

## The Effect of Health Promotion Behavior on Emotional Happiness

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### Abstract

*This study was designed to examine the affect health promotion behavior to emotional happiness for 20-30's in Korea through cross-sectional descriptive research. There were a total of 279 people who participated in this study, 198(71.0%) were males and 81(29.0%) were females. The data collection period was from December 1 to 15, 2018. The tools used to measure health promotion behaviors were HPB (Health Promotion Behavior) developed by Walker et al., and emotional happiness was PANAS (Positive and Negative Affect Scale) by Developed by Watson et al., All data was analyzed using SPSS 18.0 program. As a result of analysis, 62 (49.6%) were solving interpersonal problems and stress relief while drinking, and the people who ate twice a day were most frequent. In conclusion, health promotion behaviors have a strong correlation with emotional happiness. Based on the above results, it was suggested that the program of happiness for lining in the 20-30s age groups should strengthen the contents of health responsibility, guidance of substance abuse, formation of social relations and self actualization.*

**Keywords:** 20-30s age groups, Cross-sectional descriptive research, Emotional Happiness, Health Promotion Behaviors,

### 1. Introduction

The ages of 20-30 are the marriage, childbirth, and childcare. It is the time to achieve intimacy and productivity as a life task and this period also plays a very important social role as the most socially active period [1-2]. People often say those period are often the ones who set the foundations for comfortable life through various fluent opportunity. In addition, the happiness of the 20-30s has a great influence on the family and social role in the whole life, it could be a basis for preparing the happy senior age [3]. However, the present 20-30 generations in Korea are pouring out words that are pessimistic about their situation [4]. The so-called 'Sampo generation' implies such a meaning. 'Sampo generation' is giving up on three things; giving up on love, marriage, and childbirth [5]. This is a very unfortunate phenomenon at a time when the foundation of life should be sincerely initiated.

Due to the global economic downturn and extreme youth employment crisis, problems have arisen in many

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countries such as Japan and Europe. In Europe, young people who are hard to guarantee their future due to unstable employment conditions and low wages are sometime referred to as 'IKEA generation' [6]. Korea is also accelerating this problem. The 'Sampo generation' problem, which is now in its 20s and 30s, will be linked to serious social problems. So far, analyzing the contents of these problems, many 20s start with the burden of reimbursement of student loans after graduating from college. Also, they are reported to have a considerable burden of preparing for employment due to a job competition. In addition, a marriage requires a house to live in. Nevertheless, excessive house prices are very burdensome, so they have given up on dating or marriage in the 20-30's. People have task to solve at their age, and when they are not doing this, they feel unhappy, and situations like those in their 20s and 30s have caused them to feel unhappy.

The concept of happiness in various fields has been described as 'quality of life' or 'subjective well-being' and also happiness is used in the quality as a concept such as 'subjective of life' or 'subjective well-being' [7-9]. In other words, happiness is a subjective feeling that enhances the quality of life. Only a few decades ago, our economy status was not as good as it is now. But today's younger generation is feeling more unhappy about their lives than it was when economic conditions were difficult, and they are abandoning marriage and giving birth due to such anxiety. If so, the economic conditions and employment competition that have been studied do far may not be all of the unfortunate causes of the younger generation. According to a research by JA Kim et al., [7]. The research emphasized that health promoting behavior affect emotional happiness in the elderly people.

