RESEARCH ON INTERVENTION MEANS OF PSYCHOLOGICAL IMBALANCE AND CONSCIOUSNESS DISORDER OF UNIVERSITY ADMINISTRATORS UNDER BIG DATA

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SUMMARY

Introduction: The mental health of university administrators is not only directly related to their physical and mental health development but also affects the administrative efficiency. The psychological imbalance and consciousness disorder of the research object, and the staff due to the lack of work enthusiasm, weak sense of responsibility, received a major blow, abnormal family education and other reasons, suffering from psychological imbalance or consciousness disorder, thus affecting the psychological state and behavior of students.

Subjects and methods: Select a number of domestic related industry experts to form an expert group. The research team put forward some countermeasures to alleviate the psychological imbalance and consciousness disorder of the research object, and sent them to the expert group, and asked the expert group to evaluate the effect of the countermeasures. In addition, in order to verify the effectiveness of the selection strategies, 60 university administrators suffering from psychological imbalance or consciousness disorder were selected and divided into experimental group and control group. The experimental group underwent intervention based on the strategies summarized by the expert consultation method, while the control group only received conventional psychological treatment. Before and after the experiment, two sets of questionnaires about psychological imbalance and consciousness disorder were conducted.

Results: According to the expert inquiry method, “training in social psychology”, “training in cognition of social environment”, “confide problems to relatives and friends”, and “deliberate empathy” had the most significant influence, with the mean scores of influence grade being 4.17, 3.55, 3.82, 4.37 respectively. After the grouping experiment, the scores of psychological imbalance and disturbance of consciousness in the experimental group and the control group were 63.5 and 57.0 respectively, and 77.4 and 73.9 respectively, 13.9 and 16.9 less than the latter.

Conclusions: The use of big data technology can play a role in alleviating the psychological imbalance and consciousness barrier of university administrators.

Key words: big data - administrative personnel - psychological imbalance - disturbance of consciousness

INTRODUCTION

The administrative personnel of colleges and universities have frequent contact with college students, so the words and behaviors of students will be influenced by the thoughts and behaviors of administrative personnel of colleges and universities to a great extent (Irshad et al. 2021). However, at present, some domestic university administrators suffer from psychological imbalance or consciousness disorder due to weak sense of responsibility, careless work, disordered professional ethics and values, lack of work enthusiasm, major blow, abnormal family education and other reasons, which will have a negative effect on the immature students’ values (Graupensperger et al. 2020). Consciousness disorder refers to a state in which people’s perception of themselves and the environment is impaired, or the mental activities that people rely on to perceive the environment are impaired (Kane et al. 2019). The causes of consciousness disorders can be divided into intracranial diseases and extracranial diseases (Gutland 2021). The former mainly includes localized diseases, diffuse brain diseases, epilepsy, etc., while the latter mainly includes acute infectious diseases, endocrine diseases, exogenous poisoning, physical damage, etc. (Corallo et al. 2019). On the one hand, the current mainstream treatment methods of consciousness disorders are drug treatment and surgical treatment, and the specific treatment scheme needs to be comprehensively judged according to the cause of disease and the severity of symptoms (Onodera et al. 2019). On the other hand, psychological intervention and other treatment methods have attracted more and more attention in recent years. Psychological imbalance is the manifestation of excessive or insufficient psychological activities and abnormal psychological activities. Psychological disorder includes psychological deviation and psychological disorder (Wang et al. 2020). With the development of economy and the increase of social pressure, more and more teenagers have psychological disorders. Psychological deviation belongs to mild psychological disorder that normal people may have or less. Psychological disorder is a serious psychological disorder only possessed by mental patients. For example, if someone has a serious mental illness, his psychological disorder is also obvious. Psychological deviation and psychological disorder are different in nature and degree. Under certain conditions, the two can be transformed into each other. Psychological deviation can develop into psychological disorder. After treatment, psychological disorder can also be transformed into psychological
deviation. Psychological imbalance syndrome is not a real disease, but just a bad psychological state brought by the change of people’s living environment. With regard to the non-drug treatment of psychological imbalance symptoms, some psychological experts suggest that patients can take a deep breath at night, sort out their thinking and plan their upcoming work in their mind. This method can well alleviate the symptoms of psychological imbalance. Secondly, qualified individuals can do some aerobic exercise, such as jogging, rope skipping, etc. at the same time, in terms of diet, it is suggested to eat some light meals, which can stabilize their physiological and emotional state. Finally, if the symptoms are serious, you should find a psychologist as soon as possible to obtain professional guidance services.

