EMPHASIS ON THE IMPORTANCE OF PEER MENTORSHIP PROGRAMS IN TRANSFORMING LEARNING ATTITUDES AND DEVELOPING A PRACTICAL ACADEMIC CULTURE AMONG UNDERGRADUATES

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Abstract

New collaborative and active learning initiatives have been introduced by Chinese institutions, in response to the growing demand for improved undergraduate learning outcomes. Peer mentorship has become increasingly popular as a vehicle for universities to foster a more practical academic environment and to alter student attitudes toward learning. The objective of the current research was to evaluate the motivation, engagement and academic behaviour of students in relation to organised mentoring programs. A mixed-method methodology that merges quantitative and qualitative data was utilised to determine the link among students, peer-mentoring programs and the development of an academic practical culture. 1200 students from various undergraduate classes at different universities in China took part in the survey. The quantitative study using SPSS 25 involved an ANOVA and factor analysis, and indeed presented a significant statistical link between peer mentoring programs and the development of an academic practical culture. The findings also showed that students' leadership, collaboration, and hands-on learning are crucial in maintaining society. The connection between peer mentoring strengthened the commitment to learn, confidence, and the ability to work in a group among the students. The authors of this study state that when mentorship and practical training are combined into university curricula, Chinese students show much flexibility and participation. These programs contribute to achieving the country's agenda in making colleges more inventive, creative and employable. In this regard, structured mentorship programs that would try to bridge the gap between theory and practice by fostering a culture of cooperation, teamwork and lifelong learning will be very helpful to Chinese students.

Keywords: Peer mentorship programs; Practical academic culture; Undergraduate students; Chinese institutions; Active learning.

1. Introduction

Peer mentorship programs that emphasise the role of collaborative learning in changing university education can have significant influences on undergraduates' learning attitudes and on building an applied academic culture. They may impact positively on how a student sees things, approaches them and perceives information. Their engagement, involvement, and shared accountability create a setting where knowledge is active and meaningful. Students who receive mentorship are likely to be more critical thinkers, appreciate what they learn and regard education as a lifelong and practical process. Students' perceptions of learning are truly changed as they move from mere memorisation of facts to applications of knowledge in real-life situations. Interaction with peers furthers the development of critical thinking, resilience amidst adversity and confidence among undergraduate students. Students get to experience more interactive and supportive classrooms than ever when preoccupation shifts from individual achievement to collaboration (Lapon & Buddington, 2023). Peer mentoring is increasingly becoming recognised as an essential element in applied academic culture building and in enhancing student involvement processes in Chinese institutions. Organised mentorship programs provide students with an avenue to support one another in their research, creative activities and community-based learning. These options make it easier for students to connect difficult ideas with problems that rise in the real world. This is the reason why the focus in Chinese institutions has shifted from examination preparation to student engagement, creative thinking, and relevance to real life. Thus, peer mentoring promotes holistic and contextualized learning system consistent with

the nation's vision of establishing modern and globally competitive institutions by serving as a connection between academic goals and professional preparedness. The educational experience is improved and students obtain valuable skills that are sought after by employers owing to this transition. The next generation of graduates will be better prepared to handle the problems of a dynamic and unpredictable world if peer mentorship programs continue to encourage teamwork and analytical thinking (Lorenzetti et al., 2020).

2. Background Of the Study

Today's academic environment is changing at a pace that educational institutions are feeling compelled to do much more than only teach pupils. Creating learning spaces that are not just friendly and inviting but also supportive and inspiring is vital in ensuring that students thrive in their academic pursuits. Institutions of higher learning are under scrutiny and pressure to reconsider their prior approaches to student participation and academic support. Many students have trouble throughout their first year of college. These issues manifest as concern over completing tasks, poor time management and negative self-talk and social and academic isolation. Learning from the experiences of their peers who have confronted comparable difficulties and overcome them may seem beneficial to undergraduate students. These instructors may provide students with individualised, realistic, and compassionate guidance. In recent years, peer mentorship programs have become more well-known and reputable as an innovative approach to addressing these requirements. These initiatives have recently gained a lot of attention since they can improve students' attitudes towards school, proactive behaviours, and campus community (Sedigh et al., 2024). Higher education in China has always been significantly impacted by test-based systems. This often impedes undergraduates' capacity for both creative and practical thought. However, due to the rapid modernisation of the education industry, institutions are increasingly promoting skill-based progress and active learning. This transition is facilitated by peer mentoring which bridges the gap between classroom theory and practical experience. Students may improve their self-esteem, communication skills and collaboration via this. China has recently upgraded the cultivation of a pragmatic academic culture to the level of a national goal. Academic projects, innovation events, and community service are the focal points of new mentoring programs at universities. The ability to leverage academic information in real-world contexts is a key component of each of these encounters. The goal of Chinese institutions is to create graduates with the intellectual chops and abilities needed to fuel the country's emerging scientific economy and one way they plan to do this is by integrating mentoring with experiential learning (Pölczman et al., 2025).

