INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES

Vol 15, Issue 2, (2025) E-ISSN: 2222-6990

Influence of Family Factors and School Environment on Academic Achievement of Higher Vocational College Students in Yunnan Province, China

Li Dong Li, Dr. Wong Siew Ping
City Graduate School, City University Malaysia
Email: lindabaobei@163.com, wong.siewping@city.edu.my

To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v15-i2/24739 DOI:10.6007/IJARBSS/v15-i2/24739

Published Date: 10 February 2025

Abstract

The purpose of this study is to investigate the academic achievement of students in higher vocational colleges in Yunnan on the basis of family factors and school environment. Family factors are influenced by parental expectations and aspirations, family resources, communication and openness, parental involvement in decision-making. On the other hand, the school environment is influenced by relationship satisfaction, academic support, school facilities and school safety. According to the purpose of this study, the following objectives are to be achieved. First of all, it is necessary to determine the student's academic achievements. Second, try and identify differences in student achievement based on gender and grade groups. Next, the study looked at parental expectations and aspirations, family resources, communication and openness, parental involvement in decision-making contribution to the change of students' academic achievement in higher vocational colleges. Finally, we examine the contribution of relationship satisfaction, academic support, school facilities and school safety to the change of students' academic achievement in higher vocational colleges. Bronfenbrenner's ecological systems theory is used as a model to support the theoretical arguments of this study. The study sample will be composed of 396 first-year college students, second-year college students and third-year college students from higher vocational colleges in Yunnan, selected by Multi-stage stratified random sampling technique. The methods used in this study include independent sample t test, one-way analysis of variance and multiple hierarchical regression. The results of this study have a profound impact on many fields, including the transformation of family education patterns, the formulation of educational policies, curriculum development, and the provision of school facilities.

Keywords: Family Factors, School Environment, Academic Achievement, Higher Vocational

Introduction

China's higher education system is a vast and multi-layered system covering different types of higher education institutions and degree granting levels. In addition to the four major

categories of higher vocational education, undergraduate education,postgraduate education and doctoral education, it also includes various types of education forms such as continuing education, adult education and open education to meet the learning needs of different groups of people. As an important part of China's educational cause, higher vocational education undertakes to transport a large number of modern technical and technical talents with superb technology and professional skills to the society. It is an important force in China's talent construction and a new force in China's modernization construction(Zhang， 2020). Since the reform and opening up, the development trajectory of higher vocational education in our country can be summarized into five stages. They are the recovery and reconstruction stage (1978-1984), the rapid development stage (1985-1997), the deepening development stage (1998-2004), the connotation development stage (2005-2013) and the golden development stage (2014-present) (Yang, 2023). In the past 45 years, China's higher vocational education has experienced a leap forward in a number of measures such as structural adjustment of vocational education, policy and system adjustment. In 2018, with the fifth meeting of the Commission for Deepening Overall Reform of the CPC Central Committee, the development of higher vocational education in China ushered in a new situation. Table 1.1 shows the number of students, enrollment, and graduates in higher vocational colleges in China from 2018 to 2022 (Cao, 2022). Compared with the number of millions of students in 1978, it has achieved leapfrog development.

The fifth meeting of the Commission for Deepening Overall Reform of the CPC Central Committee stressed that vocational education should be placed in a more prominent position, docking the development trend of science and technology and market demand, and providing high-quality talent resources for promoting economic and social development and improving national competitiveness(Liu， 2023). On February 13, 2019, the "National Vocational Education Reform Implementation Plan" was officially released, fully reflecting the great importance of the Central Committee of the CPC Central Committee and The State Council to the development of vocational education, focusing on China's new ideas, new concepts, new requirements, and new measures for the development of vocational education, which is an important part of the overall deployment of socialist education with Chinese characteristics in the new era. Vocational education ushered in unprecedented development opportunities. Higher vocational education has become a hot topic at present, and there are articles on the guarantee of higher vocational education, management of higher vocational education, evaluation and quality report of higher vocational education (Zhu, 2023). This also highlights the realistic significance and the background of The Times.

