

Predictors of Perceived, Personal, and Self- Stigma on Depression and Relevant Interventions

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Abstract: Depression is a severe public health issue that affects millions of individuals throughout the world. However, more than half of patients with depression are reluctant to seek help, and the stigma of depression has been identified as the major barrier to their help-seeking. There are three kinds of stigma: perceived stigma, personal stigma, and self-stigma. However, the existing research lacks distinguishment and comparison among them. This study outlines the respective predictors of the three kinds of stigma, to fill this research gap. The findings of this review show that the three types of stigma have different predictors. People who are female, with greater depression severity, more contact with depression patients, and lower social support, reported higher perceived stigma. Higher personal stigma is predicted by being male, lower depression literacy, and less contact with depression. Moreover, greater depression symptomatology, less knowledge about depression, and less social support are associated with higher self-stigma. The existing studies on anti-stigma interventions suggest that personal stigma can be effectively reduced by the depression awareness campaign. Plus, group psychotherapy works well in decreasing self-stigma. However, existing interventions have a limited effect on reducing perceived stigma. Existing studies on predictors of stigma have some limitations: they are cross-sectional studies and usually focus on only one or two types of stigma. Therefore, future studies should conduct some longitudinal studies and investigate all three kinds of stigma simultaneously to make up for these shortcomings. The main contribution of this paper is distinguishing the predictors of perceived stigma, personal stigma, and self-stigma, providing a framework for future study on antecedents of different stigma and the design of stigma reduction interventions. This review can provide some guidance to the prevention and intervention programs for depression stigma at schools.

Keywords: depression stigma, perceived stigma, personal stigma, self-stigma.

1. Introduction

Depression is the most widespread diagnosable mental disorder. According to World Health Organization, more than 3.8 percent of the world's population suffers from depression, suggesting that around 280 million people in the world have depression [1]. Depression differs from regular mood swings or short-term emotional responses. It brings clinically significant changes in the patients' mood and behaviors, including depressed mood, loss of interest in all or nearly all

activities, a poor appetite, and difficulty sleeping or excessive sleeping [2]. Depression not only affects patients' mood state but also damages their competence to meet their responsibilities. Depressed people may lose interest in most activities of their lives, find it difficult to concentrate, and even attempt suicide. Depression not only brings pain to the patients themselves but also causes some societal issues. Since depression inhibits people's capacity to take the day-to-day responsibilities of life, the functioning of society will be negatively affected. Workers suffering from depression lose an average of 27.2 workdays per year compared with unaffected ones [2]. And these lost productive work time cost many billions lose each year.

Due to the high incidence of depression and the personal and social losses it causes, the study of depression is beneficial in promoting people's mental health. Fortunately, there are already many effective treatments available for depression, including psychotherapy (e.g., cognitive-behavioral therapy) and biomedical treatments (e.g., antidepressant medication) [3]. However, only less than 40% of depressed people seek help from professional, leading to the question of what affects patients' help-seeking behavior.

According to Clement et al., stigma to mental disorders is one of the most common and influential barriers to help-seeking behavior for mental problems [4]. Scholars generally believe that stigma has three subtypes: perceived stigma, personal stigma, and self-stigma. Perceived stigma is defined as a person's perceptions of others' stigmatizing beliefs on depression [5, 6]. Personal stigma, on the other hand, is one's own stereotypes and prejudices towards others with depression. Self-stigma refers to the depressed patients' acceptance of negative thoughts about mental illnesses and application of these beliefs to their own depression [5, 6]. To reduce people's stigma toward depression, it is necessary to know what will affect their stigma first. Unfortunately, most of the previous studies on predictors of stigma do not distinguish the three kinds of stigma, which leads to some seemingly contradictory conclusions. To bridge this research gap, this paper aims to review previous literature on predictors of stigma and summarize the predictors of perceived stigma, personal stigma, and self-stigma separately. Based on the review, the author makes some suggestions for anti-stigma interventions at schools and communities.

