



THE CHALLENGES, STRATEGY, AND ACCEPTABILITY IN THE ONLINE LEARNING OF PHYSICAL THERAPY STUDENTS; A CORRELATIONAL STUDY

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ABSTRACT

During the COVID-19 pandemic, the shift to online learning posed significant challenges for Physical Therapy (PT) students, as their education traditionally relies on hands-on skills and in-person clinical practice. This study aimed to explore the challenges, strategies, and acceptability of online learning among PT students at the Manila Central University College of Physical Therapy (MCNP). Using a Descriptive Correlational Design, the research employed a questionnaire combining Likert scales and checklists to collect data on demographic profiles, challenges faced, coping strategies, and students' perceptions of remote learning. Stratified random sampling was used to select participants, and data were gathered via an online survey distributed through social media platforms. The analysis included frequency counts, percentage distributions, means for challenges, strategies, and acceptability, as well as One-Way ANOVA to examine differences based on profile variables, and Pearson's correlation to assess relationships between challenges, strategies, and acceptability. The results showed that environmental, physical, and social factors significantly impacted the challenges students experienced, and while students developed strategies to cope with these challenges, the overall acceptability of online learning remained relatively low. A moderate correlation was found between strategies and acceptability, suggesting that while strategies were employed to manage online learning, students' satisfaction with the experience was still limited. The study provides insights into the difficulties faced by PT students in adapting to online education and underscores the importance of addressing these challenges to improve the remote learning experience. The findings highlight the need for administrators, clinical instructors, and students to collaborate in developing effective strategies that can better support PT students in navigating online learning during such disruptions, ensuring that essential hands-on skills and clinical training are not compromised. Keywords: Physical Therapy, online learning, challenges, strategies, COVID-19.

Key words: *Challenges, Strategies, Acceptability, Online Learning, Physical Therapy*

INTRODUCTION

The transition to remote learning presented challenges for physical therapy (PT) education, as PT relies heavily on hands-on skills and clinical practice. The apprenticeship model, where students



learn under the guidance of mentors in clinical settings, is a key component of PT training. However, due to the pandemic, PT students were unable to attend classrooms or clinical sites, disrupting their education and practical learning experiences.

We have conducted this study to investigate The Challenges, Strategy, and Acceptability in the Online Learning of Physical Therapy Students in MCNP. Therefore, this study will help Administrators, Students, and Clinical Instructors to explore and address this certain topic that students may face today's situation due to shifting towards Online Learning.

METHODOLOGY

This study used Descriptive Correlational Design and was conducted at the Medical Colleges of Northern Philippines specifically in the College of Physical Therapy. It involved a Stratified Random Sampling Technique where BSPT students enrolled in a higher education institution during the School Year 2021-2022 and participants were selected based on their ability to provide the needed information of this study. Researchers collected the total number of populations of BSPT students currently enrolled in SY 2021-2022 and categorize them according to what year level they belong to (1st year, 2nd year, 3rd year, and 4th year) and came up with a total of 63 respondents.

This study used a supplementary standard questionnaire with five parts: demographic details, gadgets used, connectivity, internet access, strategies for remote learning, and enjoyment of online classes during the pandemic. A 5-point Likert scale was used for responses, ranging from "Always" to "Never" for strategies, and from "Extremely Unenjoyable" to "Extremely Enjoyable" for enjoyment. Data were collected via an electronic survey on Google Forms, distributed to participants through social media.

The strategic thinking skills of the respondents will be categorically described following Robert Likert's Scale.

TABLE 1.1 Robert Likert Scale

Numerical Rating Scale	Description
5- 4.20-5.00	Always/EE
4- 3.40-4.19	Often/VE
3- 2.60-3.39	Sometimes/SE
2- 1.80-2.59	Seldom/VU
1- 1.00-1.79	Never/EU

Data collection began with an official letter to the Dean of the College of Physical Therapy. Data was analyzed using frequency count, ranking, and percentage distribution to determine respondent numbers. The mean was used to assess challenges, strategies, and acceptability, while One-Way ANOVA tested the study's objectives. Pearson R was used to determine the significant relationship between challenges, strategies, and acceptability in online learning among PT students at MCNP.

