

# The Effect of the Burnout on the Negative and Positive Automatic Thought in a Japanese Nurses



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## INTRODUCTION

	2009	2011
Turnover rate in Japanese	11.2%	10.9%

It has been said that the most important factor underlying the high turnover is burnout. To prevent nurses' turnover, it is necessary to prevent burnout. it has often been reported that in Japan, the likelihood of burnout is higher in younger nurses (Yamazaki et al. 1999,Ohue et al.2011).

- It is suggested that a **Cognitive behavior therapy (CBT)** is effective in one of the strategies of burnout reduction (Ohue et al.2011).
- It is suggested that the process of a burnout progresses in the process of “Emotional exhaustion” →“Depersonalization” →“Personal accomplishment.” (Leiter,M.P.,& Maslach,C., 1988)
- However, it is not verified to the process of a burnout how automatic thought has affected.**

## METHODS

**Subjects**  
A total of 336 nurses (27 males and 309 females) who worked at 3 acute-care hospitals and had a 5-year or shorter clinical experience.

**Questionnaire**  
**Measurement of burnout:** The MBI (Maslach Burnout Inventory for Japanese version) was used.

**Measurement of automatic thoughts:** The Japanese version of Automatic Thoughts Questionnaire-Revised (ATQ-R) was used (Kodama et al, 1994).

**Ethical consideration**  
For a subject explained a purpose and a method of this study. An answer was free will and explained that a disadvantage did not occur by having investigation cooperation or not. The research protocol was approved by the Hiroshima University Ethics Committee.

## PURPOSE

The purpose of this study is to examine the effect on a burnout of the negative automatic thought and positive automatic thought in a nurse, and to consider effective cognitive approach.

## RESULTS

First, in order to examine the effect by the combination of negative automatic thought and positive automatic thought, We considered "negative evaluation of the future" and "self-blame" as negative automatic thought and positive automatic thought, classified into the low group high group using the median about each of subscale, and conducted two-way ANOVA which make these groups a factor every three subscale of a burnout. The results revealed a significant interaction for “emotional exhaustion” (p < 0.05). Namely, it was confirmed that the higher the score for negative automatic thoughts, and the lower the score for positive automatic thoughts, the higher the score for emotional exhaustion. In relation to "depersonalization" and "personal accomplishment", although there was no significant interaction, a significant difference was found for the main effect. In order to examine a concrete factor affecting, We conducted multiple regression analysis. As a result, in "emotional exhaustion", and "depersonalization", "negative evaluation of the future" showed positive relationship and showed negative relationship by "positive automatic thought." Moreover, in the "personal accomplishment", "positive automatic thought" showed positive relationship.

Table1. Effects of automatic thoughts on burnout								
		NAT high		NAT low		Main effect(NAT)	Main effect(PAT)	Interaction
		PAT high	PAT low	PAT high	PAT low	F[df=(1, 332)]	F[df=(1, 332)]	F[df=(1, 332)]
		N=91	N=83	N=96	N=66			
Emotional exhaustion	M	17.00	20.67	15.84	17.26	23.76**	29.41**	5.81*
	SD	4.56	3.65	4.51	4.15			
Depersonalization	M	13.48	15.70	11.18	11.56	37.08**	6.03*	3.00 <sup>n.s.</sup>
	SD	5.10	5.83	4.34	3.36			
Personal accomplishment	M	13.67	11.24	14.26	13.09	8.78**	19.09**	2.34 <sup>n.s.</sup>
	SD	3.69	3.42	3.95	3.86			
NAT=Negative automatic thoughts				*: p<.05    **: p<.01    n.s.: non significant				
PAT=Positive automatic thoughts								

Table2: The relation of automatic thought and burnout			
burnout	Emotional exhaustion	Depersonalization	Personal accomplishment
	β	β	β
Negative evaluation of the future	0.26**	0.33**	-0.13 <sup>n.s.</sup>
Negative self evaluation	0.06 <sup>n.s.</sup>	0.08 <sup>n.s.</sup>	0.02 <sup>n.s.</sup>
Positive thinking	-0.27**	-0.09 <sup>n.s.</sup>	0.32**
R <sup>2</sup>	0.21	0.19	0.14

