

Understanding the Psychosomatic Responses of Individuals with Generalized Anxiety Disorder and High Conscientiousness: A Qualitative Study

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ABSTRACT

The objective of this study was to explore the psychosomatic responses and coping mechanisms of individuals with Generalized Anxiety Disorder (GAD) who exhibit high levels of conscientiousness. This qualitative study employed semi-structured interviews with 23 participants diagnosed with GAD and high conscientiousness. Participants were recruited through purposive sampling from local mental health clinics, online support groups, and community advertisements. The interviews were transcribed and analyzed using NVivo software, following the principles of grounded theory to identify themes and patterns. Theoretical saturation was achieved when no new themes emerged from the data, ensuring comprehensive analysis. The analysis revealed four main themes: physical manifestations of anxiety, psychological coping mechanisms, impact on daily functioning, and perception and understanding of anxiety. Physical symptoms included muscle tension, gastrointestinal issues, cardiovascular symptoms, respiratory problems, and sleep disturbances. Psychological coping mechanisms encompassed perfectionism, avoidance behaviors, cognitive strategies, seeking reassurance, time management, emotional regulation, and problem-solving approaches. The impact on daily functioning was significant, affecting work performance, social relationships, academic achievement, physical health, and personal hobbies. Participants' perceptions highlighted the importance of awareness, attribution of causes, attitudes towards treatment, stigma, and the influence of conscientiousness on their anxiety. The findings underscore the complex interplay between conscientiousness and anxiety in individuals with GAD. High conscientiousness can both mitigate and exacerbate anxiety symptoms, influencing the effectiveness of coping mechanisms. Personalized treatment approaches that consider individual personality traits, such as mindfulness-based interventions and resilience training, may enhance therapeutic outcomes. This study highlights the need for tailored interventions to address the unique challenges faced by conscientious individuals with GAD.

Keywords: Generalized Anxiety Disorder, Conscientiousness, Psychosomatic Responses, Coping Mechanisms, Mental Health, Personality Traits, Mindfulness, Resilience.

1. Introduction

Generalized Anxiety Disorder (GAD) is a prevalent mental health condition characterized by excessive, uncontrollable worry about various aspects of life. This persistent anxiety often leads to significant distress and impairment in social, occupational, and other important areas of functioning. The relationship between personality traits and anxiety disorders has garnered considerable interest in psychological research, with particular attention to the role of conscientiousness in moderating anxiety symptoms (Angazi et al., 2023; Imani et al., 2022; Nasiri Karbasdehi et al., 2024; Rahmatinia & Gorji, 2023; Sarabadani et al., 2023; Sharif Ara et al., 2023). GAD is marked by chronic anxiety and a tendency to worry excessively, often without a specific trigger. Symptoms include restlessness, muscle tension, difficulty concentrating, and sleep disturbances. The etiology of GAD is multifaceted, involving genetic, biological, psychological, and environmental factors. Among the psychological factors, personality traits have been shown to play a significant role in the manifestation and management of anxiety disorders (American Psychiatric Association, 2022).

Conscientiousness, one of the Big Five personality traits, is characterized by diligence, carefulness, and a strong sense of responsibility. Individuals with high conscientiousness tend to be organized, reliable, and goal-oriented. While these traits are generally considered positive, they can also predispose individuals to heightened stress and anxiety, particularly when combined with the perfectionistic tendencies often seen in highly conscientious individuals (Akram et al., 2019). This dual-edged nature of conscientiousness has implications for understanding its impact on GAD.

Research has demonstrated that conscientiousness can both buffer against and exacerbate anxiety symptoms depending on the context. For instance, conscientious individuals may employ effective coping strategies that mitigate anxiety, such as thorough planning and proactive problem-solving (Ma et al., 2021). Conversely, their high standards and fear of making mistakes can lead to increased stress and anxiety, particularly in high-stakes or uncertain situations.

Several studies have explored the relationship between conscientiousness and anxiety. For example, Shi et al. (2015) found that conscientiousness was associated with lower anxiety levels among Chinese medical students, mediated by resilience (Shi et al., 2015). This suggests that

conscientious individuals may possess greater psychological resources to manage stress. However, other studies indicate that the high demands conscientious individuals place on themselves can lead to greater anxiety under certain conditions (Lyon et al., 2020).

