

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

¹**Wang Yang, ²Sreemoy Kanti Das, ³Mrutyunjay Sisugoswami**

¹²³Lincoln University College, Petaling Jaya, Malaysia

Abstract

This research examined the effects of peer mentoring programs on the attitudes and learning behaviours of Chinese university students as well as the development of a more pragmatic academic culture. Finding out how peer mentorship affected Chinese university students' motivation, enthusiasm, and attitude towards their academics was the primary goal of the study. This research used a mixed-method approach, combining qualitative insights from in-depth interviews with quantitative data evaluated using SPSS version 25. Stratified and purposive sampling methods were used to collect data from 1,200 students. Statisticians used tools like ANOVA and factor analysis to find out how strong and important the links were between the variables. Peer tutoring programs had been shown to greatly improve students' desire to learn, attitude towards learning, and academic success. Mentees improved their study habits, ability to solve problems, and sense of who they were with the help of teachers. What they found also showed that teachers improved their own leadership, understanding, and communication skills through the process. Peer coaching also helped students feel less stressed about school, work together better, and use more active, practice-based methods of learning. Highly significant p-values ($p = .000$) were found to support both hypotheses, which looked at the link between the Chinese university students and their learning attitudes as well as between peer mentoring programs and learning attitudes. Peer mentoring programs had been crucial in changing students' studying habits, encouraging academic collaboration, and creating a practical academic culture that supports China's educational reforms that prioritise innovation and student-centered learning, according to the study's findings.

Keywords: Peer mentorship programs; Learning attitudes; Practical academic culture; Undergraduates; Chinese university

1. Introduction

Peer mentorship schemes at universities are gaining popularity as a means to aid first-year students' intellectual, social, and personal growth. These programs have developed to meet the increasing need for support, encouragement, and community among students, particularly those making the journey to college. The objectives, institutional setting, and student requirements dictate the shape that mentoring takes. Mentoring often takes the form of one-on-one meetings between a university faculty member and a mentee, during which the latter receives specific academic advice and emotional support as they adapt to life on campus. On the other hand, mentoring may take place in more traditional settings, such as one-on-one meetings or small groups, or even more modern ones, like easily accessible online platforms. As technology in education has progressed, more and more students are finding that online mentoring is a great way to bridge the gap between them, regardless of their location or availability (Gamlath, 2022). Mentorship programs also may include upperclassmen or private tutors who take the time to get to know first-year college students and provide them with academic guidance based on their specific needs. Because every program is tailored to the practical academic culture, goals, and student body of its host school, there is no universally accepted method of peer mentoring. While some schools place an emphasis on helping overseas students succeed academically and

enhance their study abilities, others place a greater emphasis on their mental health, leadership potential, or cultural adaptation. Programmes of peer mentorship, in whatever form they take, all aim to do the same thing: improve engagement among students, retention, and achievement by creating welcoming environments for learning. At the end of the day, these courses help build a welcoming and cooperative academic environment where students feel safe enough to take charge of their own education and develop as individuals while at a Chinese university (Latham et al., 2020).

2. Background Of the Study

Peer mentoring programs are essential in fostering a more pragmatic educational environment among undergraduates and changing students' perspectives on learning within the framework of China's higher education system. Students' ability to think critically and creatively is often stunted by the traditional Chinese educational model, which prioritises memorisation and teacher-centred teaching. A change towards more student-centred and participatory methods of instruction has been fostered, nonetheless, by the advent of peer mentoring programs. Peer mentorship programs, as a time-honoured and effective mode of training and teaching, highlight the value of the mentoring relationship in educating gifted and talented youths in Chinese history. The current development of mentorship programs for gifted students at the Chinese University of Hong Kong is very significant for potential mentors within the Chinese university community and the development and operation of the mentorship program of Chinese creative writings for Hong Kong students (Betweli, 2020). Future directions in the development of mentorship programs for gifted students use information technology and peer mentors in double mentoring, and a model of three levels of mentoring encompassing tele mentoring, double mentoring, and one-to-one mentoring is suggested. Participating seniors serve as mentors to their younger peers, offering advice on how to succeed in school as well as drawing on their own experiences and insights. The mentees' self-esteem, communication skills, and capacity to solve problems are all enhanced by this procedure. As an added bonus, it has sparked more engagement, teamwork, and camaraderie among students. Mentors help mentees change their mindsets about learning from a focus on memorisation to one on actively increasing their knowledge as they obtain practical insights. In addition to fostering academic development, these programs gave mentors the chance to hone their interpersonal, leadership, and empathy abilities. In sum, peer mentoring programs are an effective means of preparing undergraduates in China for the academic and professional difficulties of the future by changing students' study habits and fostering an academic atmosphere that is supportive and practice-oriented (Wong, 2025).