In view of the research issues, experts and scholars in the industry have carried out a large number of studies. Wells et al. investigated 234 female administrators in colleges and universities for the phenomenon that the psychological status of female administrators is more susceptible to uncivilized behavior, and the results showed that female administrators with stronger stigma awareness are more psychologically affected by uncivilized behavior (Wells et al. 2020). The research team of Helminiak designed a social experiment aiming at the phenomenon that the psychological and behavioral patterns of university administrators would be affected by their family economy, and the experimental results showed that the psychological imbalance of university administrators whose family economy level was lower than well-off was significantly more serious (Helminiak et al. 2020). Zhen et al. analyzed the impact of different university management systems on the psychological imbalance and consciousness disorder symptoms of university administrators, and the results of social experiments showed that the severity of psychological illness of administrators in colleges and universities with more relaxed management systems was significantly lower (Zhen 2018). However, most of them only focus on theoretical analysis, and the reliability of the conclusions is not enough. Therefore, this study attempts to design and carry out social experiments on the basis of theoretical analysis to verify the effectiveness of theoretical strategies.

SUBJECTS AND METHODS

Study setting

After using big data crawler technology to collect and study a large number of literatures on psychological imbalance and consciousness disorder, researchers found the main causes of these diseases for university administrators, as shown in Figure 1.

![Figure 1. Causes of psychological imbalance and consciousness disorder of administrative staff in colleges and universities](image)

It can be seen from Table 1 that there are four main reasons for the psychological imbalance of university administrators, namely, the disorder of professional ethics value, lack of work enthusiasm, weak sense of responsibility and careless work. The main reasons for suffering from consciousness disorders are major blows and abnormal family education. The reasons are analyzed in turn below (Shibata et al. 2019). The market economy is impacting people’s value rationality, and some administrative personnel have no time to make
in-depth rational thinking and judgment. As a result, there are all kinds of emotional contradictions and conflicts of thought and even personality. The individual’s ability of rational analysis and moral judgment decreased (Rha et al. 2020). Some college administrators are perfunctory, lack of pioneering spirit, because they cannot correctly understand and grasp the modernization reform of colleges and universities, there are obvious misunderstandings in work ideas and behaviors, which are mainly reflected in the lack of overall concept and advanced consciousness (Zeng et al. 2021). Some university administrators have a weak sense of responsibility. Lack of dedication (Ryan et al. 2018). Under the market economy, the reform of personnel system in colleges and universities is still in the stage of gradual exploration. Gradual deepening stage. Many problems do not have mature treatment methods. Some executives are often angry about the unfair distribution around them. Then the psychology loses balance, and there is an obstacle in consciousness (Shibata et al. 2019). Some staff lack rigorous and meticulous work style. Some university administrators do not recognize their work. Coupled with the lack of effective institutional constraints. Often cannot stand at the height of the overall situation. Achieve overall consideration. In terms of consciousness disorders, patients with these diseases are mainly because they have suffered major mental blows before, or they have not suffered normal family anxiety in childhood, resulting in distorted or incomplete construction of personal consciousness and cognitive system.

