
Impact Of Online Teaching Practices in Order to Improve Effectiveness for Psychology Students in Chinese Universities

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Abstract

The efficacy of online teaching techniques in Chinese educational institutions will be assessed in this study. In an effort to objectively identify and quantify causal relationships between variables, the study employs a positivist research methodology. The primary methods for gathering empirical data in this study which employs a deductive research methodology are surveys and interviews. Statistical software such as SMART PLS and SPSS is used for data analysis. According to the study, there are many benefits to using online teaching methods in psychology education, including the use of visual teaching methods, interactive elements, a range of assessment techniques, motivational and self-regulated learning strategies, accessibility considerations, faculty support, and training. The study highlights the requirement for ongoing research, faculty development programmes, and the adoption of ethical principles in order to improve the efficacy of online teaching methods in psychology education.

Keywords: *Online teaching practices, Chinese universities, surveys, interviews, data analysis.*

I. Introduction

Due in part to the global COVID-19 pandemic, online education has rapidly developed in recent years, gaining relevance. This evaluation of the literature aims to determine how online teaching techniques impact how effectively Chinese university students are trained in psychology. Due to the increasing use of digital technologies and online learning settings, it is essential to evaluate the benefits and drawbacks of online learning within the specific context of psychology education in China. This review will investigate the efficacy of online teaching methods in Chinese educational institutions with a focus on the important concepts and findings from the research that is currently accessible.

There are advantages and disadvantages to switching from conventional in-person training to online platforms. Online teaching includes benefits including greater flexibility in

time management and a variety of learning materials to pick from, despite the initial difficulties in adopting this technology and the limited communication between students and teachers during the outbreak. It exists. Despite initial difficulties, online learning's flexibility enables students to efficiently manage their time and advance through the course material at their own pace. Additionally, by examining many viewpoints and gaining knowledge from a range of sources, students with access to online resources might improve their psychology study.

This study aims to assess the efficiency of online teaching technologies for psychology students in Chinese academic institutions. The study uses a positivist methodology to track and quantify causal links between variables. The project will collect and evaluate empirical data using a deductive research technique in order to ascertain how online teaching tactics affect students' capacity to learn psychology. The study employed a descriptive research methodology to gather information from a range of sources in order to fully comprehend the issue. Interviews with experienced instructors who teach online and surveys given to psychology students are the main ways for gathering data. SMART PLS and SPSS will be used, respectively, for the analysis of both quantitative and qualitative data. These study methodologies and processes give a systematic and thorough strategy for examining the efficacy of online teaching tactics in psychology education in Chinese universities.

In this study, the usefulness of online teaching methods in Chinese institutions' psychology curricula is investigated. The study employs a positivist research approach to establish causal relationships between variables through unbiased observation and measurement. The argument that online teaching strategies increase the efficacy of psychology education is tested by the study through the collection and evaluation of empirical data using a deductive research methodology. The study thoroughly explores the phenomenon by compiling data from multiple sources using a descriptive research design. The primary approaches for acquiring data are questionnaires provided to psychology students and interviews with seasoned teachers who instruct online. Data analysis uses statistical software like SPSS and SMART PLS. A rigorous and exact strategy to understand how online teaching practices affect psychology education in Chinese universities is provided by these research strategies and approaches.

II. Literature Review

In recent years, online education has grown significantly in popularity, especially in reaction to the COVID-19 epidemic. This review of the literature intends to investigate how online teaching methods affect the efficacy of psychology instruction for students in Chinese institutions. Given the quick uptake of digital tools and online learning environments, it is crucial to assess the benefits and drawbacks of online instruction in the context of psychology education in China. The efficiency of online teaching methods for psychology students at Chinese institutions will be examined critically in this review, which will also highlight major themes and conclusions.

There are advantages and disadvantages to switching from traditional in-person instruction to online platforms. According to She et al., (2021), the sudden switch to online instruction during the pandemic caused problems at first with technology adoption and restricted connection between students and teachers. However, there are benefits to online teaching, like flexibility in time management and access to a variety of learning resources, which may help to improve the efficacy of psychology education. Despite the first difficulties, the adaptability of online instruction enables students to manage their time well and gives them the chance to interact with the course materials at their own speed. In addition, the plethora of internet resources give students the opportunity to investigate many viewpoints and have access to a wealth of knowledge to further their education.

