

The role of personality traits in influencing diagnostic outcomes

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Abstract:

The global toll of mental illness is broad and far-reaching, affecting individuals, families, communities and society as a whole. The World Health Organization (WHO) estimates that approximately one in four people worldwide will be affected by a mental health problem in their lifetime. Some diagnoses do not have long-term stability. Considering the possibility of multiple co-existing psychiatric disorders when confronting a patient, it can therefore be assumed that the change in the patient's diagnosis is not a change in the disease, but rather a change in one of the features of the assessed disorder. A high value of this feature will manifest as a certain disease, and a low value will manifest as another disease. There has been a great deal of academic research showing a strong link between personality traits and mental illnesses, specifically in terms of how different mental illnesses are characterized by different personality types. The change in diagnosis can lead to changes in treatment. However, it would be helpful if personality traits could be mapped to the possible traits of the mental illness at the outset, to identify possible trends in the patient's condition and to provide more individualized and precise treatment. So the aim of this paper is to expound the possibilities and reasons for the occurrence of changes in psychodiagnostics findings in order to set the basis for discussion, and to point out the continuity and relevance of personality traits and mental disorders by means of several psychological models.

Keywords:-personality traits; mental illness; change in diagnosis

1. Introduction

The global toll of mental illness is broad and far-reaching, affecting individuals, families, communities and society as a whole. The World Health Or-

ganisation (WHO) estimates that approximately one in four people worldwide will be affected by a mental health problem in their lifetime. Many patients are subjected to changes in treatment regimens as a result of a change in diagnosis, which can be burdensome

for patients in a number of ways. Awareness of diagnostic changes is unclear, and physicians' diagnostic results are inaccurate and biased.

2. Diagnostic consistency

One of the major aspects of assessing the reliability of a psychodiagnostic result is the long-term stability of that result. It has long been suggested that the condition can be assessed through long-term recall studies and clinical records. Based on retrospective consistency and prospective consistency we can derive the reliability and stability of the diagnosis. A study of diagnostic concordance found that the concordance could be between 50 percent and 80 percent of diagnoses made at different times, suggesting that a significant proportion of patients may receive a different diagnosis at follow-up assessment. Experiments have been conducted to document the consistency of psychodiagnostic findings in patients treated in different clinical settings, outpatient, emergency, and inpatient settings. The percentages of prospective and retrospective concordance ranged from thirty to fifty for patients with mood disorders in the outpatient setting, from fifty to seventy in the emergency setting, and from seventy to nearly ninety in the inpatient setting. And considering that in real life the outpatient setting is the most common psychodiagnostic setting because it allows them to continue with their normal life and work with only regular visits to the doctor, whereas the inpatient setting is usually used to deal with more serious mental health problems, and the emergency setting usually deals with urgent psychological crises, the psychodiagnostic results from the outpatient setting are more generalizable. In addition, prospective consistency is often considered more reliable because data are collected at or before the event. Retrospective consistency, on the other hand, is susceptible to memory bias or omission of information and thus may not be as accurate as prospective studies. In summary, considering prospective consistency of diagnosis in the outpatient setting would be useful in providing more generalizable conclusions. Based on the data obtained from this experiment, the prospective consistency for mood disorders was 54.9%, including 49.4% for bipolar disorder, but only 35.4% for bipolar disorder and depression and 44.7% for dysthymia. It can be inferred from this that the instability of psychological diagnoses in the present day has a high potential for diagnostic changes.

3. The inner workings of mental illness

3.1 The Continuum/Spectrum Model

The Continuum/Spectrum Model is a theoretical framework in psychology and psychiatry that conceptualizes mental health and mental disorders as existing on a continuum rather than as discrete categories. The spectrum model views various mental health conditions not as independent and separate, but as overlapping and sharing common characteristics. This perspective emphasizes the gradual and continuous nature of symptoms rather than strict diagnostic categories. Gradualism means that the signs of a mental illness are seen as extreme manifestations of normal mental processes. For example, mild anxiety is a normal response to stress, whereas clinical anxiety represents an extreme and disruptive version of that response. Continuity refers to the existence of a continuous transition from normal psychological experience to severe mental disorder (Cuthbert, B. N., & Insel, T. R., 2013). And there is a strong link between various psychological wellness states and different personality traits, because individual differences bring about different perceptions, which result in different mental states (Kathy A. Winter and Nicholas A. Kuiper, 1997). Therefore, we can assume that the same trait exists between personality and mental illness, and if the trait scores high a mental illness will be diagnosed. Based on the categorization of personality measurements such as the Big Five individuality concept, it can be similarly argued that the many different personality dimensions of a person lead to the many different psychological states of the person. When a person is heavily stimulated in a particular situation, such as abuse, bullying, etc., resulting in a high score on his or her assessment, a number of related traits are forced to manifest themselves visibly, and multiple, non-contradictory, and co-existing psychological states ensue, such as social avoidance, panic, anxiety, depression, and aggressive behaviors (Smith, P. K., & Sharp, S., , 1994), which are diagnosed simultaneously as depression, anxiety disorders, and behavioral problems (Juvonen, J., & Graham, S., 2014), manifesting as co-morbidities.

