

Examining the Roles of Teaching Style and Social Comparison in Academic Anxiety

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Abstract: Academic anxiety is a multidimensional phenomenon developing under multiple influences in academic environments. The present study explores how teaching style and social comparison together shape students' academic anxiety. Drawing on multiple empirical studies, this article addresses when shifts from autonomy-supportive to controlling teaching styles influence learners' engagement, motivation, and emotional functioning. Meanwhile, it also investigates how social comparison, especially upward and downward comparisons, affects students' self-concept and responses to stress. The findings showed that autonomy-supportive teaching styles might foster curiosity and self-efficacy, which reduce anxiety, whereas the controlling or neglectful ones make students perceive higher levels of pressure. Upward social comparisons often raise feelings of inadequacy and fear, while downward comparisons sometimes alleviate anxiety. These findings highlight the importance of supportive teacher-student relationships, peer comparison awareness, and a balanced academic load. They also suggest that combining inclusive teaching with social comparison awareness effectively alleviates academic anxiety and improves learners' psychological well-being. Further research should explore these processes across diverse cultural contexts, specific student subgroups, and innovative technologies for personalized support and real-time feedback.

1 INTRODUCTION

Academic anxiety is increasingly becoming one of the primary concerns in educational psychology, as it affects students' academic performance, emotional well-being, and long-term development. Academic anxiety is defined by apprehension, tension, and fear that occur in situations related to school (Gonzaga et al. 2022); it may jeopardize the socio-cognitive growth of students, thereby contributing to students' negative self-assessment and reduced motivation (Brumariu et al. 2023). Existing literature reveals that the manifestation of academic anxiety extends well beyond mere nervousness about assessments: it encompasses ongoing worries about personal competence, future outcomes, and peer comparisons, thereby shaping how students perceive themselves within academic environments (Palaroan, 2024).

In spite of the voluminous literature, two factors have come into the spotlight: teaching style and social comparison. On the one hand, teaching style refers to the distinctive methods, attitudes, and behavioral patterns that teachers employ; according to Jimola, it is highly instrumental in either alleviating or

aggravating anxiety (Jimola, 2024). Studies show that autonomy-supportive teaching fosters curiosity, engagement, and self-efficacy (Inayat & Ali, 2020), whereas controlling or neglectful teaching styles risk eroding students' intrinsic motivation (Ginsburg et al, 2022). On the other hand, social comparison emerges as another key dimension, influencing how students gauge their own abilities relative to peers (Buunk & Gibbons, 2007). More precisely, upward comparisons further increase feelings of inadequacy, while downward comparisons may in some situations decrease academic distress (Hong et al, 2022). However, how exactly these two factors-teaching style and social comparison-interact is not well examined, especially in their combined impact on academic anxiety.

Various previous studies seize aspects of the problem. For example, Salter et al. underscore the significance of supportive and warm relationships between teachers and students in reducing anxiety (Salter et al, 2024), while Xu and Li address the aspects through which social comparison may enhance self-evaluative concerns (Xu & Li, 2024). All the same, there is still a need for more integrated

research that will outline how these two domains are combined in influencing students' psychological well-being. The close association of anxiety with academic outcomes makes it an intersection whose understanding is of practical importance to educators, parents, and policymakers alike.

Against this backdrop, the present study will explore how teaching style and social comparison interactively contribute to the emergence and development of academic anxiety. Synthesizing insights from prior empirical investigations and theoretical discussions, this study will seek to: (1) identify how certain teaching approaches can either mitigate or exacerbate anxiety, (2) explain the mechanisms through which social comparison may amplify or buffer stress among students, and (3) suggest recommendations for effective interventions in diverse educational settings. This research informs both the existing literature and the patterns defined from relevant studies explored in the next sections through a multi-step process. In tune with this integrated perspective, the paper will attempt to elicit a deeper understanding of the roots of academic anxiety and, concurrently, provide a strategy that will help improve learning experiences and emotional well-being among students.

2 INTRODUCTION TO RESEARCH SUBJECTS

Academic anxiety is a multi-dimensional concept. Academic anxiety depends on the teaching style of the teacher; it also has a close relationship with social comparison. This section will elaborate on these concepts in detail.