The psychosomatic responses of individuals with GAD can manifest in various physical symptoms, including muscle tension, gastrointestinal issues, cardiovascular symptoms, respiratory problems, and sleep disturbances. The somatic component of anxiety is significant, as these physical symptoms can exacerbate psychological distress, creating a vicious cycle (Terracciano et al., 2014).

Conscientious individuals may experience these psychosomatic responses differently due to their personality traits. For instance, their tendency towards meticulousness and control may heighten their awareness and concern about physical symptoms, potentially leading to increased health anxiety (Hall et al., 2014). Additionally, their strong sense of duty and responsibility might contribute to chronic stress and associated physical symptoms, as they strive to meet their own high standards and expectations (Tao et al., 2022).

Various psychological factors mediate the relationship between conscientiousness and anxiety. Dispositional mindfulness, for example, has been found to mediate this relationship by promoting greater awareness and acceptance of present-moment experiences, thereby reducing anxiety (Liu et al., 2022). Similarly, emotional regulation strategies play a crucial role in how conscientious individuals manage anxiety. Effective emotional regulation can mitigate the impact of stress and reduce anxiety symptoms, while maladaptive strategies may exacerbate them (Tao et al., 2022).

External stressors, such as the COVID-19 pandemic, have significantly impacted mental health, exacerbating anxiety symptoms among individuals with high conscientiousness. The pandemic created an environment of uncertainty and heightened stress, challenging the coping mechanisms of conscientious individuals. Research by Üngür and Karagözoğlu (2021) highlighted that personality traits, including conscientiousness, influenced anxiety levels among athletes during the pandemic, underscoring the need to consider external factors in understanding the relationship between personality and anxiety (Üngür & Karagözoğlu, 2021).

Understanding the nuanced relationship between conscientiousness and anxiety has important implications for treatment and intervention. Tailored therapeutic approaches that consider personality traits can enhance

treatment efficacy. For instance, cognitive-behavioral therapy (CBT) can be adapted to address the specific needs of conscientious individuals by incorporating strategies to manage perfectionism and high self-expectations (Akram et al., 2019). Mindfulness-based interventions may also be beneficial in promoting acceptance and reducing the impact of stressors (Liu et al., 2022).

Additionally, psychoeducation about the dual-edged nature of conscientiousness can help individuals understand how their personality traits influence their anxiety and develop more adaptive coping strategies. Interventions that focus on enhancing resilience and emotional regulation can further support conscientious individuals in managing their anxiety effectively (Shi et al., 2015).

The interplay between conscientiousness and GAD is complex, involving a dynamic interaction of psychological, physiological, and environmental factors. Conscientious individuals with GAD experience a range of psychosomatic responses influenced by their personality traits and coping mechanisms. This study aims to provide a deeper understanding of these experiences through qualitative analysis, contributing to the broader body of knowledge on personality and anxiety disorders. By exploring the psychosomatic responses of individuals with GAD and high conscientiousness, this research seeks to inform more personalized and effective approaches to treatment and intervention, ultimately improving outcomes for this population.

2. Methods and Materials

2.1. Study Design and Participants

This study employs a qualitative research design to explore the psychosomatic responses of individuals with Generalized Anxiety Disorder (GAD) and high conscientiousness. The focus on qualitative methodology allows for an in-depth understanding of the complex interplay between psychological and physiological responses in this population. The research was conducted through semi-structured interviews, which facilitated the collection of rich, detailed data.

Participants were recruited through purposive sampling to ensure that those included had a diagnosis of Generalized Anxiety Disorder and exhibited high levels of conscientiousness. Recruitment took place through local mental health clinics, online support groups, and advertisements in community centers. Inclusion criteria required participants to be adults (18 years and older), have

a clinical diagnosis of GAD as confirmed by a mental health professional, and score in the upper quartile on the Conscientiousness scale of the Big Five Inventory (BFI).