3. Purpose Of the Research

The purpose of this research was to examine the attitudes of undergraduates towards learning and the establishment of a practical academic culture with the help of peer mentorship programs. Finding out how peer coaching and shared learning impact motivation and engagement was the main goal. This research examined how students' structured peer interactions support their resilience, confidence, and capacity to adapt what they have learnt in the classroom to real-world situations. The study additionally examined at how the dynamic between wealthy and disadvantaged students fosters cooperation and dialogue. A key question that needed addressing was whether mentoring promotes an increase in active learning engagement rather than passive learning. It aimed to find out whether these activities foster an optimistic outlook on learning and increase students' sense of personal responsibility and teamwork. The study investigated peer mentoring as a tool for education reform and experiential learning in Chinese institutions. Examining how these programs equip students for social and professional environments was the primary goal. Educators and officials anticipated that the results would provide insight into how to establish mentoring programs that foster creativity and hard work.

4. Literature Review

The study on peer mentoring in China is still in its early stages, and the research that has been carried out so far tends to focus on aspects such as mentor training or the mechanics of the program. In the context of China's higher education system, it is crucial to investigate how peer mentorship programs affect students' attitudes towards studying and the development of an active academic culture. Students with more experience help their less experienced colleagues throughout this process. In a peer-mentoring context, participants could feel more at ease asking mentors for guidance and assistance than they would in more conventional university support networks. According to the social learning hypothesis, individuals might acquire new behaviours and viewpoints when they watch and mimic the behaviours of others they trust or identify with. In this way, individuals might learn new ways of being and thinking. When a mentor is also a peer of their mentees, anybody who has recently surmounted social and intellectual obstacles comparable to those their mentees are facing may be a great role model. As a result, they perform the mentorship function wonderfully (Almulla, 2023). Chinese universities and other higher education establishments have long been distinguished by the Confucian principles of obedience, self-control, and respect for elders. Students have benefited intellectually from these concepts, but they also found it challenging them to work together and acquire autonomous study techniques. The goal of recent educational changes in China is to encourage students to think critically, be creative and have a lifelong learning mindset (Lim et al., 2022). However, according to research, Chinese students face challenges such as a lack of institutional support, the inconsistent availability of mentors, and their own inability to comprehend the course material. Nevertheless, there are a number of advantages for participants in peer mentoring (Jiang & Wang, 2025).

5. Research Questions

- How do peer mentorship programs help in developing a practical academic culture?
- What is the role of undergraduates in developing a practical academic culture?

6. Research Methodology

6.1 Research Design

The research consisted of a mixed-method approach. To analyse the numerical data, the researcher used SPSS version 25. To measure the strength and direction of the statistical association, the odds ratio and 95% confidence interval were used. A statistically significant outcome is one in which the p-value is less than 0.05. Descriptive analysis helped in understanding the core nature of the data. The qualitative data were also gathered via in-depth interviews conducted by the researcher.

6.2 Sampling

The study's sample strategy was a combination of stratified and purposive methods. 1123 was the projected sample size by the Rao-soft software. The researcher sent out 1350 surveys, received 1280 back and had to throw out 80 since they were missing some information. In all, 1200 Chinese citizens were contacted and questioned for the study. There were 576 males and 624 females who filled out the 1200 surveys and interviews.

