JOURNAL OF CURRENT SOCIAL ISSUES STUDIES Volume 2 Issue 6 , 2025, 336-341
ISSN (P): 3078-5316 | ISSN (E): 3078-5324 Doi:10.71113/JCSIS.v2i6.312

Exploring the Relationship between Social Environment, Teaching Ability, and Academic Achievement among Preschool Education Major Students in Chinese Colleges: A Conceptual Framework

He Min[1a], Yasmin Binti Hussain [2*b]

[1]Faculty of Education, City University Malaysia, 46100 Petaling Jaya, Selangor, Malaysia
**Corresponding author: Yasmin Binti Hussain*

Abstract

This article proposes a conceptual framework integrating social environment and teacher teaching ability as key determinants of academic achievement among preschool education students in Chinese colleges. Drawing from Ecological Systems Theory, Social Cognitive Theory, Teaching Effectiveness Theory, and Constructivist Learning Theory, the framework highlights how companionship, encouragement, social cohesion, and role models influence learning outcomes both directly and through the mediating role of instructional quality. Teacher teaching ability is defined across five dimensions: subject matter knowledge, instructional planning, assessment, learning environment, and communication. The framework offers a foundation for empirical validation and actionable guidance for educational policy, institutional improvement, and teacher development—particularly in under-resourced regions. This model advances a holistic understanding of academic success and supports equity-driven reforms in early childhood teacher education.

Keywords : Academic achievement, social environment, teacher teaching ability, preschool education, conceptual framework, China, early childhood education

Suggested citation : He, M., & Hussain, Y. B. (2025). Exploring the Relationship between Social Environment, Teaching Ability, and Academic Achievement among Preschool Education Major Students in Chinese Colleges: A Conceptual Framework. *Journal of Current Social Issues Studies*, 2(6), 336–341. https://doi.org/10.71113/JCSIS.v2i6.312

Introduction

Academic achievement is widely recognized as a critical indicator of educational quality, student development, and long-term socioeconomic mobility (Kuncel, Hezlett, & Ones, 2014). In the context of teacher education, especially within early childhood education (ECE) programs, student achievement serves a dual role: it reflects not only the learners' academic performance but also their preparedness to become competent educators for future generations. However, students in preschool education majors—particularly those in under-resourced or regional Chinese colleges—face multiple challenges that may impede their academic success. These include limited institutional support, uneven teaching quality, and underdeveloped peer or community support systems (Fang & Zhang, 2020; Liu et al., 2021).

Globally, research has emphasized that academic outcomes are not determined by individual ability alone but are deeply embedded in the learners' social context (Bronfenbrenner, 2005; Wang & Holcombe, 2010). The social environment, encompassing interpersonal relationships, institutional climate, peer support, and community cohesion, plays a significant role in shaping students' motivation, engagement, and academic persistence. Studies have demonstrated that students who perceive their environment as supportive—whether through emotional encouragement, social belonging, or role modeling—tend to perform better academically (Allen, Kern, Vella-Brodrick, Hattie, & Waters, 2018; Kim & Lee, 2016).

Equally critical is the quality of teaching, particularly the instructional capacity of educators to facilitate deep learning, adapt to student needs, and foster inclusive classroom environments. Teaching ability has been consistently identified as one of the strongest school-level predictors of academic achievement (Hattie, 2009; Stronge, 2018). Effective teachers influence not only students' comprehension of academic content but also their self-efficacy, learning behaviors, and emotional engagement (Darling-Hammond, Flook, Cook-Harvey, Barron, & Osher, 2020). For preschool education students, who are themselves in training to become future teachers, the modeling of effective instructional practices is both a learning tool and a professional template.

Despite the individual importance of social environment and teaching ability, their interconnected impact on academic achievement—especially through mediation mechanisms—remains underexplored in many developing or transitional

ISSN (P): 3078-5316 | ISSN (E): 3078-5324 Doi:10.71113/JCSIS.v2i6.312

education contexts. In China, while numerous reforms have targeted curriculum modernization and teacher professionalization, substantial disparities still exist across urban and rural institutions (Zhou & Brown, 2015). Students in regional colleges often operate within environments that are socially fragmented and pedagogically inconsistent, which may suppress academic potential unless buffered by high-quality instruction (Chen & Sun, 2021).

