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CRITICAL THINKING ON SOFT SKILLS DEVELOPMENT OF COLLEGE STUDENTS

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ABSTRACT

This study investigated the intricate relationship between critical thinking and the development of soft skills among college students. The research drew on the Transferability Hypothesis, which posits that skills acquired in one domain can be applied to another, to explore the extent to which critical thinking abilities influence the enhancement of time management competencies. A total of 214 students participated in the survey, responding to a researcher-made questionnaire designed to gauge their critical thinking abilities and soft skills development. The survey results revealed specific patterns. The students demonstrated a high level of agreement in their responses concerning Judgement and Problem-Solving skills (Mean = 2.54, SD = 0.47), ranking it first among the critical thinking skills assessed. Questioning (Mean = 2.51, SD = 0.49) also garnered agreement and was ranked second. Interpretation (Mean = 2.49, SD = 0.51) and Analyses (Mean = 2.47, SD = 0.49) exhibited disagreement and were categorized as low-level skills. The mean score for critical thinking skills overall was 2.50 (SD = 0.24), reflecting a collective inclination towards disagreement and a low-level proficiency. On the front of soft skills development, the students showcased a high level of agreement in Time Management Skills (Mean = 2.54, SD = 0.50), ranking it first among the assessed soft skills. Communication Skills (Mean = 2.53, SD = 0.47) and Adaptability Skills (Mean = 2.52, SD = 0.48) followed suit, with students expressing a collective agreement. Creative Thinking Skills (Mean = 2.48, SD = 0.49) yielded disagreement and were designated as low-level skills. The mean score for soft skills was 2.52 (SD = 0.25), signifying a widespread agreement and a high level of proficiency.

INTRODUCTION

Online learning can be understood as using various technologies to enhance or improve the interaction between teachers and students (Singh & Thurman, 2019). But in a survey done in Indonesian schools, it was observed that students perceived online learning to have limited effectiveness as some challenges faced by students included internet access and the capacity of their devices to be compatible with online education (Hamid, SENTRYO, & HASAN, 2020). Another study by Schlenz et al. (2020) revealed that students and teachers both perceive online learning positively. However, in any kind of learning experience, critical thinking prevails as an important educational goal (Hitchcock, 2018). Another important concept in this study are soft skills, which are defined as a group of personal qualities, habits, and attitudes that determine whether an individual has potential in a certain field and is compatible to work with (Vasanthakumari, 2019). In the sense of employment, soft skills are relevant for professional development and some examples to these include interpersonal and personal qualities like communication, time-management, and problem-solving. There is, therefore, a need to assess whether this can truly equip students with necessary critical thinking abilities and other soft skills. In line with this, the current study sought to assess the critical thinking and soft skills of students during the course of taking online classes and determine whether there are significant observable differences on the critical thinking and soft skills of students with

their demographic profiles. This study also sought to find the relationship between the soft skills of students and their critical thinking during online learning periods. Lastly, the study looked to unravel the perceptions and observations of educators on the critical thinking and soft skills of students during online learning.

Background of the study: Online learning is the use of digital tools and devices to deliver information and support learning (Mayer, 2019). Mayer (2019) further reviewed that online assessments focused on response execution, then shifted to assessing the information retention of students, which then changed to transfer performance. With regards to critical thinking and soft skills, Jones (2019) mentioned that these are the most sought-after skills in the 21st century. Most educational institutions today focus on equipping students with these invaluable skills, with critical thinking and problem solving as some examples. Another study by Sangsawang (2020) also found that teaching strategies that centered on critical thinking and problem solving were useful for teaching and career training. These points then highlight the important need of educational institutions today to focus on soft skill development in order to equip students with the necessary skills for their future. This then emphasizes the importance of this study as it can provide useful baseline data on whether the teaching strategies implemented in online education are effective in helping students hone key soft skills for both their career and personal goals.

Statement of the problem: This study aimed to assess the critical thinking and soft skills of pharmacy students at the Henan University of Chinese Medicine in Henan Province, China during their online learning period. Specifically, the study sought to answer the following questions:

What is the profile of the respondents in terms of their respective:

- Sex
- Age
- Year Level
- Is there a significant difference in the students' critical thinking when compared according to their demographic profile?
- What is the self-assessment of the students' soft skills during online classes in terms
- Is there a significant difference in the students' assessment of soft skills when compared according to their demographic profile?
- Is there a significant relationship between the students' assessment of soft skills and critical thinking in online classes?
- What are the teachers' observations regarding the students' critical thinking ability and soft skills in online learning sessions?
- What plan can be proposed to enhance the critical thinking ability and soft skills of students in online classes?