RESULTS AND DISUSSION



This section of the research shows you the results that the study found in relation to both research questions and existing knowledge following the sequence of the research objectives.

Table 1.2 **Demographic Profile of Respondents in terms of Age**

Age	Frequency	Percentage (%)
18–19 year old	13	40.6%
20 and above	19	59.4%
Total	32	100%

Table above shows the demographic profile of respondents in terms of age. A total of 32 respondents were approached for participation in the study. According to their age, (13) or 40.6% of the respondents has an age bracket ranging from 18-19 years old; (19) or 59.4% of them ranges from 20 years old above.

Table 1.3 **Demographic Profile of Respondents in terms of Sex**

Sex	Frequency	Percentage (%)
Female	27	84.4%
Male	5	15.6%
Total	32	100%

Table above shows the demographic profile of respondents in terms of sex. It is shown that majority of them were female that is 84.38% (27) while the remaining 15.63% or (5) respondents were male.

Table 1.4 **Demographic Profile of Respondents in terms of Year Level**

Year Level	Frequency	Percentage (%)
1st year	9	28.1%
2nd year	7	21.9%
3rd year	7	21.9%
4th year	9	28.1%
Total	32	100%

Table above shows the demographic profile of respondents in terms of year level. It is shown that majority of them were 4th year that is 28.13% (9). Some of them were in 2nd year and 3rd year level with the same frequency and percentage distribution that is 21.9% (7) while 28.1% (9) were 1st year level respondents.

Table 1.5 **Frequency Count and Rank Distribution of the Respondents as to Demographic Profile in terms of Gadgets Being Used**



Gadgets	Frequency	Rank
Android Phones/ Mobile Phones	29	1 st
Desktop Computer/Laptop	22	2 nd
Tablets/lpad	3	3 rd

Table above shows the frequency and rank distribution of the respondents as to demographic profile in terms of gadgets being used. It is shown that majority of the respondents used “Android Phones/ Mobile Phones” (29), some of them used “Desktop Computer/Laptop” (22) and least of them used “Tablets/ lpad” (3).

Table 1. 6 Demographic Profile of Respondents in terms of Connectivity

Connectivity	Frequency	Rank
Prepaid mobile data	27	1 st
Postpaid subscription service	5	2 nd
Total	32	100%

Table above shows the demographic profile of respondents in terms of their used connectivity at home. It is shown that majority of the respondent’s connectivity being used “Prepaid Mobile Data” (27) while the remaining uses “Postpaid Subscription Service” (5).

Table 2.1 Challenges Encountered by Respondents in terms of Environmental Factors

Statements	Mean	Description
It is difficult for me to maintain contact with activities like Google meetings and Messenger chats since I reside in a rural place where it is difficult to locate a reliable internet connection.	2.88	Sometimes
I travel for 20 minutes to another village only to have access, which is why I occasionally miss quizzes when the connection suddenly drops.	1.91	Seldom
Due to a poor internet connection, it often takes me up to an hour to open my LMS, which causes it to rain where I am.	2.31	Seldom
Every once in a while, our town experiences a nearly seven-hour power outage.	3.00	Sometimes
We frequently endure abrupt and unforeseen outages in our electricity.	3.34	Sometimes
I struggle to focus and concentrate because my home is not a suitable learning environment.	3.13	Sometimes
Every time I begin an online lesson, the surrounding noise, such as dog barking and loud voices within the house, distracts me and makes it difficult for me to focus.	3.75	Often
Overall Mean	2.90	Sometimes

Table above shows the challenges encountered by respondents in terms of environmental factors. It is shown that their assessments in overall is interpreted as “Sometimes” with a mean value of 2.90 which implies that, respondents encountered the above challenges in terms of environmental factors sometimes.