2.1 Concept of Academic Anxiety

It is a multifaceted concept embracing feelings of tension, apprehension, and fear exhibited by students in academic environments. According to Gonzaga et al., academic anxiety encompasses forms of stress and anxiety that students experience while studying in school and other similar academic settings (Gonzaga et al. 2022). This may be harmful to their socio-cognitive development and inhibit their learning skills, psychologically traumatizing them in the process. Academic anxiety entails apprehension of future academic testing, and includes self-assessment as well as expectations about academic performance.

Li and Palaroan indicate that the consistent components in defining academic anxiety across various domains are both emotional components and cognitive evaluative components (Palaroan, 2024). The emotional component pertains to negative feelings of response by students when engaging themselves in specific learning tasks and includes fear and nervousness responses. For example, math anxiety is defined as the helpless and pressurized situations a student is in regarding mathematics problems. The cognitive evaluative aspect generally refers to apprehension regarding future performance or evaluation. For instance, the definition of language anxiety encompasses communication apprehension, test anxiety, and fear of negative evaluation.

There is a strong relationship that exists between academic anxiety and academic performance. According to Brumariu et al., anxious children are at a higher risk of facing study difficulties, and it has been found that test anxiety, a specific type of academic anxiety, relates negatively to the academic performance of students (Brumariu et al. 2023). Academic anxiety may also serve as a mediator between clinical anxiety and academic performance, influencing students' self-evaluation.

2.2 Concept of Teaching Style

Teaching style is a significant concept within educational psychology, referring to a series of methods and behavior patterns that teachers may show while teaching and, therefore, essentially influence the learning experiences and results. As mentioned by Jimola, teaching style could be referred to as original fashion in which teachers display themselves while teaching and interacting with their students, influenced by teachers' personal values, beliefs, and personality traits related to education (Jimola, 2024). Teaching style guides the process of teaching and has impacts on students and their ways of learning. Besides, Inayat and Ali mentioned in their article that teaching style has a direct influence on the engagement of students in learning (Inayat & Ali, 2020). For example, an autonomous-supportive teaching style can trigger intrinsic motivation in students, while a controlling teaching style may result in an increase in extrinsic motivation, where students will learn for rewards. Moreover, teaching style is also believed to be linked with students' curiosity and inquisitiveness, for different teaching styles can stimulate or suppress these traits in students.

Moreover, teaching style is a multidimensional concept that includes how teachers teach, interact with students, and evaluate the learning results of

students. Jimola points out that a teacher's teaching style can predict the academic achievements of students, and affect their attitudes towards subjects (Jimola, 2024). Therefore, research into and understanding of teaching styles bear great significance in promoting teaching quality and helping students in their all-round development.

2.3 Concept of Social Comparison and Its Categories

Social Comparison is the central concept in social psychology that describes how individuals assess their abilities and opinions by comparing themselves to others. Leon Festinger, one of the great figures in the field of social psychology, first introduced the Social Comparison Theory in 1954. His theory hypothesized that such social comparison gave a way through which people can make an evaluation of their opinions and abilities when there is some uncertainty. In the field of educational psychology, social comparison affects students' self-perception as well as motivation, and may impact their academic anxiety and performance (Buunk & Gibbons, 2007).

Social comparison can be divided, according to the direction of comparison, into several types. Based on the direction of comparison, Xu and Li further classify social comparison into three, namely, parallel comparisons, upward comparisons, and downward comparisons (Xu & Li, 2024). Upward comparison refers to the process in which individuals choose to compare themselves with others who are superior in certain aspects. Such comparisons could lead to negative consequences in self-assessment, for instance, an increase in negative feelings, which would be harmful to mental health and a significant contributing factor to social anxiety.

In educational settings, upward comparison would imply students appraising their academic performance against peers who are performing better academically (Xu & Li, 2024). It is this upward comparison that makes students feel a little less adequate and stressed, enhancing their social anxiety along with their academic anxiety. Accordingly, understanding the various kinds of social comparison and how it influences academic anxiety helps researchers in educational psychology appreciate the way students conceptualize the self during social interplay and deal with related stresses and anxieties over academic performances.

3 IMPACT OF TEACHING STYLES ON ACADEMIC ANXIETY

Teachers are a very active element in students' processes of learning. Their teaching styles impact students in terms of their academic achievements and actually, very strongly, impact their psychic structure as well. Over the years, more specifically with the development in educational psychology, the impact of teaching style on student anxiety has also become under study. Anxiety in general cannot be related just to consequences during school years but might have seriously influential effects in later academics and personal life.

