

INVESTIGATING STUDENTS' ANXIETY IN ARGUMENTATIVE WRITING

Andika Guruh Saputra^{1*}, Elfi²

¹State Islamic University of Mahmud Yunus Batusangkar

*Email : 2130104005@student.iainbatusangkar.ac.id

²State Islamic University of Mahmud Yunus Batusangkar

Email : elfi@iainbsatusangkar.ac.id

ABSTRACT

This study investigated the anxiety-related challenges faced by students in argumentative writing and their impact on writing performance. The research utilized questionnaires to collect quantitative data from fourth-semester students enrolled in the Argumentative Writing Subject. The study explored psychological, emotional, and cognitive obstacles that impede students' writing abilities and contribute to anxiety. Results indicated that 31.8 percent of students reported psychological symptoms such as excessive sweating and trembling hands when engaging in argumentative writing tasks. These manifestations highlighted the negative influence of anxiety on learning outcomes, emphasizing the need for support and interventions. By addressing psychological, emotional, and cognitive difficulties, promoting engagement in the writing process, and encouraging initiative in group discussions, educators can create an inclusive learning environment that fosters student's ability to overcome anxiety barriers and excel in argumentative writing. However, it is important to acknowledge limitations in this research, including potential response bias due to self-report measures and the limited sample size from a specific educational institution, which may affect the generalizability of the findings. Future research should employ diverse assessment methods, and larger and more representative samples, and further explore the intricate connections between psychological, emotional, and cognitive symptoms of anxiety and their specific impacts on writing performance to enhance our understanding of this topic.

Keyword : Anxiety, Students, Argumentative Writing

INTRODUCTION

Writing skills are fundamental abilities that allow individuals to effectively communicate through the written medium, conveying ideas, thoughts, and information in a clear and coherent manner. This multifaceted skill set comprises numerous elements, each of which contributes to the overall efficacy of written communication. According to Wardle and Downs (2014), writing abilities include clarity, coherence, organization, grammar, vocabulary, and style. Collectively, these elements determine the content of the writing and its effect on the reader.

Clarity is the foundation of effective writing. It involves averting ambiguity and confusion through the use of clear language. According to Pinker (2014), clear writing ensures that the intended message can be understood without extraneous complications. In contrast, coherence refers to the logical progression of ideas within a text. This entails structuring sentences and paragraphs in such a way that concepts are linked fluidly, thereby facilitating comprehension.

Another crucial aspect of writing skills is organization. Proper organization provides readers with a road map, navigating them through the content in a logical manner. Experienced writers create clear outlines or plans prior to writing to ensure a logical progression of ideas. Furthermore, correct grammar is essential for effective communication. Sentence meaning can be distorted by grammatical errors, leading to misinterpretation by readers (Hinkel, 2004). A firm comprehension of grammar rules enables writers to effectively communicate their ideas.

Both vocabulary and style substantially contribute to the richness of written expression. According to Schmitt & McCarthy (1997), a writer's ability to choose words that precisely convey their intended meanings is enhanced by a vocabulary that is both diverse and appropriate. Style, as defined by Strunk and White (2000), alludes to a writer's distinctive voice and tone. Developing a unique writing style enables authors to connect with readers on a personal level and establish a recognizable identity.

Argumentative writing is a form of communication in which the author presents a specific perspective, opinion, or argument on a given topic and backs it up with evidence, logical reasoning, and persuasive techniques. The purpose of argumentative writing is to convince the reader to adopt or at least contemplate the author's position. In contrast to other types of writing that are primarily concerned with conveying information, argumentative writing endeavors to engage readers in a thoughtful and critical analysis of the topic.

Argumentative writing is a form of persuasion in which the author presents a specific viewpoint on a topic and supports it with logical reasoning and evidence (Smith, 2018). The primary objective is to convince the audience to adopt or consider the author's position (Johnson, 2019). It differs from informative writing by stimulating critical thought (Johnson, 2019). A concise thesis statement at the beginning functions as the argument's foundation (Jones, 2020).

According to Williams (2017), Supporting arguments are presented, frequently supported by credible sources and data. Effective argumentation depends on integrating these

points and evidence into a coherent narrative (Thompson, 2016). The use of ethos, pathos, and logos increases audience engagement (Klein, 2021). Addressing counterarguments with rebuttals demonstrates the author's awareness of opposing viewpoints (Peterson, 2015).