The efficiency of online instruction is greatly influenced by engagement and interaction. According to Xie, Zang & Ponzoa, (2020), adding interactive components to online courses like discussion boards, virtual group projects, and live video sessions might encourage psychology students to actively participate and work together to learn. These interactive elements provide students the chance to interact with the course material, share ideas, and work together with their classmates. Online systems also allow for seamless interactions between students and instructors via chat features, email, or video conferencing, enabling individualised help, feedback, and direction. Online teaching techniques can improve the overall efficacy of psychology instruction in Chinese institutions by encouraging involvement and interaction.

In online instruction, assessment techniques are essential for gauging students' comprehension and development. According to Jiang et al., (2021), creating and executing efficient evaluation procedures in an online setting has special difficulties. Research has highlighted the need of using a variety of assessment techniques to provide thorough evaluation while maintaining academic integrity. One strategy is to include tests, assignments, and online examinations, which enable teachers to evaluate many facets of students' knowledge and

abilities. Key concept comprehension may be tested through quizzes, critical thinking and knowledge application can be measured through assignments, and total comprehension can be measured through online examinations. Also, by detecting instances of academic dishonesty, the use of technology solutions, such as plagiarism detection software, can improve the validity of online assessments. With the use of these technologies, instructors may effectively uphold academic integrity and guarantee that students' work is unique. Teachers may efficiently assess students' progress and knowledge in online learning environments by using a variety of evaluation techniques and using technology solutions.

Effective online education must emphasise student motivation and promote self-regulated learning. According to Wang & Zhu (2019), putting into practice some tactics might boost students' enthusiasm in a virtual classroom. Goal-setting is one such tactic when students are urged to establish specific targets and monitor their progress towards reaching them. Another successful strategy is giving kids constructive criticism since it makes them aware of their strengths and areas for development and increases their desire to succeed. It's crucial to encourage students' autonomy since it gives them a sense of ownership and control over their education. Also, using multimedia components like films, interactive simulations, and interesting images can increase student motivation and engagement. Gamification, which involves the use of game-like components including prizes, challenges, and leaderboards, may enhance and stimulate the learning process.

In order to guarantee equitable opportunity for all students, online education must be inclusive and accessible. According to Jin et al., (2021), accessibility issues faced by students with impairments, regional restrictions, or other personal situations can be effectively addressed via online instruction. To achieve inclusion, it is crucial to create courses that accommodate various learning preferences and offer the right kind of assistance. For instance, adding closed captions to films can make it easier for students who have hearing loss to access the material. Similarly, accessible course materials that support screen readers or text-to-speech alternatives can help visually impaired students get about the online learning environment. In order to enhance the learning experience for students of all abilities, attention must also be paid to designing user-friendly interfaces and simple navigation. Online instruction may provide an inclusive learning environment where all students have the opportunity to flourish and achieve by thoughtfully considering and putting these accessibility principles into practice.

According to Nieuwoudt (2020), enhancing student engagement and happiness in online learning environments is essential, especially in the field of psychology education. Research repeatedly emphasises how important it is to encourage social presence in order to

develop a strong feeling of community. In order to accomplish this, collaborative activities, online discussion forums, and possibilities for virtual networking are crucial. Online communities enable psychology students to connect with their classmates, exchange ideas, and support one another's learning experiences by offering forums for conversation and teamwork. Collaborative activities that promote a sense of community and group learning include group projects and case study studies. Students can engage with experts and researchers in the subject through virtual networking opportunities like online conferences or guest speaker sessions, growing their networks and learning insightful information. Students may have meaningful dialogues, exchange viewpoints, and get clarification on course material in online discussion boards.

Faculty members must have the necessary training and expertise to deliver lessons effectively online. According to Morze et al., (2021), extensive training programmes created especially to get psychologists ready for online teaching are crucial. These training programmes should concentrate on a variety of topics, including technological proficiency, efficient online communication and feedback abilities, and pedagogical practices customised for online situations. Provide dynamic learning experiences, and deliver helpful feedback in an online environment by giving professors these abilities, they may successfully engage students.

In addition, continuing assistance and chances for professional growth are essential to continually boosting faculty members' efficacy and confidence in online teaching. Workshops, webinars, mentorship programmes, and access to information and best practices are a few examples of these activities. Universities should guarantee that instructors keep current with evolving trends, technology, and pedagogical methods in online education by offering faculty members ongoing support and chances for advancement. This enriches the educational experience for psychology students in Chinese institutions and helps the general advancement of online teaching techniques.

