
**Improving Emotional Intelligence to Develop Healthy Behaviour
in Leather Gloves Factory Worker**

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Abstract

Lifestyle determines body condition becomes healthy or sick. Healthy lifestyle depends on healthy behavior. Healthy behavior development affected by some factors, such as personal experience, environment, culture, influence of trusted people, mass media, institution, religion, residency, and personal emotion. This study aim to develop healthy behavior of worker at leather gloves factory in Yogyakarta by improving emotional intelligence (EI). This study was performed on two study group (control and treatment) consisted of 10 workers, respectively. Emotional intelligence score and healthy behavior of two study groups were tested by monitoring the answer of questionnaires which given before and after treatment. The groups were given lecture and workshop about emotional intelligence with 4 steps. Each step were consisted of 3 sessions. One Sample Kolmogorov-Smirnov Test and *Pair Sample Test* results shown that there were significant increase of emotional intelligence ($p=0.02$) and healthy behavior ($p=0.010$) after lecture and workshop session. The result of regression analysis shows that there was significant influence of emotional intelligence to healthy behavior of leather gloves factory workers in Yogyakarta. Improving Emotional intelligence could develop healthy behavior of leather gloves factory workers in Yogyakarta.

Keywords

emotional intelligence; healthy behavior; EI program; factory; worker

1. Introduction

Healthy lifestyle is determined by individual healthy behavior. Healthy behavior is a self-controller in maintaining the quality of health (Azwar, 2013). Health-related quality of life also has a role in determining the nutritional needs, physical activities, relaxation, and other activities that can develop healthy lifestyle (Notoatmodjo, 2011). On the contrary, unhealthy behavior will affect on the lack of attention to nutritional needs. The quality of attention on achievement of healthy lifestyle needs is determined by personal self-management. One of success factor on self-management is emotional intelligence (Ruiz,*et.al.*, 2012). Emotional intelligence (EI) defined as the ability to

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perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth” (Mayer & Salovey, 1997)

Previous study suggested that emotional intelligence is useful for decreasing the expression level of emotion and self-dependency to others (Linley et al., 2011). The ability in decreasing of emotional expression level is supported by emotional intelligence level against self-emotion (Setyowati et al., 2010). It has been shown that emotional intelligence has a role in self-recognition, awareness, empathy, and good communication skill with others. Leila et al., (2012) have suggested that improving emotional intelligence (EI) also can decrease personality disorder and depression level. EI also takes a role as controller of happiness, will, self-motivation, prevents frustration, empathy, also set the direction of thought and action (Goleman, 2007). EI program on type 2 diabetes mellitus patients was shown positive result on their quality of life (Yalcin et al., 2008). Other study on high school students has shown there is a positive correlation between EI program with motivation to do more physical activities and social interaction, and it also has improved their mental health (Li et al., 2009). Social interaction in a good working environment contributed on the success of a healthy life. The success of a healthy life requires the ability to be patient which is supported with emotional intelligence (Dusseldorp et al., 2010). Healthy lifestyle in the workplace has benefit on reducing risk of accidents (Swaputri, 2010). The purpose of the study was to investigate the effect of an EI program on the health behavior of workers in leather gloves factory.

2. Material and Methods

2.1. Design Sample

Pretest-posttest control group design model was used as the study pattern. A total of 20 leather gloves factory worker volunteered to participate in the program. Respondents were picked using purposive sampling method with inclusion and exclusion criteria. Leather gloves factory worker who have worked for 1 year without mental disorder or under a doctor care were included in the study (a total of 20 workers). Of these 10 were randomized for the study group and 10 for the control group.

Data were obtained by answering the questionnaires as an instrument in emotional intelligence measurement. Questionnaires were answered before and after lecture and workshop session. There were 25 questions in the questionnaire which have been tested using product moment and reliability test using Alpha Cronbach. The result of EI questionnaire was 0.444 shown counted r was higher than r table with $n=20$ and $\alpha=5\%$

which indicated that questions were validated. Reliability test result using Alpha Cronbach was 0.981 which >0.60 shown that emotional intelligence variables were reliable.

2.2. Study Procedure

Study was conducted on September-December 2014 at the meeting room of leather gloves factory in Yogyakarta. Emotional intelligence was measured from all respondents (control and treatment group) by answering the questionnaire before treatments. Lecture and workshop sessions were conducted periodically in 4 steps. Each period consist of 3 sessions with 100 minutes duration. Emotional intelligence after treatment was measured. Data then were analyzed using One Sample Kolmogorov-Smirnov Test and Pair Sample Test.