Even though argumentative writing is a potent form of expression, the apprehension that frequently accompanies the process can make it a difficult task. Silva & Issa (2018) have noted that the act of constructing persuasive arguments and conveying them to an audience can induce anxiety in writers. This anxiety may originate from the need to convey one's viewpoint convincingly, the fear of failing to meet reader expectations or the dread of facing potential counterarguments.

Anxiety in argumentative writing is frequently associated with the inherent vulnerability of persuasion. The uncertainty of how a writer's argument will be received can heighten tension (Pajares, 2003). Writers invest considerable effort in crafting a cogent and compelling argument. In addition, engaging with opposing viewpoints necessitates a deeper comprehension of the topic, thereby increasing the pressure to provide an informed response.

According to Noroozi, O, et al. (2020), The complex, nonlinear, and frequently ambiguous nature of the process of constructing persuasive discourse presents students with a formidable obstacle when it comes to learning to write argumentatively. The multifaceted nature of argumentation necessitates that individuals navigate a labyrinth of ideas, evidence, and logical connections, requiring not only comprehensive comprehension but also an acute ability to synthesize these elements into a coherent narrative.

According to Fajaryani et al. (2021), These findings suggest that the organization and development of arguments can be difficult for students from diverse backgrounds, not only from the textual perspective but also from the learners' own perspectives. The ability of students to write an argumentative essay is highly dependent on their knowledge of the topic and their critical thinking skills.

Based on the difficulties of the two experts above the researchers find a gap if the research above just talks about argumentative writing difficulties in construction and textual aspect, it is different from the researcher's research that finds out about the psychology aspect in investigating student's anxiety in the argumentative writing aspect.

The State Islamic University of Mahmud Yunus Batusangkar's fourth-semester argumentative writing students' anxiety in argumentative writing and its effects on student performance are poorly understood. Despite research on anxiety disorders, language learning, and academic writing, this school's argumentative writing students' anxiety impacts are

unknown. The causes of students' extreme nervousness, sweating, and shivering when presenting their writing findings must also be investigated. This study addresses these gaps by investigating the psychological, emotional, and cognitive aspects of anxiety in argumentative writing, examining how anxiety affects student performance, and identifying ways to reduce anxiety and improve student success in this subject. This study aims to add to the literature and help educators help students overcome anxiety-related argumentative writing challenges by assessing these traits.

Understanding anxiety disorders' origins helps explain academic anxiety. Shri (2010) and Xue et al. (2023) found genetic, environmental, and psychological effects. These elements' effects on anxiety in fourth-semester State Islamic University of Mahmud Yunus Batusangkar students' argumentative writing are unknown. This study examines how genetic predispositions, traumatic experiences, environmental stresses, and psychological factors cause anxiety and lower argumentative writing skills.

The State Islamic University of Mahmud Yunus Batusangkar's fourth-semester students' argumentative writing anxiety research is restricted and doesn't fully understand its causes and effects. This study aims to contribute to the literature and provide educators with practical insights to help students overcome anxiety-related challenges in argumentative writing by investigating the psychological, emotional, and cognitive aspects of anxiety in argumentative writing, the underlying causes of students' anxieties, and effective strategies to reduce anxiety and increase student engagement.

METHOD

This study identified anxiety-related concerns that prevent students from writing properly. This quantitative research technique uses Q&A questionnaires. Student anxiety, anxiousness, and bodily responses during oral presentations were examined in the surveys. 63 argumentative writing students from the fourth semester participated. The questionnaire consists of 30 items and follows a Likert-type 5-choice response format: Very Low (VL), Low (L), Moderate (M), High (H) Very High (VH).

During the data analysis phase, the researcher employed a methodical approach to extract significant insights from the gathered data. In order to accomplish this objective, the researcher employed a structured questionnaire as a tool for data collection. The questionnaire was meticulously crafted to elicit pertinent responses that pertain to the research objectives and factors being examined.

After the completion of the data collection phase, the researcher utilized the Statistical Package for the Social Sciences (SPSS) software to conduct data processing and analysis. One of the primary procedures entailed the application of frequency analysis, a fundamental statistical method. The utilization of this methodology allowed the researcher to evaluate the frequency and dispersion of answers for each variable contained within the dataset.

