



## From virtual to reality: the impact of online classes on physical education teaching and learning

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### ABSTRACT

**Background:** The return to face-to-face physical education (PE) classes after prolonged online learning during the COVID-19 pandemic has exposed significant issues, including reduced physical competence, student disengagement, and weakened social interaction. While many studies have focused on instructional strategies during online learning, limited research has explored how students' attitudes and motivation affect their re-engagement in PE during the post-pandemic transition. **Research Objectives:** This study aims to examine the influence of student attitudes and motivation on their success in physical education amid the shift back to in-person learning. **Methods:** A qualitative approach was employed involving 10 students and 6 PE instructors from higher education institutions, selected through purposive sampling. Data was gathered via in-depth interviews and analysed using Colaizzi's phenomenological method, with member checking to validate findings. **Findings/Results:** Students experienced difficulties in skill performance and social reintegration, often accompanied by low confidence and reduced enthusiasm. Teachers highlighted behavioural issues, a lack of participation, and challenges in reestablishing productive classroom dynamics. **Conclusion:** These findings suggest a need to support students' psychosocial and physical readiness through motivational and attitudinal interventions. For educators, fostering an engaging learning atmosphere and leveraging blended competencies are key. Future studies should involve broader samples and investigate the long-term effects of this educational transition to inform more effective PE practices.

**Keywords:** Physical education; post-pandemic learning; student motivation; attitude; face-to-face transition

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## INTRODUCTION

COVID-19 has emerged as one of the most disruptive global events of the 21st century, profoundly impacting various aspects of life. Governments worldwide implemented lockdowns, social distancing measures, and travel restrictions to curb the virus's spread, significantly altering daily activities, including education (Bao, 2020). During the pandemic, over 90% of the world's student population was forced to transition to online learning (Prasetyaningtyas et al., 2020). This unprecedented shift from traditional classrooms to virtual platforms had wide-reaching effects, especially for students and educators in fields that rely heavily on in-person interaction, such as physical education (Sharin, 2021).

The prolonged online learning significantly affected both students' learning abilities and teachers' pedagogical approaches (Coman et al., 2022). Several studies have highlighted a rise in mental health challenges, with both students and teachers reporting increased levels of anxiety, stress, and depression due to the pandemic's demands (Negin & Bremond, 2019). These problems were worsened in remote and underdeveloped areas, where the lack of access to technological resources left many feeling isolated and helpless (Pascua & Tagare, 2024; Sanders, 2023). For physical education, in particular, the transition to online instruction limited the ability to teach and engage students in physical activities, further compounding these challenges (Whalen et al., 2021).

Current literature also points to a decrease in social interactions during the lockdown, which has negatively impacted students' and educators' social and emotional development (Singh et al., 2020). This reduced interaction led to increased feelings of isolation and hampered students' abilities to engage in extracurricular activities, group projects, and physical education, all of which are vital for their holistic development (Habyarimana et al., 2022). Moreover, teachers face difficulties in maintaining student engagement and participation in an online format, particularly in subjects that require active participation, such as physical education (Yasuhiro et al., 2021).

Further, many students have struggled with adjusting to the structure and social dynamics of in-person education after becoming accustomed to the flexibility of online learning (Gelles et al., 2020). Social skills, which were underdeveloped during remote learning, have proven challenging to redevelop, leading to difficulties in collaborating with peers and participating in group activities (Beilmann et al., 2023). Students have faced academic gaps, with many struggling to catch up on the practical and hands-on components missed during online education, particularly in subjects like physical education (Varea & González-Calvo, 2021). On the positive side, the return to face-to-face learning has reintroduced a sense of normalcy and allowed students to benefit from direct interactions with teachers and peers, which are crucial for academic performance and social-emotional development (Hargreaves & Shirley, 2021).

Despite the extensive research on the effects of online learning and the challenges of distance education during the COVID-19 pandemic, there remains a significant gap in studies specifically examining the aftermath of online classes as students and teachers transition back to face-to-face learning, particularly in physical education (PE). Much of the existing literature has focused on academic performance and mental health during online learning, highlighting issues such as learning loss, decreased motivation, and increased anxiety among students (Giusti et al., 2021). For instance, research by Son et al. (2020) emphasizes the broader implications of distance learning on educational equity and access, yet it falls short of addressing the specific context of physical education. Additionally, while studies have documented the negative effects of prolonged isolation on social skills and emotional well-being (Al-Kumaim et al., 2021), there is limited exploration of how these challenges manifest uniquely in PE settings where physical interaction and teamwork are critical components. Existing research often overlooks the distinctive dynamics of PE, where the restoration of physical, social, and emotional interactions is vital for student engagement and success. Therefore, understanding these unique challenges is crucial for developing targeted interventions to support students and educators as they navigate the complexities of returning to in-person instruction.