2. Predictors of Depression Stigma

2.1. Predictors of Perceived Stigma

2.1.1. Gender

Being female predicts higher perceived stigma among the general population [5, 7, 8]. In the study of Calear and her coworkers, 1,375 adolescents were recruited, and their research results showed that teenage girls tended to have a higher perceived stigma than teenage boys [7]. Similar results have been found in young Australians [8]. According to Jorm and Wright, males were less likely to perceive stigmatizing attitudes about mental illnesses from others. Studies focused on adults from a wider age range also found that the gender of females was related to a greater perceived stigma of depression [5, 6]. The role of gender in the perceived stigma of depressed people is controversial. In a study conducted on Australian adults, Griffiths et al. discovered that among patients with a high degree of depressed symptoms, there was no significant gender difference in felt depression stigma [6]. Similarly, the perception of the public stigma of depressed patients in China showed no gender difference [9]. However, according to Pyne et al., female depressed subjects had a higher perceived stigma than male depressed subjects [10].

2.1.2. Depression Severity

It is counter-intuitive that patients with more severe depression are more reluctant to seek help [11]. The impact of depression severity on stigma can explain this. Studies found that more severe depression is a substantial predictor of high perceived stigma towards depression among both the general public and the patients who have been diagnosed with depression [5, 6, 9, 10].

2.1.3. Contact with Depression

For perceived stigma, the effect of exposure to depression is negative. According to Griffiths et al., adults who reported history of contacting individuals diagnosed with depression tended to have a higher perceived stigma towards depression [6]. Therefore, family members of depressed people are the at-risk population to have a high perceived stigma. This kind of effects of contacting depression also exist among teenagers. For adolescents, having depressed parents predicted higher perceived stigma [7]. Also, young people who used to have mental illness had higher perceived stigma [7, 8].

2.1.4. Social Support

Social support is a critical protective element against perceived stigma for depressed patients [9]. Social support has been highlighted as a facilitator to mental health help-seeking, and Zhou suggested that stigma played a mediating role between social support and medical-seeking behavior of adolescent depression patients [12, 13]. In other words, the higher the social support adolescents receive, the lower their perceived stigma, and thus the timelier and more proactive their medical-seeking behavior. This kind of relationship between social support and perceived stigma has also been confirmed among adults with depression [9, 14].

2.2. Predictors of Personal Stigma

2.2.1. Gender

Contrary to perceived stigma, higher personal stigma is predicted by the gender of males rather than female [6, 7]. And this kind of association between gender and personal stigma is consistent in the general public and people with depression [6, 7].

2.2.2. Contact with Depressed People

In addition to perceived stigma, contact with people diagnosed with depression also predicts an individual's personal stigma. However, the impact of such contact on perceived stigma and personal stigma is completely opposite. Prior experience in contacting individuals diagnosed with depression predicted lower personal depression stigma [5, 6, 8]. Adolescents without a history of parental depression lacked contact with depression and thus had higher personal stigma [7].

2.2.3. Depression Literacy

Depression literacy is an individual's knowledge about depression, including its typical symptoms, risk factors, and effective treatments [5]. Depression literacy has been demonstrated to be a strong predictor of personal stigma. Personal stigma towards depression is lower among people with more knowledge about depression, whether they are depressed patients or not [5, 6]. Since people with more education are more likely to be knowledgeable about mental problems, educational level is negatively associated with personal stigma [6].

2.3. Predictors of Self-Stigma

2.3.1. Depression Severity

Depression severity is significantly correlated with self-stigma to depression. Yen et al. tested self-stigma among 247 outpatients with depression and found that patients with more severe depression symptoms had higher levels of self-stigma in their illnesses [15]. Li et al. also pointed out that depression patients' number of acute attacks predicted their stigmatizing attitudes toward themselves [16]. According to Li et al., repeated depressive episodes may make patients fall into the stereotype of "I am a neurotic," thus aggravating their self-stigma. Similarly, in a study conducted on Australian adults, researchers found that people with more severe depression symptoms tended to have higher self-stigma [5].