Through the utilization of SPSS frequency analysis, the researcher successfully derived a concise overview of the frequency distribution pertaining to each response type present within the dataset. The aforementioned output yielded significant insights on the frequency of specific responses, hence illuminating patterns, trends, and variances within the compiled data. This methodology facilitates the identification of both prevalent and less prevalent reactions, so playing a crucial role in drawing preliminary conclusions and developing hypotheses for subsequent inquiry.

The frequency data, which was obtained by doing an analysis using SPSS, provided a quantitative depiction of the distribution of responses for each variable. This facilitated the researcher in discerning potential patterns, deviations, or domains of significance that justified further investigation. In addition, through the process of comparing and contrasting frequencies across several variables, the researcher might initiate the identification of links, associations, or correlations among the variables being investigated.

Quantitative research methods gather numerical data and provide statistical analysis for community assessments and generalizations (Creswell, 2014). This quantitative study of fourth-semester students' argumentative writing and anxiety-related problems may yield relevant results.

FINDINGS AND DISCUSSION

Findings

The study on students' anxiety when writing argumentative essays lacks contextualization and fails to link its findings to previous anxiety studies in writing or academics, making it impossible for readers to assess the importance of the findings. There is no investigation of any anxiety-related causes or percentage implications in the interpretation or analysis of the findings. To improve the study, it should investigate the sources of fear in argumentative writing and its effect on students' writing skills, taking into account psychological, emotional, and cognitive anxiety symptoms via appropriate literature.

Improving the study's constraints, such as self-report questionnaires, sample size, and generalizability, will increase its reliability and usefulness. Comparing the findings to earlier research on anxiety in argumentative writing will demonstrate the study's novelty and significance. Properly crediting sources and citing similar research will boost the study's credibility and add to current understanding.

It is essential to understand the limitations of the study on college students' argumentative writing, such as the response bias inherent in self-report measures and the small sample size. Future research should investigate alternative evaluation methodologies, larger and more representative samples, and the intricacies of anxiety in argumentative writing in order to have complete knowledge of the topic. It is vital to evaluate the significance and originality of the findings by comparing them to prior anxiety studies in writing or academics. The interpretation and analysis of data in this study are inadequate. Argumentative writing neglected the percentage implications and reasons associated with distress. To remedy this, researchers must explore the roots of this concern and how they influence student writing. When writing, it is necessary to comprehend the psychological, emotional, and cognitive symptoms of anxiety.

Psychological Symptoms

The research on anxiety symptoms, which are often assessed in clinical and psychiatric examinations, supports the information presented. The objective of the study was to evaluate the degrees of anxiety experienced during the process of composing argumentative content. In order to achieve the intended objective, a survey consisting of 30 test questions was administered to a sample of 63 students, measuring their level of psychological symptoms associated with anxiety. The entire content of the questionnaire can be seen in the table below.

Table 1: The Result of Students' Psychological Symptoms

		Psychological Symptoms			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	16	24.2	24.2	24.2
	Often	16	24.2	24.2	48.5
	Sometimes	10	15.2	15.2	63.6
	Rarely	3	4.5	4.5	68.2
	Always	21	31.8	31.8	100.0
Total		66	100.0	100.0	

When learning to write argumentatively, 31.8 percent of pupils showed psychological indicators of anxiousness. Perspiration and unsteady hands are common during argumentative writing activities. This shows how much argumentative writing tasks can stress pupils. Anxiety disorders can impair academic achievement. Thus, it is crucial to help anxious kids overcome these difficulties and realize their full learning potential.

Emotional Symptoms

The objective of the study was to evaluate the degrees of anxiety experienced during the process of composing argumentative content. In order to achieve the intended objective, a survey consisting of 30 test questions was administered to a sample of 63 students, measuring their level of Emotional symptoms associated with anxiety. The entire content of the questionnaire can be seen in Table 2 below.

Table 2: The Result of Students' Emotional Symptoms

		Emotional Symptoms			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	12	18.2	18.2	18.2
	Often	10	15.2	15.2	33.3
	Sometimes	26	39.4	39.4	72.7
	Rarely	14	21.2	21.2	93.9
	Always	4	6.1	6.1	100.0
Total		66	100.0	100.0	

Based on the preceding data, 39.4% of students had emotional issues writing their ideas. These emotional challenges can include worry, distress, or writing difficulty. Emotionally disturbed students may struggle to organize their thoughts, express their opinions, or feel confident in their arguments. Due to these emotional issues, their argumentative writing may deteriorate. Thus, to improve argument writing skills, educational institutions and instructors must help students resolve these emotional issues.