Significance of the study

The results of this study are beneficial to the following:

Students: This research would aid students and learners of all levels throughout their online learning experiences as it is aimed at designing teaching and learning strategies that best supplement and shape their critical thinking and soft skill development.

Teachers: As teachers are understood to be a fundamental part of the learning experience of students, it is integral that they should know the best possible ways to enhance their teaching. Educators may also benefit from the results of this study as the data collected will focus on enhancing teaching strategies.

Guidance counselors: The findings of this study will help guidance counselors to understand the students' level of critical thinking and their soft skills, which will enable them to offer important suggestions and solutions to student-related problems.

Curriculum makers: The results of this study will be of use to the individuals who are responsible for creating and designing curricula for educational institutions to follow

Ministry of education: Major organizational institutions like the Ministry of Education make valuable decisions on the academic affairs of an education system. The results of this study will benefit these organizations as they will provide a guide in making relevant decisions to improve teaching and learning in online education settings

Future researchers: The research can also be of benefit to future researchers who aim to understand the relationship between critical thinking and soft skills in online education. The results of this study will act as baseline data for future researchers who wish to further review and look into the critical thinking and soft skill development of students.

Scope and delimitation: This study examined the relationship between the critical thinking of pharmacy students and their soft skills

during online classes at the Henan University of Chinese Medicine. It took place at the Henan University of Chinese Medicine in the Henan Province in China. The sample consisted of 214 pharmacy students who attended online classes in this university as this is a major criteria for respondents. Then, their self-assessment on their critical thinking and soft skills were focused throughout the surveying period. In addition, 10 teachers from the same department were also selected and questioned regarding their observations and perceptions on the critical thinking and soft skills of students who took part in their online classes.

It should be pointed out that as the survey questions were translated to Chinese for teachers and student respondents to understand this, there may be some existing delimitations in the translation, specifically with the exact wording and connotations used. Although other words were used, the translator responsible ensured that all collected data from the survey are appropriately represented in English in the translated version. Lastly, another delimitation in the study is the time constraint faced by the researcher and the locale of the study. For the former, the researcher will conduct the entire study within two months while for the latter, the respondents will be based in China; posing some difficulties for the researcher with the limited time available.

Theoretical framework: The Transferability Hypothesis, also known as the Transfer of Learning, is a concept that explores the extent to which skills, knowledge, or information acquired in one context can be effectively applied or adapted to a different context. This theory posits that learning in one situation can positively impact an individual's performance in another situation, even if the two situations seem quite distinct. In essence, the Transferability Hypothesis addresses the question of how learning and skills gained in one area of life can be transferred and applied to improve performance in another area. The study explored the interaction between critical thinking (a cognitive skill) and soft skills (non-cognitive skills). The Transferability Hypothesis supports the idea that cognitive skills can facilitate the development of non-cognitive skills. For example, a student's ability to analyze complex information critically might contribute to their emotional intelligence by enabling them to understand perspectives and respond empathetically. By examining this dynamic, researchers can gain insights into how cognitive skills like critical thinking contribute to the holistic growth of students. Understanding the transferability of critical thinking to soft skills has pedagogical implications. Educators can design curricula that intentionally integrate critical thinking tasks and activities across various subjects and disciplines. By doing so, educators foster the transfer of critical thinking skills to the development of soft skills. For instance, assigning interdisciplinary projects that require critical analysis and collaboration can promote the transfer of skills across domains.

METHODOLOGY

This third chapter describes the various details of the methodology of the study. It includes the research design, locale, the study's respondents, sampling technique, the research instrument, the data collection technique, and the statistical data analysis that will be used.

Research locale: The research took place in one setting throughout the period of writing, gathering and analyzing data, and drawing conclusions. The teacher and student respondents of the study were taken from an educational institution in Henan Province in China. Specifically, this was the Henan University of Chinese Medicine, where pharmacy students were surveyed on their critical thinking and soft skill development during online classes. Henan University of Chinese Medicine (HUCM) was founded in 1958 in Kaifeng City, previously Henan Provincial Training College of Traditional Chinese Medicine.