Yunnan Province is located in the west of China, due to geography, history and other factors, the economic development is relatively slow, the level of education is limited. In this context, the Chinese government has issued a series of policies to promote the development of education in the western region, and the same applies to higher vocational education. Since 2006, China has invested 20.62 billion yuan in the "National Model Higher Vocational College Construction Plan" to support the development of 107 higher vocational colleges in the central and western regions. In 2015, China's Action Plan for Innovation and Development of Higher Vocational Education (2015-2018) put forward a joint plan between the East and the West. Fourteen provinces and autonomous regions with good economic development, including Tianjin and Hebei, have implemented matching support projects for the western

region and ethnic, poor and remote areas to promote the development of higher vocational education in the western region (Yuan, 2022).

Problem Statement

At present, in the period of deep development of higher vocational education, people have more attention and understanding of vocational education. The development of China's higher vocational education has made obvious achievements, but it also faces many problems. This is mainly reflected in the fact that compared with ordinary undergraduate colleges, higher vocational colleges have a lower admission threshold and students' admission results are generally lower (Lei, 2022). After entering higher vocational colleges, with the increase of school time (from the first year to the third year), they gradually show bad learning habits, inactive class participation (decreased by 47%), weak learning desire/motivation, low self-requirements, unclear learning goals, resulting in unsatisfactory academic achievements in the end, social recognition is low (Feng, 2019). In addition to the influence of grade, there are also some differences in the academic achievements between male and female students in higher vocational colleges. Wang Junfeng investigated 1,512 students in Hunan Polytechnic of Engineering and found that the academic development of female students was better than that of male students, and their academic achievements was 6.67% higher than that of male students (Wang, 2021).

With the increasingly severe employment situation, the most direct consequence of the unsatisfactory academic achievements of vocational college students is that the employment mentality of graduates is in a sub-health state, they are confused about their future work, and their thoughts and behaviors are more disorganized (Li, 2020). Due to the lack of correct employment outlook, students in higher vocational colleges often fall into the dilemma of expecting high-paying jobs, but failing to achieve their own academic achievements, resulting in obvious escape psychology from employment (Gu, 2023). More concerningly, according to data from China's Ministry of Education in 2022, dropout rates have topped 27% in a variety of technical institutions.

In addition, there is a growing ability gap among vocational college students due to unsatisfactory academic achievements in school, with more than 68% of vocational college graduates not having the logical thinking or technical skills needed by employers in emerging industries (Koo, 2021).

The problem of students' low academic achievement in higher vocational colleges has become a factor restricting social and economic development, and the discussion about students' learning achievement in higher vocational colleges has always been there. However, these discussions are more concerned with the educational process of students in higher vocational colleges, such as: research on mental health of students in higher vocational colleges, research on student management work in higher vocational colleges, research on employment problems of students in higher vocational colleges, and so on. But there is a lack of in-depth diagnosis of the causes of these problems. This study fills this gap.

Literature Review

Academic achievement refers to the knowledge, skills, competencies, skills, attitudes and dispositions which learner verifies through experiences and empowers individual and

professional success (Gose, 2023). Yet, modern outcome models appreciate the diverse ecosystems that transcend beyond content knowledge assimilation portrayed by academic scores. Outcomes include cognitive, psychomotor, and affective competence increases that support constant experiential improvement. Essentially, the perceptible competencies and motivational orientations developed and co-curricular processes through which graduates achieve personal, professional and continued personal goals are encapsulated in the academic achievement (Jabeen, Iqbal, & Saleem, 2023). Their specialization contributes to curriculum mapping, pedagogical transformation, and standardized evaluation – driving paradigm shifts towards outcome-oriented educational models based on proven tools of practice. In fact, it is the technical skills, logical thinking, communicative fluency, leadership and complex problem-conceptualization based on ethical reasoning and collaborative skills that are emphasized in the higher and vocational education outcome models that underscore career readiness (Sierra, 2020).

The classroom and apprenticeship modules are designed to grow domain knowledge simultaneously with quasi-occupational competencies for enhancing employability, entrepreneurial mindset and socially responsive graduate abilities to meet community needs (Cohen al., 2020). Significantly, policy reports have indicated that apart from domain-specific technical abilities, dynamic regenerative development based on general cognitive competencies such as reflective analysis, metacognitive skills, creativity together with motivational mindsets including self-efficacy, internal motivation and grit, are crucial to effective long-term career adaptability and success in constantly changing and unpredictable context (Jabeen, Iqbal, & Saleem, 2023). While recent approaches see academic achievement as multidimensional indicators of development embracing core disciplinary knowledge, specialised competencies, general human abilities, and developing personalities that allow one to manage professional instability, and deal with social changes. They are essential gauges of the quality of education and preparedness of workforce during an age of globalization.