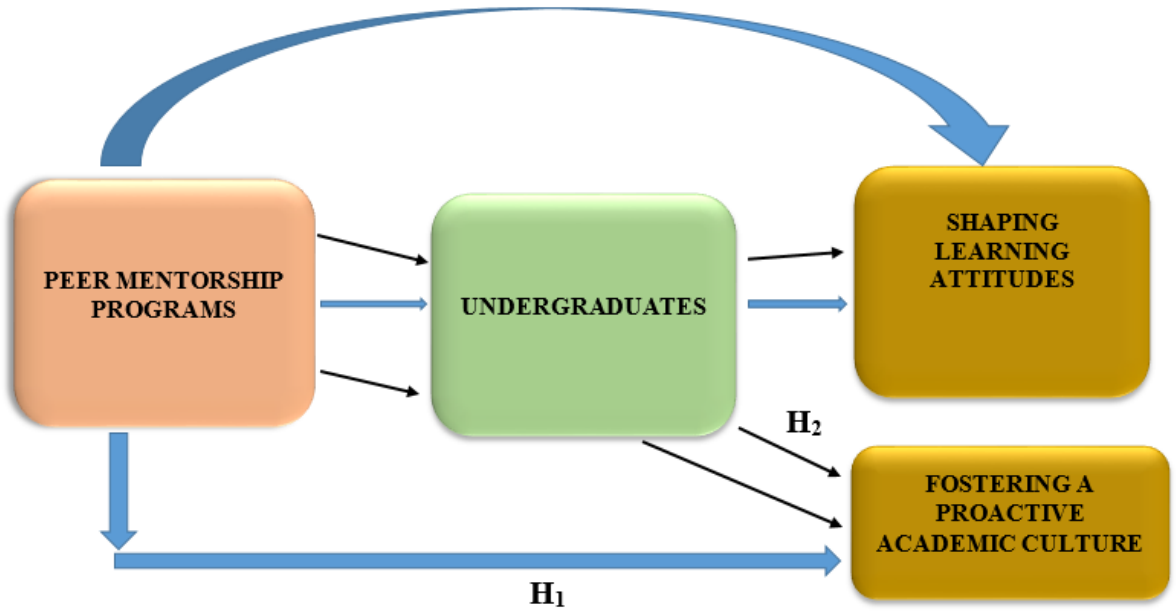
6.3 Data and Measurement:

The main data for the study were gathered using a combination of qualitative and quantitative methods. In the questionnaires, the researcher used a 5-point Likert scale to collect quantitative data from the participants. Furthermore, in-depth interviews were used to evaluate qualitative data. Internet resources were the primary focus of the researcher while gathering secondary data.

6.4 Statistical Software: The researcher used SPSS 25 and Microsoft Excel to do statistical analysis for the study.

6.5 Statistical Tools: An analysis of descriptive statistics provided insight into various demographic and level-specific features of various programs. Inductive statistical studies use many statistical procedures such as analysis of variance (ANOVA), factor analysis for assessing validity and theoretical reliability, 95% confidence intervals for odds ratios and more.

7. Conceptual Framework



8. Result

- **Factor Analysis**

Analysing publicly available data using Factor Analysis (FA) can help uncover hidden factors. In cases where no outward signs of mental or physical illness are present, diagnostic procedures may depend on regression results. By running simulations, potential weak spots, glaring connections, and gaps can be found. Evaluation of multiple regression results is done using Kaiser-Meyer-Olkin (KMO) tests. Estimates of the dependent variable are provided by the dependent variables in the statistical model accurately. There is a chance that one will come across data that is identical to another. Lessening proportions makes data easier to read. The KMO algorithm can reliably provide investigators with integers between 0 and 1. If the KMO score is between 0.8 and 1, then the sample is considered large enough. For Kaiser to give their approval, it must meet these criteria: With values between 0.050 and 0.059, this one is significantly lower than the norm, which is 0.60 to 0.69. Scores in the middle school range of 0.70 to 0.79 are considered average. Its impressive range starts at 0.90 and ends at 1.00.

Table1: KMO and Bartlett's Test

Testing for KMO and Bartlett's

Sampling Adequacy Measured by Kaiser-Meyer-Olkin .870

The results of Bartlett's test of Sphericity are as follows:

Approx. chi-square = 4350.175

df = 190

sig =.000

Table 1: KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.870
Bartlett's Test of Sphericity	Approx. Chi-Square	4350.175
	df	190
	Sig.	.000

This provides the way for claims regarding sampling. The researcher checked the correlation matrices for statistical significance using Bartlett's Test of Sphericity. The Kaiser-Meyer-Olkin statistic, with a value of 0.870, indicated that the sample size was adequate. With Bartlett's Sphericity test, a p-value of 0.00 was achieved. A positive result in Bartlett's Sphericity test indicates that the correlation matrix is not an identity matrix.