This article aims to develop a comprehensive conceptual framework that integrates social environment and teacher teaching ability as interrelated determinants of academic achievement among preschool education students in Chinese colleges. By drawing on Ecological Systems Theory (Bronfenbrenner, 2005), Social Cognitive Theory (Bandura, 1997), Teaching Effectiveness Theory (Stronge, 2018), and Constructivist Learning Theory (Vygotsky, 1978), this framework seeks to map the theoretical pathways that connect environmental context and instructional quality to student outcomes. The model not only clarifies how these variables interact but also provides a foundation for future empirical research and policy interventions in early childhood teacher education.

Theoretical Foundations

Understanding the multifaceted nature of academic achievement requires a theoretical lens that encompasses both individual and environmental determinants. This study integrates four well-established theories—Ecological Systems Theory, Social Cognitive Theory, Teaching Effectiveness Theory, and Constructivist Learning Theory—to explain how social environment and teaching ability jointly influence learning outcomes among preschool education students in Chinese colleges.

Ecological Systems Theory

Ecological Systems Theory, developed by Bronfenbrenner (1979; 2005), conceptualizes human development as the result of dynamic interactions between individuals and their surrounding environmental systems. These include the microsystem (immediate relationships such as peers and teachers), mesosystem (interactions between home and school), exosystem (influences from external environments like parents' workplaces), and macrosystem (cultural values, policies, and ideologies).

In the context of higher education, the microsystem and mesosystem are particularly relevant. Students' perceptions of companionship, encouragement, neighborhood social cohesion, and role models are situated within these systems. A nurturing microsystem has been linked to stronger academic engagement and persistence (Wang & Holcombe, 2010). In Chinese colleges, especially those in less-developed regions, ecological deficits such as fragmented social support or poor peer climate may weaken students' academic resilience (Liu et al., 2021). Therefore, ecological theory provides a foundation for understanding how diverse aspects of the social environment interactively shape academic experiences.

Social Cognitive Theory

Social Cognitive Theory (SCT), introduced by Bandura (1986, 1997), emphasizes the triadic reciprocal relationship between personal factors, environment, and behavior. Within this model, academic achievement is influenced by self-efficacy, observational learning, and social persuasion—all of which are deeply affected by students' interactions with peers, teachers, and their broader learning context.

For preschool education students, the development of academic self-efficacy is critically shaped by exposure to supportive social models and teacher feedback (Schunk & DiBenedetto, 2020). A positive social environment not only strengthens motivational beliefs but also supports the internalization of adaptive learning behaviors. Moreover, high-quality teaching acts as a mechanism of vicarious learning, through which students acquire the confidence and competence needed for professional success. SCT thus validates the importance of social environment and teaching ability as interdependent influences on academic growth.

Teaching Effectiveness Theory

Teaching Effectiveness Theory posits that instructional quality is a primary determinant of student academic performance. Hattie's (2009) synthesis of over 800 meta-analyses highlighted that teacher-related variables—especially feedback, instructional clarity, and classroom interaction—have some of the strongest effect sizes on academic outcomes.

Effective teaching involves more than delivering content; it includes fostering a positive learning climate, tailoring strategies to student needs, and encouraging reflective thinking (Darling-Hammond et al., 2020). For pre-service teachers, high-quality teaching serves not only as a source of learning but also as a model of what they are expected to replicate in their future classrooms (Stronge, 2018). In China's vocational colleges, however, variations in teaching ability—especially in rural regions—remain a barrier to student achievement (Chen & Sun, 2021). This theory supports the inclusion of teaching ability as a mediating factor that transmits the influence of environmental conditions into measurable academic outcomes.

Constructivist Learning Theory

Constructivist Learning Theory, with foundations in the works of Piaget, Vygotsky, and Bruner, conceptualizes learning as an active, contextual, and socially embedded process. According to this theory, knowledge is not passively received but actively constructed through meaningful interaction with the learning environment (Fosnot & Perry, 1996; Vygotsky, 1978).