Ayadat et al. (2020) define academic achievement as the measurable knowledge, abilities, and moral principles that students ought to possess upon completing a course. They are student-centered as opposed to teacher-centered since they specify what the students will do as opposed to what the instructor will teach (Rao, 2020). Contemporary outcome models recognize the holistic development that occurs throughout a lifetime in the cognitive, psychomotor, and emotional domains. These domains encompass specific talents, universal qualities, values, and metacognitive capacities that facilitate ongoing experiencing growth in dynamic situations. These models go beyond the mere absorption of content knowledge as indicated by academic scores (Sewagegn, 2020).

At their core, Van Alten et al. (2019) shows that academic achievements are the concrete lessons learned from extracurricular and curricular activities, such as study habits and study techniques, that equip graduates with the multifaceted skills they need to achieve their personal, academic, and professional goals. Their specificity supports evaluations, instructions, and curriculum alignment—a critical component of the outcomes-based education paradigm that gained popularity during the 1990s as learner-centric ideologies spread (Ayadat et al., 2020). The demands for demonstrable, perduring experiential capital from education-work transitions are further heightened by globalization and digitization,

which are speeding up change velocities. This is in contrast to the retention of inert content that is not easily retrieved or has no practical application when professional contexts change (Pham, 2021).

In fact, professional preparedness is emphasized by higher education and vocational education outcome models through the use of technical proficiency, sound reasoning, fluency in communication, leadership, and the ability to solve complex problems with a foundation in ethics and teamwork (Zheng & Mei, 2021). In order to increase employability, Akour & Alenezi (2022) posit that entrepreneurship, and responsiveness to local community needs, classroom, apprenticeship, and internship modules develop domain knowledge along with quasi-occupational seasoning. This is crucial given that youth unemployment is rising despite rising educational investments across countries like India, Brazil, Kenya, and even among displaced Syrian groups (Awad, 2019).

Notably, more general criticisms discuss overly deterministic curriculum packaging that, by strict assessable quantifications, undermines the serendipitous nature of deep learning, potentially deprioritizing philosophical viewpoints, values cultivation, and knowledge for its own sake (Maddalena, 2023). Furthermore, criticisms of narrow rationalization advise against reshaping educational environments for short-term economic gain without taking into account the environmental effects, injustices, or dehumanization involved in ritualized occupational training that is cut off from moral consciousness or moral reasoning and perpetuates systemic oppressions rather than the enlightened, liberated citizenry that education should ideally foster (Rao, 2020). However, learning objectives continue to be the practical road maps for modern educational journeys in a linked world with many resets, regardless of philosophical arguments. Their value is in bringing broader lifeworlds into formal education as dynamic human capital incubators and change agents through intercultural discussion, promoting fair access, problem-solving skills, and pioneering (Debarliev et al., 2022).

Belizaire, Powers, & Mekawi, (2023) define family factors as the attributes of the home setting including resources, tone, interactions and pathways that significantly influences children's developmental jouirney. The underlying processes convey protective and risk attributes according to convergence; positive dynamics foster competencies. Essentially, socioeconomic status of a family plays the role of resource base, allowing financial intervention in the family life and enriched opportunities due to parental income, occupational prestige and educational level, as used by them for parental modeling and informational capital (Belizaire, Powers, & Mekawi, 2023). In addition to the material elements, below the surface processes of nurture, interaction and expectations provide proximal relational contexts for identity consolidation, behavioral restraint, and motivational structuring due to ongoing daily contact (Hao & Pilz, 2021).

Constructing imaginary realities from emotively-tinged contexts, supportive bonding supports self-efficacy resilience, collaborative conversations encourage critical thinking, situationally consumed coherent value setting enables purposeful goal visualization for children (Belizaire, Powers, & Mekawi, 2023). Without a doubt, beyond positive examples, households wrangling with economic instability transmit anxiety or detachment just as widespread in reach. Thus family factors embody levels of manifest goods as well as

ephemeral relationships whose symbiosis is beyond categorical formulations yet has colossal import in defining Child-Environment Fit. Crucially, in fast-changing societies such as China, which suffers from widening urban-rural divides amid socio-economic realignments, reassessing family strategies that blend tradition and modernity is essential in revealing emerging development paths and dilemmas Mollborn, Rigles, & Pace, 2021). This is why timely reconstruction of family factors' morphing contours has critical importance