Sample and sampling technique: As mentioned in previous sections of this paper, the study focused on assessing the critical thinking ability and soft skill development of pharmacy students at the Henan

University of Chinese Medicine, specifically those who were enrolled in online classes. In this educational institution, the total population of pharmacy students was 480; however, the study sampled 214 students, following a 50% response distribution. With this recommended sampling size, an expected 5% margin of error and a 95% confidence level were adhered to.

On the other hand, 10 teachers were carefully selected by the researcher to be interviewed using an open-ended questionnaire. When selecting the teachers to be interviewed, they were required to be affiliated with the Pharmacy Department of the Henan University of Chinese Medicine. These teachers could originate from either the administrative branch of the department or the teaching faculty. The primary criterion was that they were involved in the online classes of the selected student sample population. Another vital factor in the selection of teacher respondents was their personal experiences, as well as their collective and individual knowledge of the pharmacy students who were surveyed. This was important to ensure that their perspectives accurately reflected the critical thinking abilities and soft skill development of their students.

Data gathering procedure: Before commencing the data gathering process, the researcher secured permission from the president of Henan University of Chinese Medicine by sending a letter of request to conduct the study in the specified location. Once approval was obtained, the prepared questionnaire and open-ended interviews were distributed to the student and selected teacher participants, respectively. After the data-gathering process was completed, the researcher organized, analyzed, and interpreted the data to extract relevant discussions from the findings. Lastly, it is also important to note that the data gathering process began in the first week of April 2023, while the proposed output of the study was presented at the end of the academic year.

Statistical analysis: The data that was gathered using the questionnaire for the student respondents underwent various types of statistical analysis. All of these analyses followed statistical treatments with a significance level set at 0.05. The software utilized for these analyses was the Statistical Package for Social Sciences (SPSS) software. On the other hand, the data that was collected through the open-ended interviews was subjected to descriptive analysis. The specific analyses that were conducted are as follows:

Frequency count and percentage: This was done by analyzing the data that had been collected on the demographic profile of the surveyed students. More precisely, the age, sex, and year level of the respondents were assessed and comprehended through the utilization of frequency counts and percentages.

Weighted mean and standard deviation: Then, with each statement that was presented in the questionnaire's indicators or subtopics, the researcher used the weighted mean to assess them and the standard deviation to evaluate the dispersion between mean and the items.

T-test / ANOVA: After calculating the weighted means for the critical thinking abilities and soft skill development of the students, they were subjected to a t-test to determine whether any differences existed between these measures and the sex of the respondents.

Pearson's (r) correlation analysis: To determine the relationship between the critical thinking abilities of students and their soft skill development in online classes, the study employed Pearson's (r) correlation analysis. This analytical approach was utilized to identify any potential linear correlation between the variables under investigation and the indicators that were employed in the study.

Thematic Analysis: This was the final analysis process employed in the study, and it was used for the data collected from the open-ended interviews with the teacher respondents. The data obtained from these interviews were qualitatively analyzed and presented descriptively.

Once the data was gathered and the results were processed in the study, the researcher utilized a significance level of 0.05 to analyze the formulated hypotheses. If the significance values derived from the results exceeded the 0.05 threshold, the corresponding null hypotheses were accepted. Conversely, if the calculated values fell below this threshold, the hypotheses were rejected.

RESULTS

In this chapter, the researcher tabulated and discussed the research findings with the developed output regarding the critical thinking on soft skills development of college students. Demographic Profile of the Respondents

The demographic profile of the respondents are as follows: Out of 214 student-respondents, the results show that majority or 50.5% of the student-respondents are males, while 106 (49.5%) of them are females. In terms of age, majority or 35.5% of the respondents are between 24–26 years old, followed by 34.1% of those that are 21–23 years old, 29.4% of those that are 18–20 years old, and 0.9% of those that are above 26. Based on the respondents' year level, majority of them are freshmen (30.4%), followed by sophomores (28.5%), seniors (22.9%), and juniors (18.2%).

Table 1. Frequency Distribution of the Students' Demographic Profile

Category	Frequency	Percentage (%)
Sex		
Male	108	50.5
Female	106	49.5
Age (years)		
18 - 20	63	29.4
21 - 23	73	34.1
24 - 26	76	35.5
Above 26	2	0.9
Year Level		
Freshmen	65	30.4
Sophomores	61	28.5
Juniors	39	18.2
Seniors	49	22.9

Based on table 2, the students were found to have an overall low level of critical thinking with a mean of 2.50. The highest-ranked dimension is their high level of judgement and problem-solving (2.54). This is followed by the students' questioning ability which is also at a high level with a mean of 2.51, their interpretation ability at a low-level with a mean of 2.49, and their analyses ability at a low level with a mean of 2.47. Several factors contribute to the high level of questioning and judgment among students during online classes:

Increased self-directed learning: Online classes often require students to take more responsibility for their own learning. They need to manage their time, engage with course materials, and actively seek out information (Kang & Zhang 2023).