In the classroom, constructivist approaches emphasize learner-centered instruction, peer collaboration, and teacher scaffolding. Teachers are seen as facilitators who support students' knowledge construction by designing interactive tasks, giving timely feedback, and encouraging critical reflection (Brooks & Brooks, 1999). When embedded within a supportive

ISSN (P): 3078-5316 | ISSN (E): 3078-5324 Doi:10.71113/JCSIS.v2i6.312

social environment, these instructional strategies significantly enhance academic achievement (Jonassen, 1999). For preschool education students, constructivist teaching not only promotes personal academic success but also serves as professional modeling for their future teaching practice.

Core Constructs and Dimensions

A comprehensive understanding of academic achievement among preschool education students requires the articulation of its influencing factors in a theoretically grounded manner. This conceptual framework focuses on three central constructs: social environment, teacher teaching ability, and academic achievement. Each of these variables is multidimensional, shaped by overlapping theoretical traditions and empirical findings, especially within the context of under-resourced higher education environments in China.

Social Environment

The social environment is defined as the network of interpersonal and institutional relationships that shape students' educational experiences, including emotional support, peer interaction, and community engagement (Bronfenbrenner, 2005). In teacher education contexts, especially those in non-elite or rural regions, students' perceptions of their social surroundings are crucial in influencing academic engagement and persistence. This study operationalizes social environment through four interrelated subdimensions: companionship, encouragement, neighborhood social cohesion, and role models. Companionship reflects the emotional and academic support derived from peer relationships, which enhances a sense of belonging and promotes collaborative learning (Kim & Lee, 2016). Encouragement pertains to motivational support provided by teachers, peers, and families, which has been shown to reinforce students' self-efficacy and academic effort (Schunk & DiBenedetto, 2020). Neighborhood social cohesion captures the degree of solidarity and trust within the school or surrounding community, facilitating emotional security and institutional trust (Zhou & Brown, 2015). Lastly, role models represent individuals who embody academic or professional excellence, guiding student aspirations through observational learning, as emphasized in Social Cognitive Theory (Bandura, 1997).

Teacher Teaching Ability

The second key construct, teacher teaching ability, is conceptualized as the instructional competence of educators, encompassing both technical skills and relational capacities. Teaching quality has long been recognized as one of the strongest school-level predictors of student achievement (Hattie, 2009; Stronge, 2018). Drawing on Teaching Effectiveness Theory and Constructivist Learning Theory, this study defines teacher teaching ability across five dimensions: subject matter knowledge, instructional planning and strategies, assessment, learning environment, and effective communication. Subject matter knowledge refers to the teacher's command over academic content, while instructional planning emphasizes the ability to organize and present information coherently. Assessment includes both formative and summative evaluation skills, which are critical for tracking and enhancing student learning. The learning environment reflects the extent to which a teacher creates an inclusive, motivating, and emotionally safe classroom. Finally, effective communication relates to the teacher's ability to convey ideas, provide feedback, and engage in responsive dialogue. Each of these dimensions plays a crucial role in shaping not only cognitive development but also student motivation, particularly in vocational colleges where students often lack strong academic foundations (Chen & Sun, 2021).

Academic Achievement

Academic achievement, the outcome variable in this model, is interpreted as a multidimensional construct that includes both objective and subjective indicators of success. Beyond test scores, academic achievement also entails students' perceived mastery of course content, their ability to manage academic demands, and their social adaptation to the college environment (Kuncel, Hezlett, & Ones, 2014; Váchová & Novotny, 2020). This framework identifies three core subdimensions: study performance, handling of study demands, and social adaptation. Study performance refers to self-perceived academic accomplishment, while handling study demands reflects time management, stress regulation, and persistence. Social adaptation assesses the student's ability to integrate into the academic community and maintain meaningful relationships. For preschool education students, these dimensions are particularly salient, as they also shape the professional dispositions required in early childhood teaching roles (Darling-Hammond et al., 2020).