Table 2.2 Challenges Encountered by Respondents in terms of Physical Factors

Statements	Mean	Description
Despite our best efforts, we are still unable to absorb the lesson being taught during the Google Meet.	3.34	Sometimes
The module is hard for me to grasp, and some of the instructions aren't apparent to me.	3.38	Sometimes
The modules' absence of additional instruction explanation leads to confusion.	3.81	Often
Weekly submissions for a subject range from one to three activities, while daily submissions differ from weekly submissions.	3.06	Sometimes
There are too many chores or activities from other subjects for me to handle.	3.38	Sometimes
There are many exercises in the module that I ended up completing without reading any of the instructional material.	3.53	Often
I still have obligations at home; therefore, I can't give my studies my complete attention.	3.94	Often
To complete the assignment, I have to look at my phone all day and even till after midnight, which makes my eyes hurt and gives me headaches.	2.84	Sometimes
The 4G connection usually appears around midnight, so I stay up late uploading and downloading my activities.	2.69	Sometimes
When we have questions, there are some instructors that seem impossible to contact.	2.78	Sometimes
Our Instructor is unavailable, therefore we ultimately submit the incorrect response or submission format.	2.75	Sometimes
Categorical Mean	3.23	Sometimes

Table above shows the challenges encountered by respondents in terms of physical factors. It is shown that their assessments in overall is interpreted as "Sometimes" with a mean value of 3.23 which implies that, respondents encountered the above challenges in terms of physical factors sometimes.

Table 2.3 Challenges Encountered by the Respondents in terms of Social Factors

Statements	Mean	Description
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I also find it challenging when people don't cooperate well in group activities.	2.84	Sometimes
Whenever there are group activities, I end up doing the most of them at the expense of my other classes.	3.59	Often
I am unable to ask any of my classmates for help because I am aware that they are also having difficulties.	3.09	Sometimes
Categorical Mean	3.18	Sometimes

Table above shows the challenges encountered by respondents in terms of social factors. It is shown that their assessments in overall is interpreted as "Sometimes" with a mean value of 3.18 which implies that, respondents encountered the above challenges in terms of social factors sometimes.

Table 3. **Respondents' Level of Acceptability in Online Learning**

Level	Frequency	Percentage
Extremely Unenjoyable	5	15.53%
Very Unenjoyable	7	21.88%
Somewhat Enjoyable	18	56.25%
Very Enjoyable	1	3.13%
Extremely Enjoyable	1	3.13%
Categorical Mean	32	100%

Table above shows the respondents' level of acceptability in online learning. It is shown that majority of them found it somewhat enjoyable that is 56.25% or 18, some rated it as very unenjoyable, 21.88% (7), extremely unenjoyable, 15.63% (5) and the same 3.13% or 1 respondent rated their level of acceptability in online learning during the pandemic as very enjoyable and extremely enjoyable. Students still find benefits from the problems they experience when using remote learning, despite the severe stress and difficulty that have been shown in recent research (e.g., Rotas & Cahapay, 2020 et al.).

Table 3.1- **One Way ANOVA: TEST OF DIFFERENCE BETWEEN CHALLENGES OF THE RESPONDENTS IN ONLINE LEARNING TO THEIR PROFILE VARIABLES**

		CHALLENGES
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VARIABLE		ENVIRONMENTAL FACTORS	PHYSICAL FACTORS	SOCIAL FACTORS
AGE	f – value	.215	.000	.110
	p – value	.646	.985	.743
SEX	f – value	3.006	8.785	8.765
	p – value	.093	.006	.006
YEAR LEVEL	f – value	3.645	9.369	3.506
	p – value	.025	.000	.028

The One-Way ANOVA test revealed a significant difference in online learning challenges based on Environmental, Physical, and Social Factors, with p-values less than 0.05. However, no significant differences were found when grouped by age, as the p-value was greater than 0.05. This suggests that challenges vary by sex and year level but not by age.

Table 3.2- One Way ANOVA: TEST OF DIFFERENCE BETWEEN STRATEGIES OF THE RESPONDENTS IN ONLINE LEARNING TO THEIR PROFILE VARIABLES

VARIABLE		STRATEGIES
AGE	f – value	1.516
	p – value	.228
SEX	f – value	.278
	p – value	.602
YEAR LEVEL	f – value	4.354
	p – value	.012

The One-Way ANOVA test showed a significant difference in online learning strategies based on year level, with p-values less than 0.05. However, no significant differences were found when grouped by age or sex, as both p-values were greater than 0.05. This means strategies differ by year level but not by age or sex.