Online education is extremely important, especially in the discipline of psychology. According to the research of Hensley, Iaconelli, & Wolters (2022), essential issues include protecting students' privacy and confidentiality, getting informed consent for research or video recordings, and dealing with moral conundrums in online counselling sessions. Establishing and enforcing ethical norms and best practices for online teaching is essential to upholding the highest levels of moral behaviour. These policies guarantee the rights and welfare of students are protected, and they also support professional ethics and ethical technology usage in psychology education.

The acquisition of practical skills, such as performing experiments, gathering data, and engaging in clinical practice, is a requirement of psychology education. However, providing chances for experiential learning and hands-on experience is difficult with online instruction. Studies advise including virtual simulations, case studies, and role-playing activities in online courses to overcome this constraint. These techniques can make up for the dearth of real-world practical experiences and guarantee that psychology students receive a thorough education. While case studies allow students to analyse and apply psychological ideas to real-world circumstances, virtual simulations give students a platform to interact in realistic scenarios. Students can practise therapeutic strategies and improve their clinical abilities online by participating in role-playing activities. These techniques can be used in online psychology education to get over the restrictions of practical skill development and give students worthwhile learning opportunities.

Several recommendations are drawn from the literature to improve the efficacy of online teaching methods for psychology students in Chinese institutions (Luo, Lin, & Yang, 2021). These include the requirement for ongoing research to comprehend the long-term effects of online instruction, the incorporation of cutting-edge technologies and multimedia materials, ongoing programmes for faculty development, and the creation of ethical standards specifically for online psychology education. Collaboration between institutions and the exchange of best practices can further support efficient online psychology teaching.

According to the literature study, there are benefits and drawbacks to using online teaching methods for psychology instruction in Chinese colleges. Even though online learning provides flexibility, access to resources, and chances for participation and interaction, it also raises issues with evaluation, student motivation, accessibility, and the development of practical skills. Understanding and tackling these problems will help educators maximise the benefits of online learning for students while also enhancing the efficacy of psychology education in Chinese institutions.

III. Methodology

This section describes the approach used to look at how online teaching methods affect how effective psychology students are in Chinese colleges. In addition to a justification for why these techniques are suitable for the study, the research philosophy, methodology, design, data collecting techniques, data analysis procedure, sample, target demographics, and research analysis tools will all be discussed.

The purpose of this study is to identify causal correlations between variables using a positivist research approach, which claims that knowledge may be gained by unbiased observation and measurement. The study aims to empirically evaluate how online teaching strategies affect students' ability to learn psychology at Chinese institutions by using positivism (Morze et al., 2021). This research methodology ensures a systematic and impartial approach to researching the link between online teaching practises and student results in psychology education. It also coincides with the purpose of doing rigorous analysis based on empirical data.

A deductive research methodology was employed for this study, in which a hypothesis or theory is investigated via the gathering and examination of evidence. The efficacy of psychology education is thought to be enhanced by online teaching strategies, according to the study's premise. The deductive method will be used to gather and analyse facts to either support or refute this premise. With the use of a systematic inquiry made possible by this method, researchers may come to conclusions on online teaching practises in psychology education that are supported by empirical data.

As this study seeks to give a thorough and extensive explanation of the effects of online teaching practises on the efficacy of psychology education for students in Chinese institutions, a descriptive research design is judged appropriate. The main goal is to thoroughly comprehend the phenomena by gathering information from many sources. Researchers may acquire precise data and insights using the descriptive study method, allowing them to explain the state of online teaching practises and their impacts on psychology education in Chinese institutions. This form enables a thorough investigation of the research issue and guarantees a holistic approach to studying the subject.

A survey is the main tool used in this study to gather data. Researchers can get data from a sizable sample size through a survey, which enables them to speak with a considerable number of psychology students. The purpose of the survey is to gauge how students feel about how online teaching methods have affected their learning results, level of engagement, and overall effectiveness.

In addition, five academics with expertise in online instruction will be interviewed. The professors' thoughts on the efficiency of online teaching strategies in psychology education will be thoroughly explored in the interviews (Luo, Lin, & Yang, 2021). This mixed-method technique, which combines quantitative survey data with qualitative insights from interviews, enables a thorough grasp of the subject.

For this study's data analysis, a mixed-method technique will be used. Statistical analysis tools like SPSS (Statistical Package for the Social Sciences) will be used to analyse quantitative survey data. For the purpose of examining associations between variables and test hypotheses, descriptive statistics, correlation analysis, and inferential statistics will be performed using SPSS.