2.3.2. Depression Literacy

In addition to personal stigma, studies have shown that people's depression literacy can also influence their thoughts and attitudes toward their own depressive symptoms (self-stigma). A lower educational level predicts higher degree of self-stigma among depression patients and the general public [15, 16, 17]. Patients with more education have lower self-stigma of depression because they have higher depression literacy, which makes them have better acceptance and compliance with medication and psychotherapy [15, 17].

2.3.3. Social Support

Social support significantly affects depression patients' self-stigma [14, 17]. Whether material support or emotional support, social support is significantly negatively correlated with self-stigma in patients with depression [17]. Patients with low social support cannot get understanding and help from others, which will aggravate their sense of loneliness and helplessness, leading to negative beliefs about themselves [14]. Besides, Kim revealed that friend support mediated the relationship between depression severity of university students and their self-stigma, which suggests that social support can buffer the effects of depression on self-stigma [18].

3. Stigma Reduction Interventions

The finding that the antecedents differed for perceived, personal, and self-stigma supports the significance of treating the three notions independently in designing anti-stigma interventions. To be specific, interventions to decrease personal stigma should focus on increasing people's depression literacy, while interventions to decrease perceived stigma should value the role of social support. For self-stigma, the treatments should include improvement in both depression literacy and social support.

3.1. Reduction of Personal Stigma: Depression Awareness Program

Mental health awareness programs are aimed at reducing the personal stigma of the general public through taking educational interventions to increase people's knowledge about mental disorders like depression [19-22]. The school-based mental health programs have been demonstrated to be effective in increasing the mental health literacy of both students and teachers [19, 20]. For school-aged children, there are many universal prevention programs for mental illnesses, and one of them is Adolescent Depression Awareness Program (ADAP). The course content of ADAP involves common signs of depression, identifying the mental disease, the stress that it is a curable disorder, and an introduction to treatment options [19]. The program also emphasizes that youth should

discuss their problems with adults they trust and seek therapy. The survey of Beaudry et al. supported the efficacy of ADAP in increasing depression literacy and facilitating help-seeking behaviors in teens [19]. In addition to students, similar depression awareness programs have also been conducted among teachers. In the study of Jorm et al., high school teachers attended a revised Youth Mental Health First Aid course [20]. In this course, teachers were educated about common mental disorders in adolescents, relevant problems (e.g., self-injury, suicidal thoughts, and behaviors), and how to treat a student with such mental problems. According to Jorm et al., the training increased teachers' mental health literacy, reduced their personal stigma and made them more like mental health professionals [20]. Most of these effects persisted six months after the training [20].

Even though school-based programs are effective among students and teachers, it is impossible to create some "company-based" programs to extend such offline mental health education to ordinary adults. For adults, internet-based programs are effective and available to improve their depression literacy. According to the meta-analysis of Griffiths et al., internet delivery could generate the same impact as face-to-face mental health awareness programs in lowering personal stigma [23]. In a Mental Health First Aid (MHFA) training, researchers found that both e-learning and the printed manual enhanced mental health knowledge and decreased participants' personal stigma [21]. The MHFA e-learning used CDs to teach participants to recognize mental disorders and help a student who is in the midst of a psychological health crisis. Websites providing information about depression could also significantly abate the personal stigma of the general public [22]. In the study on the effect of web-based depression literacy intervention, Griffiths et al. asked participants to read the BluePages website every week [22]. In addition to the basic information about depression, such as its symptoms and treatments, the site stated that depression is a disease and mild depression is as disabling as multiple sclerosis. It also emphasized that depression can and should be treated; thus, seeking treatment is important and wise. After five weeks, the personal stigma of participants who read the BluePages website was significantly reduced [22].

3.2. Reduction of Perceived Stigma

At present, there is no effective method to reduce the perceived stigma [23]. Educational interventions, no matter conducted online or offline [21, 22], generated no significant effects between the results of the pre-test and the results of the post-test. Online cognitive-and-behavioral therapy for 525 general population even caused a negative impact – the CBT increased participants' perceived stigma [22]. The results that interventions effective to personal stigma reduction do not work in decreasing perceived stigma demonstrate the significance of dealing with the notions of perceived, personal, and self- stigma separately while planning stigma reduction interventions.