The family dynamics have deep effects on the developmental paths of adolescents who are moving towards the higher vocational education pathways which are supposed to provide better socioeconomic grounds in the age of uncertainties due to technical skilling. While in broadening rural-urban gaps, the influence of financial constraints and parental guidance capabilities is much less discussed, thus raising the danger of further stratification if unattended (Belizaire, Powers, & Mekawi, 2023). According to Anyu (2021), more than 63% of the aspirants are first-generation learners from low-income villages struggling with dire course cost burdens upon policy changes abandoning government tuition fee supports since 1997 as opposed to academic streams. Lack of collateral makes loan aversions deepen education underinvestment as families are unable to navigate the implications of debt. Thus, the risks of adversely selected vocational sorting undermine the promise of college meritocracy.

Li (2022) assert that, parents in agrarian livelihoods are in the dark with respect to even these sectoral shifts or revert to conventional patterns of waiting for offspring instead of promoting innovative facets. Aspirational disconnects damage the relationship. Familiarity disparities impede career consultative abilities just as striving for upwards social mobility for children unlike their times of fortune. With gaps in alignment and understanding, tensions are created that hamper smooth transitions (Wang, 2022). Besides disturbing is that widespread parental disengagement from school processes such as monitoring academic progress, involvement in co-curricular activities, or creating friendships with peers and teachers is noted as fundamental assimilation catalysts.

Reduced involvement indicates more evaluation concerns and purpose ambivalences that disorient studentseven more as they are lost in alien spaces deprived of the community resonances that form situated identity moorings before (Lu, 2022). Accordingly, alienations enhance information opacity, leading to the danger of proxy decision-making. At the provincial level, the concentration of rurality in Yunnan also displays such restrictions in participation but with severe financial disadvantage due to the slow development in the region (Liu, Chen, & Song, 2022). It is left-behind phenomena that abound when seasonal parental outmigration in search of jobs leaves elderly relatives as caretakers, dealing with generationally disconnected value systems, digital tools use, and language barriers in academic acculturation of young cohorts. It is also important to mitigate these discontinuities.

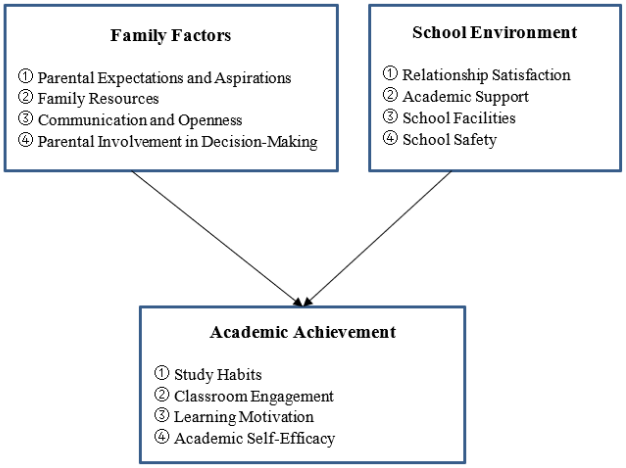

Figure 1. Research Framework

Method

This study is quantitative study and employed the method for collecting and analysing numerical data to define, predict, or clarify the phenomena of interest. Quantitative approach can empirically investigate the complex interrelationships among the family environment elements, institutional ecosystem attributes and learning competency development patterns of higher vocational college students in order to find policy-relevant insights (Mohajan, 2020). In particular, a descriptive survey-based data-gathering technique constitutes the measurement instrumentation basis. As Davis & Saunders (2022) argue, descriptive surveys provide structured numerical data that describes the participants' perspectives towards concepts, beliefs, attitudes and behaviors in reference to questions associated with the research—through standardized questions used in statistical analyses. As such, questionnaire items capture family socioeconomic status, parental expectations, vocational college teaching-learning infrastructure quality along with multiple metric measures of academic achievement encompassing academic results, critical thinking, communication self-efficacy and persistent motivation, which encompasses cognitive, skill, and affective components assessed on validated Likert scales.