**Design**

In order to obtain the countermeasures with certain application value to alleviate the psychological imbalance and consciousness disorder of university administrators, this study first collects a large number of documents in the field of different types of psychological imbalance and consciousness disorder through big data technology, and makes an in-depth study of them. On this basis, 57 experts in psychology, mental illness and key personnel of university administration were selected from China to form an expert group. The research team puts forward some countermeasures that may help to alleviate and treat the psychological imbalance and consciousness disorder of university administrators, and sends them to the members of the expert group, asking them to modify and adjust the countermeasures according to the effectiveness of the countermeasures, and evaluate the impact of the modified countermeasures on alleviating the psychological imbalance and consciousness disorder of university administrators. The impact effect evaluation is fixed as no impact, slight impact general influence, obvious influence and full influence, and give five integers of 1, 2, 3, 4 and 5 to quantify respectively. After completing the feedback, the members of the expert group will return the information to the research team, sort them out, and send them to the expert group again to obtain the next round of evaluation information. The inquiry cycle will not stop until the opinions returned by the members of the expert group have reached an agreement. Then, in order to verify the effectiveness of the selected countermeasures, group experiments are designed and carried out. 60 university administrators who suffered from different degrees of psychological imbalance or consciousness disorder and were willing to participate in the experiment were selected from China as the research objects. They were evenly divided into experimental group and control group. First, the basic information statistics and difference significance test related to the experiment were carried out. The test results showed that there was no significant difference between the two groups. According to the forms of expression, psychological imbalance is mainly manifested in post marital psychological disorder, emotional disorder and mental depression. Psychological disorder after marriage means that the psychological condition of both husband and wife is abnormal. Both parties should understand each other in their daily life and have more equal exchanges in order to fundamentally solve the problem of psychological disorder after marriage. Emotional disorder is a psychological problem with abnormal duration and emotional intensity of individual bad emotional state. Serious emotional disorder can hinder a person from correctly understanding the reality and put himself or others in danger. The main way to deal with emotional disorders is to master the skills of emotional management, so as to improve the level and ability of individual understanding, coordination, guidance, interaction and control of their own emotions and others’ emotions. The fundamental feature of depression is the imbalance of chemicals in the brain, so there are no obvious external signs and reasons for its occurrence. In some people, it seems that physical vulnerability is more likely to lead to depression, while in others, environmental and psychological factors have a greater impact. Although everyone may have depression at any age, the following are the main reasons to increase the incidence rate of depression: family history, major stimuli, physical diseases, alcohol and drug abuse, and gender roles. In order to alleviate the impact of mental depression, we must deal with the above causes. At present, the main treatment of mental depression is non drug treatment. Under this treatment mode, the recovery rate of depression: family history, major stimuli, physical diseases, alcohol and drug abuse, and gender roles. In order to alleviate the impact of mental depression, we must deal with the above causes. At present, the main treatment of mental depression is non drug treatment. 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imbalance and consciousness disorder need to be conducted for the two groups. The two sets of questionnaires are designed by the research team. The score range is 0-100. The higher the score, the more serious the symptoms are. Some contents of the questionnaire are shown in Table 1.

**Table 1.** Some contents of the questionnaire on the score of psychological imbalance and consciousness disorder of the subjects

<table>
<thead>
<tr>
<th>Questionnaire type</th>
<th>Question number</th>
<th>Investigation content</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investigation of psychological imbalance</td>
<td>#1</td>
<td>Do you think your income is reasonable compared with that of your colleagues?</td>
<td>Unreasonable; relatively unreasonable; ordinary; relatively reasonable; reasonable</td>
</tr>
<tr>
<td>Investigation of psychological imbalance</td>
<td>#2</td>
<td>Do you think your boss is fair to yourself at work?</td>
<td>Unfair; relatively unfair; ordinary; relatively fair; fair</td>
</tr>
<tr>
<td>Investigation of psychological imbalance</td>
<td>#3</td>
<td>Do you think your working ability has been underestimated?</td>
<td>Not at all; probably not; uncertain; possible; absolutely</td>
</tr>
<tr>
<td>Investigation of psychological imbalance</td>
<td>#4</td>
<td>Do you think your working hours are significantly longer than those of your colleagues?</td>
<td>Not at all; probably not; uncertain; possible; absolutely</td>
</tr>
<tr>
<td>Investigation of psychological imbalance</td>
<td>#5</td>
<td>Do you think your promotion opportunities are significantly lower than those of comparable colleagues?</td>
<td>Full compliance; relatively consistent; uncertain; relative nonconformity; not at all</td>
</tr>
<tr>
<td>Investigation of psychological imbalance</td>
<td>#6</td>
<td>Do you think your boss often gives you negative comments?</td>
<td>Full compliance; relatively consistent; uncertain; relative nonconformity; not at all</td>
</tr>
<tr>
<td>Investigation of consciousness disorder</td>
<td>#1</td>
<td>How often have you been in a state of confusion in the last three months?</td>
<td>High; relatively high; medium; relatively low; low</td>
</tr>
<tr>
<td>Investigation of consciousness disorder</td>
<td>#2</td>
<td>How often have you fallen asleep in the last three months?</td>
<td>High; relatively high; medium; relatively low; low</td>
</tr>
<tr>
<td>Investigation of consciousness disorder</td>
<td>#3</td>
<td>How often have you been numb in the last three months?</td>
<td>High; relatively high; medium; relatively low; low</td>
</tr>
<tr>
<td>Investigation of consciousness disorder</td>
<td>#4</td>
<td>How often have you had sleep paralysis in the last three months?</td>
<td>High; relatively high; medium; relatively low; low</td>
</tr>
<tr>
<td>Investigation of consciousness disorder</td>
<td>#5</td>
<td>How often have you had hallucinations in the last three months?</td>
<td>High; relatively high; medium; relatively low; low</td>
</tr>
<tr>
<td>Investigation of consciousness disorder</td>
<td>#6</td>
<td>How often have you felt your skin pricked in the last three months?</td>
<td>High; relatively high; medium; relatively low; low</td>
</tr>
</tbody>
</table>