As schools worldwide reopen for in-person instruction, it is essential to investigate how this shift impacts not only academic learning but also the physical and social development crucial in subjects like PE. The transition back to face-to-face learning

presents a unique set of challenges that may hinder students' ability to engage fully in physical activities and teamwork, which are integral components of PE. Given that physical education serves not only to promote fitness but also to foster social skills, teamwork, and emotional resilience, understanding the implications of this transition is vital for both student well-being and overall educational outcomes. Furthermore, the reintegration process may reveal disparities in students' readiness to participate due to varying levels of physical activity engagement during online learning, which could affect their confidence and motivation in a traditional PE setting. Addressing these challenges is critical for informing effective strategies that support both students and educators as they navigate the complexities of returning to physical classrooms. This research aims to fill this gap by providing insights into the unique experiences of students and teachers, ultimately guiding the development of targeted interventions that enhance the quality of physical education during this pivotal transition. By focusing on the physical, social, and emotional aspects of reintegration, this study seeks to contribute to a more comprehensive understanding of how to foster an inclusive and engaging learning environment that meets the needs of all students in the post-pandemic educational landscape.

This study offers a unique contribution to the growing body of literature on post-pandemic education by specifically focusing on the aftermath of online learning in the context of PE, a subject that has received limited attention in existing research. Unlike previous studies that broadly examine the effects of online learning on general education or academic performance, this research zeroes in on the physical, social, and emotional challenges faced by both students and PE teachers during the transition back to face-to-face classes. What sets this study apart is its use of Colaizzi's method in the qualitative analysis, ensuring a systematic and participant-validated exploration of lived experiences. Additionally, by incorporating insights from both students and teachers, it provides a more holistic view of the challenges and opportunities for improving delivery of physical education in a post-pandemic world, offering targeted recommendations for skill development, social engagement, and teacher training that are often overlooked in broader educational research.

This research is both timely and essential, as it offers critical insights into the unique challenges faced by students and physical education teachers in the post-pandemic transition back to in-person learning. By shedding light on issues such as skill gaps, decreased social interaction, and the need for more engaging physical education environments, the study provides actionable data that can guide educational leaders and policymakers in creating targeted intervention programs tailored to these specific needs. Furthermore, the research serves as a foundation for future studies, contributing to a deeper understanding of the long-term impacts of the pandemic on physical education and the broader educational landscape. Its findings will not only enhance current educational practices but also support the development of more resilient, adaptable teaching models for both students and teachers in similar future scenarios.

## **METHOD**

### **Research Design**

This study utilized a qualitative research design, particularly a descriptive approach, to explore and describe the aftermath effects of online classes on teaching and learning in the context of physical education. Qualitative research aims to understand individuals' experiences, perspectives, and interactions with their environment (Sandelowski & Leeman, 2012). The descriptive approach in qualitative research focuses on providing an accurate portrayal of specific individuals, groups, or situations as they naturally occur (Colorafi & Evans, 2016). This research design and approach are most appropriate for the

study because the aim is to understand the real-world experiences and challenges of tertiary students and physical education teachers after returning to face-to-face classes. The descriptive approach is well-suited to providing detailed, contextualized insights into the “aftermath effect” of online courses.

### **Research Participants and Sampling**

The sample comprised 10 tertiary students currently enrolled in physical education classes and 6 physical education teachers from various institutions in region 12, Mindanao, Philippines, all of whom had experienced both online and face-to-face classes during and after the COVID-19 pandemic. The participants included a mix of male and female individuals, ensuring diverse perspectives on the challenges and opportunities encountered during this transition. Purposive sampling, a non-probability sampling technique, was used to select participants who could provide rich, relevant, and diverse insights into the aftermath of online classes in the context of physical education. This method allows the researcher to focus on individuals with firsthand experience of the phenomenon under investigation (Hennink et al., 2020).

The selection criteria for students included those who had participated in online PE classes during the pandemic (2019-2022) and had since returned to face-to-face courses. Similarly, the teachers selected had taught physical education online and face-to-face. This deliberate selection ensured that the participants could reflect on the challenges, opportunities, and adjustments they faced in transitioning from online to face-to-face learning.

Given the qualitative nature of the study, the sample size was kept small to allow for in-depth exploration of each participant’s experience. In qualitative research, the goal is not generalization but a rich, detailed understanding of the participants’ perspectives, making a smaller sample size appropriate (Sandelowski & Leeman, 2012). Saturation was achieved when no new themes or significant information emerged during the interviews, confirming that the data collected was sufficient for addressing the research questions (Hirose & Creswell, 2023).

### **Data Analysis Procedure**

This study employed Colaizzi’s method of data analysis, a rigorous approach specifically designed to analyze qualitative data in phenomenological research. Colaizzi’s method ensures a systematic and comprehensive process, making it suitable for capturing experienced participants. The process involves several steps that guide the analysis from the initial data collection to the final extraction of significant themes (Edward & Welch, 2011).

The first step in this method is familiarization, where the researcher thoroughly reads and re-reads the participants’ transcribed interviews to immerse themselves in the data. This process helps ensure a deep understanding of the participants’ experiences. After familiarization, the researcher identifies significant statements, key phrases, or expressions directly related to the research question. These statements are extracted from the data and serve as the foundation for the analysis.

Next, meanings are formulated, where each significant statement is interpreted to uncover its underlying meaning. This involves reducing the data to essential elements that reflect the participants’ experiences. From these meanings, themes are developed by grouping similar meanings to form broader categories that represent the essence of the phenomenon being studied.

Once the themes are identified, they are organized into a comprehensive description that encapsulates the experiences shared by the participants. The findings are then presented clearly and structured, often in the form of narratives or thematic categories, supported by significant statements. This step is crucial in ensuring that the data is categorized and provides meaningful insights into the research question.