This study is quantitative study and employed the method for collecting and analysing numerical data to define, predict, or clarify the phenomena of interest. Quantitative approach can empirically investigate the complex interrelationships among the family environment elements, institutional ecosystem attributes and learning competency development patterns of higher vocational college students in order to find policy-relevant insights (Mohajan, 2020). In particular, a descriptive survey-based data-gathering technique constitutes the measurement instrumentation basis. As Davis & Saunders (2022) argue, descriptive surveys provide structured numerical data that describes the participants' perspectives towards concepts, beliefs, attitudes and behaviors in reference to questions associated with the research—through standardized questions used in statistical analyses. As such, questionnaire items capture family socioeconomic status, parental expectations, vocational college teaching-learning infrastructure quality along with multiple metric measures of academic achievement encompassing academic results, critical thinking, communication self-efficacy and persistent motivation, which encompasses cognitive, skill, and affective components assessed on validated Likert scales.

This survey approach is applicable for investigations of prevalence, distributions, determinants and patterns underlying sophisticated educational phenomenon because generalizability of the findings increases when data includes different demographics such as gender, ethnicity and geographic residence representing heterogeneity across provinces (Al-Ababneh, 2020). The objectives also coincide with the cross-sectional format of current state assessment in contrast to tracking methods that take a longer period of implementation.

Within a limited timeframe, the cross-sectional research design involves gathering information at a single point. At a particular point in their educational path, how students perceive and experience things is captured using this tool. Simultaneously collecting data on multiple factors through a diverse group of participants, this approach enables an in-depth examination of family dynamics, school resources, and students' academic performance (Fitzgerald & Konrad, 2021).

With this research design, the quantitative survey approach shines. Consistent administration to a sizable and varied sample can be achieved through the systematic collection of data with questionnaires. By means of statistical analysis, this approach grants access to data that can be used to explore the ties, correlations, and interrelationships among variables (Lessler et al., 2021).

Through the quantitative design, researchers can investigate the current state of affairs within the study population. Despite limitations on capturing complex relationships, the design is highly efficient in pinpointing short-term factors impacting students' educational experiences. A robust research framework for investigating the impact of family factors and school environment on learning results arises through coupling the selected cross-sectional study design with the quantitative survey method (Mengash, 2020). Insights are derived by focusing on capturing moments in time that showcase students' experiences and viewpoints regarding educational achievement in a diverse and rapidly changing environment.

By analyzing student perspectives and experiences concerning family aspects and school settings, the research design intends to identify their impact on academic performance. Quantitative surveys are employed when analyzing structured data using statistical methods. Variables are examined through patterns, connections, and correlations within this design's framework.

Due to their ability to collect data from a wide range of sources within a limited time, cross-sectional designs were chosen for this analysis. Data collection efficiency holds great importance, taking into account the expanse of our research covering various vocational colleges across Yunnan Province. Academic achievement, school environments, and family factors are the areas our study explores. At a specific point in time, a cross-sectional design captures valuable baseline information for future longitudinal research. Correlations between family dynamics and school environment factors can be identified by gathering data from numerous higher vocational institutions and students.

Findings

The findings of this study underscore the significant impact of family factors and the school environment on the academic achievement of higher vocational college students in Yunnan

Province, China. Through quantitative analysis, we have identified several key insights. Firstly, family factors such as parental expectations, family resources, communication, and parental involvement in decision-making play pivotal roles in shaping students' academic performance. Students from families with higher socioeconomic status and greater parental involvement tend to achieve better academically, highlighting the importance of a supportive and conducive home environment. Secondly, the school environment, including relationship satisfaction, academic support, school facilities, and school safety, significantly influences academic achievement. Schools providing a supportive learning environment tend to foster higher levels of academic performance among students, emphasizing the importance of quality infrastructure and support services. Lastly, gender and grade level differences impact academic achievement, with female students outperforming male students and academic performance improving as students progress through their college years. Understanding and addressing disparities based on gender and grade level are crucial for promoting equitable educational outcomes.

Discussion

The findings of this study highlight the complex interplay between family factors, the school environment, and academic achievement among higher vocational college students. In discussing these findings, several key points emerge. Firstly, the importance of family support cannot be overstated, as family factors significantly influence students' academic performance. Creating a supportive home environment and fostering positive family dynamics are essential for promoting student success in higher vocational education. Secondly, the role of the school environment is crucial, with relationship satisfaction, academic support, and school facilities being key determinants of academic achievement. Schools must prioritize creating a supportive and conducive learning environment to enhance student engagement and academic performance. Lastly, addressing gender and grade level disparities is essential, as these factors impact academic achievement. Educators and policymakers must implement strategies to promote equitable educational opportunities for all students, regardless of gender or grade level.