In order to further improve the accuracy of the results of the questionnaire survey, the above questionnaire options are digitized as follows. Arrange the options of each question in descending order of negative effects, and then assign values to each option with the numbers 1, 2, 3, 4 and 5 in turn. After verification, the reliability and validity of the two questionnaires meet the requirements. It is allowed to be used in this study. Finally, in the study, the measurement type features are displayed in the form of mean ± standard deviation for t-test, and the counting type features are displayed in the form of number or proportion of number for Chi square test. The significance level of difference is taken as 0.05.

**RESULTS**

After the study, sort out all effective data and information, first analyze the final results of expert consultation, and count the distribution of different comments of the expert group on the research topic, as shown in Figure 2. Note that all measurement type
features in the study are displayed in the form of mean ± standard deviation for t-test, and counting type features are displayed in the form of number or proportion of number for Chi-square test. The significance level of difference is taken as 0.05.

![Figure 2](image_url)

**Figure 2.** Statistics of the final consultation results of the expert group

The horizontal axis in Figure 2 represents the psychological intervention methods finally agreed by the expert group that can help the research object alleviate the disease. Each filling color represents different levels of influence, and the height of each rectangle represents the number of expert groups whose selection of a method can bring a certain level of influence. It can be seen from the observation of Figure 2 that the expert group agreed that there are four psychological intervention methods that can alleviate the psychological imbalance and consciousness disorders of university administrators, namely, “social psychology training”, “social environment cognition training”, and “telling problems to relatives and friends” and “deliberate transposition thinking”. The number of people in the expert group who choose each countermeasure to have a “full impact” on the alleviation of diseases is 8 respectively there are 11, 3 and 6 people in the expert group. The number of people who choose each countermeasure to have a “significant impact” on the remission of the disease is 28, 31, 13 and 20 respectively. The number of people who choose each countermeasure to have a “general impact” on the remission of the disease is 14, 9, 26 and 21 respectively. The number of people who choose each countermeasure to have a “slight impact” or “no impact” on the remission of the disease is 7, 6 15 and 10, indicating that “social environment cognitive training” plays the most significant role in alleviating the psychological imbalance and consciousness disorder of the research object, “social psychology training” plays the second role in alleviating the psychological imbalance and consciousness disorder of the research object, and “telling problems to relatives and friends” plays a smaller role. After the experiment was carried out according to the consultation results, the score data of psychological imbalance and consciousness disorder of the research object are shown in Figure 3. Note that the calculation method of the mean value of intra group scores in Figure 3 is shown in equation (1).

$$y_j = \frac{\sum_{i=1}^{N_j} x_{ij}}{N_j}$$  \hspace{1cm} (1)

In formula (1), $y_j$ is the mean value of the characteristics to be tested of $i$ groups of samples, $x_{ij}$ is the sample value of $j$ of $i$ groups of samples, and $N_j$ is the number of $i$ groups of samples.

Note that in Figure 3, the horizontal axis represents the evaluation items, namely “psychological imbalance” and “consciousness disorder”, the vertical axis represents the scores of each index questionnaire of each group, and different filling colors represent different groups. According to Figure 3, on the premise that there is no significant difference in the total score of each questionnaire between the two groups before the experiment, there are significant differences in the score data of psychological imbalance and consciousness disorder questionnaire between the experimental group and the control group after the experiment. Specifically, after the intervention, the average scores of psychological imbalance and disturbance of consciousness in the experimental group were 63.5 and 57.0 respectively, which were 13.9 and 16.9 lower than
those in the control group. This shows that a variety of intervention measures accepted by the experimental group, that is, training members in social psychology and social environment cognitive ability, forcing personnel to frequently use transposition thinking to analyze problems in the process of work, and requiring members to communicate frequently with their relatives, are indeed helpful to alleviate the symptoms of psychological imbalance and consciousness disorder of university administrators.