Therefore, deeply understanding how different teaching styles influence students' academic anxiety and exploring the specific mechanisms through which teaching styles alleviate or exacerbate academic anxiety is of great importance to optimize teaching methods and improve educational quality. The following are some of the key studies in the research area that explain the impact of teaching styles on academic anxiety.

The first study, done by Inayat and Ali, related the teaching styles to the students' engagement, curiosity, and exploratory behavior (Inayat & Ali, 2020). This study had a sample size of 402, which was drawn from schools and universities. From the total, 173 school students had an age range between 13 and 17 years and 229 university students whose age range was between 19 and 37 years. The present research has used three questionnaires: the Perceived Parental Autonomy Support Scale (P-PASS), the Student Engagement Instrument, and the Curiosity and Exploration Inventory. Thus, these tools are a means of measurement for the perceptions of pupils about the teacher's autonomy-supportive or controlling teaching style and about students' engagement, curiosity, and exploratory behavior. These findings revealed that students' engagement and curiosity were positively associated with autonomy-supportive teaching styles, whereas controlling teaching styles potentially undermined students' intrinsic motivation. This also illustrates how teaching styles may affect students' emotional states and behaviors, and, in turn, potentially indirectly impact academic anxiety.

Similarly, Inada probed strategies which teachers utilized in the foreign language classrooms to reduce student anxiety while improving their communicative ability (Inada, 2021). This study researched six teachers on how they tackled anxiety to allow the students to be in a better place in their

communications. They recommended strategies like a non-threatening class atmosphere, much oral practice in English, and maximum exploitation of class interaction dynamics that would work towards diminishing the anxiety feeling among the students. Although this study provides some concrete teaching strategies, it is more specialized towards the context of foreign language instruction.

The third study by Chen et al. explored the associations between students' perceptions of teachers' Academic Productivity Talk (APT) and students' emotions and dialectical engagement (Chen et al, 2020). The sample size in this study was 2,225 seventh- and eighth-grade students from 16 middle schools in one Chinese city. Of these, 1,146 were seventh graders and 1,079 were eighth graders. The mean age was 11.87 years, with 52.4% males and 47.6% females. Quantitative data collection included student questionnaires that had measures for students' perceptions of teachers' APT, their classroom emotions-both enjoyment and anxiety-and their dialectical engagement with other students. Besides, students' mathematics achievement tests were used, together with questionnaires on student gender and family resources. These findings supported the positive relationship between teachers' APT and students' dialectical engagement; students' emotions-encompassing both enjoyment and anxiety-mediated this relationship. This gives a new light into how teaching styles influence academic anxiety through emotional pathways.

Moreover, a recent study by Ginsburg et al. involved 51 elementary school teachers aged between 23 and 63 years, with teaching experience ranging from 0.5 to 33 years (Ginsburg et al, 2022). This wide range in ages and teaching experiences makes the sample more representative since it encompasses different kinds of teachers. Most of the teachers had limited training in alleviating anxiety among students. On the whole, it would appear that anxiety coping strategies among teachers themselves are lacking, which might affect their ability to handle and reduce anxiety among the students effectively. This study examined the understanding of anxiety and evidence-based anxiety reduction strategies in the classroom among elementary teachers in detail. Data collection was realized through questionnaires that probed teachers' personal and professional backgrounds, their background knowledge of anxiety and the treatment of anxiety, such as core manifestations of anxiety-physiological arousal, behavioral avoidance, and anxious thoughts-and the strategies they actually employed in the classroom for reducing anxiety, such as relaxation techniques, encouraging coping self-

talk, and gradual exposure to feared situations. The measurement instruments included a teacher background form, the Teacher Anxiety Knowledge Assessment (TKAA), the Classroom Strategies Questionnaire, a Teacher Efficacy Belief Scale, and an educator form of the Maslach Burnout Inventory (MBI). While it was determined that teachers had some degree of knowledge regarding anxiety, no statistical relationship was seen between this and the reported strategies used to reduce anxiety. This means that although teachers are aware of anxiety, their coping strategies are not applied well enough to cope with anxiety in students, thereby potentially increasing it. Therefore, teachers need further training in raising their awareness of anxiety and, consequently, how to effectively apply strategies aimed at reducing anxiety in the classroom. The study is important in trying to understand how teaching styles influence students' anxiety levels, while it has shown the probable disconnection between teachers' knowledge and their practice.

