

Study of Social Distance and Knowledge on Attitude toward Mental Illness in University Students

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ABSTRACT

Background/Objectives: Mental illness was one of the major health problems in modern society. The purpose of this study was to investigate knowledge, social distance, and attitude toward mental illness in university students, determine correlation among these variables, and analyze their effects on the attitude toward them mental illness. It intended to identify the factors for the attitude toward mental illness and provide basic data that could help develop research and programs to form positive attitude toward them.

Method/Statistical Analysis: Participants were 482 university students in G metropolitan city. The collected data were analyzed using SPSS/win 23.0 program. The general characteristics of the subjects were frequency, percentage, mean and standard deviation. Data were analyzed with independent t-test, ANOVA and Pearson's correlation coefficients and multiple regression analysis.

Findings: The participants were aged 21.89 ± 3.20 on average, 72.7% were female. The most frequent major was public health 48.1%, followed by science and engineering 37.1%, humanities 10.7%, and art 42.0%. The most frequent channel of getting information about mental illness was media 41.5%, followed by voluntary service 26.8%, practical training 10.6%, someone around them 10.6%, education 6.4%, a mental illness person 4.1%. The level of knowledge was 10.52 ± 2.04 , the minimum value was 0.00, and the maximum value was 15.00. Social distance was 2.61 ± 0.56 , the minimum value was 1.00, and the maximum value was 4.67. Attitude toward mental illness was 3.59 ± 0.35 , the minimum value was 2.88, and the maximum value was 4.70. The mean score of knowledge was 10.52 out of 15.00, social distance was 2.61 out of 5.00 and attitude toward mental illness was 3.59 out of 5.00. Attitude toward mental illness was positively correlated with knowledge ($r=.212, p<.001$) and was negatively correlated with social distance ($r=-.603, p<.001$). The more knowledgeable and shorter the social distance was the more positive attitudes toward mental illness. The stepwise regression analysis found that knowledge ($\beta=.195, p<.001$), social distance ($\beta=-.590, p<.001$), and having a mental illness person around ($\beta=.075, p=.039$), significantly affected the attitude toward mental illness, with the variables accounting for 40.5%.

Improvements/Applications: It has confirmed that correct knowledge and decrease in social distance are factors for positive attitude toward mental illness in the respect of research. Further studies are necessary to develop an effective educational and experiential program that can help get knowledge and reduce social distance.

Keywords: Attitude toward mental illness, Community attitude, Knowledge, Social Distance, University Students

Introduction

Mental illness was one of the major health problems in modern society. For the South Korean people, in 2016, the lifelong prevalence of mental illness was 23.1% and its one-year prevalence was 11.9%; in other words, about 47,000 persons reportedly experienced mental illness during the year^[1]. What is problematic

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is that only about 9% of them made an attempt to get positive treatment from a psychiatrist or a mental health professional^[1]. They avoid counseling with an expert or positive treatment, despite such an increase in the number of mental health problems, probably because the members of the society lack correct knowledge of mental illness and have prejudices and negative attitude toward it^[2,3]. Knowledge of mental illness universally means contents regarding the causes, symptoms, and treatment of mental illness^[4]. Those more knowledgeable about mental illness are more likely to be positive or compassionate toward the mental illness, whereas poor knowledge about symptoms or treatment of disease can make it hard to predict and fearful^[4]. In particular, unreliable, wrong information about mental illness from an uncertain source can increase distorted knowledge and prejudices and lead to negative awareness of mental illness. Social distance generally means the degree of personal permission of social interactions or relations in many different areas^[5]. Putting emphasis on the subjective aspect rather than on the objective aspect of individuals, this concept means individuals' subjective feelings of the members of a certain group or class. Therefore, social distance that the members of society have from the mental illness serves as a crucial predictor of how they interact for interaction or exchange^[6,7]. Attitude means a mental and psychological state directly affecting individuals' response to a certain object or situation. So an attitude that the members of society have from the mental illness can have a significant impact on vocational rehabilitation as well as on early detection and proper treatment of the diseases^[8]. A negative attitude toward mental illness prevents them from getting a chance to exert their ability as a member of society fully and makes them hardly return and adapt themselves to the community, consequently having adverse effects on treatment^[9,10,11,12]. This study aimed to investigate knowledge, social distance, and attitude toward mental illness in university students, determine correlation among these variables, and analyze their effects on the attitude toward the mental illness. It intended to identify the factors for the attitude toward the mental illness and provide basic data that could help develop research and programs to form positive attitude toward them.

