

LEVERAGING SOCIAL MEDIA PLATFORMS FOR PERFORMANCE-BASED ASSESSMENT IN PHYSICAL EDUCATION

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Abstract

This study examined the effectiveness, reliability of assessment, and digital privacy concerns associated with using social media platforms for the performance-based evaluation in Physical Education (PE). A pure quantitative, descriptive-comparative design was employed. Data were gathered from 500 respondents (400 students and 100 teachers) selected through stratified random sampling from secondary schools and higher education institutions that used Facebook, YouTube, and TikTok for PE performance tasks. A researcher-made Likert-scale questionnaire, validated by experts in PE, educational technology, and research, measured perceived effectiveness, assessment reliability, and privacy concerns; pilot testing yielded a Cronbach's alpha above 0.80. Descriptive statistics (mean, standard deviation, percentage) and independent-samples t-tests at the 0.05 level of significance were used.

Findings showed high perceived effectiveness of social media-based performance assessment among students ($M = 4.21$) and teachers ($M = 4.09$), with no significant difference between groups, indicating shared acceptance of social media as an assessment support tool. Reliability results revealed that social media-based evaluation ($M = 4.13$) was significantly more reliable than traditional in-person assessment ($M = 3.86$; $p < 0.05$), suggesting that recorded submissions and rubric-guided review increase consistency and objectivity in scoring. Despite these advantages, respondents reported high levels of digital privacy concerns (overall $M = 4.00$), with teachers expressing slightly greater concern, highlighting risks of data exposure and content misuse. Based on the results, practical guidelines were proposed emphasizing ethical use, informed consent, controlled access, and institutional policy support to maximize benefits while safeguarding learner privacy.

Keywords: Social Media Platforms, Performance-Based Assessment, Physical Education, Assessment Reliability, Perceived Effectiveness, Digital Privacy Concerns

1. Introduction

Physical Education (PE) in the Philippine K to 12 curriculum is designed to develop learners' fitness, movement competence, and lifelong participation in physical activity through authentic and skills-based learning experiences (Department of Education [DepEd], 2019). In this context, classroom assessment is expected to be standards-based, learner-centered, and reflective of real performance. DepEd Order No. 8, s. 2015 emphasizes that assessment should measure what learners "know, can do, and value," and that performance tasks are a key component of evaluating competencies across learning areas, including MAPEH (DepEd, 2015). During the pandemic, DepEd Order No. 31, s. 2020 further reinforced the primacy of performance tasks by reducing reliance on quarterly exams and highlighting authentic outputs as major evidence of learning, particularly for subjects where skills demonstration is essential (DepEd, 2020). Therefore, PE teachers are institutionally mandated to implement performance-based assessment (PBA) as the most valid approach for evaluating motor skills, routines, and fitness-related competencies.

However, despite this policy direction, implementing PBA in PE remains challenging in practice. Performance tasks often require time-intensive observation, repeated demonstrations, and detailed scoring, yet PE periods are limited, and classes are frequently large. As a result, teachers struggle to accurately document performances, provide timely feedback, and maintain consistent scoring across learners. These constraints became more visible in blended and remote learning setups, where teachers needed alternative ways to capture performance evidence. Research on PE assessment during COVID-19 noted that teachers had difficulty ensuring fairness and reliability when performance outputs were not systematically recorded, prompting many to rely on digital submissions (Lacuata & Diano, 2022). Consequently, the search for feasible, technology-supported assessment approaches has intensified, especially those aligned with learners' real-life digital practices.

In parallel, social media platforms have become ubiquitous learning spaces among Filipino youth. Video-centered apps such as TikTok and YouTube, as well as interactive platforms like Facebook, are now embedded in students' daily routines for communication, entertainment, and increasingly, informal learning. Recent studies show that PE students frequently engage with fitness and movement content on TikTok and YouTube, often modeling routines they watch and sharing their own activity videos (Garcia, 2024; Zhu et al., 2025). Likewise, physical educators internationally report using social media for professional learning and instructional exchange, with YouTube and Facebook among the most common platforms (McNamara et al., 2022). Because PE learning is inherently visual and performance-driven, the affordances of social media—recording, replaying, sharing, and commenting—seem well-suited to capturing authentic evidence of students' skills. Moreover, broader educational research suggests that social media-supported assessment can enhance engagement and immediacy of feedback, while allowing learners more control over how they present their performance outputs (Khalil & Abdelrahman, 2022). Thus, social media may serve as a practical extension of DepEd's call for authentic performance assessment.