Verification is an essential part of Colaizzi’s method. After the initial analysis and theme development, the researcher returns to the participants to seek validation of the results. This step ensures that the findings accurately reflect the participants’ experiences, enhancing the credibility and trustworthiness of the data.

Finally, exhaustive description and interpretation occur, where the researcher synthesizes the findings to provide a detailed, final description of the phenomenon. The result is a well-rounded understanding of the aftermath of online classes in physical education, highlighting the key challenges and insights from both students and teachers.

### Ethical Consideration

Ethical considerations were a fundamental aspect of this research, ensuring that the rights and well-being of participants were prioritized throughout the study. Informed consent was obtained from all participants, clearly outlining the purpose of the research, the voluntary nature of their involvement, and their right to withdraw at any time without consequence. To adhere to confidentiality, participants were assigned unique identifiers, and any identifying information was removed from the data prior to analysis and reporting. Furthermore, all data was securely stored and only accessible to the research team to protect participants’ privacy. This commitment to ethical standards not only fostered a safe environment for participants to share their experiences but also enhanced the credibility and integrity of the research findings.

## RESULTS AND DISCUSSION

The results of this study highlight the key challenges and opportunities experienced by both students and physical education teachers during the transition from online to face-to-face learning. The findings are categorized into several themes, including the impact on students’ physical skills, social interactions, and teachers’ classroom management and engagement strategies. The following tables present a detailed breakdown of these themes, offering a comprehensive view of the participants’ responses and the implications for improving physical education delivery post-pandemic.

**Table 1. The Aftermath of Online Class to the Tertiary Teachers and Students in the Face-to-Face Class**

Essential Themes	Frequency Level	Core Ideas
Knowledge Deficit from Online Learning	Typical	– Students demonstrate a lack of knowledge post-online learning.
	General	– Knowledge gaps observed in student understanding.
	Typical	– Insufficient knowledge retention from virtual classes.
Disruptive Student Behavior	Typical	– Persistent behavioral issues among students.
	General	– Challenges with student conduct, even at the tertiary level.
	General	– Disruptive behavior impacting the learning environment.

Essential Themes	Frequency Level	Core Ideas
Decline in Academic Performance	Typical	– Decreased student participation and grades.
	General	– Lower academic performance in assessments.
	General	– Decline in student engagement and achievement.
Underdeveloped Student Competence	General	– Insufficient knowledge and skill development.
	Typical	– Inability to acquire specific competencies.
	General	– Underdeveloped and incomplete skill sets.
Deficient Social and Confidence Skills	Typical	– Difficulty in socializing with peers.
	General	– Impacted social interactions with classmates.
	General	– Challenges in rebuilding confidence and social skills.

**Legend:**

General – response was mentioned by 50% or more of the participants.

Typical – response mentioned by at least 25% but less than 50% of the participants.

Variant – response mentioned by less than 25% of the participants.

Table 2 outlines the suggestions provided by tertiary teachers and students to improve the implementation of face-to-face physical education classes. These recommendations focus on enhancing student engagement, improving teaching strategies, and upgrading facilities to better support the return to in-person learning.

**Table 2. Suggestions of Tertiary Teachers and Students for the Better Implementation of Face-to-Face Class**

Essential Themes	Frequency Level	Core Ideas
Mastery of Online Platforms	Typical	– Teachers should master online platforms.
	General	– Incorporate online tools in face-to-face learning.
	General	– Leverage digital platforms for classroom efficiency.
Enhancement of School Infrastructure	General	– Provide necessary resources to support effective teaching and learning.
	Typical	– Upgrade school facilities to prevent disruptions.
	General	– Equip schools with adequate tools for both students and teachers.
Teacher and Student Skill Development Programs	Typical	– Implement skill enhancement programs for student development.
	General	– Promote initiatives to improve both teacher and student skills.
	General	– Encourage student engagement and socialization through structured activities.

**Legend:**

General – response mentioned by 50% or more of the participants.

Typical – response mentioned by at least 25% but less than 50% of the participants.

Variant – response mentioned by less than 25% of the participants.

This section delves into the aftermath of online learning as experienced by tertiary teachers and students during the transition back to face-to-face classes in physical education. It aims to provide a comprehensive analysis of the unique challenges and opportunities that emerged because of this shift, highlighting how the prolonged period of online instruction has influenced both teaching practices and student engagement.

## **The Aftermath of Online Class to the Tertiary Teachers and Students in the Face-to-Face Class**

### *Knowledge Deficit from Online Learning*

This theme also highlights the teacher participants' experiences with students who lack sufficient knowledge during face-to-face classes. Teachers think that this is because of the online courses where students have difficulty learning because of the different problems they face during the pandemic, which makes it challenging for teachers to teach current topics in face-to-face classes. According to the research participant:

*[“...The experience I had with some of my students is that they are not as knowledgeable compared to those who attended face-to-face classes directly.”] – RQ2TKP3*

In addition, in response, teachers revisit past topics to establish a connection with the ongoing curriculum, which causes a delay in the teachers' delivery of the lessons the students need to learn. This impacts the lesson that the instructor must impart to the face-to-face classes. Factors contributing to the knowledge gap among online course students include challenges teachers face in controlling student activities and responses, as well as the absence of learning discussions and physical presence in the classroom (Kurniati et al., 2023). Additionally, poor infrastructure of schooling, transport, and utilities, along with changing demography, exacerbate knowledge gaps among students in conflict zones.