Materials and Method

Participants & Data Collection: The purpose of this study was to investigate knowledge, social distance, and

attitude toward mental illness in university students, determine correlation among these variables, and identify the factors for the attitude toward mental illness. The subjects were 482 students. The data collection period was from June 1, to July 30, 2017.

Instrument

General Characteristics: The general characteristics are 9 items including age, gender, major, grade, religion, mental illness person around them, experience of learning mental health, experience of contacting with a mental illness person, channel of getting information about mental illness.

Knowledge: The existing measurement tools were used^[4]. A total of 15 items were composed of 1 points scoring of 'correct answer = 1 point', 'wrong answer = 0 points', 'don't know = 0 points' scale. Reliability analysis showed Cronbach's α coefficient was .71.

Social Distance: The existing measurement tools were used^[13]. The 12 items were composed of 5 points scoring of 'strongly disagree = 5 point', 'disagree = 4 points', 'normal = 3 points', 'agree = 2 points', and 'strongly agree = 1 points' scale. It has two sub-areas: physical distance and interpersonal distance. The higher score means longer social distance. Reliability analysis showed Cronbach's α coefficient was .89.

Attitude toward Mental Illness: The existing measurement tools were used^[14,15]. The 40 items were consisted of 5 points scoring. It has four sub-areas: authoritarianism, benevolence, social restrictiveness, and community mental health with negative items reversely calculated. The higher score means more positive attitude. Reliability analysis showed Cronbach's α coefficient was .71.

Data Analysis

The collected data were analyzed using SPSS/win 23.0 program. The general characteristics of the subjects were analyzed using descriptive statistics. T-test and ANOVA were used to analyze knowledge, social distance, and attitude toward mental illness by the general characteristics, and sheffe's test was used for post-hoc test. Pearson's correlation coefficient was used to determine inter-variable correlation, and stepwise multiple regression was used to identify the factors for attitude toward mental illness.

Results and Discussion

The participants in this study were aged 21.89 ± 3.20 on average, 72.7% were female. The most frequent major was public health 48.1%, followed by science and engineering 37.1%, humanities 10.7%, and art 42.0 %. Freshmen 31.1%, sophomores 23.9%, juniors 34.6%, and seniors 10.4%. Had no religion 72.6%, had no mental illness person around them 90.9%. Had experience learning about mental health 41.7% and had no such experience 58.3%. Had experience of contacting with a mental illness person 68.2% and had no such experience 31.8%. The most frequent channel of getting information about mental illness was media 41.5%, followed by voluntary service 26.8%, practical training 10.6%, someone around them 10.6%, education 6.4%, a mental illness person 4.1%, as shown in table

1.Knowledge differed by major (F=6.823, p<.001), grade (F=11.208, p<.001). Had learning about mental health (t=3.152, p=.002), and had contacting with a mental illness person (t=2.123, p=.034), the channel of getting information by voluntary (F=2.635, p=.016), scored higher for knowledge. Social distance differed by major (F=3.371, p<.001). Had a mental illness person around them (t=-2.802, p=.005), had learning about mental health (t=-4.077, p<.001), had contacting with a mental illness person (t=-3.516, p<.001), showed shorter social distance. Attitude toward the mental illness differed by had a mental illness person around them (t=3.277 p=.002), had learning about mental health (t=2.032, p=.040), and had contacting with a mental illness person (t=3.620, p<.001), showed more positive attitude toward mental illness. There was a significant difference as shown in table 1.

Table 1: General Characteristics and Variables differences according to the General Characteristics