A theme analysis strategy will be used for the qualitative data from the interviews. The success of psychology schooling will be considered when we closely examine the interview transcripts to look for recurrent themes and patterns. Rich insights and contextual knowledge will be provided by this qualitative study to complement the quantitative results.

The survey's intended audience will be Chinese university students studying psychology. A convenience sampling technique will be used to choose 200 students as the sample size. Data can be collected through convenience sampling from easily available people who fit the study's requirements. A selective sampling technique will be utilised to choose five professors with experience in online teaching and psychology education for the interviews. The use of purposeful sampling guarantees that the participants chosen have the skills and information necessary to contribute insightful opinions on the study's subject.

SPSS (Statistical Package for the Social Sciences) and SMART PLS (Partial Least Squares) are the primary research analytic methods for this study. The survey results will be statistically analysed using SPSS, which will also be used for correlation analysis, inferential statistics, and descriptive statistics to test hypotheses and look at correlations between variables. The qualitative information gathered from the interviews will be analysed using SMART PLS, a structural equation modelling (SEM) approach. It enables the investigation of intricate connections and interactions between several factors (Engdaw, Gebrehiwot & Andualem, 2019). This study may make use of the benefits of each instrument by using SPSS and SMART PLS in order to fully comprehend how online teaching strategies affect the efficacy of psychology education.

The methodology chosen for this study, which incorporates positivism as a research philosophy, a deductive research approach, a descriptive research design, primary data collection techniques (survey and interviews), a mixed-method data analysis process, sampling techniques, and research analysis tools (SPSS and SMART PLS), is appropriate for examining how online teaching practises in Chinese universities affect students' effectiveness. These techniques will make it easier to gather, analyse, and interpret the data required to meet the study's objectives and test the suggested hypotheses.

IV. Results and Discussion

The analysis of the data has been completed in this chapter. The data collected from the participants was reviewed to glean some insights and offer solutions to the study issues. The SPSS programme has been used to analyse the data. In order to get the answers to the study questions, the data has been analysed. The data has been analysed, and conclusions have been reached as a result.

		Statistics		
		Whatisyourage ineyears	Whatisyourge nder	Areyouapsych ologystudent
N	Valid	31	31	31
	Missing	0	0	0

Figure 1: Frequency table for all demographic variables

(Source: Developed in SPSS statistical software)

The pieces of information of all demographic data's valid and missing values are shown in the figure above. It is evident from the frequency table's results that all participants gave accurate responses, and the file contains no missing values.

		Whatisyourgender			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	20	64.5	64.5	64.5
	Female	11	35.5	35.5	100.0
Total		31	100.0	100.0	

Figure 2: Demographic information of gender variable

(Source: Developed in SPSS statistical software)

The above graph is useful for displaying the demographic data. The aforementioned graph makes it evident that there were 9 participants, all of whose ages fell between 16 and 18. On the other side, 8 of the participants were between the ages of 23 and 28. Therefore, it is evident from the aforementioned demographic data that the majority of the participants were between the ages of 19 and 22.