### *Disruptive Student Behavior*

This theme discusses the teacher participants' challenges with students exhibiting negative attitudes in face-to-face classes, stemming from a misconception that the dynamics are like online courses where some students may have felt more relaxed. Understanding this perception is crucial as teachers work to clarify the distinctions between online and face-to-face learning environments. According to the research participant:

*[“...there are difficulties and behavioral problems even in college, as there are still students with challenging behaviors.”] – RQ2TKP3*

*[“...first, I think the issue with the students' behavior is that they have become accustomed to a relaxed environment in online classes. They tend to rely heavily on online resources, especially for their requirements.”] – RQ2TUP3*

Moreover, the challenging behavior exhibited by students creates communication difficulties for teachers and leads to misunderstandings. This can make the class unorganized, and students don't follow the teachers' rules (Tagare, 2023). Students' behavioral issues change when they return to face-to-face learning. The transition to face-to-face learning can cause re-entry shock, leading to affective and cognitive problems such as a lack of confidence in communication, insecurity, and worries about the pandemic (Tagare, 2022). Furthermore, Students' behavior has been

observed to be impacted by online learning. During the Covid-19 epidemic, traditional classroom instruction gave way to online learning, creating new difficulties for teachers and students. Studies have indicated that various factors, including perceived ease of use, performance expectations, enabling conditions, and social influence, can impact how students behave in online classes (Van Anh et al., 2022).

#### *Decline in Academic Performance*

This theme highlights the teacher participants' challenges with the impact of students' performances on their evaluations, where the student's grade can also influence the teacher's performance and create a wrong perception of the teacher for not being able to teach the students properly and for not being an effective teacher on providing the students a quality education in the face-to-face teaching. According to the research participant:

*[“...When it comes to evaluation, the grades and participation of students tend to be lower. This affects the teacher's evaluation because what the students achieve reflects on the teacher. Some may say the teacher is ineffective because their students did not learn much from them. So, it has an impact on the teacher's reputation.”] – RQ2TKP3*

On top of that, due to students' low performance in class, teachers may receive lower evaluation grades, leading to perceptions that the teacher is not effectively imparting knowledge. The correlation between student grades and teacher evaluations can give rise to misinterpretations, with some believing that the teacher is not delivering effective instruction (Camariñas et al., 2022). Factors contributing to low student performance in face-to-face classes include lack of family or parental support, financial issues, motivation, learning facilities, interaction, equality, teaching techniques, and adapting to face-to-face learning (Estrada-Araoz et al., 2023). According to the study of (Ruslim et al., 2020), the results indicate a lack of a significant connection between student-rated teaching evaluations and their final exam scores.

#### *Underdeveloped Student Competence*

The transition from online learning back to face-to-face classes poses challenges for student participants, and a common issue they encounter is a perceived lack of knowledge and skills because, during the online class, students have problems doing the physical activities that lead to them not acquiring the skills. As stated by research participants:

*[“...I realized that I lacked knowledge and skills, especially in the context of online learning. It seemed like I didn't have a deeper understanding of specific topics.”] – RQ2SKP3*

*[“...my skills are not yet fully developed. That's why I'm having difficulty catching up now in face-to-face classes, especially in developing skills like dance and sports.”] – RQ2SUP2*

Furthermore, the students' lack of skills and knowledge makes it hard for them to catch up in the face-to-face class, making them doubt whether they are ready for face-to-face learning. Students may face challenges in self-monitoring, self-assessment, and planning in the digital educational environment, which is crucial for successful online learning (Greer et al., 2014). Limited access to reliable internet connections can also hinder

students' ability to participate fully in online learning activities. Furthermore, the rapid transition to online instruction during the COVID-19 pandemic may have resulted in students lacking familiarity and proficiency with online learning tools and technologies (Jahan et al., 2022).

#### *Deficient Social and Confidence Skills*

This theme talks about the return to face-to-face classes following an extended period of online learning. It introduces a set of challenges for student participants in terms of socialization and self-confidence. The extended dependence on digital platforms has changed the nature of interpersonal relationships, isolating them from the outside world and making it more difficult for students to return to face-to-face learning. As stated by the research participant:

*[...the challenge of being unable to relate much with my classmates. Being confined within the four walls of my room, it's not easy for me to socialize or mingle with them.] – RQ2SKP4*

*["...the socialization with others, especially our classmates, was affected. Since I started my first year in college, we initially had online classes."] – RQ2SKP5*

*[...It's embarrassing to perform in front of many people because, unlike before when it was just a screen, now there are many spectators, judges, and various reactions."] – RQ2SKP2*

This implies that having low confidence and social skills makes their educational process challenging. The fear of socializing, lack of confidence to participate in activities, and the presence of others make them reluctant to join in or perform their activities. They also struggle to initiate conversations with their classmates, which makes them feel alone among the other students. This further affects their engagement in the face-to-face learning environment (Poblador et al., 2022). In line with the study of (Estrada-Araoz et al., 2023), Students experiencing low confidence in face-to-face classes can be attributed to several factors. One factor is the adaptation period after transitioning from online learning to face-to-face classes, which can decrease students' learning motivation. In the study of (Ongcoy & Tagare, 2024), The problems in socializing among students and teachers in face-to-face classes include communication, social development, and student motivation issues. They may experience difficulties understanding lessons and activities, leading to poor collaboration and instructional time. Additionally, limited face-to-face learning can also result in student activity and concentration challenges during classes (Tagare, 2023).