Taken together, these three constructs and their subdimensions form the theoretical backbone of the proposed conceptual framework. The model assumes that a supportive social environment enhances academic achievement directly and indirectly through the mediating influence of teacher teaching ability. The integration of psychological and pedagogical constructs reflects a holistic view of student development and provides a basis for future empirical testing and policy design.

Proposed Conceptual Framework

ISSN (P): 3078-5316 | ISSN (E): 3078-5324 Doi:10.71113/JCSIS.v2i6.312

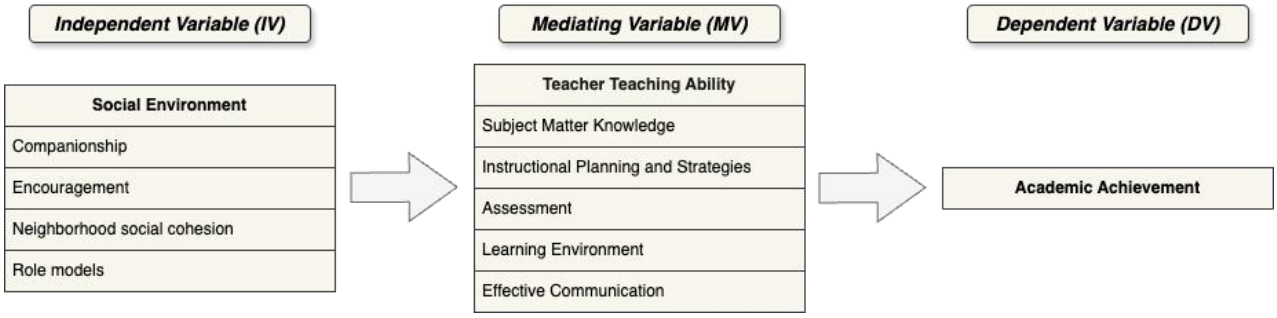

Figure 1. The Conceptual Framework of the Study

Building upon the theoretical foundations and the multidimensional constructs previously discussed, this section presents the proposed conceptual framework designed to explain the mechanisms through which social environment and teacher teaching ability influence academic achievement among preschool education students in Chinese colleges. The framework is both theoretically informed and empirically testable, integrating contextual, instructional, and outcome variables into a cohesive model of academic development.

As illustrated in Figure 1, the framework proposes a mediated pathway in which the social environment directly affects teacher teaching ability, which in turn influences students' academic achievement. Additionally, the model acknowledges the possibility of a direct effect of social environment on academic achievement. However, the primary assumption guiding this model is that teacher teaching ability functions as a critical mediating mechanism, transforming environmental inputs into educational outcomes through instructional processes and student-teacher interactions.

The first domain, social environment, is conceptualized as a multidimensional construct comprising four subcomponents: companionship, encouragement, neighborhood social cohesion, and role models. These dimensions represent the interpersonal and institutional climate within which students operate. Positive peer relationships and emotional encouragement foster psychological security and motivation, while social cohesion and exposure to inspiring role models reinforce academic norms and aspirational thinking (Allen et al., 2018; Bronfenbrenner, 2005; Kim & Lee, 2016).

The second domain, teacher teaching ability, mediates the relationship between social context and academic achievement. It encompasses five core subdimensions: subject matter knowledge, instructional planning and strategies, assessment, learning environment, and effective communication. These components reflect the teacher's ability to not only transmit knowledge but also foster a student-centered, reflective, and inclusive learning experience. Research consistently highlights that high-quality teaching can mitigate the adverse effects of a weak social environment and enhance student achievement even in under-resourced settings (Hattie, 2009; Stronge, 2018; Chen & Sun, 2021).

Finally, the framework situates academic achievement as the outcome variable, characterized by study performance, ability to manage academic demands, and social adaptation. These outcomes are not solely influenced by cognitive input but are shaped by the interplay between perceived environmental support and the instructional quality received by students (Darling-Hammond et al., 2020; Váchová & Novotny, 2020).