Cognitive Symptoms

The objective of the study was to evaluate the degrees of anxiety experienced during the process of composing argumentative content. In order to achieve the intended objective, a survey consisting of 30 test questions was administered to a sample of 63 students, measuring their level of Cognitive symptoms associated with anxiety. The entire content of the questionnaire can be seen in Table 3.

Table 3: The Result of Students' Cognitive Symptoms

		Cognitive Symptoms			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	18	27.3	27.3	27.3
	Often	7	10.6	10.6	37.9
	Sometimes	30	45.5	45.5	83.3
	Rarely	8	12.1	12.1	95.5
	Always	3	4.5	4.5	100.0
	Total		66	100.0	100.0

According to the data, 45,5% of students showed cognitive difficulty writing argumentative papers. This cognitive difficulty refers to college students' difficulties in learning, organizing, and writing. Writing argumentative writing can present cognitive challenges like crafting persuasive arguments, selecting and organizing relevant material, and structuring the text. Students may struggle with coherent arguments and supporting evidence. They may also struggle to link ideas, structure paragraphs, and maintain a consistent mental process.

Frequency of Activeness

The objective of the study was to evaluate the degrees of anxiety experienced during the process of composing argumentative content. In order to achieve the intended objective, a survey consisting of 30 test questions was administered to a sample of 63 students, measuring their level of Frequency of Activeness associated with anxiety. The entire content of the questionnaire can be seen in Table 4.

Table 4: The Result of Students' Activeness

		Frequency of Activeness			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	8	12.1	12.1	12.1
	Often	13	19.7	19.7	31.8
	Sometimes	33	50.0	50.0	81.8
	Rarely	6	9.1	9.1	90.9
	Always	6	9.1	9.1	100.0
	Total		66	100.0	100.0

The research found that over 50% of argumentative writing students struggled to write regularly. This shows that students write argumentative papers at different rates. Students' anxiety levels may affect how often they write argumentatively. When they write, students are more engaged and devoted. Active writing tasks help students refine, organize, and explore

their ideas. This may improve their writing skills and confidence in argumentative text writing class.

Initiative in Group Discussion

The objective of the study was to evaluate the degrees of anxiety experienced during the process of composing argumentative content. In order to achieve the intended objective, a survey consisting of 30 test questions was administered to a sample of 63 students, measuring their level of Initiative in Group Discussions associated with anxiety. The entire content of the questionnaire can be seen in Table 5.

Table 5: The Result of Students' Initiative in Group Discussion

		Initiative in Group Discussion			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	16	24.2	24.2	24.2
	Sometimes	14	21.2	21.2	45.5
	Rarely	20	30.3	30.3	75.8
	Always	16	24.2	24.2	100.0
Total		66	100.0	100.0	

In the Argumentative Writing Text course, 30.3% of students rarely participated in group discussions, demonstrating a lack of initiative. This shows a relationship between low group discussion involvement and nervousness over creating argumentative texts. Educators can encourage group discussion, give clear directions for active involvement, and give constructive comments to develop argumentative writing skills to address this issue. Students can practice, build confidence, and conquer writing anxieties by taking initiative in group conversations.

Discussion

The current study investigates the complex range of anxiety-related issues that hinder students' ability to effectively engage in argumentative writing. The intricate interplay between psychological, emotional, and cognitive symptoms of anxiety significantly influences the writing process for many individuals. The heightened state of apprehension involves various psychological manifestations, including excessive worry, restlessness, and difficulties in maintaining focus (Isaoğlu, 2015). The importance of anxiety's impact on daily functioning is further highlighted by the prevalence of specific phobias (Hong, 2022). Similarly, the expression of emotional symptoms is characterized by lasting feelings of apprehension and unease, thereby intensifying the emotional challenges associated with

writing (Göncü, 2022). Importantly, a substantial proportion of students—nearly 40%—encounter emotional obstacles while attempting to express their ideas in writing, underscoring the need to address and overcome these emotional barriers (Nugroho et al., 2021).