### **The suggestions of Tertiary Teachers and Students for the Better Implementation of Face-to-Face Classes**

#### *Mastery of Online Platforms*

This theme delves into the suggestions made by teacher participants to enhance their proficiency in navigating online platforms like Kahoot and other platforms that can help teachers provide quality education and examine how this development can positively impact the effectiveness of teachers in face-to-face teaching. As stated by the research participant:

*[“...I suggest that all teachers should be knowledgeable about online platforms and tools.”] – RQ3TKP2*

*[“...they can still utilize such platforms even in face-to-face classes.”] – RQ3TUP3*

This implies that having knowledgeable teachers on online platforms is essential for providing the quality education that students need in today’s digital age. These educators can effectively navigate and leverage various online tools, ensuring a seamless and engaging learning experience. Their proficiency enables them to adapt to different learning styles, preparing students for diverse educational environments they may encounter in the future (Pascua & Tagare, 2024). In accord with (ElSayary, 2023), acquiring proficiency in navigating online platforms provides several benefits for teachers as it improves their digital competence, allowing them to use technology creatively to overcome challenges in the teaching and learning process. It also enhances teachers’ IT self-efficacy, increasing their confidence in using online teaching platforms, and contributes to teachers’ satisfaction and perceived success in their educational activities, ultimately improving the quality of their lessons and making them more attractive and comprehensive for students (Poblador & Tagare, 2023). Additionally, proficiency in online platforms enables teachers to effectively integrate and evaluate digital competence acquisition, evaluation, and certification within formal curricula, enhancing the overall learning experience for students (Shatri et al., 2021).

#### *Enhancement of School Infrastructure*

This theme explores the suggestions of teacher participants aimed at promoting good facilities where all the needs of the teachers and students are provided. Teachers need the right equipment to use in their teaching to provide the quality education that the students need, for it helps improve the learning experience of both students and teachers. As stated by research participants:

*[“...I recommend providing the needs of the school to prevent any problems for teachers.”]  
– RQ3TKP3*

Besides, a well-equipped facility in school plays a crucial role in enabling teachers to deliver quality education to students. Such facilities contribute significantly to the improvement of students’ skills, creating additional opportunities for both students and the school in terms of achievements in competitions. Well-equipped facilities enhance the overall learning experience and foster a conducive academic and extracurricular excellence environment. According to (Yangambi, 2023), improving school facilities for PE has several benefits. Modern and adequate physical facilities create an atmosphere conducive to learning and positively impact students’ knowledge and performance. Furthermore, A strong connection between enhancing school facilities and achieving improved learning outcomes ultimately elevates the school’s overall quality (Octavia, 2020). School facilities emerged as a critical factor supporting student learning achievements and teacher performance. Investing in and improving school facilities directly and positively impacts the learning environment, fostering conditions that contribute to enhanced student success and teacher effectiveness (Alsaudi, 2015).

#### *Teacher and Student Skill Development Programs*

This theme explores student participants’ valuable suggestions regarding the problems they face in the entire face-to-face class, such as skill and knowledge enhancement, developing their self-confidence, and social skills. The incorporation of skills and knowledge enhancement activities to support students lacking essential skills

and knowledge in the face-to-face class and boosting students' confidence and social skills will be a big help for students who have lost confidence or have low self-esteem, activities for students to develop their socialization skills in face-to-face classes to engage and relate with their classmates, this will help a student whose having difficulty in engaging with others after a long period of online learning. As stated by the research participants:

*[“...For me skill enhancement, a student can develop the specific skills related to the challenges they are facing.”] – RQ3SKP1*

*[“...my suggestion is that our department should have a program, for example, a skill enhancement program. This is a way to improve the skills of the students.”] – RQ3SUP1*

*[“...So, my suggestion is to socialize with classmates.”] – RQ3SKP3*

*[“...For me, my suggestion is for the students to engage more with other people, to socialize.”] – RQ3SKP5*

Furthermore, enhancing students' skills can bring about a positive transformation in their performance by aiding in developing knowledge and skills. This improvement contributes to skill development and enhances the implementation of face-to-face classes. Engaging in enhancement activities can significantly improve students' face-to-face learning experiences by fostering the development of confidence and social skills. Students can meet new people and forge meaningful friendships through these activities, creating a positive and supportive learning environment. According to (Wang & Sugiyama, 2014), skills enhancement for PE students has several benefits. Improving movement skill proficiency in students can lead to increased enjoyment and lifelong participation in physical activities, especially for low-skilled students. Regular participation in health-enhancing physical activity in PE classes can positively affect body composition musculoskeletal development and reduce the risk of coronary heart disease (Faigenbaum et al., 2015). Integrative strength and skill-based training in PE programs can improve measures of physical fitness, including aerobic capacity, muscular fitness, and flexibility in children (Gapa & Tagare, 2023). Training PE students with high quality in track and field teaching can enhance their teaching skills, practical capacity in competition organization and training, and research capabilities, giving them an advantage in the job market (Faigenbaum et al., 2015).