❖ **Independent Variable**

- **Peer Mentorship Programs:**

Peer mentorship programs organise activities where more experienced students teach and guide their less experienced peers. These programs are designed to assist students in their personal development while helping them cope with challenges in academics. The role of mentors is to help students organise their studies, get used to college life, and develop useful skills. They explore the campus atmosphere and several teaching philosophies. The student-to-student communication philosophy differentiates peer mentoring from traditional approaches to academic support. Students can learn from each other in a supportive and personal manner when they understand each other and share experiences. In this environment, students will benefit by observing and communicating with each other (Collier, 2023). Peer mentoring is founded on the philosophy that people can be helpful to each other in many ways. There is a growing demand for higher education institutions to adopt a peer mentorship program to meet the needs of a diverse undergraduate student population. Indeed, Western and Asian universities, especially those in China have started moving away from exam-based and hierarchical approaches to pedagogy towards those that are more student-centered, comprehensive, and supportive. Peer mentoring lies at the heart of such success. The founders of the program were confident that the program would help bring about social, intellectual and personal development in young people (Lim et al., 2022).

❖ **Mediating Variable**

- **Undergraduates:**

Undergraduates are those who are not presently enrolled in a master's program. The researcher is qualified to enrol in college as a first-year student after graduating from high school. Undergraduates are people who are still working towards earning a bachelor's degree. After high school, they presently intend to continue their education. Students pursuing their first degree at an institution or college that has been officially accredited by the government are known as undergraduates. Usually, this degree is a bachelor's degree. Undergraduates may improve their ability to think critically and solve problems by enrolling in courses that combine classroom education with real-world experience. The course's main objective is to help students think critically and analytically so they can make wise decisions and quickly assimilate new information. By developing their critical thinking skills, students

who took these courses were better prepared for their future academic or professional objectives (Adebisi, 2022). Chinese undergraduate education places a strong emphasis on the acquisition of both academic and applied knowledge. Internships, practical experimentation and academic coursework are all recognised in the educational system. In an undergraduate program, general education typically takes up the first two years, while major-specific coursework takes up the final years.

❖ **Dependent Variable**

- **Developing Practical Academic Culture:**

Creating an environment where students can apply what they have learnt in the classroom to real-world situations is part of developing a practical academic culture. Its main objective is to close the gap between research and theory. Students are expected to apply what they have learnt in class to real-world problems. Instead of rote memorisation, the emphasis here is on engagement. Practical training is highly valued by learners in a practical academic culture. It encourages project work, internships and research. In terms of students' learning, actions speak louder than words. Teachers act as mentors, guiding pupils towards more independent thought processes and creative analytical techniques. Because they can better see how what they study relates to their lives both now and in the future, students benefit from this type of environment (Bai & Wang, 2024). A practical academic culture has been established as a national goal in China. Universities are increasingly prioritising the connection between education and social and economic needs. The school strongly encourages students to take part in service learning, internships, and entrepreneurial endeavours. These attempts allow them to apply their knowledge effectively.

- **Relationship between peer mentorship programs and developing a practical academic culture:**

Peer mentorship allows students to take ownership of their education, transforming the school into a more active learning setting. The mentors, by following a routine academic schedule and managing their time effectively and developing life management skills as well, set a good example for those they work with. It is when students take ownership of their education that a practical academic culture develops. Peer coaches facilitate this through assisting their mentees in overcoming various challenges and building confidence. These are improved projects, collaboration, and research activities that require active participation. This shifts from rote learning to active learning. Group projects allow students to develop their leadership, communication, and teamwork skills. These programs develop a sense of community that allows dynamic and continuous learning (Friedman et al., 2021). Peer mentorship programs are being increasingly implemented by universities in China to allow for a more practical learning environment. In line with the government's objective to make undergraduates more creative and employable, these programs are implemented. With the leadership of experienced Chinese mentors, for instance, students can more easily engage in research projects, group projects, and internships. They also guide and assist international and rural students as they become enrolled in college (Wong, 2025).

After examining the above discussion, the researcher arrived at the following hypothesis to examine the impact of peer mentorship programs on developing a practical academic culture.