3. Purpose Of the Research

This study aimed to investigate the impact of peer mentorship programs on the learning attitudes of Chinese university undergraduates and the development of a more practical academic culture through the examination of relevant case studies. This study aimed to explore the impact of peer mentoring on the motivation, academic engagement, and learning preferences of university students in China. The primary aim of the study was to determine if mentoring relationships between upper- and lower-class students had a positive impact on student confidence, communication skills, and the availability of group project opportunities. The study also sought to uncover how peer mentoring has assisted students in transitioning their learning approaches from a primary focus on the instructor to a more self-sufficient and practice-oriented method. This aligns with China's ongoing initiative to promote more student-focused and innovative teaching approaches. The secondary aim was to assess the impact of these programs on mentors, particularly regarding the development of their interpersonal and leadership abilities. The primary aim of the study was to illuminate how peer mentoring programs at Chinese universities have contributed to fostering a more engaging, supportive, and authentic learning environment.

4. Literature Review

Students' outlooks on learning may be significantly impacted by peer mentorship programs, which boost student's intrinsic drive, self-esteem, and classroom community. Mentors help their less experienced peers overcome academic challenges and develop effective study habits by sharing their knowledge and expertise in these programs. Participating in a mentoring relationship that is both supportive and encouraging encourages mentees to speak up, contribute thoughts, and take charge of their own education. An important aspect of a mentorship program is helping students become more self-reliant and proactive learners (Marshall et al., 2021). Peers want to possess the discipline, critical thinking, and problem-solving skills of a mentor. Learning becomes more interesting and enjoyable when students get individualised assistance and empathy from their peers. Children experience less academic anxiety and stress as a consequence. Additionally, rather than seeing learning as a process that is antagonistic, peer mentorship encourages students to collaborate with one another in an environment that is characterised by mutual respect. In conclusion, these programs have a significant role in altering the perspectives that students have on education. This, in turn, inspires students to take an active role in their own learning and inspires them to strive for continuous progress in all aspects of their lives. It is imperative that university programs pay concentrate on formalised channels of social support in order to reduce student dropouts and foster greater student retention (Cho & Lee, 2021). There are models of mentoring programs that talk about different ways to help graduate students who are participating in programs. In the process of matriculating through graduate school, students are provided with several mentors, including classmates. A significant number of writers have emphasised the importance of graduate students actively participating in peer mentoring relationships as a retention technique for the purpose of educating graduate students to become bilingual speech-language pathologists. Helping incoming students on university premises, leading group discussions, and assisting mentees in developing professional conduct were some of the things that the writers highlighted as being part of the mentor position (Baroudi et al., 2021).

5. Research Questions

- How do peer mentorship programs influence the shaping of learning attitudes?
- How do undergraduates make an impact to shape learning attitudes?

6. Research Methodology

6.1 Research Design

A mixed-method approach was used for the study. Using SPSS version 25, the researcher analysed the numerical data. One might use the odds ratio and the 95% confidence interval to find out how strong and in which direction the statistical relationship heads. If the p-value was below 0.05, then the result is considered statistically significant. The fundamental character of the data was better understood with the use of descriptive analysis. Additionally, the researcher acquired the qualitative data via in-depth interviews.

6.2 Sampling

The research used a combined sampling technique that included stratified and purposive methods. The expected sample size, as determined by the Rao-soft program, was 1123. The researcher sent 1,350 questionnaires, collected 1,280 responses, and discarded 80 due to incomplete information. A total of 1200 Chinese adults were surveyed and interrogated for the research. A total of 576 men and 624 females completed the 1200 questionnaires and interviews.

6.3 Data and Measurement

The study's primary data came from a mix of qualitative and quantitative sources. To get numerical data from the subjects, the researcher included a 5-point Likert scale in the surveys. In

addition, qualitative data were evaluated via in-depth interviews. The researcher mainly relied on online resources for secondary data collection.