This conceptual model is grounded in four interrelated theories: Ecological Systems Theory, which explains the multilayered influence of the environment; Social Cognitive Theory, which emphasizes modeling, feedback, and self-efficacy; Teaching Effectiveness Theory, which highlights pedagogical quality as a direct determinant of outcomes; and Constructivist Learning Theory, which positions learning as socially and instructionally mediated. Together, these perspectives justify the theoretical assumptions and directional paths embedded in the model.

Importantly, the framework is designed to guide empirical testing through quantitative methods, such as structural equation modeling (SEM), enabling researchers to evaluate both direct and indirect effects, examine the strength of mediating pathways, and compare differential contributions of each subdimension. This provides a robust foundation for future studies aiming to improve academic success among pre-service teachers and inform evidence-based interventions in Chinese teacher education.

Implications for Future Research and Practice

The conceptual framework presented in this article offers a theoretically grounded model that advances the understanding of academic achievement in teacher education, particularly within the context of under-resourced Chinese colleges. By integrating social environment and teacher teaching ability as interdependent determinants, the framework not only addresses existing gaps in educational theory but also generates practical insights for policy makers, teacher educators, and institutional leaders.

Implications for Future Research

First, this model provides a robust foundation for empirical testing using advanced statistical techniques such as structural equation modeling (SEM), mediation analysis, or multi-group comparisons. Researchers may investigate the relative strength of direct and indirect paths, evaluate the mediating role of teacher teaching ability, and examine whether these relationships vary by student demographic factors such as gender, socioeconomic status, or urban-rural background. Additionally, this

ISSN (P): 3078-5316 | ISSN (E): 3078-5324 Doi:10.71113/JCSIS.v2i6.312

framework supports cross-cultural comparisons, encouraging researchers in other countries to replicate the model and explore contextual similarities and differences in how environmental and instructional factors shape academic success.

Second, future studies can extend this model longitudinally. The cross-sectional nature of many existing studies, including much of the Chinese teacher education literature, limits causal inferences. A longitudinal application of this framework can clarify how changes in perceived social support or teaching quality over time impact academic achievement. This is particularly useful for teacher education programs that span several years and involve developmental progression in student competencies.

Third, this model opens opportunities for scale development and validation. Each of the constructs—social environment, teacher teaching ability, and academic achievement—can be further refined through psychometric studies that confirm factorial structures and ensure measurement invariance across different subpopulations. Instruments developed under this framework could significantly contribute to assessment and evaluation in educational institutions, especially for program review and quality assurance purposes.

Finally, researchers may explore moderation effects by incorporating variables such as emotional resilience, learning motivation, or institutional support. These variables could either amplify or buffer the effects described in the model and enrich understanding of the interplay between personal, instructional, and contextual factors.

Implications for Educational Practice and Policy

From a practical standpoint, this framework highlights several avenues for enhancing student outcomes in preschool teacher education programs. The significant role of the social environment underscores the need for institutions to invest in creating inclusive, socially cohesive learning spaces. Strategies such as peer mentoring, faculty-student engagement activities, community-based learning, and inclusive housing policies can promote companionship, encouragement, and cohesion among students—particularly in vocational colleges with historically low student integration.

In addition, the framework reinforces the importance of teacher professional development. The five subdimensions of teacher teaching ability identified here—subject matter knowledge, instructional planning, assessment, learning environment, and communication—should serve as core pillars in designing training modules for faculty. In-service training, peer observation programs, and reflective teaching practices should be encouraged across higher education institutions to raise instructional quality, especially in regional and rural teacher training colleges.

This framework also calls for curricular reform. Course design in teacher education should reflect constructivist and student-centered pedagogies, enabling pre-service teachers to experience and internalize the type of teaching practices they are expected to implement in early childhood classrooms. Furthermore, formal feedback systems should be established to allow students to assess instructional effectiveness, with results informing ongoing professional learning for educators.

From a policy perspective, ministries and educational authorities should recognize the dual importance of social support systems and instructional quality in teacher education. Funding models and quality assurance metrics should reward institutions not only for academic results but also for demonstrated efforts in building supportive learning communities and enhancing teaching effectiveness. Moreover, specific guidelines could be introduced to support regional equity in preschool teacher education, helping address systemic disparities between urban and rural institutions.

