

# *The Relationship Between the Degree of Stigma and Social Distance in Depression*

## *- The Mediating Role of Anxiety*

Hailin Yang<sup>1,a,\*</sup>

<sup>1</sup>Law School, Tianjin University of Commerce, Tianjin, 300000, China

a. yanghailin@stu.tjcu.edu.cn

\*corresponding author

**Abstract:** As depression and other mental illness groups have come into the public eye, the public has their own views and attitudes towards depression groups, and there are many negative evaluations. There is the stigma of depression and the increased social distance between the depressed community and the public. In this study, we surveyed 190 college students to measure their stigma against depression, social distance from depression, and anxiety. The mediating effect analysis of SPSS data analysis was used to study the relationship between anxiety level as a mediating variable. The current results show that depression stigma is positively correlated with social distance, and depression stigma has a positive predictive effect on social distance, which is consistent with the results of previous studies, such as Rusch et al., found that there is an implicit stigma phenomenon among the public towards mental illness groups, which increases the social distance between the two. At the same time, this study suggests that anxiety levels have a partial mediating effect on the relationship between depression and social distance, and the higher the degree of depression stigma, the higher the anxiety level, which in turn leads to the increase of social distance. This paper provides preliminary evidence for the study of the factors influencing social distance, particularly the effect of the degree of stigma.

**Keywords:** Stigma, Anxiety, Social Distance

## 1. Introduction

One of the potential negative outcomes of the widespread conceptualisation of depression is the stigma attached to it [1]. Studies have shown that there is a significant positive correlation between self-stigma and anxiety in the rare disease patient population. The participants of the survey are 378 patients with rare diseases. The psychological factors measured included the degree of self-stigma, anxiety and adverse childhood experiences, and unsteady load levels. Internalized stigma of mental illness (ISMI) developed by Ritsher et al. was utilized to assess the stigma experience of the participants [2]. The Generalized Anxiety Disorder-7 (GAD-7) scale developed by Spitzer et al. in 2006 test the levels of anxiety [3]. For analysis part, EpiData 3.1 was used to establish the database was established via EpiData 3.1. Analysis was conducted through SPSS 22.0 [2]. Apart from the descriptive statistics, the chi-square test was conducted to compare the differences between groups.

The association between anxiety symptoms and self-stigma and AL levels in rare disease groups was examined through multivariate logistic regression analysis. The results showed that anxiety symptoms (OR=3.619, 95%CI: 2.020~6.483) and self-stigma (OR=5.932, 95%CI: 2.212~15.905) were associated with a high risk of high AL levels in patients with rare diseases (P<0.01). The study took anxiety as the starting point to support the "self-distance effect" proposed in this study, and explored whether there were differences in participants' perception of anxiety-inducing events in the two cases of social distance and temporal distance, social distance and spatial distance, and the study showed that anxiety status was significantly positively correlated with psychological distance [4]. This study showed a significant positive relationship between intergroup anxiety and social distance (r=0.358, P<0.01), and the sample of this study was 582 high school students, including 302 boys and 280 girls, aged 14-20 years [5]. The psychological variables measured in this study were depression stigma, social distance, intergroup anxiety, and self-efficacy, and the social distancing scale was modified from the social distancing scale developed by Bastian et al, The Intergroup Anxiety Scale was modified from the Intergroup Anxiety Scale developed by Stephan et al [4,6]. SPSS20.0 and AMOS23.0 were used for data analysis and processing. The Bootstrap program was used to test the multiple mediation effect.

## 2. Method

### 2.1. Samples and Instrument

This study distributed questionnaires on multiple platforms such as WeChat Moments, Questionnaire Star, Douban, etc., and retained college students aged 18-25 years old through data exclusion, and a total of 48 questionnaires were collected when answering the questions, and the content of the questionnaire was: depression stigma scale, social distance scale, and anxiety scale (SAS) table, a total of 48 questions. Characteristics of the research subjects: The research subjects were mainly college students, a total of 190 people, with an equal proportion of men and women.

Table 1: Questionnaire validity of depression stigma scale

KMO	0.647
Approximate chi-square	677.767
Freedom	190
Sig.	<0.001

Table 2: Questionnaire validity of social distance scale

KMO	0.706
Approximate chi-square	162.740
Freedom	21
Sig.	<0.001

Table 3: Questionnaire validity of SAS

KMO	0.903
Approximate chi-square	1632.909
Freedom	45
Sig.	<0.001

## 2.2. Analysis

Through literature survey, this study learned that social distance of depression groups was significantly positively correlated with depression stigma under the mediating effect of cluster anxiety (with literature). Therefore, this study wanted to further verify whether anxiety as a mediating variable has a significant effect on the independent variable (the degree of depression stigma) and the dependent variable (college students' social distance from the depression group).

## 3. Result

SPSS data analysis software was used to analyze the data collected by the questionnaire.

Table 4: Normality test. X (degree of stigma of depression) Y (social distance) M (level of anxiety)

	statistics	dof	distinctiveness
X	0.085	190	0.002
Y	0.087	190	0.001
M	0.203	190	<0.001

The results showed that XYM did not conform to the normal distribution (Sigx=0.002, Sigy=0.001, Sigm<0.01), so the correlation analysis was carried out using Spearman's formula (See Table 4).