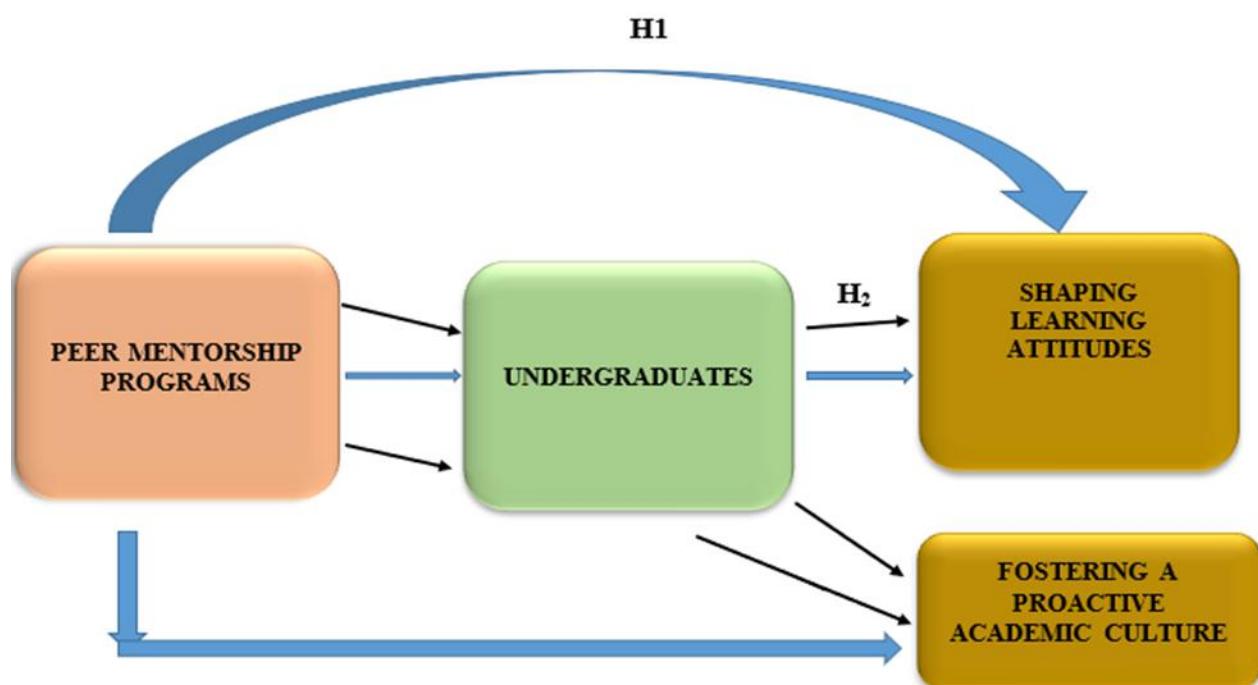
6.4 Statistical Software

When it came time to analyse the data for the study, the researcher reached for SPSS 25 and Excel.

6.5 Statistical Tools

Several demographic and level-specific aspects of different programs were illuminated by an examination of descriptive data. Analysis of variance (ANOVA), factor analysis (for evaluating theoretical reliability and validity), 95% confidence intervals (for odds ratios), and many other statistical methods were used in inductive statistical investigations.

7. Conceptual Framework



8. Result

- **Factor Analysis**

On occasion, factor analysis (FA) will use a method to check the validity of a collection of measurement items. Ignoring the possibility that unseen variables could have an impact on overt ones is a typical mistake. One method that relies on a framework is FA, or precision analysis. Accurately measuring mistakes and establishing causal relationships between observable events is a primary goal of this study.

Kaiser-Meyer-Olkin (KMO) factor analysis might reveal it if the data is suitable for it. To guarantee that there is an enough sample size overall, the researchers verify that each model component has a sample size. The findings reveal a shared variation across several components. When applying the factor estimations, data with lower percentages yield better results.

The output of the KMO algorithm might be anything from zero to one. If the KMO number falls anywhere between 0.8 and 1, testing becomes essential.

Researchers need to take immediate action to address the problem of inadequate sampling when the KMO is less than 0.6. Considering the consensus among writers, 0.5 is a common choice, with values often falling between the range of 0.5 to 0.6.

Assuming incomplete encounters constitute a statistically significant fraction of all contacts, the KMO score approaches zero. It is much more difficult to evaluate components when important linkages are present.

The frequency ranges from 0.050 to 0.059 and exhibits significant variation.

The range of 0.60 to 0.69 is quite appropriate.