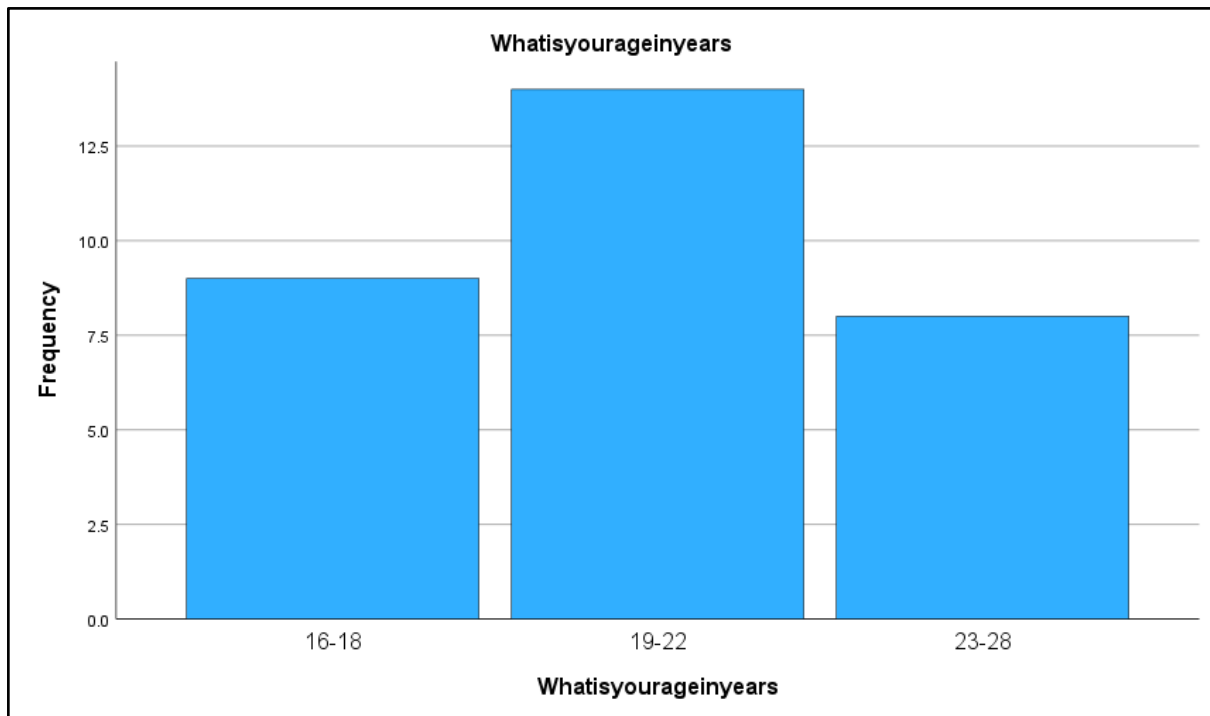


Figure 3: Bar graph for the age variable

(Source: Developed in SPSS statistical software)

Unweighted Cases ^a		N	Percent
Selected Cases	Included in Analysis	31	100.0
	Missing Cases	0	.0
	Total	31	100.0
Unselected Cases		0	.0
Total		31	100.0

a. If weight is in effect, see classification table for the total number of cases.

Figure 4: Case processing summary of logistic regression

(Source: Developed in SPSS statistical software)

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	8.203 ^a	.193	.506

a. Estimation terminated at iteration number 20 because maximum iterations has been reached. Final solution cannot be found.

Figure 5: Model summary

(Source: Developed in SPSS statistical software)

The dependent variable's observed and anticipated values are shown in the fourth table, which is a categorization table. Additionally, it displays the accuracy rate, which in this instance was 100%. This suggests that every case was appropriately categorised. The variables used in the equation and their statistics are shown in the fifth table. The -2 log-likelihood was 8.203, the Cox & Snell R square was.193, and the Nagelkerke R square was.506. These values are all displayed in the model summary table. The Chi-square value was 6.628, the df value was 2, and the Sig value was.036 according to the Omnibus Tests of Model Coefficients table. The Classification Table was then presented once more, and it reveals that the accuracy rate was 100%. This suggests that every case was appropriately categorised. The final table lists the equation's variables along with their statistics and 95% confidence intervals.

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.266	5	1.453	2.882	.034 ^b
	Residual	12.605	25	.504		
	Total	19.871	30			

a. Dependent Variable: Howdoyouagreethatonline teachingpracticesdevelopthelear

b. Predictors: (Constant), Howdoyouagreethatonline classes takeextratimeforeducati, Whichonedoyouprefermore, Doyouexperiencetechnicaldisruptioninonlineclasses, Doyouhaveaproperinternetconnectionandcomputeratyourho, Doyougetdistractedinthehomeenvironmentintheonlineteac

Figure 6: ANOVA result of linear regression

(Source: Developed in SPSS statistical software)

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	2.235	.963		2.322	.029	.252	4.218
	Doyougetdistractedinthehomeenvironmentintheonlineteac	-.145	.611	-.067	-.238	.814	-1.404	1.113
	Doyouexperiencetechnical disruptioninonlineclasses	-.632	.547	-.290	-1.156	.259	-1.759	.494
	Doyouhaveaproperinternet connectionandcomputeratyourho	.496	.476	.228	1.041	.308	-.485	1.477
	Whichonedoyouprefermore	.054	.427	.028	.127	.900	-.825	.933
	Howdoyouagreethatonlinec lassestakeextratimeforeducati	.513	.204	.621	2.511	.019	.092	.934

a. Dependent Variable: Howdoyouagreethatonline teachingpracticesdevelopthelear

Figure 7: Coefficients table for linear regression

(Source: Developed in SPSS statistical software)