2.2. Measure

2.2.1. Semi-Structured Interview

Data were collected using semi-structured interviews, which provided the flexibility to explore participants' experiences in depth while maintaining a consistent structure across interviews. An interview guide was developed based on existing literature and expert consultation, covering topics such as:

Participants' experiences of anxiety and its physical manifestations

The impact of conscientiousness on their coping mechanisms and daily functioning

The perceived relationship between their anxiety and conscientiousness

Interviews were conducted in person or via video call, depending on participants' preferences and availability. Each interview lasted between 60 and 90 minutes and was audio-recorded with the participants' consent for subsequent transcription and analysis.

2.3. Data Analysis

The data analysis process followed the principles of grounded theory to identify themes and patterns within the data. Interviews were transcribed verbatim and imported into NVivo software for coding and analysis. Initial coding was performed to identify significant statements and concepts, which were then grouped into broader themes through axial coding. Theoretical saturation was achieved when no new themes or insights emerged from the data, indicating that the data collection process was complete.

3. Findings and Results

The study included 23 participants diagnosed with Generalized Anxiety Disorder and exhibiting high levels of conscientiousness. The sample comprised 15 females (65%) and 8 males (35%), with ages ranging from 21 to 55 years ($M = 34.7$, $SD = 9.4$). The majority of participants were employed full-time (70%, $n=16$), while the remaining participants were either part-time employees (13%, $n=3$), students (9%, $n=2$), or unemployed (8%, $n=2$). Regarding educational attainment, 9 participants (39%) held a bachelor's degree, 7 participants (30%) had completed a

master's degree, 5 participants (22%) had some college education, and 2 participants (9%) had attained a high school diploma. The participants' conscientiousness scores, as

measured by the Big Five Inventory, ranged from 38 to 50, with a mean score of 44.6 (SD = 3.1), indicating high levels of conscientiousness across the sample.

Table 1

The Results of Qualitative Analysis

Main Themes	Subthemes	Concepts
1. Physical Manifestations of Anxiety	1.1 Muscle Tension	Chronic muscle pain, stiffness, headaches, jaw clenching
	1.2 Gastrointestinal Issues	Nausea, irritable bowel syndrome, loss of appetite
	1.3 Cardiovascular Symptoms	Rapid heartbeat, chest pain, palpitations
	1.4 Respiratory Problems	Shortness of breath, hyperventilation, choking feeling
	1.5 Sleep Disturbances	Insomnia, nightmares, restless sleep
2. Psychological Coping Mechanisms	2.1 Perfectionism	Over-preparation, fear of mistakes, high self-criticism
	2.2 Avoidance Behaviors	Social withdrawal, procrastination, task avoidance
	2.3 Cognitive Strategies	Reframing thoughts, mindfulness, positive self-talk
	2.4 Seeking Reassurance	Frequent checking, asking for validation, dependence on others
	2.5 Time Management	Strict scheduling, prioritizing tasks, delegation
	2.6 Emotional Regulation	Suppression of emotions, emotional outbursts, mood swings
	2.7 Problem-Solving Approaches	Systematic planning, step-by-step strategies, resourcefulness
3. Impact on Daily Functioning	3.1 Work Performance	Difficulty concentrating, overworking, missed deadlines
	3.2 Social Relationships	Strained relationships, reduced social activities, communication issues
	3.3 Academic Achievement	Study anxiety, perfectionism in assignments, fear of failure
	3.4 Physical Health	Frequent doctor visits, chronic health issues, medication dependence
	3.5 Personal Hobbies and Interests	Loss of interest, reduced participation, hobby-related anxiety
4. Perception and Understanding of Anxiety	4.1 Awareness of Symptoms	Recognition of triggers, understanding of physical responses, symptom tracking
	4.2 Attribution of Causes	Genetic predisposition, life stressors, past trauma
	4.3 Attitudes Towards Treatment	Openness to therapy, skepticism about medication, preference for holistic approaches
	4.4 Stigma and Self-Perception	Feelings of shame, fear of judgment, self-stigmatization
	4.5 Influence of Conscientiousness	Sense of responsibility, guilt over symptoms, striving for control

3.1. Physical Manifestations of Anxiety

Participants reported various physical manifestations of anxiety. Muscle Tension was a common symptom, with participants describing chronic muscle pain, stiffness, headaches, and jaw clenching. One participant noted, "I often feel like my muscles are in a constant state of tension, especially in my neck and shoulders."