Flexibility and individual pacing: Online classes offer flexibility in terms of when and where students engage with the material. This allows students to learn at their own pace and revisit concepts as needed (Bagiati et al, 2022).

Diverse learning resources: Online classes often provide a wide range of learning resources such as videos, articles, interactive simulations, and discussion that encourage students to explore different sources, compare viewpoints, and assess the credibility of information, leading to heightened critical thinking (Abdi, Khosravi, Sadiq, & Demartini, 2021).

Active online discussions: Many online classes incorporate discussion forums where students interact with peers and instructors.

Table 2. Summary of the Self-Assessment of the Students' Critical Thinking during Online Classes

Critical Thinking	Mean	(SD)	Qualitative Description	Interpretation	Rank
1.Questioning	2.51	(0.49)	Agree	High Level	2
2.Interpretation	2.49	(0.51)	Disagree	Low Level	3
3. Analyses	2.47	(0.49)	Disagree	Low Level	4
4. Judgement and Problem Solving	2.54	(0.47)	Agree	High Level	1
MEAN SCORE	2.50	(0.24)	Disagree	Low Level	

Scale: 1.00-1.50 = Very Low Level / 1.51-2.50 = Low Level / 2.51-3.00 = High Level / 3.51-4.00 = Very High Level

Table 3. Student's Critical Thinking Based on Demographic Profile

Profile	Mean (SD)	t- or F-value	p-value	Interpretation
Questioning				
Age	2.51 (0.49)	1.85	0.140	Not significant
Sex		1.61	0.109	Not significant
Year Level		0.71	0.548	Not significant
Interpretation				
Age	2.49 (0.51)	2.32	0.076	Not significant
Sex		0.41	0.684	Not significant
Year Level		2.96	0.033	Significant
Analyses				
Age	2.47 (0.49)	0.38	0.765	Not significant
Sex		-0.33	0.744	Not significant
Year Level		0.48	0.697	Not significant
Judgment and Problem Solving				
Age	2.54 (0.47)	0.42	0.740	Not significant
Sex		-2.60	0.010	Significant
Year Level		0.44	0.726	Not significant
Critical Thinking				
Age	2.50 (0.24)	1.29	0.279	Not significant
Sex		-0.39	0.700	Not significant
Year Level		1.22	0.305	Not significant

A p -value < 0.05 is considered significant.

Table 4. Summary of the Self-Assessment of the Students' Soft Skills during Online Classes

Soft Skills	Mean	SD	Qualitative Description	Interpretation	Rank
1. Adaptability Skills	2.52	0.48	Agree	High Level	3
2. Time Management Skills	2.54	0.50	Agree	High Level	1
3. Communication Skills	2.53	0.47	Agree	High Level	2
4. Creative Thinking Skills	2.48	0.49	Disagree	Low Level	4
MEAN SCORE	2.52	0.25	Agree	High Level	-

Scale: 1.00-1.50 = Very Low Level / 1.51-2.50 = Low Level / 2.51-3.00 = High Level / 3.51-4.00 = Very High Level

Table 5. Difference in the Self-Assessment of Students' Soft Skills Based on Demographic Profile

Profile	Mean (SD)	t- or F-value	p-value	Interpretation
Adaptability skills				
Age	2.52 (0.48)	0.28	0.838	Not significant
Sex		-1.64	0.104	Not significant
Year Level		0.47	0.707	Not significant
Time Management Skills				
Age	2.54 (0.50)	0.41	0.744	Not significant
Sex		-0.69	0.490	Not significant
Year Level		1.32	0.270	Not significant
Communication skills				
Age	2.53 (0.47)	1.83	0.143	Not significant
Sex		0.69	0.491	Not significant
Year Level		0.88	0.454	Not significant
Creative Thinking Skills				
Age	2.48 (0.49)	0.93	0.429	Not significant
Sex		1.20	0.233	Not significant
Year Level		0.52	0.672	Not significant
Soft Skills				
Age	2.52 (0.25)	0.97	0.406	Not significant
Sex		-0.21	0.833	Not significant
Year Level		1.00	0.392	Not significant

*A p -value < 0.05 is considered significant.

