

Emotional Regulation Difficulties in High-Neuroticism Individuals and Their Relationship with Physical Health and Social Interaction

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Abstract. Neuroticism is one of the "Big Five personality traits". Its characteristic is the frequent experience of negative emotions such as anxiety and unease, and a high sensitivity to stress. Emotional regulation difficulties such as frequent avoidance and excessive self-blame probably play a mediating role, but existing studies mostly rely on questionnaires. This study selected data from approximately 140 posts on Chinese social media and papers related to neuroticism to examine how highly neurotic individuals express their emotions, health concerns, and social problems in natural situations. The data will be screened through keywords related to anxiety, insomnia, self-blame etc, and encoded with neurotic traits, emotion regulation strategies, or health or interpersonal outcomes. Using demographic information as the control variable, through the statistics and analysis of the data, we examined the potential mediating role of emotion regulation. The predicted results show that people with high neuroticism are slightly more frequently with difficulties in emotional regulation and health or social problems, emphasizing the importance of emotional regulation as an intervention target.

Keywords: neuroticism, emotion regulation, physical health, interpersonal relationships, social media

1. Introduction

1.1. Background on neuroticism

Neuroticism is one of the big five personality traits. Its disposition is frequent. A past experience of feelings like fear and discomfort, or a greater susceptibility to anxiety. People with high neuroticism scores usually find that even small challenges can trigger their strong emotional reactions, consistent with prior findings linking neuroticism to increased response to life challenges [1]. For example, prior research found that higher neuroticism predicts greater depressive reactions to stress and social comparisons [2]. Such responses can negatively affect their day life to make them face difficulties to keep a stable social relationships condition. Repeated over long periods of time, the stress from life can trigger off a process of loss of immune resistance in a majority of individuals. This might result in fatigue, low immunity to infections, anxiety, and several other psychological disorders. Therefore,

the appearance of frequent stress needs to be monitored across various sections of society. There are multiple factors that lead to this, so this paper aims to review the patterns of life events that contribute to stress and how social support during these stages can influence a person's chances of recovery as an intervention, both at an individual and a societal level.

1.2. Links to health and relationships

There are some research papers already that have demonstrated the association between high neuroticism and some negative emotional outcomes. Neurotic individuals tend to experience more interpersonal conflict, lower relationship satisfaction, and greater sensitivity to criticism. For instance, one study found that adolescents' levels of neuroticism strongly predicted the frequency of conflicts in their relationships with parents and peers [3]. For the interpersonal interactions, people with high levels of neuroticism usually have problems with having conflicts with others, worse relationship satisfaction, and greater sensitivity to perceive criticism. For physical health, people with high neuroticism probably have some anxiety disorders, depression, or adverse health behaviors such as amnesia or poor dietary habits [4]. These two domains of social health and physical health often influence each other. For instance, interpersonal stress can lead to physiological stress, and also chronic diseases would impose additional stress on interpersonal relationships. Therefore, searching for how neuroticism affects these two situations is important, because it can be used for developing psychological diseases intervention measures.

1.3. The role of emotion regulation

Emotional regulation is defined as the process of how people monitor and influence their own emotional responses. People with high levels of neuroticism may have greater difficulty in regulating their negative emotions, such as repression, avoidance, or excessive self-blame. Especially excessive self-blame because it lets people focus more on the pain rather than on problem-solving. They are more prone to maladaptive coping strategies such as avoidance, rumination, or excessive self-blame [5]. Therefore, the negative emotional state of them will be prolonged. Although repression seems to just reduce the external manifestation of emotions, it also increases physiological arousal, and also leads to avoidance that often prevents people from addressing the problem of interpersonal relationships or health issues. If these patterns form a long-term cycle, it will lead to a poor emotional regulation exacerbating physical symptoms and social difficulties.

1.4. Limitations in existing research

Although some research papers have already identified these correlations, most of those data came from the controlled surveys or laboratory experiments, there is probably some self report bias that may not fully capture the real performance of neurotic tendencies in their daily life. However, the language used by people in daily life, such as online forums or social media, can more realistically reflect the manifestations of personality traits. The posts from social media can provide a lot of source of data, not only revealing explicit complaints about health or interpersonal relationships, the languages used in posts can also show the emotional styles, coping strategies, and social cognition. These data may reflect the association between experience and emotion of people in a direct way for people with high levels of neuroticism's experience and response to the world.

1.5. Purpose and hypotheses

This study aims to explore how people with high levels of neuroticism are having difficulties in emotion regulation, physical health problems, and interpersonal communication challenges facing their problems in daily life and reflect on their real emotion in content they published online. This research will utilize the public posts that are published by people who seem to exhibit high levels of neuroticism, focus on analyzing how these traits and emotions are reflected in their contents, and study how difficulties in emotion regulation are associated with neuroticism to negative life outcomes. If they show their age or gender in their content as well, I will also examine whether the manifestation of these difficulties varies by gender or age. Based on existing evidence, I can analyze if the posts showing high levels in neuroticism will more frequently mention difficulties with emotion regulation, complain more about health issues, and describe more interpersonal problems. Furthermore, I can anticipate that difficulty with emotion regulation will serve as a common thread connecting high levels in neuroticism to the adverse outcomes, and show its potential as a psychological disease intervention.