3.2 Co-morbidity

In specific situations or cases, an individual who meets the diagnostic requirements for a mental illness is very most likely to satisfy the analysis standards for other kinds of mental illness at the same time. "Co-morbidity" explains this phenomenon well: people can have multiple diagnoses. There is a wealth of data showing that the prevalence of cases of co-morbidity is much higher than expected, while the prevalence of one mental disorder is

much smaller than expected. (Boyd 1984). A 12 months' research illustrates that more than 40% of patients were comorbid (Ronald C. Kessler, 2005), showing that mental illnesses are interconnected and significantly correlated. And some of the most highly correlated diseases has been represented as some common syndromes: bipolar disorder (major depressive episode with mania or hypomania), double depression (major depressive episode with dysthymia), anxious depression (major depressive episode with mania or hypomania) (Ronald C. Kessler, PhD; Wai Tat Chiu, AM; Olga Demler, MA, MS; Ellen E. Walters, MS, 2005). So one of the big reasons why people will have a change in diagnosis is because of the presence of co-morbidities. Of course, the doctor's diagnostic criteria, and the patient's self-representation are also factors that should not be ignored, but are beyond the scope of our discussion.

4. Correspondence between mental illness and personality

Earlier we mentioned that personality traits and mental illnesses are strongly linked, and this link will be highlighted below through several models.

4.1 Liability-Spectrum Model

The Liability-Spectrum Model is a theoretical framework for understanding and explaining how different individuals or groups perceive and distribute responsibility. In clinical diagnosis, responsibility spectrum models can help psychologists evaluate the sense of responsibility of individuals in different situations. This is useful for understanding individual self-conceptions, behavioral motivations, and emotional responses, especially when diagnosing illnesses such as depression, compulsion, and marginal personality disorder (Kelley, H. H., & Michela, J. L., 1980).

4.2 Attribution Theory

Attribution theory is used to explain people's understood explanations for behavior. Individuals will attempt to attribute the cause of behavior to either intrinsic factors (e.g., personality, motivation) or extrinsic factors (e.g., environment, luck) through the attribution process.

4.3 Internalizing Spectrum

The internalization spectrum is used to explain a group of psychological disorders associated with internalized behavior and emotional problems. These disorders are usually manifested as an introverted transformation of emotions and behaviors, i.e. an individual deals with emotional issues internally. It includes a range of emotional

and anxiety disturbances: depression: persistent emotional decline, low self-esteem, loss of interest and despair; anxieties: excessive fear, fear and tension. Individuals also tend to experience negative emotions, depression, self-confidence, guilt, and other emotional experiences (Achenbach, T. M., & Rescorla, L. A., 2001).

4.4 Externalizing Spectrum

The externalizing spectrum is used to describe a class of psychological and behavioral problems characterized by external behavioral manifestations. Individuals are impulsive and lack self-control, and may act without fully considering the consequences, resulting in harm to others or the environment. Individuals on the externalizing spectrum often tend to blame the external environment or others rather than self-reflecting. They may believe that their behavior is triggered by external pressures or the actions of others, thus reducing self-responsibility (Beekman, A. T. F., & Penninx, B. W. J. H., 2002).

4.5 Connections and interactions

Patients suffering from mental illnesses often experience dysregulation of responsibility, where they individuals have an over perception or absence of responsibility. With an over-perception of responsibility, individuals take on additional unnecessary responsibilities and often feel negative emotions such as guilt, common psychological disorders include depression and anxiety disorders where they worry excessively and blame themselves excessively. Inadequate sense of responsibility is manifested in avoidance behaviors such as antisocial. Thus, the strength of the sense of responsibility can determine what actions or consequences an individual takes in a particular situation. Negative attributional style, on the other hand, refers to an individual's tendency to adopt a negative or unfavorable attributional model when interpreting his or her own or others' behaviors and events, which leads to negative emotional reactions and behavioral outcomes. This attributional style can lead to learned helplessness in individuals. The relationship between learned helplessness and depression is not just about passive helplessness in behavior, but a cognitive process. When individuals repeatedly experience uncontrollable negative events and interpret these events in a negative attributional manner, they develop a chronic negative view of themselves and believe that they have no control over important events in their lives, which ultimately leads to depression (Abramson, 1978).