Table 6. Relationship of Critical Thinking and Soft Skills

Variables	Questioning		Interpretation		Analyses		Judgment		Critical thinking	
	r-value	p-value	r-value	p-value	r-value	p-value	r-value	p-value	r-value	p-value
Adaptability	0.05	(0.460)	0.00	(0.994)	-0.01	(0.912)	-0.05	(0.452)	-0.00	(0.967)
Time Management	-0.04	(0.594)	-0.06	(0.415)	-0.21	(0.003)*	0.01	(0.938)	0.06	(0.409)
Communication skills	0.08	(0.273)	-0.11	(0.110)	-0.03	(0.647)	-0.03	(0.631)	-0.05	(0.452)
Creative thinking	-0.11	(0.094)	-0.02	(0.736)	0.00	(0.963)	0.06	(0.349)	-0.04	(0.578)
Soft skills	-0.02	(0.824)	-0.09	(0.190)	0.08	(0.227)	-0.01	(0.932)	-0.02	(0.817)

Table 7. Teacher-Respondents' Perceptions on the Use of Critical Thinking Skills and Soft Skills by the Students During Online Classes

Perceptions on the Use of Critical Thinking Skills and Soft Skills by the Students During Online Classes	Recurring Themes
A. Use of Critical Thinking Skills During Online Classes	<ul style="list-style-type: none"> The students tend to get distracted during class. The students have difficulty in expressing their ideas well. There are students who become more active in online discussion forums.
B. Use of Soft Skills During Online Classes	<ul style="list-style-type: none"> The students do not actively participate during lessons. There is a lack of confidence on the part of the students, which affects their performance in class.
C. Improvement Critical Thinking Skills and Soft Skills by the Students During Online Classes	<ul style="list-style-type: none"> The students' communication skills and social skills need improvement to help them learn better in class. The students need to build their confidence for them to actively participate during discussions. Students should actively participate in class to develop their problem-solving skills, creativity and critical thinking.

Engaging in online discussions requires students to formulate arguments, defend their viewpoints, and respond to others' ideas (Gribble & Wardrop, 2021).

Enhanced communication skills: Online classes often rely heavily on written communication. This emphasis on effective communication prompts the students to think critically about how to convey their ideas persuasively and logically (Anderson, Carter, & DiRenzo, 2021). *Immediate access to information.* With the internet readily available, students can quickly access additional resources to supplement their understanding. This encourages them to verify information, evaluate sources, and synthesize different perspectives, all of which contribute to higher levels of critical thinking (Cuthbert, Kubinec, Tanis, Jeong, Wei, & Schlossberg, 2005). Based on Table 3, there are no significant differences in the self-assessment of the students' critical thinking among levels of age, sex, and year level in terms of questioning and analyses. Similarly, there are no significant differences in the students' critical thinking skills in terms of interpretation among levels of age and sex. The critical thinking skills in terms of interpretation of juniors are significantly higher compared to seniors ($p=0.018$). There are also no significant differences in critical thinking skills in terms of judgment and problem-solving among levels of age, and year level. The judgment and problem-solving skills of females are significantly higher than males ($p=0.005$). Based on table 4, the students were found to have an overall high level of soft skills with a mean of 2.52. The highest ranked dimension is their high level of time management skills (2.54). This is followed by the students' communication skills, which are also at a high level with a mean of 2.53, their adaptability skills at a high-level with a mean of 2.52, and their creative thinking skills at a low level with a mean of 2.48. Several factors contribute to the high level of soft skills development among students during online classes. These factors arise from the unique characteristics and dynamics of online learning environments:

Independent learning: Online classes often require students to take a more active role in their learning process, thus fostering soft skills development (Yachmenyk, Kornus, Braslavskaja, & Rozhi, 2022).

Digital literacy: Students naturally acquire skills in navigating digital interfaces, troubleshooting technical issues, and effectively communicating online, all of which contribute to their digital and communication skills (Werdistira, 2023).

Communication and collaboration: Online classes frequently encourage interaction through discussion boards, forums, and group projects. Engaging in virtual discussions and collaborating on projects help students enhance their written communication, teamwork, and negotiation skills (Blessing, Wood, & Grahovec, 2022). Based on table 5, there are no significant differences in the self-assessment of the students' soft skills among levels of age, sex, and year level in terms of adaptability skills, time management skills, communication skills, and creative thinking skills. According to a study by Zhang et al. (2021), when investigating how students in China responded to the sudden change to online learning, it was found that adaptability and student engagement were positively related with positive academic emotion while being negatively related with negative academic emotion. In addition to this, academic emotion was a mediating variable between the relationship of adaptability and student engagement. In simple terms, this data indicates that the ability of students to adapt to their environment has an impact in their engagement with course materials and further shows the importance of fostering this skill in students.