Health promotion is defined in the Ottawa Charter as "the process of cultivating the ability of people to increase their control over their health and improve their health" [10-11]. And the goal of health promotion is to give everyone the same opportunity and resources to ensure that everyone reaches their full potential for health. According to JA Kim et al., the quality of life is emphasized to practice and maintain health promoting behavior. A more detailed definition of health promoting behavior is the definition of Walker and Pender. Walker and Pender (1987) defined health promotion behaviors as activities to improve a healthy lifestyle, and five categories of health promoting activities were classified as health responsibility or personal hygiene, nutrition habit, exercise, stress management, social relation, and self-actualization [12]. Personal hygiene could be defined as an act of maintaining cleanliness of body such as personal hygiene. In the concept of health promotion, 'nutrition' is to maintain a person in the best condition by eating a balanced diet which can reduce the person's risk of heart disease, diabetes, osteoporosis and some cancers. Exercise is an important health promotion activity that maintains health by promoting strengthening of muscles and flexibility, including prevention of cardiovascular disease. Health promotion emphasizes prevention; Stress management is an important health promotion. Stress management can also be seen as important in promoting mental health by strengthening positive mentalities. In addition, stress management can effectively reduce chronic diseases. In a recent competitive society, people are exposed in various social environments whether they want or not, in this social environment, formation of social relations is an important factor in forming the intimacy and support of social relations. The social environment is related to behavioral mechanisms and immune function [13-14]. In this concept, social relations are related to behavioral mechanisms and immune function. In this concept social relations are related to health promotion. Self actualization is to maximize potential by satisfying one's own needs. In other words, it means to promote health as much as possible. Looking at the above studies, the ultimate goal of health promotion focuses on physical and mental emotional well-being. Recently, Korea is expressing its unhappy life in the 20s and 30s who are engaged in socially active activities, so that they could say 'Sampo generation' rather than happiness. Happiness is a subjective concept and the discussions about these expressions are diverse. However, it could be said that the negative expressions of the present age, which developed economically than the past, solve the absolute poverty, but the relative poverty has increased.

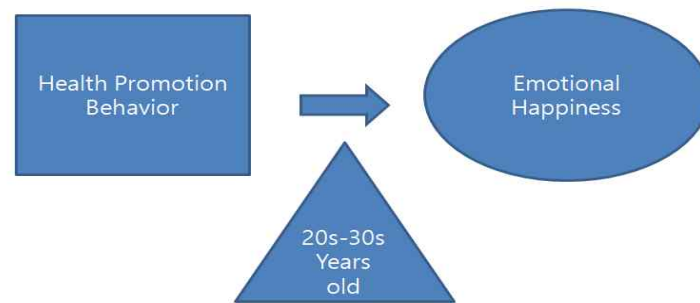
In the 20s and 30s, it is an important time to start a new life as an adult, and it is also a time to form new families such as love, marriage, and childbirth. This period is also the most active period of our society, and its happiness will have a considerable impact on society as a whole. The purpose of this study was to identify the general characteristics of the 20-30 age groups and to investigate the effect of health promoting activities on emotional happiness. Through this research, basic data of realistic program's developing to solve their real problem will be prepared. Therefore, the purpose of this research is as follows. First, identify the general

characteristics of people in their 20s and 30s. Second, analyze the correlation between health promotion behavior and emotional happiness. Third, determine the Effect of Health Promotion Behavior on Emotional Happiness.

## 2. Research Methods

### 2.1. Research design

This research was designed to investigate the effect of health promoting behavior on emotional happiness in Korea 20-30 age group through cross-sectional descriptive research (Figure 1)



**Figure 1. Research design**

### 2.2. Research tools

#### 2.2.1. Health Promotion Behavior

The health promoting behavior measurement tool for this study was developed by Walker et al., [12]. A total 47 items were composed of personal hygiene, nutrition habit, substance abuse, exercise, stress management, and self-actualization. 1 point was interpreted as ‘not at all’, 2 points as ‘sometimes’, 3 points as ‘often’, and 4 points as ‘always’. The higher the score, the higher the health promoting behavior. The reliability of the sub-factors of the health promotion behavior in this research was as Table 1.

**Table 1. Sub-factor Reliability of HPB Measurement Tool**

Sub-factor	Item Number	Cronbach $\alpha$
Personal hygiene	1-10	0.725
Nutrition habit	11-18	0.731
Substance abuse	19-24	0.752
Exercise	25-29	0.831
Stress management	30-39	0.808
Self actualization	40-47	0.898

#### 2.2.2. Emotional Happiness

Emotional happiness was measured by the positive and negative affect scale (PANAS) developed by Watson, D., Clark, A. A., & Tellegan, A. [15]. This questionnaire was a 5-point Likerts composed of 10 items related to positive emotion and 10 items representing negative emotion. Negative emotions were calculated by scoring backwards. And the higher the score, the higher the emotional happiness. In this research, the reliability

(Cronbach alpha) of PANAS was 0.904.