This study provides a valuable foundation for future research on the post-pandemic transition in physical education, offering insights that can guide further exploration. Future studies could expand on this work by investigating the long-term effects of the shift from online to face-to-face learning, particularly in how it impacts students' physical development, social skills, and overall well-being. Researchers might also consider exploring these issues across different educational levels, from primary to tertiary education, and in various geographic and cultural contexts to capture a broader perspective. Additionally, future research could delve deeper into the effectiveness of specific intervention programs designed to address the challenges identified in this study, such as initiatives focused on skill recovery, student engagement, and teacher training. By building on these findings, future studies can contribute to a more comprehensive understanding of how to effectively adapt physical education programs to better meet the evolving needs of both students and educators in a post-pandemic world.

## CONCLUSION

This study concludes that the transition from online to face-to-face learning following the COVID-19 pandemic has surfaced several issues for tertiary education, particularly in physical education. One of the most significant challenges encountered by both teachers and students during online learning was connectivity issues. Unstable internet connections severely impeded teaching delivery and student participation, especially in geographically remote areas. This technical barrier was intensified by the lack of technological expertise among students and teachers, leading to further disruptions in the educational process. Evaluating student activities and maintaining their attention online also proved problematic, impacting the overall quality of education delivered during this period.

As tertiary institutions resumed face-to-face classes, the aftermath of prolonged online learning became evident. Students exhibited a noticeable knowledge gap, underdeveloped skills, and a lack self-confidence and social skills. These deficiencies were likely worsened by online learning environments' reduced interaction and engagement opportunities. Additionally, inappropriate behavior and declining academic performance among students highlighted the need for a structured and supportive classroom setting that fosters discipline and academic rigor.

In conclusion, the shift to face-to-face learning has underscored the complexities of adapting to new educational paradigms. However, the transition has also revealed the adaptability of tertiary education, as it presents an opportunity to implement meaningful changes that enhance the overall educational experience. By addressing the identified issues and embracing the recommended strategies, tertiary institutions can ensure that their students and teachers are well-equipped for the demands of contemporary education, fostering a robust and adaptive learning environment that instills confidence in the sector's resilience.

While this study offers valuable insights into the aftermath of online learning in physical education, it is not without limitations. One key limitation is the relatively small sample size, which comprised only 10 tertiary students and 6 physical education teachers from a specific region in Mindanao, Philippines. This limited representation may restrict the generalizability of the findings to broader populations or different educational contexts. Additionally, the focus on a single region may overlook unique challenges and experiences encountered in other geographic areas or cultural settings. Furthermore, the study relied solely on qualitative methods, which, while providing rich, detailed data, may be influenced by participant biases and subjective interpretations. Future research would benefit from larger, more diverse samples and a mixed-methods approach to capture a more comprehensive understanding of the impacts of online learning on physical education across various contexts. Acknowledging these limitations is essential for contextualizing the findings and guiding further investigations in this critical area of study.

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## CONFLICT OF INTEREST

The authors declare no conflict of interest.

## REFERENCES

- Al-Kumaim, N. H., Alhazmi, A. K., Mohammed, F., Gazem, N. A., Shabbir, M. S., & Fazea, Y. (2021). Exploring the Impact of the COVID-19 Pandemic on University Students' Learning Life: An Integrated Conceptual Motivational Model for Sustainable and Healthy Online Learning. *Sustainability*, 13(5), 2546. <https://doi.org/10.3390/su13052546>
- Alsaudi, F. (2015). Effect of the School Facilities Factor and Sports Activities Factor on Parents in Terms of Private and Public School Choice at Riyadh City, Saudi Arabia. *Universal Journal of Educational Research*, 3(12), 1059–1069. <https://doi.org/10.13189/ujer.2015.031215>
- Bao, W. (2020). Covid-19 and Online Teaching in Higher Education: A Case Study of Peking University. *Human Behavior and Emerging Technologies*, 2(2), 113–115. <https://doi.org/10.1002/hbe2.191>
- Beilmann, M., Opermann, S., Kalmus, V., Vissenberg, J., & Pedaste, M. (2023). The Role of School-Home Communication in Supporting the Development of Children's and Adolescents' Digital Skills, and the Changes Brought by COVID-19. *Journal of Media Literacy Education*, 15(1), 1–13. <https://doi.org/10.23860/JMLE-2023-15-1-1>
- Camariñas, R. P., Tagare, R. L., & Tagare, R. L. (2022). Private Tertiary Students' Unspoken Thoughts in Learning Physical Education Amidst Covid-19 Pandemic: Implications for Intervention. *Edu Sportivo: Indonesian Journal of Physical Education*, 3(1), 41–55. [https://doi.org/10.25299/es:ijope.2022.vol3\(1\).8444](https://doi.org/10.25299/es:ijope.2022.vol3(1).8444)
- Colorafi, K. J., & Evans, B. (2016). Qualitative Descriptive Methods in Health Science Research. *HERD: Health Environments Research & Design Journal*, 9(4), 16–25. <https://doi.org/10.1177/1937586715614171>
- Coman, C., Țiru, L. G., Meseșan-Schmitz, L., Stanciu, C., & Bularca, M. C. (2022). Online Teaching and Learning in Higher Education during the Coronavirus Pandemic: Students' Perspective. *Sustainability*, 12(24). <https://doi.org/10.3390/su122410367>
- Edward, K.-L., & Welch, T. (2011). The Extension of Colaizzi's Method of Phenomenological Enquiry. *Contemporary Nurse*, 39(2), 163–171. <https://doi.org/10.5172/conu.2011.163>
- ElSayary, A. (2023). The Impact of a Professional Upskilling Training Programme on Developing Teachers' Digital Competence. *Journal of Computer Assisted Learning*, 39(4), 1154–1166. <https://doi.org/10.1111/jcal.12788>
- Estrada-Araoz, E. G., Bautista Quispe, J. A., Córdova-Rojas, L. M., Ticona Chayña, E., Mamani Coaquira, H., & Huaman Tomanguilla, J. (2023). Mental Health of University Students when Returning to Face-to-Face Classes: A Cross-Sectional Study. *Behavioral Sciences*, 13(6), 438. <https://doi.org/10.3390/bs13060438>
- Faigenbaum, A. D., Bush, J. A., McLoone, R. P., Kreckel, M. C., Farrell, A., Ratamess, N. A., & Kang, J. (2015). Benefits of Strength and Skill-Based Training during Primary School Physical Education. *The Journal of Strength & Conditioning Research*, 29(5), 1255–1262. <https://doi.org/10.1519/JSC.0000000000000812>