The responsibility spectrum model and attribution theory can be combined analytically to explain the emotional responses and behaviors of individuals with mental illness. In the internalized spectrum, individuals tend to attribute

negative emotions and problems to themselves, which can lead to excessive self-responsibility and guilt. This can be seen as part of the spectrum of responsibility, i.e. individuals take more responsibility for themselves in the responsibility spectrum. In the externalized sphere, individuals may attribute problems to the external environment or others, rather than themselves. This tendency may manifest itself as evading responsibility or pushing responsibility to

others, which is associated with responsibility allocation in the accountability spectrum model. In behavior problems or behavioral disorders, individuals might feel that they are not responsible for certain behaviors, resulting in more external behaviour (such as aggressive, antisocial behaviours). The relationship between internalization and externalization is not strictly separate, and the two can interact.

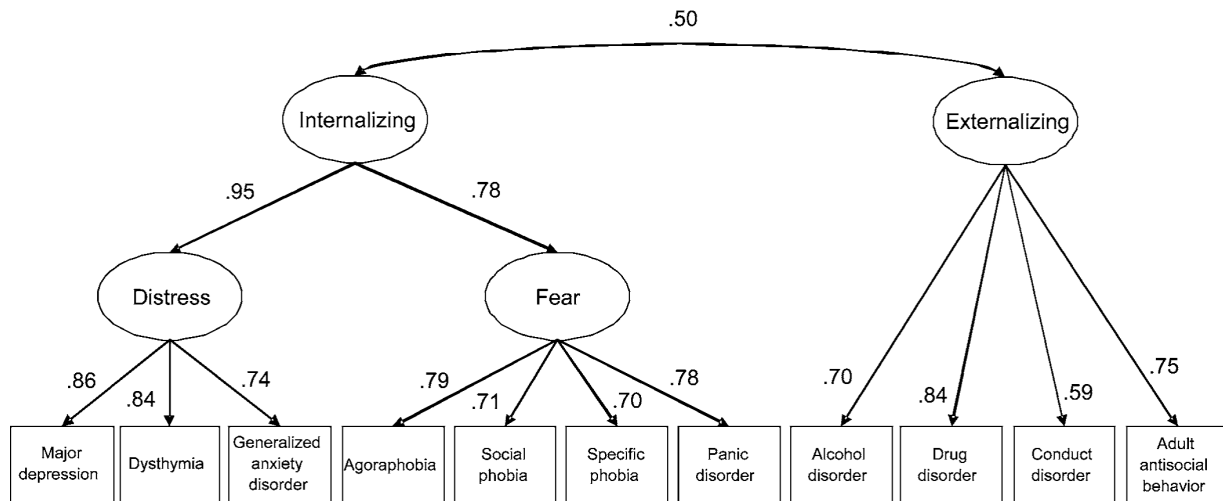


Fig.1 Path diagram for best-fitting meta-analytic model (Robert F. Krueger & Kristian E. Markon, 2006)

As shown in Figure 1, there is a high degree of correspondence between the responsibility construct and personality traits. There is strong empirical support for a close relationship between personality traits and psychopathological phenomena, which sheds light on the close connection between the two and provides insights into the psychological dimensions of the co-morbidity model. Challenges on the spectrum of introversion are strongly linked to negative emotions and general dispositional tendencies, while problems on the spectrum of extroversion are strongly related to specific personality characteristics and broad non-inhibitory domain characteristics (Clark, 2005; Krueger, 2005). There is a close association between personality and the field of psychopathology, considering the criterion level of regulatory imbalance. In this context, negative emotions appear to be a risk factor for introversion disorders. However, when there is an imbalance in the regulatory mechanism, negative emotions may become a risk factor for externalizing disorders. This finding highlights the heterogeneous effects of emotion regulation across personality traits and reveals its significant impact on psychological well-being. In fact, there is already research evidence that personality traits can directly explain the pattern of co-morbidity, a conclusion that is consistent with established psychological theories (Khan et al., 2005). The study found that the pattern of

introversion disorders within the group and coexisting with extroversion disorders was significantly affected by neuroticism. When exploring the co-morbidity pattern, neuroticism and the tendency to explore new things (i.e., inhibitory personality traits) were found to be significant in the group exhibiting extroversion disorders.