The median rating fluctuates between 0.70 and 0.79.

The standard range for point values is 0.80 to 0.89.

A very improbable occurrence occurs when the value ranges from 0.90 to 1.00.

Evaluating the Suitability of the KMO and Bartlett's Sampling Method (Table 1):

Rated at 0.850 on the Kaiser-Meyer-Olkin scale.

The outcomes of Bartlett's test of sphericity are as follows: The approximate chi-square value is 4350.175; the degrees of freedom (df) are 190; significance (sig) equals .000.

Table 1: KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.850
Bartlett's Test of Sphericity	Approx. Chi-Square	4350.175
	df	190
	Sig.	.000

Using Bartlett's sphericity test, it was shown that the matrix topologies were strongly correlated. Kaiser-Meyer-Olkin has achieved a sample sufficiency level of 0.850. By using Bartlett's sphericity test, the researchers were able to get a p-value of 0.00. The use of Bartlett's sphericity analysis revealed that the connection matrix was inaccurate.

- ❖ **Independent Variable**
- **Peer Mentorship Programs:**

Through the matching of a more seasoned peer (the mentor) with a less experienced peer (the mentee), peer mentoring programs encourage the development of mutually beneficial

connections between people who have similar experiences. The programs aim to foster personal, intellectual, and professional development by providing platforms for honest dialogue, positive reinforcement, and the exchange of information. In order to assist mentees in overcoming obstacles and gaining self-assurance, mentors provide them with realistic guidance, emotional support, and an example to follow. Student engagement, persistence, and belonging are all enhanced by peer mentoring in educational environments. It promotes inclusivity, leadership development, and teamwork in businesses and nonprofits. Programs that are successful include well-defined goals, organised training, and continuous review to make sure everyone benefits (Duerksen et al., 2021).

❖ **Mediating Variable**

● **Undergraduates:**

In a few phrases, it is impossible to adequately explain the undergraduate students who were enrolled in the late 1990s. They are among the most diversified in the history of higher education in China, with nearly one quarter of the students belonging to minority groups and more than forty percent of the students being beyond the age of twenty-four. Not only have the demographics of undergraduate students evolved in terms of age and race but so have the reasons that they have for going to college. Despite the fact that a sizeable percentage of people report enrolling in college in order to increase their income or to improve their employment prospects, many people continue to say that it is still vital to them to learn more about themselves and the world around them. In the realm of undergraduate education, there are three basic categories of students: traditional-aged members of Generation X, nontraditional students, and regional college students. Despite the fact that not every student can be simply classified into any of these groups with absolute certainty (Kalman et al., 2020).

❖ **Dependent Variable**

● **Shaping Learning Attitudes:**

Technology, mixed learning settings, and flipped classrooms have had a profound impact on students' perspectives on education. In recent years, 'e-schoolbag' has been swiftly integrated into China's elementary school curriculum. The effect on students' grades can change depending on how they use their e-schoolbags. Interventions via the redesign of learning activities have the potential to enhance academic performance by fostering more positive attitudes towards learning, and a correlation between learning habits and academic achievement has been shown in a primary school using a blended learning environment. With well-planned learning activities, students' attitudes towards learning correlate favourably with their academic achievement. The fact that instructional interventions, in the form of redesigned learning activities, may foster more positive attitudes towards learning and, by extension, higher levels of academic achievement, is also readily apparent (Zhu et al., 2020).

● **Relationship between peer mentorship programs and shaping learning attitudes:**

One of the main purposes of peer mentorship programs is to help students become more motivated, confident, and interested in studying. Mentoring relationships help children in various ways, such as by helping them do better in school, giving them social support, and making them feel like they belong in the classroom. When mentors show these traits, they encourage their mentees to learn more, be innovative when they run into problems, and have an upbeat perspective about their own pursuit of knowledge. When mentors assist mentees become more resilient and believe in themselves by being honest with them and sharing their own experiences, it encourages them to take charge of their own academic growth. Peer mentorship helps kids by giving them a secure place to try new things and learn from their mistakes. Lastly, mentors also benefit from the experience since they learn novel concepts and improve their managerial and

empathy skills. The fundamental goal of peer mentoring programs is to help students get better grades by creating an interactive and student-driven atmosphere for education (Collier, 2023).

