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Overthinking as a Predictor of Somatic Symptoms, Psychological Distress, and Social Dysfunction in Adults.

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ABSTRACT

Overthinking is frequently associated with negative health outcomes. This study examines its predictive role in somatic symptoms, psychological distress, and social dysfunction in adults, using the GHQ-28 scale. A quantitative design was employed with a sample of 250 participants aged 21–40. Statistical analyses, including Pearson correlation, t-tests, and linear regression, exposed that overthinking is positively and significantly correlated with all three health areas. The strongest association was found with psychological distress ($r = 0.52$), followed by social dysfunction ($r = 0.45$) and somatic symptoms ($r = 0.41$). Regression analyses inveterate overthinking as a significant predictor for all outcome, with psychological distress again showing the highest beta value ($\beta = 0.48$). No significant gender differences were detected in the effect of overthinking across these variables. These findings highlight the necessity for interventions to mitigate overthinking and address public mental health. The study highpoints the impact of overthinking on mental and physical health and its probable to interrupt social functioning, supporting the significance of addressing rumination in clinical and preventive surroundings.

Keywords: Somatic Symptoms, Psychological Distress, and Social Dysfunction

Introduction

Overthinking has increasingly been recognized as a significant contributor to mental and physical health disturbances. Emerging evidence suggests that excessive cognitive rumination may contribute not only to psychological distress but also to the manifestation of somatic symptoms and disruptions in social functioning. Individuals engaged in habitual overthinking often report physical complaints such as fatigue, headaches, and gastrointestinal issues, despite the absence of identifiable medical causes. Furthermore, the cognitive preoccupation characteristic of overthinking can impede Somatic Symptoms, Psychological Distress, and Social Dysfunction.

This study aims to examine the predictive role of overthinking in relation to three interrelated domains of adult well-being: somatic symptoms, psychological distress, and social dysfunction. By investigating these associations in adult population, the research seeks to clarify the extent to which overthinking serves as a risk factor and to

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inform interventions that target cognitive-emotional processes across diverse health outcomes.

Somatic syndrome is one of the predominant issues in health care (Perez, David Let al.,2015). There is a list of symptoms such as pain, numbness, and gastroenterological problems with no certain affinity (Eriksen, T. E., & Risør, M. B. ,2014). Commonly studies emphasize that those with somatization symptoms have psychiatric morbidity and are less likely to attend work (Poulsen, Otto Melchior, et al.,2013). Somatic symptoms are prevalent in people with some kinds of psychiatric disorders.

Psychological distress can be theorized as a term about multiple common psychological circumstances, ranging from subclinical symptoms to clinical detects of depression, anxiety or stress. (Scandurra, C., Pizzo, R., & Freda, M. F. ,2024). High levels of distress can be a feature of mental health including depression or anxiety(Bartoli, Francesco, et al.,2024). Numerous forms of psychological distress, share alike symptoms and may be related to the same trails of dysregulation (Stewart, S. H. (2024)). Numerous forms of psychological distress have been consistently linked to a number of detrimental physical health outcomes, such as mortality, aging, and cognitive decline (Barry, Vaughn, et al.,2020).

Social dysfunction occurs as a concern of many factors, the most noticeable of which are chronic illnesses; an extended and developing form of illness; as described by WHO (Yach, Derek, et al.,2004).Main chronic diseases which tend to be connected to social dysfunction are cancer, diabetes, respiratory and heart diseases. Readings have discovered that different chronic illnesses have been connected to social life of patients, leading to social dysfunction. (Roca, Mihai, et al.,2015). Social dysfunction occurs is a negative feature of individual's social adjustment. (Khawaja, H. R., & Hamid, M. ,2018).

Literature Review

Overthinking, often conceptualized as a repetitive, ruminative cognitive process, has been progressively recognized in psychological research for its substantial impacts. Overthinking is characterized by excessive rumination on earlier events or worry about future likelihoods, often without productive consequences. This cognitive style is mostly relevant when observing its role in predicting **somatic symptoms**, **psychological distress**, and **social dysfunction** in adults.

Overthinking and Psychological Distress

Hasan (2019) observed that overthinking leads to detrimental physical and psychological effects. Literature has confirmed link between overthinking and various forms of psychological distress, including anxiety and depression. Ciobotaru, Delia, et al., (2024) indicated rumination as a primary cognitive weakness that deepens and extends depressive episodes. Overthinkers often focus more on problems instead of attempting to resolve them, which results in increased emotional sensitivity and difficulty managing one's mood. Similarly, Borkovec et al. (2004) described worry that further form overthinking issues as a hallmark of generalized anxiety disorder, suggesting that insistent overthinking creates chronic stress and fear.

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Overthinking and Somatic Symptoms

Overthinking also has strong implications for physical health, particularly the occurrence of **somatic symptoms**—physical complaints without identifiable medical causes. Individuals who habitually overthink tend to report higher levels of fatigue, muscle tension, headaches, and gastrointestinal issues (Devi, E. ,2025). These somatic expressions are believed to be the result of heightened autonomic arousal and stress due to continuous cognitive overload. According to studies, overthinking makes it harder to perceive and interpret physical sensations, which can result in health anxiety and symptoms that cannot be explained medically. (Barsky & Ahern, 2005).