3. Results and Discussion

Table 1 shows that there are no changes of emotional intelligence and healthy behavior on control group for 4 months of the study. This condition indicated that there would be no change of emotional intelligence and healthy behavior without treatment intervention that related to there isno information dynamic on work environment which can stimulate the improvement of worker emotional intelligence (EI). It was correspond with Azwar (2013) that argued healthy behavior (HB) change could be stimulated in persuasive way by putting the new ideas, new thoughts, or opinions into personal thought. Without these stimulations, there will be no change on their life behavior.

Table 1. Outlines the EI and HB Score of Control and Treatment Group.

No.	Code	Pre Test		Post Test		Description
		IE Score	BH Score	IE Score	BH Score	
1.	KRY(control)	60	72	60	72	Relative Constant
2.	DSR(control)	72	75	72	76	Relative Constant
3.	KST(control)	70	76	70	76	Relative Constant
4.	STK(control)	50	60	50	60	Relative Constant
5.	DST(control)	56	60	56	60	Relative Constant
6.	STK(control)	40	65	45	65	Relative Constant
7.	DSN(control)	55	55	55	55	Relative Constant
8.	TGR(control)	50	60	50	60	Relative Constant
9.	MTS(control)	49	70	49	70	Relative Constant
10.	BJY (control)	60	60	60	60	Relative Constant
11.	SR	76	79	77	80	Increase
12.	MYN	60	69	74	73	Increase
13.	TW	65	80	86	85	Increase
14.	TNJ	65	62	67	70	Increase
15.	SNU	82	76	91	92	Increase
16.	ADM	52	70	70	82	Increase
17.	BJY	67	48	68	70	Increase
18.	TMN	65	74	86	79	Increase
19.	SMD	65	63	69	67	Increase

The results of paired samples test (Table 2) show that emotional intelligence scores (pre-test and post-test) was $p=0.002$ which means in the 95% of confidence interval there were significantly different EI score. Analysis of differences on pretest and posttest healthy behavior (Table 2) was shown $p=0.010$ which means in the 95% of confidence interval there were significantly different mean scores of healthy behavior.

Table 2. One Sample Kolmogorov-Smirnov Test and Pair Sample Test Scores of Emotional Intelligence and Healthy Behavior after treatments

	Mean	std Deviation	Paired Differences		t	df	Sig. (2 tile)
			std Error Mean	95% Confidence Interval of the Difference Lower Upper			
Pair 1. EI_Score_Before EI_Score_After	-9.80000	7.43565	2.35136	-15.11914 -4.48086	-4.168	9	.002
Pair 2. HB_Score_Before HB_Score_After	-8.90000	863391	2.73028	-15.07633 -2.72367	-3.260	9	.010

The results of the regression analysis are displayed in Table 3. It show that there is significant effect of emotional intelligence on healthy behavior ($p=0.005$). The results showed that improving emotional intelligence has significant effect on the improved health behavior on leather gloves factory workers.

Table 3. ANOVA (b) Regression Test of Emotional Intelligence Effect on Healthy Behavior

Model	Sum of Squares	df	Mean Square	F	Sig.
1. Regression	449,971	1	449,971	14.255	.005(a)
Residual	252.529	8	31.566		
Total	702.500	9			

Description : a. Predictors: (Constant), b. Healthy behavior score after treatment (dependent variable)

There are improvements of emotional intelligence and healthy behavior of workers on treatment group which given lecture and workshop. Pair simple test data (table 2) shown the significant effect of treatment on emotional intelligence ($p=0.002$) and healthy behavior (0.010). The results of ANOVA regression analysis (table 3) explained that there were significant improvement of emotional intelligence ($p=0.005$) with healthy behavior. The emotional intelligence improvement gave the positive effect on leather gloves factory workers in Yogyakarta (Weng *et al.*, 2009). Emotional intelligence could induce self-recognition on someone which cause they become more sensitive on environment and choose wisely between following their desire or healthy life needs. The ability to manage their self-desire controlled by their emotional intelligence

(Reeves, 2005). Goleman (2007) stated that self-awareness can be achieved when someone has high emotional intelligence which can prevent them to do anything that will give negative effects. Self-awareness will give the direction to safety. Self-awareness which developed on leather gloves factory workers has stimulated them to behave in healthy way.

4. Conclusion

The study demonstrated that there was a significant effect of Emotional Intelligence development training workshop on the workers of leather gloves factory in Yogyakarta.

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