Gastrointestinal Issues were frequently mentioned, including symptoms such as nausea, irritable bowel syndrome, and loss of appetite. A participant shared, "Whenever my anxiety flares up, my stomach feels like it's tied in knots, and I can't eat."

Cardiovascular Symptoms like rapid heartbeat, chest pain, and palpitations were also prevalent. "My heart races, and sometimes it feels like it's going to jump out of my chest," one interviewee explained.

Respiratory Problems included shortness of breath, hyperventilation, and a choking feeling. As one participant

described, "There are times when I feel like I can't catch my breath, even though I'm breathing."

Sleep Disturbances such as insomnia, nightmares, and restless sleep were significant issues. "I have trouble falling asleep and staying asleep because my mind just won't shut off," said a participant.

3.2. Psychological Coping Mechanisms

Several psychological coping mechanisms were identified. Perfectionism emerged as a key strategy, with behaviors like over-preparation, fear of mistakes, and high self-criticism. One participant remarked, "I feel like I have to do everything perfectly, and any mistake feels catastrophic."

Avoidance Behaviors included social withdrawal, procrastination, and task avoidance. A participant stated, "I avoid social situations because they make me too anxious. I'd rather stay home."

Cognitive Strategies such as reframing thoughts, mindfulness, and positive self-talk were commonly used. "I try to remind myself that my anxiety isn't always rational and focus on the present moment," shared one interviewee.

Seeking Reassurance involved frequent checking, asking for validation, and dependence on others. "I often need to ask my friends and family if I'm doing things right or if everything is okay," a participant explained.

Time Management techniques included strict scheduling, prioritizing tasks, and delegation. One participant noted, "I keep a detailed schedule to manage my tasks and reduce anxiety about forgetting something important."

Emotional Regulation strategies encompassed suppression of emotions, emotional outbursts, and mood swings. "I try to keep my emotions in check, but sometimes they just spill over," said an interviewee.

Problem-Solving Approaches involved systematic planning, step-by-step strategies, and resourcefulness. "When I'm faced with a problem, I break it down into smaller steps and tackle them one by one," shared a participant.

3.3. Impact on Daily Functioning

The impact of anxiety on daily functioning was significant. Work Performance was affected by difficulty concentrating, overworking, and missed deadlines. One participant mentioned, "My anxiety makes it hard to focus at work, and I end up working longer hours to catch up."

Social Relationships were strained due to reduced social activities and communication issues. A participant explained, "My anxiety has made it difficult to maintain friendships because I often cancel plans last minute."

Academic Achievement was hindered by study anxiety, perfectionism in assignments, and fear of failure. "I spend hours perfecting my assignments because I'm terrified of getting a bad grade," one interviewee noted.

Physical Health issues included frequent doctor visits, chronic health problems, and medication dependence. "I see my doctor often because my anxiety causes so many physical symptoms," shared a participant.

Personal Hobbies and Interests suffered due to loss of interest, reduced participation, and hobby-related anxiety. "I've stopped doing many of the things I used to enjoy because my anxiety gets in the way," explained one participant.

3.4. Perception and Understanding of Anxiety

Participants' perceptions and understanding of their anxiety were explored. Awareness of Symptoms included recognition of triggers, understanding of physical responses, and symptom tracking. "I've become very aware of what triggers my anxiety and try to monitor my symptoms closely," said a participant.

Attribution of Causes varied, with participants citing genetic predisposition, life stressors, and past trauma. One interviewee mentioned, "I think my anxiety is partly due to my family history and some difficult experiences I've had."

Attitudes Towards Treatment reflected openness to therapy, skepticism about medication, and a preference for holistic approaches. "I'm willing to try therapy, but I'm cautious about taking medication," shared a participant.

Stigma and Self-Perception involved feelings of shame, fear of judgment, and self-stigmatization. "I often feel ashamed of my anxiety and worry about what others think of me," one participant explained.

Influence of Conscientiousness included a sense of responsibility, guilt over symptoms, and striving for control. A participant noted, "My conscientiousness makes me feel like I should be able to control my anxiety better, and I feel guilty when I can't."