![Figure 3](image_url)

**CONCLUSIONS**

In view of the psychological imbalance and consciousness disorder of some university administrators, this study found some effective countermeasures by means of expert consultation and data collection using big data technology, and then designed and carried out group social experiments to verify the effectiveness of these strategies. The results show that the expert group agreed that there are four psychological intervention methods that can alleviate the psychological imbalance and consciousness disorders of university administrators, namely, “social psychology training”, “social environment cognitive training”, “talking to relatives and friends”, “deliberate transposition thinking”, and the psychological imbalance between the experimental group and the control group after the experiment. The average scores of consciousness disorder questionnaire were 63.5 and 57.0 respectively, which were 13.9 and 16.9 lower than those of the control group. The experimental results show that the countermeasures proposed in this study are indeed helpful to alleviate the symptoms of psychological imbalance and consciousness disorder of university administrators.

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**Conflict of interest**: None to declare.

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RESEARCH ON THE INFLUENCE OF ANXIETY DISORDER ON COLLEGE STUDENTS’ INNOVATION AND ENTREPRENEURSHIP

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SUMMARY

Background: With the advent of the Internet age and the continuous development of information technology, music, dance, education and other methods have been gradually proved to improve anxiety. Under the guidance of the national strategy of entrepreneurship and innovation, college students’ innovation and entrepreneurship has been supported by the society. Most college students have begun to devote themselves to innovation and entrepreneurship activities, and have made corresponding achievements at this stage.

Subjects and methods: 200 students with anxiety disorder with different degrees of psychological anxiety were selected as the research object. According to the digital random grouping method, they were divided into control group and experimental group. The subjects in the control group adopted the conventional innovation and entrepreneurship teaching scheme, and the students in the experimental group adopted the innovation and entrepreneurship teaching scheme combined with psychology. After 6 months of teaching, the mental health status of patients was analyzed by Hamilton Anxiety Rating Scale (HAMA), and the anxiety of college students was analyzed and evaluated by ID3 decision tree algorithm. The HAMA scale is divided into two factors: mental and physical, with a total of 14 items. Each item is quantified by 5-level score, and the total score is 60 points.

Results: Compared with the control group, the improvement rate of anxiety students in the experimental group was higher in the seven mental factor dimensions. This is because the increase of innovative entrepreneurship teaching programs for college students combined with psychology can help students dredge psychological problems in time.

Conclusions: The psychological intervention program of college students with entrepreneurial anxiety can greatly improve the psychological health of college students.

Key words: anxiety disorder - college student - entrepreneurship - influence

INTRODUCTION

With the increase of academic pressure, interpersonal pressure, employment pressure, social adaptation pressure and other pressures, students are prone to anxiety, fear, anxiety, irritability and other bad emotions (Karayagiz 2020). This phenomenon has attracted the keen attention of many experts and educators at home and abroad (Yoo et al. 2019). Student anxiety disorder is one of the common psychological diseases of college students, which will not only affect the mental health of students, but also have a negative impact on their study and life (Rankin et al. 2018).

Mennin and other scholars proposed to apply emotion regulation therapy to patients with generalized anxiety disorder for intervention. The experimental setting shows that emotion regulation therapy is effective and practical (Mennin et al. 2018). Researchers such as Newby have proposed a scheme combining cognitive behavioral therapy and mental health based on the Internet. The research results verify that the scheme can alleviate anxiety caused by disease (Newby et al. 2018). Pepper and other researchers analyzed the relationship among autism, early psychosis and social anxiety disorder, and expounded the role of social cognition and its relationship with young adult disability characterized by social disorder (Pepper et al. 2018).

A large number of studies at home and abroad show that there is a great correlation among college students’ emotional intelligence, psychological anxiety and learning adaptability, and the proportion of college students with anxiety disorder is gradually increasing. Anxiety disorder of college students is a very complex psychological and emotional disorder. Its clinical manifestations are usually motor agitation and sympathetic hyperactivity. The causes of the disease are depression, mental stimulation, personality, innate heredity, etc., which are manifested in negative emotions such as anxiety, shame, disappointment, anxiety and fear (Da et al. 2020). Generally speaking, anxiety itself is a very reasonable emotional response. However, long-term anxiety will lead to physiological and emotional diseases. According to different types, anxiety can be divided into pathological anxiety and realistic anxiety. Pathological anxiety is one of the most common types of anxiety (Siew et al. 2019). Its clinical manifestations are panic anxiety, generalized anxiety disorder and so on. At present, the most common intervention measures for anxiety disorders are personalized psychological intervention, lectures on professional knowledge of mental health and so on. Although these intervention methods can reduce the psychological anxiety of patients to a certain extent, the application scope of these intervention methods is greatly constrained, and the implementation is difficult, the effect is poor, and the real-time performance is low (Katie 2018). Therefore, they have little value in clinical promotion. After entering the university, college students are facing great