Overthinking and Psychological Distress

Numerous studies have shown a strong correlation between overthinking and psychological distress, such as anxiety and depression. Rumination is a primary cognitive vulnerability that exacerbates and prolongs depressive episodes (du Pont, Alta, et al.,2019). Excessive emotional reactivity and poor mood regulation result from overthinkers' propensity to focus on issues rather than find solutions. Similarly, Querstret, D. (2014) identified worry, a future-focused type of overthinking, as a defining feature of generalized anxiety disorder, implying that ongoing overthinking feeds a vicious cycle of ongoing stress and anxiety.

Overthinking and Social Dysfunction

Overthinking's social repercussions are equally worrisome. In social situations, excessive rumination frequently causes people to withdraw socially, avoid interpersonal risk, or become unduly critical of themselves (Gupta, A. ,2024). Ruminators are less likely to pursue social support and more likely to practice interpersonal difficulties (Afifi, Tamara, et al., 2013). Additionally, overthinking can impair social cognition by raising negative biases, misinterpretations during social interactions (Mirdamadi, M.,2023).

Hypotheses

H1: Overthinking is significantly correlated with somatic symptoms, psychological distress, and social dysfunction.
H2: There are no significant gender differences in the impact of overthinking on these health outcomes.
H3: Overthinking significantly predicts somatic symptoms, psychological distress, and social dysfunction in adults.

Material and Methodology

A cross-sectional quantitative study was conducted using the GHQ-28. A total of 250 adults aged 21–40 participated. The demographic breakdown was: 52% male, 48% female. The sample included 70% single, 25% married, and 5% other. Participants represented lower (8%), middle (85%), and higher (7%) socioeconomic statuses. Pearson correlation and regression analysis were applied to examine associations and

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predictive relationships. Overthinking Scale, Somatic Symptom Scale, Psychological Distress Scale and Social Dysfunction Scale were used. Data were analyzed using IBM SPSS. Statistical tests Pearson Correlation Analysis, Independent Samples t-Test and Simple Linear Regression were conducted.

Results

Table 1

Pearson Correlation between Overthinking and Health Outcomes

Variable	r	p
Somatic Symptoms	0.41	< .001
Psychological Distress	0.52	< .001
Social Dysfunction	0.45	< .001

Note. All correlations are significant at the 0.01 level (2-tailed).

All correlations are **positive and statistically significant** (**p < .001**), suggesting that higher levels of overthinking are associated with worse outcomes in all three domains. The **strongest correlation** is with **psychological distress** (**r = 0.52**), followed by **social dysfunction** (**r = 0.45**) and **somatic symptoms** (**r = 0.41**).

These results provide support for the hypothesis that **overthinking is significantly related to negative mental, physical, and social health outcomes**.

Table 2

Independent Samples t-Test for Gender Differences in Overthinking Impact

Variable	t	df	p
Somatic Symptoms	1.21	248	.228
Psychological Distress	0.98	248	.328
Social Dysfunction	0.75	248	.456

Interpretation:

None of the differences between **males and females** in the impact of overthinking on **somatic symptoms**, **psychological distress**, or **social dysfunction** are statistically significant (**p > .05**).

This indicates that **gender does not significantly moderate** the relationship between overthinking and the measured outcomes.

Table 3

Regression Analysis Summary

Predictor	B	SE B	β	p
Somatic Symptoms	0.52	0.07	0.43	<.001
Psychological Distress	0.6	0.06	0.48	<.001

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Social Dysfunction	0.49	0.05	0.45	<.001

Interpretation:
All three predictors are **statistically significant** ($p < .001$), suggesting strong associations between overthinking and each outcome variable.
Psychological **Distress (β = 0.48)** is the **strongest predictor**, followed by **Social Dysfunction (β = 0.45)** and **Somatic Symptoms (β = 0.43)**.
This indicates that individuals who overthink are more likely to experience higher levels of psychological distress, somatic complaints, and impaired social functioning.

Discussion
The study reveals significant relationships of overthinking between somatic symptoms, psychological distress, and social dysfunction. It also indicates that higher levels of overthinking are linked with worse physical, mental, and social health outcomes. This is consistent with earlier literature that necessarily links overthinking to increased levels of depression, anxiety, and emotional dysregulation (McLaughlin & Nolen-Hoeksema, 2011). Overthinking, especially in the form of repeated negative thinking patterns, is thought to worsen psychological symptoms through the maintenance of negative mood states and disruption of problem-solving skills. (Devi, E. ,2025).
Overthinkers might shun people to prevent selfdoubt,fearof criticism,or being unabl e to articulate themselves and hence lose their potential to sustain relationships and fulfill social roles (Zumbrunn, S. ,2020).This reinforces the argument that overthinking is not only an intrapersonal problem but also undermine one's ability to connect and assist. Finally, the association with somatic symptoms speaks to the psychophysiological effects of rumination. Chronic cognitive stress can lead to physiological tension, sleep disturbances, headaches, and other physical complaints (Borscht, J. F., Vercuil, B., & Thayer, J. F. ,2020).In addition, the fact that there are no substantial gender differences in the effect of overthinking indicates that these relationships are stable in male and female participants. This is contrary to some previous research proposing that women tend to be more rumination-prone (Alert, Jens, et al.,2025).

Conclusion
The strong correlations identified in this study confirm overthinking as a predictor of Somatic Symptoms, Psychological Distress, and Social Dysfunction in Adults. These results suggest the importance of early detection, cognitive-behavioral therapy (CBT), mental health interventions, specific treatments and mindfulness-based interventions to reduce rumination and mitigate its adverse impacts.

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