- ***"H_{01}: There is no significant relationship between peer mentorship programs and developing a practical academic culture."***
- ***"H_1: There is a significant relationship between peer mentorship programs and developing a practical academic culture."***

Table 2: H_1 ANOVA Test

ANOVA					
Sum					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	39936.307	566	3993.631	2356.855	.000
Within Groups	145.083	633	1.630		
Total	40081.390	1199			

The research has resulted in a number of remarkable findings. When the p-value is less than 0.05, an F-value of 2356.855 is considered statistically significant. This denotes that the ***"H_1: There is a significant relationship between peer mentorship programs and developing a practical academic culture"*** is accepted, and the null hypothesis is rejected.

- **Relationship between undergraduates and developing a practical academic culture:**

A school can develop a culture of academic initiative if it gets its students to do something rather than simply listening to their lecturers. This is unique because it fosters initiative, teamwork, and individual responsibility for mistakes. Because they are the largest community on campus and because they have a much greater advantage in influencing the places, where they invest most of their time, undergraduates are crucial in establishing and sustaining this culture. Educational establishments and instructors also have an impact on this process. When instructors promote practice-oriented learning, then students begin to appreciate practical knowledge. Undergraduates know how classroom ideas connect with practical needs. They can also gain experience through course work, field trips, and internships. When they see how classroom learning addresses real life challenges, they appreciate the relevance of applying it (Djiraro Mangue & Gonondo, 2021). In China, there is the massive incentive for students to join volunteer work, research-oriented learning, and entrepreneurial courses. They are also trained in applying classroom ideas in real settings such as neighbourhoods and companies. It is through this hands-on experience that undergraduate students can develop analytical and practical skills. Together, these initiatives are making the academic culture in China stronger and more contemporary and shifting the focus of higher education away from tests towards real-life training that will better equip them for life's challenges in their later years (Song & Yang, 2023).

After examining the above discussion, the researcher arrived at the following hypothesis to evaluate the role of undergraduates in developing a practical academic culture.

- ***"H_{02}: There is no significant relationship between undergraduates and developing a practical academic culture."***
- ***"H_2: There is a significant relationship between undergraduates and developing a practical academic culture."***

Table 3: H_2 ANOVA Test

ANOVA					
Sum					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	39936.307	486	3993.631	2368.855	.000
Within Groups	145.083	713	1.630		
Total	40081.390	1199			

Several significant results have been drawn from the study. When the p-value is less than 0.05 and the F-value is 2368.855, statistical significance has been established. This denotes that the ***"H_2: There is a significant relationship between undergraduates and developing a practical academic culture"*** is accepted, and the null hypothesis is rejected.

9. Discussion

Research showed that peer-mentoring programs help students adopt a more realistic academic mindset. In addition, the results show that college undergraduates have a significant role in the development of this kind of culture on campus. Student engagement, accountability and the drive to study all improve when they take part in mentoring programs. It is via fellow students that they can make the practical connection between what they have learnt in the classroom and the real world. In performing so, the focus moves from abstract concepts to concrete knowledge and the acquisition of new abilities. The study's participants included academics and workers from universities and other organisations seeking to change their educational systems via peer mentorship initiatives. They elaborated on how these programs promote learning via hands-on experience, increase self-esteem, and ease the transition to college life. They highlighted how the connection between peers influences learning behaviour and academic engagement via their involvement. All of the participants provided input that highlighted the ways in which mentoring facilitated personal development, improved cooperation, and established routines for experiential learning.

10. Conclusion

Undergraduate education may benefit from collaborative learning, particularly when considering the connection between peer mentorship programs and the development of a pragmatic academic culture. Through peer mentorship, which encourages participation, teamwork, and confidence, students may alter their viewpoint on education. When mentors and students share their experiences and thoughts, classroom knowledge may have a bigger effect in the real world. The results included more dedication to academic performance and positive attitudes towards learning. When mentoring is included into university programs, students improve their communication and social skills and become more dedicated to their academic goals in Chinese educational institutions. A more immersive and participative approach to learning, rather than one that is based on rote memorisation, has the potential to create a more useful academic atmosphere. Both the participants' intellectual and personal growth benefit from the excitement, teamwork, and mutual respect that these programs provide. Peer mentoring programs' cumulative effects on students' academic achievement and job prospects may be the subject of future research. Further education results might be enhanced via mentorship programs if comparative research across institutions exposed variations in efficacy.

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