2. Methods

2.1. Research approach

This study will utilize qualitative content analysis to analyze how people with high levels of neuroticism express their life experience with emotional language in public online posts. So the main focus of the study will be their language in content, which can reveal emotional reflections, health-related issues, and interpersonal interaction experiences. Therefore I can avoid the limitations of self-report bias that may be affected by social expectations or memory biases by this method.

2.2. Data sources and selection

The analysis materials are approximately 140 posts that come from Chinese social media platforms and discussion forums where people share personal experiences and their emotions. The sources include Weibo, Rednotes, Zhihu, and some other public social media. I will mainly search for some key words that reflect emotional responses such as worry, overthinking, self-blame, and intense emotional reactions, which are clear expressions of emotions and often associated with a high level of neuroticism. Most of the collected posts are written in the first person and clearly describe the person's own experiences. To maintain relevance and reliability, posts that seem fictional, satirical, or posting unrelated to personal emotional experiences will not be analyzed.

2.3. Ethics and anonymization

All the posts that are published on those social sites that are used for data collection mentioned above are published anonymously, so it ensures the protection of the people's privacy.

2.4. Operational definitions and variables

The independent variable in this study is the neuroticism level of people, which is operationalized through the presence and intensity of how they use emotional language in their posts. For example, the negative interpretation bias, frequent changes in emotional tone, and repeated expression of pain are going to be highlighted for defining their neuroticism levels. The dependent variables are

divided into two aspects. The first aspect is physical health. It will be measured by some symptoms or physical issues occurring in their content that are related to stress, such as insomnia or anxiety and depression. The second aspect is interpersonal relationships. It will be evaluated by the different levels of conflicts, misunderstandings, withdrawal from social activities, or excessive reliance on others to achieve emotional stability in their daily life. Emotional regulation difficulties will be regarded as the mediating variables. It will be identified through language that reflects their emotional reflection, such as avoidance, self-blame, or difficulty calming down after emotional events. If the posts contain demographic information such as gender or age, it will also be recorded as a control variable to explore potential differences in expression patterns.

2.5. Coding and analysis

For the coding process, I will read each post to capture the context, especially the key words that show emotional reflections, then identify and classify the relevant segments. Those words and segments will assign a code to represent neuroticism characteristics, emotional regulation strategies, and health and interpersonal relationship outcomes in a person's content. Also the frequency and intensity of these codes was recorded.

2.6. Empirical models

Although this study is defined as a qualitative study, I used the empirical models to quantify the relationships between variables. For example, calculate the correlation coefficients between my dependent variable and the independent variable by the coding indicators' occurring frequency. Mediation analysis was also applied. I compared the strength of the relationship between neuroticism and outcomes before and after including emotional regulation difficulties as an intermediate variable.

3. Results

Due to my research hypotheses and theoretical background, the expected findings of my study is that posts with high neuroticism characteristics will exhibit more conditions with difficulty in emotional regulation. These difficulties may be reflected by complainings such as "being unable to calm down", overreaction to daily stressors, or excessive self-blame and avoidance tendencies. For example, people who frequently write about feeling overwhelmed or unable to control their reactions are also more likely to simultaneously describe negative experiences related to physical health or interpersonal relationships. Therefore, I expected a positive correlation between high neuroticism levels and negative outcomes. It may be specifically manifested as the higher the neuroticism, the more physical health problems such as depression or anxiety, and interpersonal difficulties such as conflict, estrangement, or excessive reliance on others' emotions.

More in detail, I expected that posts classified as having high neuroticism characteristics will contain a higher proportion of expressions of health complaints and social problems compared to those with low neuroticism. These phenomena will provide support for the hypothesis that difficulty in emotional regulation is an important mechanism connecting neuroticism with negative outcomes. It indicates that neuroticism itself is not simply related to health or relationship problems; however, it manifests these negative outcomes through emotional regulation deficits.

My prediction for the second aspect is related to the intensity of emotional expression and interpersonal conditions. Posts that demonstrate intense emotions such as anger, sadness, or fear are

expected to exhibit the highest levels of distress in both the health and interpersonal interactions. This result illustrates that difficulties in emotion regulation amplify the negative effects of neuroticism. So people with more extreme emotional language might find it more difficult to calm their emotions and maintain a stable emotional state in stressful situations. The relationship between expression intensity and the range of negative outcomes can emphasize that language can serve as an indirect indicator of an individual's psychological vulnerability and its impact on happiness.