4. Discussion and Conclusion

This study explored the psychosomatic responses of individuals with Generalized Anxiety Disorder (GAD) and high conscientiousness through qualitative analysis of semi-structured interviews. The findings revealed several key themes: physical manifestations of anxiety, psychological coping mechanisms, impact on daily functioning, and perception and understanding of anxiety. These themes provide a comprehensive understanding of how conscientious individuals with GAD experience and manage their anxiety.

Physical Manifestations of Anxiety emerged as a significant theme, with participants reporting muscle tension, gastrointestinal issues, cardiovascular symptoms, respiratory problems, and sleep disturbances. These findings align with previous research indicating that anxiety often manifests physically, exacerbating overall distress and complicating symptom management (Akram et al., 2019; Hall et al., 2014).

Psychological Coping Mechanisms included perfectionism, avoidance behaviors, cognitive strategies, seeking reassurance, time management, emotional

regulation, and problem-solving approaches. These coping strategies reflect the high levels of conscientiousness in participants, as conscientious individuals are known for their structured and diligent approaches to managing stress (Ma et al., 2021). However, the dual-edged nature of conscientiousness means that these coping strategies can sometimes exacerbate anxiety rather than alleviate it (Lyon et al., 2020).

The Impact on Daily Functioning was profound, affecting work performance, social relationships, academic achievement, physical health, and personal hobbies and interests. These findings highlight the pervasive nature of GAD, which affects various aspects of life and is often exacerbated by the high standards and self-expectations characteristic of conscientious individuals (Tao et al., 2022; Thuy, 2023).

Participants' Perception and Understanding of Anxiety included awareness of symptoms, attribution of causes, attitudes towards treatment, stigma and self-perception, and the influence of conscientiousness. This theme underscores the importance of psychoeducation and personalized treatment approaches that consider individual differences in personality traits (Liu et al., 2022; Shi et al., 2015; Vaheb, 2024).

The physical symptoms reported by participants, such as muscle tension and gastrointestinal issues, are consistent with existing literature on the somatic manifestations of anxiety. Akram et al. (2019) found that anxiety and depression often mediate the relationship between insomnia symptoms and personality traits like conscientiousness and emotional stability. This mediation suggests that conscientious individuals may experience heightened awareness and concern over physical symptoms, leading to increased health anxiety and further physical manifestations of anxiety (Akram et al., 2019).

Psychological coping mechanisms identified in this study, such as perfectionism and time management, reflect the high conscientiousness of participants. Ma et al. (2021) found that conscientiousness could lead to both beneficial and detrimental effects on stress management, depending on the context. While conscientious individuals might employ effective coping strategies, their high standards and fear of mistakes can also lead to increased stress and anxiety. This dual-edged nature of conscientiousness explains why some participants in our study reported that their coping mechanisms sometimes exacerbated their anxiety (Ma et al., 2021).

The impact of GAD on daily functioning reported in this study aligns with previous research showing that anxiety disorders can significantly impair various aspects of life. Thuy (2023) highlighted the mediating role of social support and self-esteem in managing anxiety among adolescents, suggesting that conscientious individuals might benefit from targeted interventions to improve social support and self-esteem (Thuy, 2023). Similarly, Tao et al. (2022) emphasized the role of emotion regulation strategies in managing anxiety and depression, further supporting the need for personalized therapeutic approaches that consider individual personality traits (Tao et al., 2022).

Participants' perceptions and understanding of their anxiety highlight the importance of psychoeducation and personalized treatment. Liu et al. (2022) found that dispositional mindfulness mediated the relationship between conscientiousness and mental health issues, suggesting that mindfulness-based interventions could be particularly beneficial for conscientious individuals (Liu et al., 2022). Shi et al. (2015) also emphasized the role of resilience in managing anxiety, indicating that enhancing resilience could be a valuable therapeutic target for conscientious individuals with GAD (Shi et al., 2015).

This study has several limitations that should be acknowledged. First, the sample size was relatively small, with only 23 participants, which may limit the generalizability of the findings. Additionally, the study relied on self-reported data from semi-structured interviews, which may be subject to recall bias and social desirability bias. The cross-sectional design of the study also precludes any causal inferences. Future research could address these limitations by employing larger, more diverse samples, using longitudinal designs, and incorporating objective measures of anxiety and coping mechanisms.