### 2.3. Research participants

Participants who participated in the research were 20-30 generations in Korea who voluntarily responded by sending the questionnaire online at random. Among the respondents who participated in the study, 279 copies of the data were used for the analysis. The survey period was December 1 to 15, 2018.

## 3. Result

### 3.1. General characteristics.

A frequency analysis was performed to determine the general characteristics of the participants (Table 1). The respondents were 36-39 years old with 198 (71.1%) of them, in the following case, 48 (17.2%) were below 25 years old, 21 (7.5%) were 31-35 years old and 14 (4.3%) were 26-30 years old. Among the participants 198 (71.0%) were males and 81 (29.0%) were females. The education level was the highest with 141 (50.5%) people graduated from university, 69 (24.7%) graduated from graduate school, 63 (22.6%) graduated from high school, 3 (1.1%) graduated from middle school and 3 (1.1%) graduated from elementary school. Marriage status was the highest with 189 (37.7%) married, 84 (30.1%) unmarried, 3 (1.1%) separated and 3 (1.1%) divorced. There were 132 (47.3%) people with no religion, 69 (24.7%) with Protestantism, 42 (15.1%) with Catholicism, 33 (11.8%) with Buddhism, and others with 1 (3.3%). Of the respondents, 125 (80.7%) were drinking alcohol and 69 (24.7%) were the most likely to drink for social relationship making, 32 (15.1%) were drinking alcohol because they just liked alcohol, 33 (11.8%) were drinking alcohol because of their mood, 30 (21.5%) drink alcohol to relieve stress, and others were 21 (7.5%). As for smoking, the highest number of people who do not smoke at present was 135 (48.4%) people, 103 (36.6%) people answered that they smoke and 42 (15.1%) people answered that they quit smoking. The average daily sleep time was 141 (50.5%) sleeping 6-8 hours a day, 108 (38.7%) sleeping 4-6 hours and 27 (9.7%) sleeping for 8 hours or more, and 3 (1.1%) for less than 4 hours. Among them, 159 (57.0%) were the most frequent meals, and 51 (18.3%) were vegetarians, 36 (12.9%) were others, and 12 (4.3%) were eating school food mainly. The number of people eating twice a day was the highest with 129 (46.2%) people, with 123 (44.1%) with 3 people and 21 (7.5%) people with irregular, once a day meal per day was 3 (2.2%) .

**Table 1. General characteristics**

N=279					
Variables	Type	N (%)	Variables	Type	N (%)
Age	↓ 25	48(17.2)	Education	Elementary	3(1.1)
	26-30	14(4.3)		Middle	3(1.1)
	31-35	21(7.5)		High	63(22.6)
	36-39	198(71.0)		College	141(50.5)
Gender	Male	198(71.0)	Marriage	Master ↑	69(24.7)
	Female	81(29.0)		Married	189(24.7)
Religion	Protestant	69(24.7)	Smoking	Single	84(30.1)
	Catholic	42(15.1)		Separate	3(1.1)
	Buddhist	33(11.8)		Devoice	3(1.1)
	Others	3(1.1)		Yes	103(36.6)

Alcohol	None	132(47.3)	Meal	No	135(48.4)
	Social	69(24.7)		Stop	42(15.1)
	Happiness	33(11.8)		Meat	159(57.0)
	Stress	30(21.5)		Vegetable	51(18.3)
	Enjoy	42(15.1)		Instant	21(7.5)
	Others	21(7.5)		School food	12(4.3)
Sleeping	None	54(19.3)	Number of Meal	Others	36(12.9)
	↓ 4hr	3(1.1)		1 time	3(2.2)
	4-6hr	108(38.7)		2 times	129(46.2)
	6-8hr	141(50.5)		3 times	123(44.1)
	8hr ↑	27(9.7)		Irregular	21(7.5)