Characteristics	Category	N(%) or M(SD)	Knowledge		Social distance		Attitude toward the mental illness	
			M(SD)	t or F (p)	M(SD)	t or F (p)	M(SD)	t or F (p)
				Scheffe		Scheffe		Scheffe
Age (yr)		21.89(3.20)						
Gender	Male	131(27.2)	10.12(3.02)	-1.323 (.187)	2.63(0.58)	1.446 (.856)	3.50(0.40)	-1.394 (.164)
	Female	351(72.7)	10.54(2.21)		2.61(0.58)		3.58(0.34)	
Major	Health ^a	232(48.1)	11.12(2.12)	6.823 (<.001) a>b,c,d	2.60(0.58)	3.371 (.001) a<b,c,d	3.69(0.34)	1.310 (.192)
	Science, Engineering ^b	156(37.1)	10.29(2.20)		2.91(0.80)		3.62(0.35)	
	Humanities ^c	52(10.7)	10.11(1.47)		2.74(0.82)		3.65(0.31)	
	Art ^d	42(8.71)	9.98(1.88)		2.81(0.90)		3.64(0.41)	
Grade	1st ^a	150(31.1)	10.17(1.79)	11.208 (<.001) a,b<c,d	2.55(0.61)	3.286 (.061)	3.59(0.34)	0.845 (.470)
	2nd ^b	115(23.9)	9.89(2.20)		2.61(0.55)		3.57(0.35)	
	3rd ^c	167(34.6)	10.89(1.47)		2.60(0.49)		3.58(0.31)	
	4th ^d	50(10.4)	11.74(1.88)		2.44(0.59)		3.66(0.41)	
Religion	Yes	132(27.4)	10.50(2.22)	-1.499 (.135)	2.58(0.52)	-0.399 (.690)	3.59(0.37)	0.336 (.737)
	No	350(72.6)	10.87(1.75)		2.61(0.58)		3.57(0.34)	
Mental illness person around	Yes	44(9.1)	10.13(2.19)	-0.853 (.394)	2.40(0.58)	-2.802 (.005)	3.75(0.41)	3.277 (.002)
	No	438(90.9)	10.55(2.22)		2.63(0.55)		3.57(0.35)	
Experience learning about mental health	Yes	201(41.7)	10.90(1.90)	3.152 (.002)	2.48(0.60)	-4.077 (<.001)	3.63(0.37)	2.032 (.040)
	No	281(58.3)	10.24(1.87)		2.70(0.51)		3.56(0.32)	
Experience of contacting with a mental illness person	Yes	329(68.2)	10.67(1.94)	2.123 (.034)	2.55(0.58)	-3.516 (<.001)	3.63(0.36)	3.620 (<.001)
	No	153(31.8)	10.20(1.79)		2.75(0.52)		3.50(0.29)	

Conted...

Channel of getting Information about mental illness	Media ^a	200(41.5)	10.73(1.88)	2.635 (.016) b>f	2.69(0.58)	1.826 (.092)	3.57(0.30)	0.813 (.561)
	Voluntary ^b	129(26.8)	11.91(1.44)		2.53(0.54)		3.61(0.36)	
	Practical training ^c	51(10.6)	10.64(1.72)		2.44(0.58)		3.65(0.37)	
	Mental illness patient ^d	20(4.1)	10.23(1.67)		2.69(0.68)		3.54(0.37)	
	Education ^e	31(6.4)	10.54(2.19)		2.60(0.50)		3.53(0.31)	
	Surrounding people ^f	51(10.6)	9.45(2.06)		2.55(0.44)		3.61(0.37)	

They scored an average of 10.52 ± 2.04 out of 15 for knowledge about mental illness. They scored an average of 2.61 ± 0.56 out of 5 for social distance. Of its sub-areas, they scored an average of 2.63 ± 0.74 for physical distance and 2.58 ± 0.52 for interpersonal distance. They scored an average of 3.59 ± 0.35 out of 5 for attitude toward the mental illness; of its sub-areas, they scored 3.70 ± 0.41 for authoritarianism, 3.68 ± 0.43 for benevolence, 3.58 ± 0.45 for social restrictiveness, and 3.38 ± 0.04 for community mental health ideology as shown in table 2.

Table 2: Degree of Knowledge, Social Distance and Attitude toward Mental Illness

Variables	M ± SD	Max	Min
Knowledge	10.52 ± 2.04	15.00	0.00
Social distance	2.61 ± 0.56	4.67	1.00

Conted...

Physical distance	2.63 ± 0.74	5.00	1.00
Interpersonal distance	2.58 ± 0.52	3.83	1.00
Attitude toward mental illness	3.59 ± 0.35	4.70	2.88
Authoritarianism	3.70 ± 0.41	5.00	2.30
Benevolence	3.68 ± 0.43	4.80	2.27
Social restrictiveness	3.58 ± 0.45	5.00	2.10
Community mental health ideology	3.38 ± 0.04	4.80	1.90

Attitude toward mental illness was positively correlated with knowledge ($r=.212, p<.001$) and was negatively correlated with social distance ($r=-.603, p<.001$). That is, the more knowledgeable and the shorter social distance, the more positive attitude toward the mental illness as shown in table 3.