- Gapa, I. J., & Tagare, R. J. (2023). Dropped Interest: Generation Z Students' Demotivating Reasons on Gradual Dislike on Sports and Recreation. *Sportis. Scientific Journal of School Sport, Physical Education and Psychomotricity*, 9(1), 98–124. <https://doi.org/https://doi.org/10.17979/sportis.2023.9.1.9076>
- Gelles, L. A., Lord, S. M., Hoople, G. D., Chen, D. A., & Mejia, J. A. (2020). Compassionate Flexibility and Self-Discipline: Student Adaptation to Emergency Remote Teaching in an Integrated Engineering Energy Course during Covid-19. *Education Sciences*, 10(11), 304. <https://doi.org/10.3390/educsci10110304>
- Giusti, L., Mammarella, S., Salza, A., Del Vecchio, S., Ussorio, D., Casacchia, M., & Roncone, R. (2021). Predictors of Academic Performance during the Covid-19 Outbreak: Impact of Distance Education on Mental Health, Social Cognition and Memory Abilities in an Italian University Student Sample. *BMC Psychology*, 9, 1–17. <https://doi.org/10.1186/s40359-021-00649-9>
- Greer, D. L., Smith, S. J., & Basham, J. D. (2014). Practitioners' Perceptions of Their Knowledge, Skills and Competencies in Online Teaching of Students with and without Disabilities. *Journal of the American Academy of Special Education Professionals*, 150–165.
- Habyarimana, J. de D., Tugirumukiza, E., & Zhou, K. (2022). Physical Education and Sports: a Backbone of the Entire Community in the Twenty-First Century. *International Journal of Environmental Research and Public Health*, 19(12), 7296. <https://doi.org/10.3390/ijerph19127296>
- Hargreaves, A., & Shirley, D. (2021). *Well-Being in Schools: Three Forces that Will Uplift Your Students in a Volatile World*. ASCD.
- Hennink, M., Hutter, I., & Bailey, A. (2020). *Qualitative Research Methods*. Sage.
- Hirose, M., & Creswell, J. W. (2023). Applying Core Quality Criteria of Mixed Methods Research to an Empirical Study. *Journal of Mixed Methods Research*, 17(1), 12–28. <https://doi.org/10.1177/15586898221086346>
- Jahan, F., Al Azri, M., Al Azri, A. H. S., Alwahaibi, L., & Siddiqui, M. (2022). Challenges Imposed by Online-Based Learning on Acquiring Clinical Knowledge and Skills. *Journal of Family Medicine and Disease Prevention* 8, 150. <https://doi.org/10.23937/2469-5793/1510150>
- Kurniati, D., Riyono, A., & Utomo, B. (2023). Challenges in Online Assessment: The Case of Indonesian Teachers. *International Journal of Social Science*, 2(5), 2063–2068. <https://doi.org/10.53625/ijss.v2i5.4811>
- Negin, F., & Bremond, F. (2019). An Unsupervised Framework for Online Spatiotemporal Detection of Activities of Daily Living by Hierarchical Activity Models. *Sensors*, 19(19), 4237. <https://doi.org/10.3390/s19194237>
- Octavia, E. T. (2020). How Do School Facilities Affect School Quality? Case Study in Vocational High School at Pati, Indonesia. *KnE Social Sciences*, 865–881. <https://doi.org/10.18502/kss.v4i6.6648>
- Ongcoy, P. J. B., & Tagare, R. L. (2024). The Role of Social Support in Shaping Students' Goal Achievement. *The International Journal of Learner Diversity and Identities* 31(1), 950–958. <https://doi.org/10.5281/zenodo.11633160>