Conclusion (Or Limitation or Suggestion for Further Studies)

In conclusion, this study provides valuable insights into the factors influencing academic achievement among higher vocational college students in Yunnan Province, China. By understanding the roles of family factors, the school environment, and individual characteristics, stakeholders can develop targeted interventions and strategies to enhance student success. Promoting a supportive home environment, improving school infrastructure, and addressing gender and grade level disparities are essential steps towards fostering academic achievement among higher vocational college students. By leveraging these insights, policymakers, educators, and stakeholders can work together to create more equitable and inclusive educational opportunities that empower all students to reach their full potential.

Motivation and Contribution of the Study

The increasing focus on higher vocational education in China, particularly in underdeveloped regions like Yunnan, highlights the urgent need to understand the factors influencing students’ academic success. With rapid socio-economic transformations and rising educational expectations, it is crucial to explore how family dynamics and school

environments shape students' learning outcomes. This study is motivated by the need to bridge existing knowledge gaps regarding the underlying causes of low academic achievement in vocational education. While previous research has explored aspects of student engagement, employment prospects, and psychological well-being, little attention has been given to the combined impact of family factors and institutional support structures on academic success. By identifying key determinants such as parental involvement, school facilities, and relationship satisfaction, this study provides empirical evidence that can inform policymakers, educators, and stakeholders. The findings offer practical insights to develop targeted interventions that improve student performance, enhance institutional support, and foster a more inclusive and effective vocational education system in China.

References

Akour, M., & Alenezi, M. (2022). Higher education future in the era of digital transformation. Education Sciences, 12(11), 784.

Ahn, M. Y., & Davis, H. H. (2020). Four domains of students' sense of belonging to university. Studies in Higher Education, 45(3), 622-634.

Al-Ababneh, M. (2020). Linking ontology, epistemology and research methodology. Science & Philosophy, 8(1), 75-91.

Amerstorfer, C. M., & Freiin von Münster-Kistner, C. (2021). Student perceptions of academic engagement and student-teacher relationships in problem-based learning. Frontiers in Psychology, 12, 4978.

Andel, S. A., de Vreede, T., Spector, P. E., Padmanabhan, B., Singh, V. K., & De Vreede, G. J. (2020). Do social features help in video-centric online learning platforms? A social presence perspective. Computers in Human Behavior, 113, 106505.

Ansari, A., Hofkens, T. L., & Pianta, R. C. (2020). Teacher-student relationships across the first seven years of education and adolescent outcomes. Journal of Applied Developmental Psychology, 71, 101200.

Antony-Newman, M. (2018). Parental involvement of immigrant parents: A meta-synthesis. Educational Review, 71(3), 362–381. https://doi.org/10.1080/00131911.2017.1423278

Anyu, N. W. (2021). First and poor: Understanding how first-generation low-income students at elite university formulate and understand their sense of belonging in the age of COVID-19 (Doctoral dissertation, University of Pennsylvania).

Awad, A. (2019). Economic globalisation and youth unemployment–evidence from African countries. International Economic Journal, 33(2), 252-269.

Ayadat, T., Ahmed, D., Chowdhury, S., & Asiz, A. (2020). Measurable performance indicators of student learning outcomes: A case study. Global Journal of Engineering Education, 22(1), 40-50.

Baafi, R. K. A. (2020). School physical environment and student academic performance. Advances in Physical Education, 10(2), 121.

Bailey, D., Almusharraf, N., & Hatcher, R. (2021). Finding satisfaction: Intrinsic motivation for synchronous and asynchronous communication in the online language learning context. Education and Information Technologies, 26, 2563-2583.

Barber, L. D. (2023). Towards a better tomorrow at College of Eastern Idaho: Mindfulness from the mat: An embodied perspective with self-efficacy and resiliency (Doctoral dissertation, Arizona State University).

Barrett, P., Treves, A., Shmis, T., & Ambasz, D. (2019). The impact of school infrastructure on learning: A synthesis of the evidence.

Bazhydai, M. (2020). Social learning mechanisms of knowledge exchange: Active communication, information seeking and information transmission in infancy. Lancaster University (United Kingdom).