Future research should explore the relationship between conscientiousness and GAD in larger, more diverse populations to enhance the generalizability of the findings. Longitudinal studies could provide insights into the causal pathways linking conscientiousness and anxiety, helping to identify potential intervention points. Additionally, future research could examine the efficacy of tailored interventions, such as mindfulness-based therapies and resilience training, in reducing anxiety symptoms among conscientious individuals. Exploring the genetic and neurobiological underpinnings of conscientiousness and its interaction with anxiety disorders could also provide valuable insights into personalized treatment approaches.

Practitioners should consider the dual-edged nature of conscientiousness when treating individuals with GAD. Psychoeducation should emphasize the benefits and potential drawbacks of conscientiousness, helping individuals understand how their personality traits influence their anxiety and coping mechanisms. Tailored interventions, such as cognitive-behavioral therapy (CBT) and mindfulness-based stress reduction (MBSR), should be adapted to address the specific needs of conscientious individuals, focusing on managing perfectionism and enhancing resilience. Additionally, promoting social support and self-esteem could mitigate the impact of anxiety on daily functioning, improving overall treatment outcomes. By considering individual differences in personality traits, practitioners can develop more effective, personalized treatment plans for individuals with GAD and high conscientiousness.

In conclusion, this study provides valuable insights into the psychosomatic responses of individuals with GAD and high conscientiousness. The findings highlight the complex interplay between personality traits and anxiety, emphasizing the need for personalized treatment approaches. By addressing the dual-edged nature of conscientiousness and tailoring interventions to individual needs, practitioners can improve treatment outcomes and enhance the quality of life for individuals with GAD. Future research should continue to explore these relationships, providing further evidence to inform clinical practice and improve mental health care for this population.

Authors' Contributions

Authors contributed equally to this article.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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Declaration of Interest

The authors report no conflict of interest.

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Ethics Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

References

- Akram, U., Gardani, M., Akram, A., & Allen, S. (2019). Anxiety and Depression Mediate the Relationship Between Insomnia Symptoms and the Personality Traits of Conscientiousness and Emotional Stability. *Heliyon*, 5(6), e01939. <https://doi.org/10.1016/j.heliyon.2019.e01939>
- American Psychiatric Association, A. (2022). *Diagnostic and statistical manual of mental disorders: DSM-5-TR*. Washington, DC: American psychiatric association. <https://doi.org/10.1176/appi.books.9780890425787>
- Angazi, F., Hosseini, S., Arefi, M., & Kakabraei, K. (2023). Structural model of anxiety disorders based on corona anxiety, mental health and the level of health concern with the mediating role of coping strategies in pregnant women. *Applied Family Therapy Journal (AFTJ)*, 4(5), 161-172. <https://doi.org/10.61838/kman.afj.4.5.9>
- Hall, K. T., Tolkin, B. R., Chinn, G. M., Kirsch, I., Kelley, J. M., Lembo, A., Kaptchuk, T. J., Kokkotou, E., Davis, R. B., & Conboy, L. (2014). Conscientiousness Is Modified by Genetic Variation in Catechol-O-methyltransferase to Reduce Symptom Complaints in IBS Patients. *Brain and Behavior*, 5(1). <https://doi.org/10.1002/brb3.294>
- Imani, Z., Zanganeh Motlagh, F., & Abbasi, M. (2022). Marital Disturbance and Object Relations in Mothers of Children with an Autism Spectrum Disorder (ASD): The Mediating Role of Psychological Coherence. *Journal of Adolescent and Youth Psychological Studies (JAYPS)*, 3(1), 111-122. <https://doi.org/10.61838/kman.jayps.3.1.9>
- Liu, T., Liu, Z., Zhang, L., & Mu, S. (2022). Dispositional Mindfulness Mediates the Relationship Between Conscientiousness and Mental Health-Related Issues in Adolescents During the COVID-19 Pandemic. *Personality and individual differences*, 184, 111223. <https://doi.org/10.1016/j.paid.2021.111223>
- Lyon, K., Juhász, G., Brown, L. J. E., & Elliott, R. M. (2020). Big Five Personality Facets Explaining Variance in Anxiety and Depressive Symptoms in a Community Sample. *Journal of affective disorders*, 274, 515-521. <https://doi.org/10.1016/j.jad.2020.05.047>
- Ma, J., Liu, C., Peng, Y., & Xu, X. (2021). How Do Employees Appraise Challenge and Hindrance Stressors? Uncovering the Double-Edged Effect of Conscientiousness. *Journal of occupational health psychology*, 26(3), 243-257. <https://doi.org/10.1037/ocp0000275>
- Nasiri Karbasdehi, Z., Fakhri, M., & Ghanadzadegan, H. (2024). Comparing the Effectiveness of Mindfulness and Positive Psychology Training on Reappraisal and Suppression in Students with Generalized Anxiety Disorder Symptoms.