### 3.2. Correlation between health promotion behavior and emotional happiness.

Pearson correlation was used to analyze the relationship between health promotion behavior and emotional happiness (Table 2). The results of the analysis appeared they emotional happiness was found in Hygiene ( $r=.468$ ,  $p<0.01$ ), Nutrition ( $r=.258$ ,  $p<0.01$ ), Exercise ( $r=.334$ ,  $p<0.01$ ), and Social relation formation ( $r=.677$ ,  $p<0.01$ ), and Self-actualization was correlated  $r=.662$  ( $p<0.01$ ) in the statistical significance level.

**Table 2. Correlation between health promotion behavior and emotional happiness**

Variables	Mean	SD	1	2	3	4	5	6	7
1.Hygiene	3.77	0.56	1	.487**	.238**	.333**	.391**	.441**	.468**
2.Nutrition	2.80	0.72		1	.202**	.236**	.154*	.198**	.258**
3.Abuse	2.75	1.00			1	-.075	.127**	.039	-.002
4.Exercise	2.88	1.03				1	.303**	.194**	.334**
5.Relation	3.57	1.59					1	.642.**	.677**
6.Actualization	3.87	1.59						1	.662**
7.Happiness	3.49	0.60							1

\*\* , Correlation is significant at level 0.01 (both side)

\* , Correlation is significant at level 0.05 (both side)

### 3.3. Differences in Health Promotion Behavior and Emotional Happiness according to gender

A t-test was conducted to identify the difference of health promotion behavior and emotional happiness according to gender of research participants (Table 3). As a result of the analysis, under statistical significance, male and female appeared differences in substance abuse and exercise. Substance abuse was appeared to be higher in female than male (male=2.45, female=3.48,  $p<0.01$ ) and exercise was higher in male than female (male=2.97, female=2.66,  $p<0.05$ ).

**Table 3. Differences in Health Promotion Behavior and Emotional Happiness according to gender**

Type	Mean		SD		T	P
	Male	Female	Male	Female		
Happiness	3.77	3.78	.621	.393	-.263	.793

Nutrition	2.77	2.88	.740	.650	-1.150	.251
Abuse	2.45	3.48	.944	.728	-8.744	.000**
Exercise	2.97	2.66	1.055	.919	2.289	.023*
Relation	3.56	3.59	.606	.551	-.469	.640
Actualization	3.89	3.81	.676	.604	.978	.329
Happiness	3.49	3.47	.628	.515	.332	.740

\*, p<0.05, \*\*,p<0.01

### 3.4. Differences in Emotional Happiness according to marital status

An ANOVA test was conducted to identify the difference in emotional happiness according to marital status (Table 4). The results of the analysis appeared that the current separation group had higher emotional happiness (M=4.40, SD=.000), and married people were appeared as M=3.56, SD=.547, single people as M=3.28, SD=.654, ), and devoiced people as M=3.80, SD=.000) under the statistical significance (p<0.01). Therefore emotional happiness was the highest among those who separated in the statistical significance (p<0.01).

**Table 4. Differences in Emotional Happiness according to Marital status**

Marital status	Mean	SD	F/p	Post hoc result
Married(a)	3.56**	.547	4.362/.000**	c>a,b
Single(b)	3.28*	.654		
Separate( c)	4.40**	.000		
Devoiced(d)	3.80	.000		

\*, p<0.05, \*\*,p<0.01

### 3.5. The Effect of Health Promotion Behavior on Emotional Happiness

Multiple regression analysis was conducted to identify the effects of health promotion behaviors on emotional happiness (Table 5). The results of regression analysis appeared that the personal hygiene (t=2.627, p<0.05), substance abuse (t=-2.524, p<0.05), social relation formation (t=7.417, p<0.01), self-actualization (t=6.098, p<0.01) factors affect emotional happiness at statistical significance. The explanatory power of the health promotion behavior on emotional happiness was 59% (R<sup>2</sup>=.590) and the Durbin-Watson value was 1.836, so that the independence of the residuals for analysis have been secured.