Lastly, a similar study which also goes closely with the topic under study is the systematic literature review carried out by Salter et al. (Salter et al, 2024). This review was a systematic evaluation according to the guidelines of PRISMA and was given an extensive review over how teacher-student relationships (TSRs) affect student anxiety. Most research findings identify that superior quality TSRs result in lower anxiety among the students. More specifically, TSRs that are perceived by students as supportive, warm, and caring, corresponding to a teaching style characterized by an authoritative teaching style of high responsiveness and appropriate levels of control or permissive teaching styles with high responsiveness and low levels of control, are associated with less anxiety, while those characterized by dependency, motivational support, conflict, or harassment correspondingly align with an authoritarian teaching style of high control and low responsiveness or neglectful styles of teaching with low levels of control and responsiveness with increased anxiety. This points to the fact that teaching styles can contribute to the anxiety of students, especially when it comes to creating a supportive and encouraging learning environment.

In summary, this chapter has tried to explain how teaching styles influence the students' academic anxiety by these five major studies, all related to this problem from different angles. While there were some differences among the focus of their studies, methodology, and limitations, several findings have been commonly obtained. While Ginsburg et al. focused on the understanding of anxiety by

elementary teachers and their use of anxiety reduction strategies (Ginsburg et al, 2022), Salter et al. present a broader perspective by systematically reviewing the impact of TSRs on middle school students' anxiety (Salter et al, 2024). Inayat and Ali investigated how teaching styles could affect engagement, curiosity, and the exploratory behavior of students (Inayat & Ali, 2020). Meanwhile, Inada considered the activities taken by teachers that could help to minimize anxiety in foreign language classes (Inada, 2021); Chen et al. conducted a similar investigation into teachers' use of APT, relating this to student feelings and engagement reflected by the students themselves (Chen et al, 2020). These studies employed various methods such as surveys, semi-structured interviews, and a systematic literature review, representing diverse research designs and techniques of data analysis.

These studies altogether suggest that the teaching style of teachers, especially the autonomy-supportive and controlling style, influences the level of academic anxiety among students to a great extent. Specifically, teaching styles have been related to variables such as student engagement, curiosity, exploratory behavior, dialectical engagement, emotions including enjoyment and anxiety, and self-efficacy. Positive TSRs and supportive teaching styles may relate to lower levels of anxiety in students, while controlling teaching may be associated with increased anxiety in students. For instance, autonomy-supportive teaching styles relate positively to higher levels of engagement and curiosity, increased dialectical engagement and self-efficacy that may lower the levels of academic anxiety. On the other hand, controlling teaching styles may damage intrinsic motivation and increase anxiety among students. Moreover, emotional support and caring by teachers have been noted to enhance students' self-efficacy and thereby reduce academic anxiety. These findings highlight the critical role of teachers in influencing students' psychological health and academic performance.

Nevertheless, there are a number of limitations and challenges in current research: most studies use cross-sectional designs, which reduce the clarity of the causal relationship, making it difficult to clearly specify which causal links between teaching styles and academic anxiety exist. Moreover, many have been bound mostly to students from certain cultural or educational backgrounds, with little comparative cross-cultural research that might influence the generalization of these findings. Also, mechanisms of how teaching styles create certain influences on types of academic anxieties, such as test anxiety or social anxiety, have to be identified in further research.

4 IMPACT OF SOCIAL COMPARISON ON ACADEMIC ANXIETY

While competition in education is at a rise in the modern atmosphere, social comparison has been one of the prime influences to take hold of the student's academic anxiety. Social comparison, too, bears impacts beyond academics, where the issue is related to social anxiety, self-esteem, and well-being. Therefore, the impact of social comparison on academic anxiety is of great significance to understand the inner world of students, optimize educational practices, develop effective interventions, reduce students' psychological stress, promote comprehensive development, and improve student welfare.

This chapter will synthesize extant research into the effects of social comparison on academic anxiety, discussing findings according to different research methods and theoretical perspectives. The following studies provide deep insight and empirical data.

Pigart et al. investigated how the identity of students influences their degree of Fear of Negative Evaluation (FNE) and examined the mediating role played by academic social comparison; the sample population consisted of 909 undergraduate science majors from 15 different research universities in the United States (Pigart et al, 2024). Students' FNE and Academic Social Comparison were measured by adapted copies of the Brief Fear of Negative Evaluation (BFNE) and the Social Comparison Scale (SCS). It does explain how academic social comparison mediates the association between student identity and FNE, especially in those large university science courses where there is a greater FNE for women/non-binary and LGBTQ+ students due to feelings of academically being inferior to their peers, thus directly impacting their academic anxiety. It also alludes to the need of reducing that fear of evaluation in those specific groups, precisely so as to equalize science opportunities.