- Pascua, K., & Tagare Jr, R. L. (2024). Experiences, Motivation, Commitment, and Suggestions of Physical Education Teachers Amidst COVID-19 Crisis. *Egitim ve Bilim*, 49(219), 187–200. <https://doi.org/10.15390/EB.2024.12095>
- Poblador, S. A. C., Tagare, R. L., & Tagare, R. L. (2022). K To 12 Transition in Action: Threading the Opportunities and Challenges on the Implementation of Senior High School Sports Track in Southern Philippines. *Edu Sportivo: Indonesian Journal of Physical Education*, 3(1), 65–76. [https://doi.org/10.25299/es:ijope.2022.vol3\(1\).8467](https://doi.org/10.25299/es:ijope.2022.vol3(1).8467)
- Poblador, S. A., & Tagare, R. J. (2023). Phenomenological Probe on Senior High School Teachers' Experiences in Teaching Sports Track During the Transition Years of Philippine K To 12. *Sportis. Scientific Journal of School Sport, Physical Education and Psychomotricity*, 9(1), 20–40. <https://doi.org/10.17979/sportis.2023.9.1.9203>
- Prasetyaningtyas, W. E., Nasri, W. O. L. A., & Amalianita, B. (2020). Self-Report on the Occurrence of Insomnia and the Habit of Taking Multivitamins Against Academic Stress among Students in the Early Period of Covid-19 Pandemic. *Konselor*, 9(2), 81–94. <https://doi.org/10.24036/0202092110553-0-00>
- Ruslim, N. M., Ee, N. L., Saharun, N., Baharuddin, N., Bakar, N. A. A., & Abd Karim, M. K. (2020). The Correlation between Teaching Evaluation and Lecturers' Performances. *Asian Social Science and Humanities Research Journal (ASHREJ)*, 2(1), 32–37. <https://doi.org/10.37698/ashrej.v2i1.21>
- Sandelowski, M., & Leeman, J. (2012). Writing Usable Qualitative Health Research Findings. *Qualitative Health Research*, 22(10), 1404–1413. <https://doi.org/10.1177/1049732312450368>
- Sanders, D. (2023). *The Struggle for Health: Medicine and the Politics of Underdevelopment*. Oxford University Press. <https://doi.org/10.1093/oso/9780192858450.001.0001>
- Sharin, A. N. (2021). E-Learning during Covid-19: A Review of Literature. *Jurnal Pengajian Media Malaysia*, 23(1), 15–28. <https://doi.org/10.22452/jpmm.vol23no1.2>
- Shatri, K., Buza, K., & Bunjaku, F. (2021). Teachers' Perception on the Benefits of Using Online Resources. *International Journal of Emerging Technologies in Learning (Online)*, 16(11), 289. <https://doi.org/10.3991/ijet.v16i11.21407>
- Singh, S., Roy, D., Sinha, K., Parveen, S., Sharma, G., & Joshi, G. (2020). Impact of Covid-19 and Lockdown on Mental Health of Children and Adolescents: A Narrative Review with Recommendations. *Psychiatry Research*, 293, 113429. <https://doi.org/10.1016/j.psychres.2020.113429>
- Son, C., Hegde, S., Smith, A., Wang, X., & Sasangohar, F. (2020). Effects of Covid-19 on College Students' Mental Health in the United States: Interview Survey Study. *Journal of Medical Internet Research*, 22(9), e21279. <https://doi.org/10.2196/21279>
- Tagare Jr, R., & Tagare, R. L. (2022). An Ethnographic Probe on the Cultural Values and Symbols of Generation Z Students: Implications for Course Contextualization. *European Online Journal of Natural and Social Sciences*, 11(2), pp-347. <https://doi.org/10.4995/muse.2021.15492>
- Tagare, R. L. (2023). Back to in-Person Classes in the Philippine Basic Education: Threading the Opportunities and Limitations in the Teaching of Physical Education. *Retos*, 47, 986–993. <https://doi.org/10.47197/retos.v47.95921>

- Van Anh, N. T., Tung, H. T., & Uyen, T. P. C. (2022). The Factors Affect the Online Learning Behaviour of Students. *Journal of Social and Political Sciences*, 5(3), 31-45. <https://doi.org/10.31014/aior.1991.05.03.361>
- Varea, V., & González-Calvo, G. (2021). Touchless Classes and Absent Bodies: Teaching Physical Education in Times of Covid-19. *Sport, Education and Society*, 26(8), 831–845. <https://doi.org/10.1080/13573322.2020.1791814>
- Wang, X., & Sugiyama, Y. (2014). Enhancing Social Skills Through College Physical Education. *Journal of Physical Education and Sport*, 14(2), 158-163. <https://doi.org/10.7752/jpes.2014.02025>
- Whalen, L., Barcelona, J., Centeio, E., & McCaughtry, N. (2021). # Healthykidsquarantined: Supporting Schools and Families with Virtual Physical Activity, Physical Education, and Nutrition Education during the Coronavirus Pandemic. *Journal of Teaching in Physical Education*, 40(3), 503–507. <https://doi.org/10.1123/jtpe.2020-0299>
- Yangambi, M. (2023). Impact of School Infrastructures on Students Learning and Performance: Case of Three Public Schools in a Developing Country. *Creative Education*, 14(4), 788–809. <https://doi.org/10.4236/ce.2023.144052>
- Yasuhiro, K., Su-Hie, T., & Neary, S. (2021). Mental Health of Malaysian University Students: UK Comparison, and Relationship between Negative Mental Health Attitudes, Self-Compassion, and Resilience. *Higher Education*, 81(2), 403–419. <https://doi.org/10.1007/s10734-020-00547-w>