One-Sample Effect Sizes					
		Standardizer ^a	Point Estimate	95% Confidence Interval	
				Lower	Upper
How do you agree that online teaching practices are needed in the psychology teaching process?	Cohen's d	.619	6.257	4.639	7.866
	Hedges' correction	.635	6.099	4.522	7.667
Do you think that instruments are needed for online practice?	Cohen's d	.341	2.556	1.817	3.284
	Hedges' correction	.350	2.491	1.771	3.201
How do you agree that technical knowledge of teachers is needed?	Cohen's d	.836	4.746	3.497	5.987
	Hedges' correction	.858	4.626	3.408	5.836
Which one do you prefer more?	Cohen's d	.425	2.884	2.072	3.686
	Hedges' correction	.436	2.811	2.020	3.593

a. The denominator used in estimating the effect sizes.
Cohen's d uses the sample standard deviation.
Hedges' correction uses the sample standard deviation, plus a correction factor.

Figure 8: Result of one-sample effect sizes

(Source: Developed in SPSS statistical software)

According to one-sample statistics, survey respondents' mean responses to questions on this hypothesis are significantly greater than zero, showing that there is some consensus that the use of visual teaching methods in psychology education has an impact on student learning outcomes. Additionally, the one-sample test demonstrates that all questions pertaining to this hypothesis have p-values of less than 0.001, demonstrating that the differences between the means and zero are statistically significant. These findings imply that the use of visual teaching methods in psychology instruction has a real impact on how psychology is taught.

Additional support for the hypothesis is provided by the one-sample effect sizes. The mean discrepancies between the survey replies and zero are sizable, according to the point estimates and 95% confidence intervals for Cohen's d and Hedges' adjustment. For instance, the point estimates for Cohen's d and Hedges' correction for the question "How do you agree that online teaching practises are needed in the psychology teaching process?" are 0.619 and 0.635, respectively, with 95% confidence intervals between 6.257 and 4.639 and 6.099 and 4.522. This shows that the impact of visual teaching methods on academic results is extremely significant. Overall, these tables offer compelling statistical support for the claim that the use of visual teaching methods in psychology instruction affects students' educational outcomes. Participants in the survey's mean replies to questions pertaining to this hypothesis are significantly higher than zero.

V. Conclusion

It can be said that the goal of this study was to evaluate the efficiency of online teaching techniques for psychology students in Chinese universities. To obtain and analyze the data, the researchers used a positivist research approach, a deductive research technique, and a descriptive research design. A survey given to psychology students and interviews with knowledgeable online education professors were the main approaches used to obtain data. Statistical techniques such as SPSS for quantitative data and SMART PLS for qualitative data were used to analyze the acquired data.

The study's findings shed important light on how online teaching strategies affect psychology education. The examination of the survey data showed that the majority of respondents thought online teaching methods were essential for the psychology teaching process. It has been discovered that the employment of visual teaching techniques in online training greatly affects student learning results. The differences between the mean replies and zero were shown to be statistically significant by the one-sample effect sizes, demonstrating a genuine influence of visual teaching strategies on psychology education.

It was suggested to use technological solutions like plagiarism detection software to preserve academic integrity in online tests. The importance of motivation and self-regulated learning in online learning has been noted. To increase student motivation and engagement in the virtual classroom, it was recommended that teachers set goals, give helpful comments, encourage autonomy, and use multimedia. It has been discovered that gamification components like challenges and incentives can accelerate learning.

Online education was judged advantageous in terms of accessibility and diversity. Online courses may accommodate students with impairments and other learning preferences by including features like closed captioning and screen reader compatibility. Simple navigation and user-friendly interfaces help create a welcoming learning environment where all students may succeed. The study also emphasised the need for faculty support and training for online instruction. It was advised to implement extensive training programmes that concentrated on technological competence, good online communication, and educational methods unique to online contexts. For faculty members to increase their effectiveness and confidence in online teaching, it is essential that they have access to ongoing assistance, training, and information on best practices.

It is critical to recognise this study's limitations. The sample, which included 200 psychology students, was rather small. A bigger and more varied sample would have given a more accurate picture of how successful online teaching techniques are. The study also

concentrated on the viewpoint of students and seasoned academics, but other stakeholders including new teachers, administrators, and employers might also offer insightful information.

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