analysis was performed using the SAS 9.3 version program and analyzed by χ^2 -test, t-test, ANCOVA and Fisher's exact test.Age, a variable having a difference between the two groups, was treated as a covariate.

Questionnaire

Korean job stress measurement tool was used(Chang S J *et al.*, 2005). Job demand Cronbach's α is .81, job autonomy Cronbach's α is .67, relationship conflict Cronbach's α is .71, job instability Cronbach's α is .70, organizational system Cronbach's α is .74, inadequate Cronbach's α is .71, organizational culture Cronbach's α is .73. Cognitive emotion regulation strategy used the CERQ-short(Granefski N *et al.*, 2001). Cronbach's α is .70 - .84.As the well-being measurement tool, subjects' subjective well-being tool was used(Diener E *et al.*, 1985; Kim J H., 2007). Cronbach's α is .81 - .95.A modified version of the shortened version of

Choi's(Choi S M *et al.*, 2007) 22 questions was developed based on 39 items of Stress Response Inventory (SRI) developed by GO(Goo G B *et al.*, 2000). In this study, physical symptoms were Cronbach's α is .86, depression Cronbach's α is .91 and anger Cronbach's α is .88.

Results and Discussion

The characteristics of the subjects are shown in Table 1. Age, the variable difference between the two groups, was treated as a covariate($p= .035$). The job stress between the two groups is shown in Table 2. In the group to which the program was applied, the total job stress score decreased after the experiment($p<.001$). The differences in cognitive emotional regulation strategies between the two groups are shown in Table 3. Compared to the control group, the score of the positive cognitiveemotional control strategy was higher in the experimental group, and the score of the negative cognitiveemotional control strategy was lower($p<.001$). Subjective well-being and stress response are shown in Table 4. Compared to the control group, the subjective well-being score was higher in the group to which the program was applied, and the score for stress responses was lower($p<.001$).

Table 1: General characteristics of subjects

Variables	Categories	Experimental(24)	Control(30)	χ^2 or t(p)
		M \pm SD/N (%)		
Age(year)		36.37 \pm 7.37	32.56 \pm 4.80	-2.19(.035)
Gender	Female	24(100.0)	30(100.0)	
Marital status	Married	8(33.3)	9(30.0)	.068(.798)
	Single	16(66.7)	21(70.0)	
Education	High school	9(37.5)	10(33.3)	.256(.879)
	College	8(33.3)	12(40.0)	
	University	7(29.2)	8(26.7)	
Religion	Protestant	7(29.2)	12(40.0)	(.594)*
	Catholic	3(12.5)	3(10.0)	
	Buddhism	2(8.3)	5(16.7)	
	Others	12(50.0)	10(33.3)	
Empolyment	Regular	13(54.2)	19(63.3)	.464
	Irregular	11(45.8)	11(36.7)	
Shift work	Day work	24(100.0)	30(100.0)	
Work duration(month)		82.75 \pm 46.60	59.53 \pm 49.41	-1.76(.84)
Total work duration(month)		102.8 \pm 55.08	87.60 \pm 58.93	-.97(.337)
Department	Inbound	17(70.8)	20(66.7)	(.534)*
	Outbound	1(4.2)	5(16.7)	
	blending	5(20.8)	4(13.3)	
	Others	1(4.2)	1(3.3)	
Monthly income (10,000 won)	\leq 150	2(8.3)	3(10.0)	(.310)*
	\leq 200	9(37.5)	17(56.7)	
	\leq 300	13(54.2)	10(33.3)	

* : Fisher's exact test

Table 2: Job stress

Variables	Group	Pre-test	Post-test	F(p)
		M \pm SD	M \pm SD	
Job demand	Experimental	65.62 \pm 19.08	53.47 \pm 17.19	15.82(<.001)