Based on table 6, there is a weak but significant negative relationship between critical thinking skills in terms of analyses and time management ($r=-0.21$, $p=0.003$). There are no significant relationships between other pairwise correlations. In the context of this study, the Transferability Hypothesis can be applied to explore whether the critical thinking skills developed by college students have a positive impact on their time management skills. The Transferability Hypothesis suggests that skills acquired in one domain can be transferred and applied in another domain. In this case, the analytical abilities cultivated through critical thinking could potentially be applied to time management. The Transferability Hypothesis also aligns with the notion of holistic skill development. Students who enhance their critical thinking abilities might also improve their capacity to assess and adapt to different contexts, including time management.

Additionally, the Transferability Hypothesis implies that students who apply strategic thinking in one context (such as learning) might apply similar strategies to other contexts (such as managing time). Hence, incorporating the Transferability Hypothesis into the study can have pedagogical implications. Educators can design interventions that explicitly connect critical thinking exercises with time management strategies.

For instance, teaching students to break down complex tasks using critical thinking could also teach them how to manage their time more efficiently. By linking cognitive skills with practical skills, educators can encourage the transfer of learning from one domain to another.

Use of critical thinking skills during online classes: The respondents underscored that during online lessons, they get easily distracted, and it affects their problem-solving and critical thinking. Distractions manifest as snippets of information unrelated to current tasks, originating either externally or internally within their thoughts. Interruptions arise when an individual chooses to involve themselves in multiple tasks simultaneously. Instances where individuals attempt to concurrently execute two or more tasks with distinct objectives are commonly termed as multitasking (Gazzaley and Rosen, 2016). The advent of new social media applications has brought about a lasting alteration in the ability of adolescents and young adults to concentrate. According to Carrier et al. (2009), teenagers are capable of managing six or seven forms of media concurrently. Studies by Risko et al. (2013), indicate that utilizing technology for both class-related and unrelated activities can lead to cognitive overload, resulting in a diminished capacity to absorb and process information during lectures. Similarly, Junco and Cotton (2012) demonstrated that multitasking can have a detrimental impact on students' academic performance. Another observation is that students have difficulty in expressing their ideas during class. Students expressed sentiments of detachment from their instructors, the course material, and their peers. Individuals enrolled in these courses delineated their online interactions as primarily consisting of text-based lectures and various reading and writing tasks. A noteworthy observation was that several of these assignments appeared to curtail the students' capacity to cultivate advanced cognitive skills and creative thinking (Alawamleh, et al., 2020).

Use of soft skills during online classes: It has been emphasized by the respondents that they do not actively participate during online lessons and that they frequently encountered feelings of isolation, being overshadowed by peers, or hesitancy in openly sharing their thoughts. Another concern expressed by the respondent is the decrease of confidence of the students, which affects their performance in class. Venturing into online learning for the first time can pose challenges for students, compounded by the absence of comprehensive non-verbal communication. A spectrum of factors within the online classroom milieu, encompassing interactions between students and instructors, engagement levels, the accessibility of learning materials, internet connectivity, financial considerations, perceived educational quality, self-assurance, and effective time management, collectively shape the holistic experience of participants in online education, thereby influencing their contentment (Li, et al., 2023).

Improvement critical thinking skills and soft skills by the students during online classes: One aspect presented by the respondents that need improvement is the students' communication and social skills which are components of critical thinking. Communication involves the transmission, reception, or interchange of ideas, information, or messages, either through spoken or nonverbal means. This process encompasses verbal, written, and nonverbal forms and encompasses the skills of listening and providing feedback (Alshumaimeri and Alhumud, 2021).

Their analysis asserts that instructors often fail to motivate students to engage in dialogue and employ suboptimal approaches for augmenting communication proficiencies. Another area that needs improvement is the students' confidence which is part of an individual's soft skills. The preliminary phase of student planning, encompassing their initial goals, expectations, and interests in the course, has been shown to wield considerable influence over successful outcomes (Landrum, 2020). Following this preliminary assessment stage, students' personal beliefs regarding their capabilities play a crucial role in shaping their motivation and utilization of learning strategies to attain their objectives.

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