Pulford et al. directed their efforts towards the investigation of the academic self-confidence concerning social comparison (Pulford et al, 2018). The sample consisted of 325 students from the University of Leicester, with 80 males and 245 females aged between 18 and 44 years old. Measuring the student participants' tendencies to compare themselves socially with others in educational settings, the Academic Social Comparison Scale (ASCS), as it was called, consisted of a 27-item scale. The Individual Learning Profile (ILP) was another

scale used in the research that measured the academic self-confidence of the students. The ASCS scale contains three subscales: downward comparison, upward comparison, and no comparison while the ILP scale contains ratings of self-confidence in six academic areas. The results showed that downward social comparison was relatively uncommon, as the mean score of the items assessing it was 3.35 on a 7-point scale, which is below the midpoint of 4, indicating that generally students disagreed to make such a comparison. Furthermore, this type of comparison did not significantly relate to academic self-confidence. On the contrary, those students who revealed less social comparison demonstrated more self-assuredness in reading, writing, and time management skills. Furthermore, it turned out that upward social comparison was actually undermining the level of one's self-confidence, whereas lower levels of social comparison tended to relate to high academic self-confidence. Upward social comparison is carried out by female students rather than male ones. Finally, the research showed that higher academic self-confidence may alleviate academic anxiety; thus, students with stronger self-confidence may experience less academic anxiety.

Okano and Nomura focused on upward social comparison and the social anxiety of social comparison, placing significant attention on the moderating role of self-assessed social skills (Okano & Nomura, 2023). According to the results, in the case of subjects who showed low perceived levels in the area of social skill self-assessment, upward social comparison is associated with social anxiety significantly; hence, providing supplementary evidence for the relationship of social comparison to academic anxiety.

Hong et al. conducted research with 90 junior high school students in Taiwan, with an average age of 14.47 years (Hong et al, 2022). These were further divided at random into three groups: No Comparison Group (NCG), Upward Comparison Group (UCG), and Downward Comparison Group (DCG). In the study, three methods were designed for teaching Chinese writing skills: in NCG, students independently completed the composition; in UCG, excellent composition samples were prepared for students to write about on the same topic; and in DCG, poor samples were prepared for students to critique. Students composed writings on six topics in five lessons. In the study, scales measured the cognitive anxiety of students, self-confidence enhancement, and writing performance. The results showed that the UCG and DCG students outperformed the NCG in significantly improving

their Chinese Composition Writing (CCW) skills. In addition, cognitive anxiety significantly decreased among DCG students. Furthermore, the self-confidence enhancement in terms of writing tasks was significantly higher among the UCG and DCG students than among the NCG students. This study proves a positive effect of social comparison on school achievements and offers valid suggestions for educational practice. Apart from examining the relationship of variables across different scales, this experiment attempted to validate how social comparison affects academic anxiety by employing an experimental approach. Its relatively comprehensive contextual design also provides a certain degree of ecological validity, making the conclusion highly convincing.

Beyond these studies, the systematic review and meta-analysis by McCarthy and Morina investigated the association between social comparison, depression, and anxiety with comprehensive analysis and found that social comparison was significantly associated with both issues of mental health (McCarthy & Morina, 2020). Though having a wider scope, the results again confirmed the role of social comparison in academic anxiety; social comparison processes were suggested for a consideration in future studies in clinical samples.

In the study by Xu and Li, the total sample consisted of 463 Chinese college students, from freshmen to seniors, who took part in the survey (Xu & Li, 2024). Using questionnaires, participants completed the scales in the following order: the Upward Social Comparison Scale, Relative Deprivation Scale, Ruminative Thinking Scale, and Social Anxiety Scale. The study found a significant positive association between upward social comparison and social anxiety among Chinese college students, mediated by relative deprivation and ruminative thinking. This result is also supported by prior research that stated social comparison is related to student's self-evaluation and mental health, especially in college student groups. More importantly, the study gave a more complex explanation to the relationship between social comparison and academic anxiety and emphasized the psychological mechanism of social comparison.