	Control	60.56±21.77	68.06±19.09	
Job control	Experimental	52.08±11.59	39.58±11.33	48.41(<.001)
	Control	49.44±15.46	59.17±13.90	
Interpersonal conflict	Experimental	33.33±14.65	22.22±14.67	27.45(<.001)
	Control	26.30±17.14	39.63±21.97	
Job insecurity	Experimental	34.72±18.33	23.61±14.68	22.80(<.001)
	Control	41.11±21.32	52.22±22.20	
Organization system	Experimental	43.06±15.86	33.68±11.12	15.65(<.001)
	Control	46.11±17.74	56.67±15.70	
Lack of reward	Experimental	47.22±12.37	45.37±20.18	0.07(.759)
	Control	48.52±16.11	46.27±20.86	
Occupational environment	Experimental	33.68± 20.34	37.15± 19.81	1.80(.156)
	Control	36.94± 13.43	32.50± 20.57	
Total score	Experimental	44.25±9.12	36.44±8.26	39.68(<.001)
	Control	44.14±10.39	50.65±10.85	

Table 3: Comparison of changes in Cognitive Emotion Regulation Strategies

Variables	Group	Pre-test	Post-test	F(p)
		M±SD	M±SD	
Positive Cognitive Emotion Regulation Strategies	Experimental	31.92±5.90	37.54±5.28	89.68(<.001)
	Control	33.17±5.52	29.13±5.59	
Negative Cognitive Emotion Regulation Strategies	Experimental	21.58±7.92	16.00±3.37	64.09(<.001)
	Control	24.43±5.75	23.67±8.20	

Table 4: Subjective well-being and stress response

Variables	Group	Pre-test	Post-test	F	p
		M±SD	M±SD		
Satisfaction with Life	Experimental	17.29±4.35	21.63±4.16	51.89	<.001
	Control	17.03±3.82	15.47±3.92		
Life Satisfaction Expectancy	Experimental	23.54±6.74	27.79±5.34	31.23	<.001
	Control	22.67±5.13	19.93±5.04		
Subjective well-being	Experimental	40.83±9.76	49.42±8.00	81.68	<.001
	Control	39.70±8.18	35.40±7.40		
Somatization	Experimental	21.58±7.92	16.54±6.35	7.17	.01
	Control	24.43±5.75	23.67±8.19		
Depression	Experimental	20.03±5.10	14.08±6.11	12.27	<.001
	Control	20.03±5.40	18.71±6.88		
Anger	Experimental	15.77±4.63	8.75±3.69	43.83	<.001
	Control	13.46±4.13	13.25±4.39		
Stress Response	Experimental	59.47±15.36	39.38±14.72	23.26	<.001
	Control	57.93±12.34	53.54±18.09		

As a result of the application of the positive mindfulness program in this study, the job stress score decreased after applying the program. This was the same result as the result of a metastudy applying the mindfulness stress relief program to the general public, relieving stress, depression and anxiety and Improving the quality of life even better (Khoury B *et al.*, 2015). In the experimental group, subjective well-being, consisting of sub-factors of satisfaction with life and life satisfaction expectancy, was significantly increased. As a result of applying the 8-week

mindfulness meditation program to employees of large corporations, it was the same result as reducing stress and increasing well-being(Bodstock S *et al.*, 2019). In a study that applied the well-being cognitive cataloging technique to female college students five times, it was consistent with the results that the applied group improved subjective well-being, including satisfaction with life and life satisfaction expectancy, and relieved stress(Shin A *et al.*, 2010). As a result of applying a mindfulness-based program to nurses and service workers, the effect of improving emotional burnout, promoting relaxation, and enhancing life satisfaction was confirmed(Poulin P A *et al.*, 2008). In the experimental group, the positive cognitive-emotional regulation strategy was significantly increased, but the negative cognitive-emotional regulation strategy was significantly decreased. This is the same as the result of a study that reduces negative emotions because subjects clearly see their emotional content due to mindfulness training, observe and re-evaluate their experiences constantly changing(Kober H *et al.*, 2019). These results are interpreted as the effect of the cognitive coping method of the mindfulness model, as a stress relief effect that increases positive emotions and decreases negative emotions through positive re-evaluation of stress stimuli(Garland E l *et al.*, 2011).

Conclusion

This study proved its effectiveness by applying a mindfulness-positive psychology program as a strategy for stress relief of call center workers, and it is said that the basis for applying a stress relief program for workplace workers was established. Therefore, it is expected to contribute to the vitalization of related research by expanding it to workers in various fields in the future.

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