- Journal of Assessment and Research in Applied Counseling (JARAC)*, 6(1).
<https://journals.kmanpub.com/index.php/jarac/article/view/1716>
- Rahmatinia, M., & Gorji, Y. (2023). The effectiveness of cognitive analytical therapy on improving generalized anxiety disorder and reducing anxiety symptoms in women of Isfahan city. *Psychology of Woman Journal*, 4(3), 28-40.
<https://journals.kmanpub.com/index.php/psywoman/article/view/710>
- Sarabadani, A., Hasanzadeh, R., & Ghanadzadegan, H. (2023). The effectiveness of acceptance and commitment therapy on distress tolerance and cognitive emotion regulation in women with generalized anxiety disorder. *Applied Family Therapy Journal (AFTJ)*, 4(2), 96-114.
<https://doi.org/10.61838/kman.aftj.4.2.6>
- Sharif Ara, B., Khosropour, F., & Molayi Zarandi, H. (2023). Effectiveness of Acceptance and Commitment Therapy (ACT) on Emotional Processing, Irrational Beliefs and Rumination in Patients with Generalized Anxiety Disorder. *Journal of Adolescent and Youth Psychological Studies (JAYPS)*, 4(4), 34-44.
<https://doi.org/10.61838/kman.jayps.4.4.5>
- Shi, M., Liu, L., Wang, Z. Y., & Wang, L. (2015). The Mediating Role of Resilience in the Relationship Between Big Five Personality and Anxiety Among Chinese Medical Students: A Cross-Sectional Study. *PLoS One*, 10(3), e0119916.
<https://doi.org/10.1371/journal.pone.0119916>
- Tao, Y., Liu, X., Hou, W., Niu, H., Wang, S., Ma, Z., Bi, D., & Zhang, L. (2022). The Mediating Role of Emotion Regulation Strategies in the Relationship Between Big Five Personality Traits and Anxiety and Depression Among Chinese Firefighters. *Frontiers in Public Health*, 10.
<https://doi.org/10.3389/fpubh.2022.901686>
- Terracciano, A., Scuteri, A., Strait, J., Sutin, A. R., Meirelles, O., Marongiu, M., Orrù, M., Pilia, M. G., Ferrucci, L., Cucca, F., Schlessinger, D., & Lakatta, E. G. (2014). Are Personality Traits Associated With White-Coat and Masked Hypertension? *Journal of Hypertension*, 32(10), 1987-1992.
<https://doi.org/10.1097/hjh.0000000000000289>
- Thuy, N. T. (2023). Personality Traits and Anxiety Disorders of Vietnamese Early Adolescents: The Mediating Role of Social Support and Self-Esteem. *The Open Psychology Journal*, 16(1).
<https://doi.org/10.2174/0118743501251636230921105854>
- Üngür, G., & Karagözoğlu, C. (2021). Do Personality Traits Have an Impact on Anxiety Levels of Athletes During the COVID-19 Pandemic? *Current Issues in Personality Psychology*, 9(3), 246-257. <https://doi.org/10.5114/cipp.2021.106138>
- Vaheb, S. (2024). Multiple Sclerosis and Personality Traits: Associations With Depression and Anxiety. *European Journal of Medical Research*, 29(1).
<https://doi.org/10.1186/s40001-024-01772-0>