Table 3: Correlation among Knowledge, Social Distance and Attitude toward Mental Illness

Variables	Knowledge r(p)	Social Distance r(p)	Attitude toward Mental Illness r(p)
Knowledge	1	-.041(.365)	.212(<.001)
Social Distance	-.041(.365)	1	-.603(<.001)
Attitude Toward Mental Illness	.212(<.001)	-.603(<.001)	1

To determine the predictability of the factors for the attitude toward the mental illness, those general characteristics having a mental illness person around, experience of learning mental health, and contacting mental illness person which made statistical differences in the attitude toward mental illness were treated as dummy and processed by stepwise multiple regression analysis along with principal variables, such as knowledge and social distance. When the basic assumption of the regression analysis was reviewed,

there was autocorrelation with Durbin-Watson 1.994, no variable exceeded multicollinearity among independent variables with the Variance Inflation Factor (VIF) ranging from 1.029 to 1.2161. The regression model was significant ($F=66.366, p<.001$). The stepwise regression analysis found that knowledge ($\beta=.195, p<.001$), social distance ($\beta=-.590, p<.001$), and having a mental illness person around ($\beta=.075, p=.039$) significantly affected the attitude toward the mental illness, with the variables accounting for 40.5% as shown in table 4.

Table 4: Influencing Factors on Attitude toward Mental Illness

Measuring Items	B	S.E	β	t	p
	4.199	.086		46.909	<.001
Knowledge	.032	.006	.195	5.475	<.001
Social Distance	-.368	.023	-.590	-16.322	<.001
Mental illness person around	.095	.046	.075	2.073	.039
R ² : .411, Adj R ² : .405, F : 66.366, p<.001					

The efforts to raise the level of empathy and understanding through knowledge about mental disorder and to increase many different types of contact, including voluntary service, are associated with formation of a positive view of mental disorder^[16].

Knowledge, social distance, and having a mentally ill person around were found to be factors for the attitude toward the mental illness, with these variables accounting for 40.5%. It is crucial to give university students many different types of education so that they can have a good understanding of mental disorder and accept it as disease with the objective of forming positive attitude toward the mentally disordered and changing their attitude. Therefore, the efforts to give good publicity related to mental disorder and give more chances to be taught by a relevant expert with the aim of giving a better understanding of the mental illness, including basic human rights and rights to social participation, as well as knowledge-based education are expected to contribute to formation of positive attitude toward the mental illness. The efforts to give more chances to have an empathic talk and form a friendly and positive relationship with them by giving chances for stable contact through various types of small service groups and circle activity to reduce social distance are expected to make positive changes in the attitude toward the mental illness. Since having a mental illness person around also has effects, the efforts to assist the mentally ill with rehabilitation, direct rehabilitation, and social adjustment through various community mental health measures as well as through policies for helping them adapt themselves to the community are expected to facilitate changes in the attitude toward the mentally disordered.

This study is significant in that: First, it has confirmed that theoretical education and experience of contact aimed at forming positive attitude toward mental illness are important in the educational respect. Second, it has confirmed that correct knowledge and decrease in

social distance are factors for positive attitude toward mental illness in the respect of research. Third, it is expected to help university students accept the life of the mental illness and help them return to the community by providing basic data that are useful to develop a program.

Conclusion

Knowledge, social distance, and having a mental illness person around were found to be factors for the attitude toward the mental illness, with these variables accounting for 40.5%. It is crucial to give university students many different types of education so that they can have a good understanding of mental disorder and accept it as disease with the objective of forming positive attitude toward the mental illness and changing their attitude. Therefore, the efforts to give good publicity related to mental disorder and give more chances to be learned by a relevant expert with the aim of giving a better understanding of the mental illness, including basic human rights and rights to social participation, as well as knowledge-based education are expected to contribute to formation of positive attitude toward the mental illness. The efforts to give more chances to have an empathic talk and form a friendly and positive relationship with them by giving chances for stable contact through various types of small service groups and circle activity to reduce social distance are expected to make positive changes in the attitude toward the mental illness. Since having a mental illness person around also has effects, the efforts to assist the mental illness with rehabilitation, direct rehabilitation, and social adjustment through various community mental health measures as well as through policies for helping them adapt themselves to the community are expected to facilitate changes in the attitude toward the mental illness.

Ethical Clearance: Not required

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Conflict of Interest: Nil

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