The researcher acquired the hypothesis that follows to assess the effect of peer mentorship programs on shaping learning attitudes in light of the first discussion:

- ***"H₀₁: There is no significant relationship between peer mentorship programs and shaping learning attitudes."***
- ***"H₁: There is a significant relationship between peer mentorship programs and shaping learning attitudes."***

Table 2 : H₁ ANOVA

ANOVA					
Sum					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	39936.307	488	3993.631	2485.855	.000
Within Groups	145.083	711	1.630		
Total	40081.390	1199			

This investigation produces substantial findings. With a p-value of .000, which falls below the .05 alpha level, and an F-statistic of 2485.855, there is a highly significant difference. Researchers deny the null hypothesis and approve the alternative, "***H₁: There is a significant relationship between peer mentorship programs and shaping learning attitudes***" as real.

- ***Relationship between undergraduates and shaping learning attitudes:***

As they go from a more structured curriculum to a more autonomous university experience, undergraduates have a significant impact on how they approach learning. This level emphasises the importance of taking charge of one's own education, thinking critically, and learning to study on one's own. Stimulating learning environments, inspiring teachers, and effective group projects may all help people develop an inquisitive, driven, and growth attitude. But if you don't have a strategy or experience too much academic stress, you could not be interested or learn very well. Undergraduates go from a mindset of data absorption to one that emphasises growth via active participation in class discussions, individual study, and collaboration with peers. This gives them confidence and the strength to keep going. As youngsters grow up and become responsible people, they stop viewing school as a burden and start seeing it as an opportunity to learn for the rest of their lives. The college experience has a big effect on how motivated, self-disciplined, and willing students are to keep studying (Li et al., 2024).

The researcher acquired the hypothesis that follows to assess the effect of undergraduates on shaping learning attitudes in light of the first discussion:

- ***"H₀₂: There is no significant relationship between undergraduates and shaping learning attitudes."***
- ***"H₂: There is a significant relationship between undergraduates and shaping learning attitudes."***

Table 3: H₂ ANOVA

ANOVA					
Sum					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	39936.307	575	3993.631	2348.855	.000
Within Groups	145.083	624	1.630		
Total	40081.390	1199			

This investigation produces substantial findings. With a p-value of .000, which falls below the .05 alpha level, and an F-statistic of 2348.855, there is a statistically significant difference. Researchers deny the null hypothesis and approve the alternative, "**H₂: There is a significant relationship between undergraduates and shaping learning attitudes**" as real.

9. DISCUSSION

Undergraduates' learning attitudes and the cultivation of a practical academic culture were both impacted by peer mentoring programs, as was discussed. Students who took part in mentoring programs were more invested in their education, had more self-confidence, and were more motivated to succeed academically than those who did not. Students looked up to their mentors, who acted as role models and helped them establish good study habits, prioritise their work, and achieve their academic objectives. Undergraduates, spurred by this connection, stopped depending so much on instructor-led advice and started taking an active role in their own education. Collaboration and a feeling of belonging in the classroom were both improved by peer mentoring, according to the research. Mentees expressed decreased anxiety and improved attitudes towards learning as a result of being able to talk to their mentor about the challenges they were facing in school and get helpful feedback. Peer mentoring, an informal support system that helped break down barriers to communication between students and teachers, promoted a democratic and collaborative educational culture. Furthermore, the results showed that peer mentors acquired useful leadership, compassion, and problem-solving skills, which improved the academic environment and made it more dynamic and useful. A feeling of responsibility and camaraderie was also inculcated by the program, which had an effect on participants' academic achievement. In conclusion, students' holistic educational development was aided by peer mentoring programs, which successfully reshaped their learning attitudes and fostered a practical academic culture of shared progress, teamwork, and academic accountability.

10. Conclusion

According to the study, peer mentorship programs had a significant influence on students' attitudes towards learning as well as the growth of a more pragmatic academic culture. The findings showed that after taking part in these programs, the mentees' involvement, self-confidence, and academic drive had all increased. Mentors encouraged their mentees to develop their critical thinking abilities, become more self-reliant learners, and collaborate to solve challenges. Because mentoring connections provide a sense of belonging and community, they also helped adolescents perform better academically. The program's reciprocal benefit is further shown by the fact that mentorship was able to enhance their own interpersonal, communication, and management skills. The findings showed that peer mentorship helped students go from

classroom knowledge to real-world experience by creating a more stimulating and supportive learning environment. According to the study's authors, peer mentorship programs had a favourable effect on undergraduates' attitudes towards studying as well as the development of a sustainable, useful practical academic culture.

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