There would be more differences that can be observed if the posts contain information about gender or age, and I expected that women will express more self-blame, excessive thinking, or concerns related to interpersonal relationships more frequently than men, which is related to the gendered emotional expression patterns in existing studies. I have also expected that young people may show stronger emotional responses, while older people may present more chronic stress or accumulated health problems in their expressions. Although the possibility to compare those groups is low, because most people who would express themselves on social media are young people, if such patterns emerge, they will provide a more nuanced dimension for explaining the results and support the view that personality traits and demographic factors jointly shape emotional experiences and expressions.

In conclusion, these prediction results are expected to demonstrate that people with high levels of neuroticism would not only have more difficulties in emotional regulation, but also facing some observable physical health and social life problems. If the data can show us the associations between high levels of neuroticism and the difficulties in physical health and social problems, it could support the claim that emotional regulation difficulties are playing a mediating role between neuroticism and negative outcomes in life. Furthermore, if the predictions are true, it could strengthen the argument that analyzing natural language use is an effective method that helps understand how personality traits shape daily experiences and psychological vulnerability.

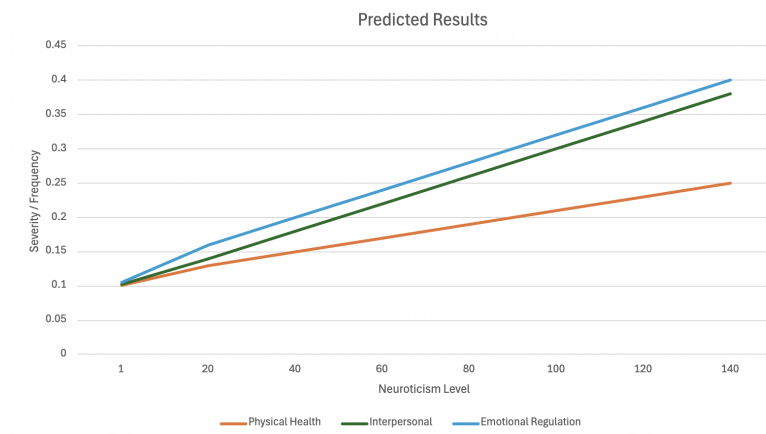


Figure 1. Predicted results

4. General discussion

The objective of this study is to explore whether individuals with high neuroticism are more likely to encounter difficulties in emotional regulation, which leads to negative outcomes in physical health and interpersonal relationships. The significance of this research question lies in the fact that although there is already a large amount of evidence indicating that neuroticism is an important factor affecting people's happiness, the specific impact of each different personality trait of the Big Five on real life has not been fully explored, especially in natural situations such as online

communication. By analyzing publicly available online posts and some previous research papers on neurotic-related content, I attempted to capture the emotional and relational dilemma expressions hidden beneath the words and results.

According to research hypotheses, it is expected that people with high neurotic traits will post more frequently and more strongly show signs of emotional regulation difficulties, such as frequent avoidance and excessive self-blame. These posts are also more likely to mention that they have problems such as sleep disorders, anxiety and interpersonal relationship stress. The predicted results show that there is a positive correlation between neuroticism and the two outcome domains, and difficulty in emotion regulation may act as a mediating variable. This is consistent with findings that neuroticism interacts with stressful life events, producing additive and synergistic contributions to depression and anxiety [6]. This indicates that emotional management methods may play a core role in the process in which neuroticism affects daily life.

The significance of this study lies in its provision of more evidence for causal models of personality traits, emotion regulation, and various life outcomes. These findings can provide references for intervention measures in some health issues, helping highly neurotic individuals improve their emotional coping strategies and thereby reducing their vulnerability to stress-related health problems and social interactions.

This study also has some limitations. Firstly, publicly available online posts may affect the representativeness and authenticity of the samples. The personal experiences shared may not be completely true. Secondly, the judgment of neuroticism and difficulty in emotional regulation is based on language features rather than standardized psychological assessments, which may introduce subjectivity in the coding process. Secondly, the data collected in other papers related to neuroticism may not be able to provide completely accurate data support for this research question and may not form a completely accurate causal relationship.

In terms of generalizability, the conclusions of this study are mainly applicable to people who actively use Chinese online platforms. Cultural and Internet language styles may influence the way emotions are expressed, which means that in other cultural or language environments, the result patterns may not be fully replicated. However, the potential mechanism by which emotion regulation plays a mediating role between neuroticism and life outcomes can make this research likely to have a certain degree of universality in cross-cultural contexts by combining language analysis with direct personality assessment and expanding to more situations.

5. Conclusion

In conclusion, this study highlights the role of emotion regulation difficulties in linking neuroticism to negative life outcomes. People high in neuroticism are predicted to express stronger negative emotions and struggle to manage them effectively. It could lead to more health complaints and interpersonal stress in their daily lives. These findings emphasize the importance of addressing emotion regulation in therapeutic interventions for neurotic people. The analysis of natural language from social media provides a valuable window into how personality traits shape people's life experiences. Future work could continue to explore these relationships and test interventions aimed at improving emotional coping in highly neurotic populations.

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