4.6 Correspondence

From this we can see that neuroticism has a very important role in mental illness, and there is a large body of study to sustain this conclusion: negative affect is highly linked to neuroticism; depression and anxiety is positively correlated with neuroticism. In the literature on the Big Five personality, Neuroticism refers to high neurosis is often associated with a range of psychological disorders, especially anxiety and depression. High neuroscience individuals are more sensitive to stress responses, have greater emotional fluctuations, and are prone to negative emotions (McCrae, R. R., & Costa, P. T., 2004; Krueger, R. F., & Markon, K. E., 2014). But under spectrum expression, people will have different symptoms. With high N-values, people on the internalizing spectrum are prone to depression, anxiety disorders (including generalized anxiety disorder and social anxiety disorder), obsessive-compulsive disorder, and eating disorders. And people with an externalizing spectrum are prone to antisocial personality

disorder, attention deficit hyperactivity disorder, and more (Lynam, D. R., & Miller, J. D., 2015, Nigg, J. T., 2006). Similarly, we can see that the toughness of duty plays an essential function in psychological health. Responsibility in psychology and psychopathology typically involves the way individuals self-perceive and attribute behaviors, emotions, and outcomes. Research has shown that people with a moderate sense of responsibility tend to exhibit a high degree of psychological resilience, and that they are able to deal successfully in the face of stress or adversity without excessive guilt or avoidance of responsibility. Excessive responsibility, on the other hand, is likely to lead to obsessive-compulsive disorder (OCD) and depression. People with OCD may feel that they must take full responsibility for certain things, such as repeatedly checking that a door is locked for safety, or being unable to part with something for a long period of time, due to their perfectionist or repetitive obsessive-compulsive behaviors or thoughts. This excessive sense of responsibility exacerbates their anxiety and obsessive-compulsive behaviors. Depressed individuals often take excessive responsibility for their own behavior or that of others, leading to feelings of self-blame, guilt, and helplessness. This excessive responsibility may stem from the individual's cognitive biases, such as over-attributing one's own faults or even attributing others' behavior to one's own inadequacies (Tangney, J. P., & Dearing, R. L., 2002). Excessive lack of responsibility, on the other hand, is one of the characteristics of antisocial personality disorder. They lack a sense of responsibility for social norms and the rights of others: this is often characterized by a neglect for the feelings and civil liberties of others and an absence of regret. This lack makes them more likely to take part in antisocial and criminal behavior (Miller, J. D., & Lynam, D. R., 2001). Among the Big Five personalities are Neuroticism as well as Extraversion, Openness, Agreeableness, and Conscientiousness. They are also associated with mental illness but Neuroticism is supported by more research as being the most strongly associated with mental illness (showing a significant positive correlation with the symptoms of most mental illnesses) (Malouff, J. M., Thorsteinsson, E. B., & Schutte, N. S., 2005). The strength of the degree of manifestation of different personality traits determines the psychological state of the person, which affects the likelihood of the existence of co-morbidities as well as leads to changes in the results of psychological diagnosis. Different personality traits also correspond to different acquired psychological disorders. Responsibility and neuroticism play a key role.

5. Discussion

5.1 Clinical application

Given that most patients with mental illnesses choose to be seen and treated in an outpatient setting, it would be helpful if physicians used standardized tests, such as the IPIP-NEO and NEO-PI-R, to test for neuroticism in the initial diagnosis and then to If doctors use standardized tests such as "IPIP-NEO" and "NEO-PI-R" to test the patient's neuroticism values, and then combine them with their own experience and the patient's self-report, they can deduce whether there is a possibility of co-morbidities in the patient, and then personalize the patient's treatment process or medication according to the specific situation to try to avoid changing the treatment when the diagnosis changes at the later stage of the follow-up. Because different conditions require different therapies, according to some research, more severe depression may indicate a better success with behavioral activation than with cognitive treatment, and obsessive-compulsive personality disorder may indicate a better response to interpersonal therapy than cognitive therapy (Barber JP, Muenz LR,1996). Also a multitude of research studies have actually shown that the change in treatment, such as a change in medication, can have a substantial impact on the economic, psychological (self-perception) and other aspects of the patient. Accurate and targeted treatment programs will help patients recover as quickly as possible.

5.2 Limitation

This paper discusses only the relationship in between private characteristic and mental illness, and lacks consideration of individual differences (including gender). Individual differences can affect an individual's adjustment to illness, and given that different people have different life experiences, social support systems, and perceptions, they may have different ways of adapting to the same mental illness. This means that different people have different criteria for the level of responsibility and neuroticism discussed in this paper, which may lead to different outcomes and some individual cases. Similarly, this paper also lacks consideration of the socio-cultural context, where diagnostic tools and criteria may show bias in different cultural contexts, leading to misdiagnosis or inaccurate diagnosis. For example, Western diagnostic criteria may not be applicable to all cultural contexts.

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