The reason for the low effectiveness of these existing programs is that they neglected the key predictor of perceived stigma – social support. This paper suggests future interventions for perceived stigma reduction to include social support increasing into their design, such as community-based activities. The community-based activities should target women, patients with depression, and their families, hold regular meetings and invite people to share their views on depression and concerns about other people's prejudices. This kind of meeting can encourage people to know others' true views on depression, and members can support each other.

3.3. Reduction of Self-Stigma: Group Psychotherapy

Group psychotherapy combining psychoeducation and cognition restructuring has been demonstrated to be effective in decreasing the self-stigma of depression patients [24, 25].

Researchers conducted a 6-week group program aimed at reducing the self-stigma of people with psychological problems [24]. They developed a structured group and employed cognitive therapy (stressed establishing unconditional self-acceptance) and a psycho-educational approach to treat participants. Prior to the start of the group and after it ended, the self-stigma of twenty participants (18 – 65 years old) was measured to evaluate the effects of this program. The results showed a considerable reduction in self-stigma after the six group sessions [24]. Another study supported the effectiveness of mindfulness-based group therapy in self-stigma reduction [25]. Mindfulness practice can mobilize the brain's social neural network and cultivate a nonjudgmental awareness of negative emotions [25]. Yuan et al. recruited 160 inpatients with depression aged 18 to 60 and randomly divided them into a control group and an observation group [25]. Both groups received antidepressants based on serotonin reuptake inhibitor (SSRI) and routine nursing intervention in the medical psychology department. The responsible nurses introduced the two groups of participants to the hospital regularly, explained the purpose and precautions of examination and treatment, distributed depression health education materials, and gave discharge guidance before discharge. On this basis, the observation group also included additional group mindfulness decompression training. After four weeks of intervention, both groups' self-stigma levels were lower than before the intervention, but the observation group's self-stigma scores were considerably lower than those of the control group [25]. The results showed that the combination of cognitive intervention and mental health knowledge is more effective than just psycho-education.

3.4. Target Groups of Different Interventions

The focus of an intervention is on which stigma depends on the target group. While designing stigma reduction programs for the general public, the key is to reduce their personal stigma of depression. The aggregation of people's personal stigma forms the real public stigma, representing the general attitude to depression in society. Therefore, decreasing the personal stigma of the general public can create a society friendly to depression. For people with depression, however, the interventions should focus on reducing perceived and self-stigma to promote their help-seeking and treatment adherence.

4. Limitations and Future Direction

Existing studies on predictors of stigma have some limitations. First of all, they are all cross-sectional studies. Future studies can do some longitudinal studies to confirm the effects of these identified predictors on stigma. Additionally, most existing studies focus on only one or two types of stigma. Therefore, assessing and comparing perceived, personal, and self-stigma simultaneously can be a good research direction in the future.

5. Conclusions

This paper is one of the first to compare the antecedents of perceived, personal, and self-depression stigma, which can be a guideline for future studies on the antecedents of various stigma and the design of stigma reduction programs. The findings suggest that the three types of stigma have different predictors. Higher perceived stigma is predicted by being female, severer depression symptoms, more contact with depression, and lower social support. On the other hand, personal stigma is always higher among males, those with lower depression literacy, and those who have limited contact with depressed people. Also, greater depression severity, lower level of depression literacy, and less social support predict higher self-stigma. Existing research on anti-stigma therapies indicates that the depression awareness program is beneficial in lowering personal stigma, and group psychotherapy is useful in reducing self-stigma. Existing approaches, however, have had

minimal success in lowering perceived stigma. Existing research on stigma antecedents has certain limitations: they are cross-sectional studies and usually focus on only one or two categories of stigma. To compensate for these inadequacies, future research can do longitudinal studies that look at all three types of stigma at the same time. This paper can provide some guidance for the design of depression stigma related prevention and intervention programs at schools.

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