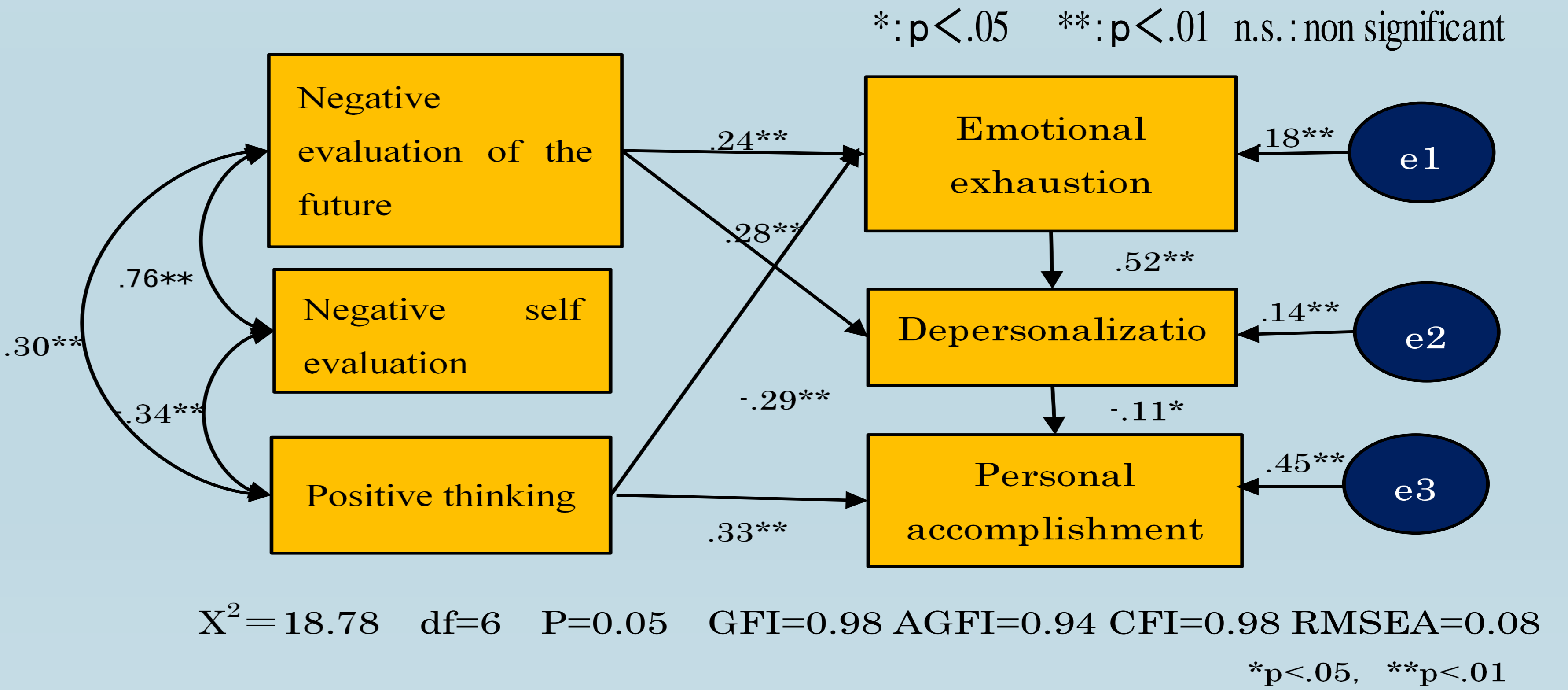


figure 1. Model of negative and positive automatic thought in burnout process

## CONCLUSION

That is, in decrease in a burnout, while putting power into decreasing "negative automatic thought", it is necessary to increase "positive automatic thought." It was suggested especially that decrease of "negative evaluation of the future" and the intervention in ""positive automatic thought" are important. This was mostly in agreement also with the result of Kendall (1992), and a possibility that this method could reduce "emotional exhaustion" used as the key point of a burnout was suggested.