Finally, the model provides a framework for institutional self-evaluation. By adopting the constructs and dimensions articulated here, colleges can implement structured audits of their learning environments and teaching practices, with a focus on identifying strengths and areas for improvement. This evidence-based approach to institutional development can lead to more targeted, effective strategies for promoting academic success.

Conclusion

This conceptual framework highlights the intertwined roles of social environment and teacher teaching ability in shaping academic achievement among preschool education students in Chinese colleges. Grounded in multiple educational theories, the model offers a comprehensive view of how contextual and instructional factors interact. It provides a practical foundation for future empirical studies and actionable insights for improving teacher training and student support systems. Ultimately, fostering both supportive environments and effective teaching is essential for cultivating capable early childhood educators.

Conflict of Interest

The authors declare no conflict of interest.

References

[1] Allen, K. A., Kern, M. L., Vella-Brodrick, D., Hattie, J., & Waters, L. (2018). What schools need to know about fostering school belonging: A meta-analysis. *Educational Psychology Review*, 30(1), 1–34. https://doi.org/10.1007/s10648-016-9389-8

[2] Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman.

[3] Bronfenbrenner, U. (2005). *Making human beings human: Bioecological perspectives on human development*. Sage.

[4] Brooks, J. G., & Brooks, M. G. (1999). *In search of understanding: The case for constructivist classrooms* (2nd ed.). Alexandria, VA: ASCD.

[5] Chen, F., & Sun, X. (2021). Student perception of teacher effectiveness and its impact on learning engagement in Chinese

colleges. *International Journal of Educational Development*, 80, 102298. https://doi.org/10.1016/j.ijedudev.2020.102298

[6] Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020). Implications for educational practice of the science of learning and development. *Applied Developmental Science*, 24(2), 97–140. https://doi.org/10.1080/10888691.2018.1537791

[7] Fosnot, C. T., & Perry, R. S. (1996). Constructivism: A psychological theory of learning. In C. T. Fosnot (Ed.), *Constructivism:* Theory, *perspectives, and practice* (pp. 8–33). Teachers College Press.

[8] Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Routledge.

[9] Jonassen, D. H. (1999). *Designing constructivist learning environments*. In C. M. Reigeluth (Ed.), *Instructional-design* theories *and models: A new paradigm of instructional theory* (Vol. 2, pp. 215–239). Lawrence Erlbaum Associates.

[10] Kim, H., & Lee, M. (2016). The influence of peer relationships and school environment on Korean students' academic achievement. *Asia Pacific Education Review*, 17(1), 13–26. https://doi.org/10.1007/s12564-015-9402-7

[11] Kuncel, N. R., Hezlett, S. A., & Ones, D. S. (2014). A comprehensive meta-analysis of the predictive validity of the Graduate Record Examinations. *Psychological Bulletin*, 140(2), 380–407. https://doi.org/10.1037/a0034858

[12] Liu, Y., Zhang, L., & Peng, J. (2021). Social isolation and academic adjustment in underdeveloped colleges: A mixed-methods study. *Journal of College Student Development*, 62(5), 584–600.

[13] Schunk, D. H., & DiBenedetto, M. K. (2020). Motivation and social-emotional learning: Theory, research, and practice. In M. L. Kern & M. L. Wehmeyer (Eds.), *The Palgrave handbook of positive education* (pp. 261–283). Palgrave Macmillan.

Stronge, J. H. (2018). *Qualities of effective teachers* (3rd ed.). ASCD.

[14] Váchová, A., & Novotny, P. (2020). Academic achievement: A multidimensional approach to measuring university students' success. *Educational Research and Reviews*, 15(10), 584–592. https://doi.org/10.5897/ERR2020.4036

[15] Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

[16] Wang, M.-T., & Holcombe, R. (2010). Adolescents' perceptions of school environment, engagement, and academic achievement in middle school. *American Educational Research Journal*, 47(3), 633–662. https://doi.org/10.3102/0002831209361209

[17] Zhou, M., & Brown, D. (2015). *Educational learning theories: 2nd edition*. Education Open Textbooks, 1. https://oer.galileo.usg.edu/education-textbooks/1