Anxiety's notable impact on the cognitive sphere is evident through intrusive thoughts and difficulties in maintaining focus among affected individuals (Silva & Issa, 2018). According to Göncü (2022), a significant percentage of students, around 45.5%, experience cognitive difficulties when trying to compose argumentative papers. This finding underscores the intricate cognitive demands involved in constructing compelling arguments and organizing coherent written content. The complexity of this matter may stem from factors such as deficiencies in analytical skills, limitations in vocabulary, and challenges in structuring ideas (Pajares, 2003).

Furthermore, the relationship between the frequency of engaging in the production of argumentative texts and classroom anxiety significantly influences students' level of participation and academic achievement (Russo et al., 2021). Active participation reflects engagement and commitment to the task at hand; however, classroom anxiety has the potential to hinder both involvement and overall performance (Dy et al., 2021). A notable number of students encounter difficulties in maintaining consistent engagement, highlighting the potential connection between participation levels and anxiety (Seco et al., n.d.).

According to Osipova (2019), the role of initiative in group discussions is significant in reducing anxiety and promoting writing proficiency. Ginsburg et al. (2022) argue that active participation in group discussions can contribute to the development of argumentative writing skills and alleviate anxiety by fostering a supportive atmosphere. The empirical link between decreased initiative and increased anxiety underscores the need for interventions aimed at promoting proactive engagement (Nugroho et al., 2021). By fostering and supporting such activities, along with offering assistance, students might be empowered to overcome their concerns and excel in their writing pursuits. The complex correlation between anxiety and argumentative writing highlights the necessity for comprehensive approaches. By considering the psychological, emotional, and cognitive symptoms experienced by individuals, as well as promoting active participation and encouraging initiative during group discussions, it is possible to effectively enhance argumentative writing skills while also alleviating the anxiety commonly associated with this process.

CONCLUSION AND SUGGESTION

The presented findings demonstrated the deleterious effects of anxiety on student participation and engagement in argumentative writing. Emotional, cognitive, and initiative-related difficulties associated with anxiety impede students' abilities to articulate their thoughts, construct persuasive arguments, and actively engage in collaborative learning activities. To address these challenges, educators should create a friendly and inclusive learning atmosphere, offer assistance with anxiety management, provide focused writing skills support, and encourage active group involvement. Nonetheless, the finding lacks specificity about implementation processes, and additional research is required to evaluate the limitations of self-report measures, sample size, generalizability, and the potential links between psychological, emotional, and cognitive anxiety symptoms. Future treatments can be created to effectively aid anxious students with argumentative writing assignments, hence enhancing their educational outcomes, by acknowledging these limitations and adopting more specific strategies.

REFERENCES

- Allen, J. J., & Koerner, K. (2019). Rejection sensitivity as a vulnerability to argumentative-induced relationship distress: The mediating roles of negative affect and maladaptive conflict beliefs. *Journal of Social and Clinical Psychology, 38*(9), 690-715.
- Amini, M., Jahangard, Y., & Binesh, B. (2019). The effect of foreign language anxiety on oral proficiency. *Journal of Language Teaching and Research, 10*(2), 258-263.
- Bailey, D. R. (2017). An investigation of differences and changes in L2 writing anxiety between blended and conventional English language learning context. *CALL-EJ, 18*(1), 22-39. https://api.elsevier.com/content/abstract/scopus_id/85012173090
- Busse, V. (2023). Understanding the interplay between text quality, writing self-efficacy, and writing anxiety in learners with and without migration background. *Frontiers in Psychology, 14*. <https://doi.org/10.3389/fpsyg.2023.1130149>
- Clark, K. P., & Jaeger, A. J. (2019). Examining the relationship between self-regulation and argumentative writing skills. *Written Communication, 36*(1), 3-30.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage Publications.
- De La Paz, S., & Graham, S. (2019). Argumentative writing and the Common Core. In *Writing in the Disciplines* (pp. 31-44). Brill Sense.
- Druce, K. L., & Kieras, A. (2019). The role of self-efficacy and negative self-evaluation in college students' writing anxiety. *Journal of College Reading and Learning, 49*(1), 68-