In summary, in the research field that has explored the influence of social comparison on academic anxiety, the above six studies provide different perspectives and findings. The research by Hong et al. and Pigart et al. focused on special student groups or special teaching objectives (Hong et al, 2022, Pigart et al, 2024), while the research of Xu and Li and Pulford et al. focused on social comparison in

relation to academic self-confidence and social anxiety in general (Xu & Li, 202, Pulford et al, 2018). While McCarthy and Morina took a broader approach by conducting a systematic review and meta-analysis across various populations and contexts, looking at the relationship between social comparison and depression and anxiety (McCarthy & Morina, 2020), Okano and Nomura narrowed down their examination to the role of self-assessed social skills in moderating social comparison and social anxiety (Okano & Nomura, 2023). Thus, both studies indicate the key role of individual differences during the process of social comparison. These studies were differently designed, some using cross-sectional survey designs, and employed questionnaires and scales to elicit responses on how social comparison impacts the psychological states of individuals, especially in regard to education and academic achievement, in its relation to negative emotions such as anxiety and depression.

Taken together, these studies indicate that social comparison is a very universal psychological phenomenon and hence may be an important variable for the formation and development of academic anxiety. In general, upward social comparison is related to academic anxiety, while in some studies, it has been documented that downward social comparison reduces emotional distress. In addition, feelings of relative deprivation and ruminative thinking have been proved to be two mediators between social comparison and academic anxiety, which further reveals the psychological mechanisms whereby social comparison affects academic anxiety.

Although the current literature on the relationship between social comparison and academic anxiety has provided valuable insights, there are still some limitations and challenges. First, most studies have adopted cross-sectional designs that do not allow for the establishment of causality. Second, the diversity of research samples is limited, with many studies focusing on students in specific cultural or educational contexts, thus limiting the generalizability of the research findings. Furthermore, while more sensitive measurement tools are able to capture different directions, they themselves are not sufficient for accounting for different influences of social comparison on academic anxiety. It would therefore be more necessary to lay down new theory or models regarding the influencing mechanism that can comprehensively explain the contribution of social comparison to academic anxiety.

5 DISCUSSION AND SUGGESTIONS

5.1 Overall Conclusions of Current Research

In summary, academic anxiety is a multidimensional construct, which emanates from several influences that interact complexly, such as teaching style and social comparison.

As earlier presented, the autonomy-supportive or controlling strategies of teachers could either reduce or increase academic anxiety. More particularly, supportive TSRs in the enhancement of curiosity, self-efficacy, and engagement generally correspond to low levels of academic anxiety. In contrast, controlled or neglectful teaching styles are associated with heightened test anxiety, decreased intrinsic motivation, and higher stress.

Meanwhile, how students compare themselves with their peers-most especially upward social comparison-enhances feelings of inadequacy, thus feeding into academic anxiety. In a number of studies, downward comparison tends to offer some respite; however, these effects are rather inconsistent across different contexts or groups of students. It is in these subjective meanings of such comparisons, such as feelings of relative deprivation and ruminative thinking, that the true determinants of the emergence or intensification of academic anxiety really lie.

The findings of these studies altogether demonstrate that academic anxiety emerges from the complex interplay between TSRs, teaching practices, and social comparison processes; no single factor would have solely explained its development. Rather, it is in how the teachers organize the learning environment and how students place themselves within the peer context that together shapes students' experiences of anxiety in school.

5.2 Suggestions Based on Conclusions

Teaching style, social comparison, and TSRs are some of the critical factors contributing to academic anxiety. Interventions which depend on teaching methods, awareness by teachers, self-regulated learning and homes which are encouraging will go a long way to help with academic anxiety. With these interrelated influences in mind, the following suggestions aim to reduce academic anxiety and create a more positive learning experience:

Firstly, academic anxiety deals with the teaching style being inclusive and supportive with the climate

of respect and encouragement; in this environment shaped by the inclusive and supportive teaching style, the differences among the pupils are accepted. There are also aspects where the elements of pupil autonomy in learning, and the assessment along with constructive feedback, is frequently provided. Teachers can allow students to have a sense of ownership and therefore increase their motivation while decreasing the level of stress when planning lessons or presenting different ways to approach problems.

Besides, it is relevant that teachers be able to identify symptoms of anxiety and practice classroom-based interventions. Professional development on how to identify symptoms of anxiety, as well as specific strategies with anxious students, provides the teacher with practical means of reducing learners' stress. Short relaxation exercises, discussions in small groups, or individualized conversations may thus help learners develop coping mechanisms and gradually build resilience.