**Table 5. The Effect of Health Promotion Behavior on Emotional Happiness**

Independent Variable	Nonstandard factor		$\beta$	t	P	Tolerance
	B	SD				
Constant	.258	.185		1.393	.165	
Hygiene	.142	.054	.134	2.627	.009*	.578
Nutrition	.058	.038	.069	1.535	.126	.741
Abuse	-.062	.025	-.104	-2.524	.012*	.881
Exercise	.048	.025	.083	1.914	.057	.806
Relation	.399	.054	.394	7.417	.000**	.535
Actualization	.296	.048	.325	6.098	.000**	.532

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 $R^2=.590$ , Modified  $R^2=.581$ ,  $F=65.222$ ,  $p=.000$ , Durbin-Watson=1.836

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Dependent variable : emotional happiness

\*,  $p<0.05$ , \*\*,  $p<0.01$ 

#### 4. Conclusion

The beginning of this research began with the report the happiness index of 20-30 generations in Korea was low. A total of 279 participants were included in this research and those who voluntarily participated by sending a questionnaire online. Data collection for the study was conducted from December 1, 2018 to December 15. The questionnaire for the study consisted of general characteristics, health promotion behavior items, and emotional happiness items. The time required for the questionnaire response was about 10 minutes. Analysis methods for this research were frequency analysis, t-test, ANOVA, and multiple regression analysis using SPSS 18.0. As a result of general characteristics analysis, there were 36-39 years old with 198 (71.1%) of them, in the following case, 48 (17.2%) were below 25 years old, 21 (7.5%) were 31-35 years old and 14 (4.3%) were 26-30 years old. The participants of this research were limited to 20-30, but most of the respondents actually took over a relatively large proportion of the 36-39 year olds and needed an understanding of the interpretation of the original research purpose. And also among the participants 198 (71.0%) were males and 81 (29.0%) were females. In other words, the majority of this study could be attributed to males aged 36-39. Of the respondents, 125 (80.7%) were drinking alcohol and 69 (24.7%) were the most likely to drink for social relationship making, 32 (15.1%) were drinking alcohol because they just liked alcohol, 33 (11.8%) were drinking alcohol because of their mood, 30 (21.5%) drink alcohol to relieve stress. Of the respondents, 125 (80.7%) responded that they drank alcohol. Of these, 62 (49.6%) were drinking alcohol for socialization and stress relief. These results indicate that almost half of the respondents have solved interpersonal problems and stress by drinking alcohol. And the number of people eating twice a day was the highest with 129 (46.2%) people, with 123 (44.1%) with 3 people and 21 (7.5%) people with irregular, once a day meal per day was 3 (2.2%). And 129 (46.2%) of those who eat two meals a day were found not to eat nutritionally balanced meals. As a result of the correlation analysis between health promotion behavior and emotional happiness, there were strong correlation between two of them in the statistical significance level ( $p<0.01$ ). The results of this study were similar to those reported by Scorcolini-Comin F et al., through 'The scientific study of happiness and health promotion: an integrative literature review [16]. These above results showed that the sub-factor of health promotion behaviors affect emotional happiness. As a result of the effects of health promotion behaviors' sub-factor on emotional happiness, personal hygiene ( $t=2.627$ ,  $p<0.05$ ), substance abuse ( $t=-2.524$ ,  $p<0.05$ ), social relation formation ( $t=7.417$ ,  $p<0.01$ ), self-actualization ( $t=6.098$ ,  $p<0.01$ ) factors were found to affect to emotional happiness at statistical significance. Results such as these were similar to those highlighted in cross-cultural review and [17-18] and it was similar to what Diener E emphasizes in its analysis of subjective well-being. In other words, among the five sub-factor of health promoting behavior, four domains except nutrition were found to affect emotional happiness. Based on the above results, it was suggested that the program of happiness for living in the 20-30s age groups should strengthen the contents of health responsibility, guidance of substance abuse, formation of social relations and self actualization.

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