Table 3.3- One Way ANOVA: TEST OF DIFFERENCE BETWEEN LEVEL OF ACCEPTABILITY OF THE RESPONDENTS IN ONLINE LEARNING TO THEIR PROFILE VARIABLES

VARIABLE		ACCEPTABILITY
AGE	f – value	.071

	p – value	.791
SEX	f – value	4.608
	p – value	.040
YEAR LEVEL	f – value	2.553
	p – value	.076

The One-Way ANOVA test showed a significant difference in the acceptability of online learning based on profile variables, with p-values less than 0.05. However, no significant differences were found when grouped by age or year level, as both p-values were greater than 0.05. This suggests that while acceptability varies by sex, it does not significantly differ based on age or year level.

TABLE 4.1- Pearson R TEST OF RELATIONSHIP BETWEEN THE CHALLENGES, STRATEGIES AND LEVEL OF ACCEPTABILITY OF ONLINE LEARNING AMONG THE RESPONDENTS

Variable		CHALLENGES		
		ENVIRONMENTAL FACTORS	PHYSICAL FACTORS	SOCIAL FACTORS
STRATEGIES	r – value	.621*	.379*	.461*
	p – value	.000	.033	.008
ACCEPTABILITY	r – value	-.473*	-.528*	-.351*
	p – value	.006	.002	.049

The study found a statistically significant correlation between challenges related to Environmental, Physical, and Social Factors in online learning. It also revealed a low correlation between strategies and acceptability for Physical and Social Factors, but a moderate correlation overall. The findings suggest that challenges in these areas have a low correlation with strategies and acceptability in online learning for physical therapy students. This aligns with the idea that adaptability and self-regulation help individuals manage their circumstances, reducing stress and enhancing education as a global good.

TABLE 4.2 PEARSON R TEST OF SIGNIFICANT RELATIONSHIP BETWEEN STRATEGIES AND LEVEL OF ACCEPTABILITY OF ONLINE LEARNING AMONG RESPONDENTS

VARIABLE		STRATEGIES
ACCEPTABILITY	r- value	-.091



	p- value	.619
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Table above shows the significant relationship between strategies and level of acceptability of respondents in an online learning using a Pearson r Correlation test. It is shown that the result was found to be not significant having a p-value of 0.619 which is greater than the 0.05 level of significance. This implies that, there is no significant relationship between strategies and level of acceptability of respondents in an online learning.

RESULT

AND

DISCUSSION

Out of 63 PT students, 32 participated in the study. The majority were 1st-year and 4th-year students, with most respondents being female (84.4%) and aged 20 or older (59.4%). Android phones were the most commonly used devices, and most used prepaid mobile data for internet connectivity. Respondents reported encountering challenges related to environmental, physical, and social factors "sometimes," and used strategies for online learning "sometimes."

Regarding acceptability, most found online learning "Somewhat Enjoyable" (56.25%). The study found significant differences in challenges, strategies, and acceptability based on profile variables (with p-values < 0.05). Significant correlations were found between challenges (environmental, physical, and social factors) and strategies and acceptability. However, correlations between strategies and acceptability related to physical and social factors were low, with a moderate correlation between strategies and overall acceptability. This study highlights the low correlation of challenges with strategies and acceptability in online learning for PT students.

CONCLUSION

Based on the result from the study, the following conclusions are made that:

The study explored the challenges, strategies, and acceptability of online learning among physical therapy students, showing significant differences in challenges based on environmental, physical, and social factors, and in strategies based on year level (p-values < 0.05). Acceptability was also influenced by profile variables. The Pearson R test found significant correlations between challenges and other factors, with low correlation between strategies and acceptability in physical and social factors. Overall, there was a moderate correlation between strategies and acceptability. The study concluded that challenges related to physical and social factors had low correlation with strategies and acceptability in online learning.

RECOMMENDATIONS

1. Future researchers are advised to do an extension for the quantitative component using surveys and involving a bigger sample in the various levels of PT Students considering this restriction. This strategy



will offer a deeper perspective on the difficulties, solutions, and acceptability used by students in remote learning.

2. Teachers/Clinical Instructors should make adjustments to the instructional needs, such as the amount of activities and submission deadlines, when planning the lesson. Students will benefit from this action as they master the modular content and get used to the remote delivery method.

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