In addition to academics, strengthening students' self-regulated learning and emotional management skills is one of the keys to reducing academic burdens. That is, when learners set goals, plan study schedules, monitor progress, and evaluate outcomes, they are usually able to feel a heightened sense of control over their academics. Mindfulness, reflective journaling, and guided self-talk are other techniques that enhance emotional regulation and may reduce the effects of highly competitive or performance-oriented environments.

Finally, a favorable home environment is conducive to students' coping well with anxiety about school. Parents can further encourage the sharing of difficulties with schoolwork, setting realistic goals, and limiting the emphasis on upward social comparisons. This kind of atmosphere would give their child the chance to feel safe: sharing his or her difficulties and asking for advice if necessary. In case there are signs of severe anxiety, further professional psychological consultation is needed in order to protect students emotionally and support overall academic success.

5.3 Future Research Directions

Therefore, from a methodological perspective, more longitudinal studies are needed on academic anxiety in the future; this design has the potential of showing how academic anxiety naturally evolves over the years, of better specifying how teaching style, social comparison, and academic anxiety interact or cause

each other problems, and detecting critical points which can be timely intervened.

Additionally, further research on academic anxiety is thus usefully embedded within an exploration of its manifestation across diverse cultural and educational contexts, since it would appear that cultural norms and values do indeed make a critical contribution to shaping students' perceptions of and reactions to academic pressures. More particularly, cross-cultural comparisons may yield information on how the socialization of learning behavior, teacher-student interaction, and parent-child interaction serve to identify more precisely which factors of academic anxiety are universal and which are culture-specific.

Moreover, specific research into subgroups of students, such as first-grade students, learners with special needs, or those from economically disadvantaged backgrounds, can give far more detailed strategies for reducing anxiety. Because these tailored interventions are matched to the particular challenges of a given subgroup, researchers and practitioners are able to develop targeted approaches that help optimize learning outcomes and mental well-being.

The other promising avenue may be research in the field of technological solutions, including online platforms and applications for learning, digital self-regulation tools, and emotional support. The continuation of this avenue may describe, for instance, how new developments in these technologies may explain how virtual classrooms, adaptive learning, and mental health applications will reduce academic stress through direct and personalized feedback, as well as direct and personalized emotional support. With the robust measures of anxiety on board, such technology being embedded within empirical studies allows the delineation of new opportunities toward cultivating supportive and student-centered learning environments.

6 CONCLUSION

This article focused on how teaching style and social comparison shape academic anxiety among students. Evidence reviewed showed that an autonomy-supportive teaching style may nurture curiosity, engagement, and self-efficacy—all of which tend to reduce anxiety—while controlling or neglecting teaching styles consistently elevate anxiety because they risk students' intrinsic motivation and sense of security. Whereas social comparison processes, and

upward comparisons in particular, often create feelings of inadequacy and test-related stress, downward comparisons can sometimes reduce distress in some contexts. What all these studies share is the finding that academic anxiety results when students perceive a discrepancy between their capabilities and the demands imposed on them, either by teachers or peers. Teachers who foster respectful classroom climates and constructive feedback reduce students' academic concerns; inclusive pedagogical approaches further support learners to develop confidence and resilience. Overall, interplays between teaching style and social comparison have consequences on emotions within the classrooms and also broaden the influence over learning outcomes more generally.

By synthesizing the results of the studies, a protective buffer in academic anxiety would be provided through strategies that promote good TSRs, emotional support, and constructive peer-based evaluations. Highly competitive settings can heighten negative self-assessments and perceived academic pressures, again pointing to a need for balance in supportive learning communities.

The insights gained here have implications for educational practice and policy. Greater awareness of how teaching approaches influence students' emotional well-being may help guide teacher-training programs, encouraging more supportive methods. Recognizing the role of social comparison provides school administrators and counselors with a framework for interventions that foster healthy peer interactions. Research findings could therefore be used to inform strategies to improve academic performance and mental health.

For the future, further research should be done with longitudinal designs and culturally diverse samples in order to better establish causal relations and improve generalizability. Research into subgroups with unique vulnerabilities, such as students with special learning needs, might also inform our understanding of targeted interventions. Lastly, exploration into technology-based tools, including adaptive learning platforms, could yield novel avenues for reducing academic anxiety through personalized support and real-time feedback.

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