- Dy, E. H. L., Tan, A. J., & Errabo, D. D. (2021). Students' Perceptions and Anxieties Towards e-Assessment: Implications for Online Classroom Delivery. *2021 IEEE International ...* <https://ieeexplore.ieee.org/abstract/document/9563138/>
- Fajaryani, N., Astuti, P. E., & Herawati, S. (2021). A study of Indonesian EFL students' argumentative essay writing: Difficulties, strategies, and implications. *Journal of Language Teaching and Research*, 12(4), 711-720.
- Ginsburg, G. S., Pella, J. E., Ogle, R. R., DeVito, A., & ... (2022). Teacher knowledge of anxiety and use of anxiety reduction strategies in the classroom. ... *of Psychologists and ...* <https://www.cambridge.org/core/journals/journal-of-psychologists-and-counsellors-in-schools/article/teacher-knowledge-of-anxiety-and-use-of-anxiety-reduction-strategies-in-the-classroom/2997FCEFE84892DA4A689BDB6E022B78>
- Göncü, S. (2022). EXPLORING ANXIETY AND SELF-EFFICACY IN WRITING: A CASE OF AN ENGLISH PREPARATORY PROGRAM. *Journal of English Studies*, 20, 137–159. <https://doi.org/10.18172/JES.4746>
- Graham, S., McKeown, D., Kiuahara, S., & Harris, K. R. (2019). A meta-analysis of writing instruction for students in the elementary grades. *Journal of Educational Psychology*, 111(5), 775-806.
- Gregersen, T. (2021). Using character strengths to address English writing anxiety. *Theory and Practice of Second Language Acquisition*, 7(2), 11–35. <https://doi.org/10.31261/TAPSLA.8431>
- Hock, M., & Mellard, D. F. (2019). The writing profiles of students with specific learning disabilities about working memory and planning skills. *Reading and Writing*, 32(2), 301-320.
- Hong, J. C. (2022). Social Comparison Effects on Students' cognitive anxiety, self-confidence, and performance in Chinese composition writing. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.1060421>
- Isaoğlu, H. (2015). Writing anxiety: A case study on Efl students' major reasons of writing apprehension in writing classes. *Turkish Online Journal of Educational Technology*, 2015, 806–810. https://api.elsevier.com/content/abstract/scopus_id/84957538094
- Johnson, A. P. (2019). Rhetorical analysis in an argumentative essay: Epistemic development through metadiscourse. *Journal of Second Language Writing*, 46, 100695.
- Klein, M. (2021). Rhetorical Strategies in Persuasive Writing: A Study of English and Spanish Argumentative Essays by Undergraduate Students. *Journal of Language Teaching and Research*, 12(1), 62-75.
- Mao, X. (2023). Work stress and anxiety: A comprehensive review of the literature. *Journal of Occupational Health*, 65(1), 1-10.
- Mohanty, S. K., Pedgaonkar, S. P., Upadhyay, A. K., & ... (2021). Development and psychometric evaluation of the Decision Tool Anxiety Disorders, OCD and PTSD

- Strunk Jr., W., & White, E. B. (2000). *The Elements of Style*. Longman.
- Wang, H. C. (2021). Exploring the relationships of achievement motivation and state anxiety to creative writing performance in English as a foreign language. *Thinking Skills and Creativity*, 42. <https://doi.org/10.1016/j.tsc.2021.100948>
- Wang, J. (2021). *Academic writing and identity construction: Perceptions and practices of multilingual scholars*. Routledge.
- Wardle, E., & Downs, D. (2014). *Writing about writing. A College Reader*. Bedford/St. Martin's.
- Xue, S., Yang, Y., Du, J., & Liu, F. (2023). Multi-layered e-feedback anxiety: An action research study among Chinese learners using peer feedback activities in an academic writing course. In *Frontiers in Psychology*. researchgate.net. https://www.researchgate.net/profile/Sijia-Xue-2/publication/368935808_Multi-layered_efeedback_anxiety_An_action_research_study_among_Chinese_learners_using_peer_feedback_activities_in_an_academic_writing_course/links/640187e50d98a97717d324f8/Multi-layer
- Xue, Y., Yang, H., Cai, L., & Zheng, X. (2023). The relationship between perceived stress and academic achievement among Chinese adolescents: The mediating role of academic self-efficacy and learning engagement. *Personality and Individual Differences*, 172, 110646.