Table 5: Correlation between Degree of Depression Stigma and Social Distance

	X	Y
correlation coefficient	1.000	0.340**
Distinctiveness		<0.001

\*\*At the 0.01 level (two-tailed), the correlation is significant

Table 6: Correlation between Degree of Stigma of Depression and Level of Anxiety

	X	M
correlation coefficient	1.000	0.155
Distinctiveness		0.032*

\*At the 0.05 level (two-tailed), the correlation is significant

Table 7: Correlation between Social Distance and Level of Anxiety

	M	Y
correlation coefficient	1.000	0.356**
Distinctiveness		<0.001

\*\*At the 0.01 level (two-tailed), the correlation is significant

The results showed that there was a significant positive correlation between depression stigma X and anxiety and social distance Y ( $r=0.340$ ,  $\text{Sig}<0.001$ ), anxiety M and social distance Y ( $r=0.356$ ,  $\text{Sig}<0.001$ ), and depression stigma X was significantly positively correlated with anxiety M ( $r=0.356$ ,  $\text{Sig}=0.032$ ) (See Table 5-7).

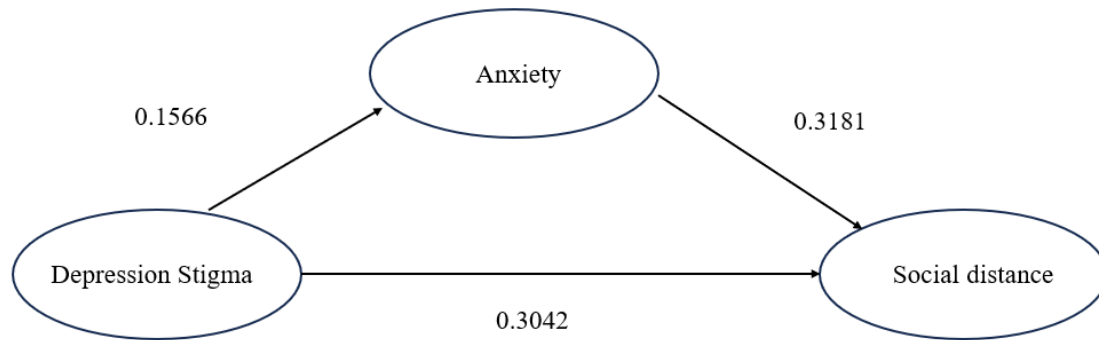


Figure 1: Relation between Variables

Modle4 was used for mediating effect analysis, Process plug-in was used for mediating effect test, and Modle4 was used for analysis, and it was found that anxiety degree had a significant mediating effect as a mediating variable (See Figure 1). Among them, anxiety degree can positively predict the degree of depression stigma ( $t=2.7134$ ,  $p=0.031$ ,  $LLCI=0.0238$ ,  $ULCI=0.492$ ) and social distance ( $t=4.8766$ ,  $p<0.001$ ,  $LLCI=0.1901$ ,  $ULCI=0.4485$ ), and depression stigma can positively predict social distance ( $t=4.6635$ ,  $p<0.0001$ ,  $LLCI=0.2902$ ,  $ULCI=0.7158$ ).

#### 4. Discussion

Improving anxiety has an impact on reducing the stigma of depression, and the anxiety of contemporary college students, and the social distancing of college students towards depressed patients is expected to be improved. The enlightenment of this study can be divided into the following two aspects: first, from the perspective of college students, reducing the stigma of depression can reduce their anxiety, and then reduce the social distance of college students from depression, and at the same time, it can also improve the psychological state of college students. The prejudice and stigma of depression among college students can be reduced through popular science lectures and other forms in universities, so as to reduce the social distance between the two. Second, from the social level, the stigma of the depressed group by college students leads to an increase in the social distance between the two, which is not conducive to the social integration of the depressed group and the solution of psychological problems [7]. Studies have shown that there is a significant association between anxiety symptoms and self-stigma in patients with rare diseases, An association study of anxiety symptoms and self-stigma with unsteady load in patients with rare diseases [5] This is consistent with the findings of this study. Second, previous studies have not directly studied the direct relationship between the two, and there are no studies that directly show a significant association between anxiety levels and public stigma, indicating that this is the innovation of this study. In addition, studies have shown that anxiety has a significant positive effect on interpersonal distance in adolescents the influence of attachment style on empathy in middle school students: the mediating role of emotional complexity and interpersonal distance [8]. This study goes a step further by exploring the effects of anxiety on social distancing and constructing a model of the interaction between the three.

#### 5. Conclusion

Finally, this study explored the complex interactions among college students between social distance, anxiety, and depression stigma. The aim of the present study is to examine the impact factors influencing public perceptions and attitudes regarding people who suffer from depression. Findings

of the present study are in line with prior studies, showing an association between depression stigma and social distancing.

It's worth noting that anxiety plays a mediating role between depression stigma and social distancing. Based on the current study, a partial mediating effect of anxiety levels on the association between social distance and depression stigma was observed. In other words, anxiety levels are positively related to higher levels of depression stigma, which in turn causes a greater social distance.

In the current study, 190 college students were included in the sample. The statistical analyses via SPSS indicated the associations among social distance, anxiety, and depression stigma. The mediation analysis confirmed the mediating role of anxiety between stigma and social distance.

The findings of the present study offer the following implications. For college students, the reduction of depression stigma could contribute to a lower level of anxiety and, consequently, to diminishing social distance. Reducing the depression stigma not only helps to create a harmonious living environment for people suffering from depression, but also helps regular people to communicate more with each other.

In conclusion, this study firstly confirmed the relation between depression stigma and social distance, and then stressed the effect of anxiety as a mediator. Future research could further replicate the outcomes of the current study in a larger sample. Moreover, more longitudinal studies could be conducted to clarify the causal relationship between variables. For therapeutic practice, practitioners should focus on individuals' anxiety, depression stigma for socially isolated groups.

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