Nevertheless, a clear research niche remains. While the global literature acknowledges that social media can support learning and even assessment, studies also highlight unresolved issues related to assessment credibility, platform limitations, and blurred boundaries between social and academic spaces (Pangrazio & Selwyn, 2022). In PE settings specifically, evidence on whether social media-based assessment improves reliability compared to traditional in-person scoring is still limited, especially in the Philippine basic and higher education contexts. Even when teachers adopt video submissions, systematic evaluation of their effectiveness and scoring consistency is rarely documented. This gap matters because DepEd's assessment framework requires that performance tasks be not only authentic but also fair, valid, and reliable across learners (DepEd, 2015). Without empirical support, social media use in PE assessment risks becoming an informal workaround rather than a defensible pedagogical strategy.

In addition, ethical and legal concerns intensify the need for focused investigation. DepEd has repeatedly reiterated that learner privacy must be protected in digital environments. The "Guidance on Posting Learners' Images or Data on Social Media" (Memorandum OM-OUOPS-2024-05-03942, disseminated through various division memoranda in 2024–2025) requires parental or guardian consent before posting learner images or identifiable data online and anchors this protection on the Child Protection Policy (DepEd Order No. 40, s. 2012) (DepEd, 2012; DepEd Region X, 2024). DepEd's data privacy notice also stresses compliance with the Data Privacy Act of 2012 in any collection, processing, or sharing of learner information (DepEd, 2024). National privacy advisories for online learning further warn that digital tools must be used with safeguards against unauthorized sharing, profiling, or misuse of student content (National Privacy Commission, 2020). Therefore, even if social media offers functional benefits for PE assessment, its use must be weighed against learners' privacy risks and teachers' ethical responsibilities.

However, few studies quantify how strongly students and teachers perceive these privacy concerns in relation to assessment use.

Given these realities, the present study addresses a timely and policy-relevant gap by empirically examining how social media platforms can be leveraged for performance-based assessment in Physical Education. Specifically, it investigates (1) the perceived effectiveness of social media for PBA among students and teachers, (2) the reliability of scoring PE performance tasks through social media compared with traditional in-person evaluation, and (3) the level of digital privacy concerns experienced by participants. By anchoring the inquiry in DepEd's assessment mandates and privacy directives, the study aims to generate evidence-based guidelines for responsible integration of social media into PE assessment practices. Ultimately, this work contributes to strengthening classroom assessment in PE by proposing an approach that is authentic, manageable, and aligned with both learning standards and learner protection policies in the Philippine educational context.

2. Method

2.1 Research Design

This study employed a pure quantitative research design, specifically using a descriptive-comparative approach, to determine the effectiveness of social media platforms for performance-based assessment in Physical Education. The design enabled the collection of numerical data from students and teachers through a validated Likert-scale survey and performance assessment rating sheets, allowing for objective measurement of perceived effectiveness, assessment reliability, and digital privacy concerns. Descriptive statistics such as mean, standard deviation, and percentage were used to summarize respondents' ratings, while inferential statistics—particularly independent samples t-tests—were applied at the 0.05 level of significance to examine differences between students' and teachers' perceptions and between reliability scores from social media-based and traditional in-person assessments. This non-experimental design did not manipulate variables but instead compared naturally occurring responses and evaluation outcomes to generate empirical evidence for the development of responsible and effective social media assessment guidelines in PE.

2.2 Participants

This study consisted of 500 respondents from selected public and private secondary schools and higher education institutions, in which social media platforms were used for Physical Education performance tasks and assessment. Of the total sample, 400 were students currently enrolled in PE courses and actively engaged in performance-based assessments, while 100 were PE teachers who facilitated, monitored, and evaluated these tasks. Respondents were chosen through stratified random sampling to ensure proportional representation of both groups and institutional affiliations, and only those with firsthand experience using platforms such as Facebook, YouTube, and TikTok for PE performance submission or evaluation were included to provide valid and reliable perspectives on effectiveness, reliability, and digital privacy concerns.

2.3 Instrumentation

The study used two primary instruments to collect quantitative data: a structured researcher-developed survey questionnaire and performance assessment rating sheets. The survey questionnaire was designed to measure respondents' perceived effectiveness of social media platforms for performance-based assessment, the perceived reliability of scoring through these platforms versus traditional in-person evaluation, and the level of digital privacy concerns; it included demographic items and statements rated on a five-point Likert scale from Strongly Disagree (1) to Agree (5) Strongly. Complementing this, standardized PE performance rubrics

and rating sheets were used by teachers to score student performance tasks submitted via social media and during in-person evaluation, ensuring consistent criteria across assessment modes. Both instruments underwent expert validation by specialists in Physical Education, educational technology, and research, and a pilot test demonstrated high internal consistency (Cronbach's $\alpha > 0.80$), confirming the questionnaire's reliability for the main study.

2.4 Data Analysis

This study followed a purely quantitative procedure using both descriptive and inferential statistics. After retrieving and encoding the completed questionnaires and performance rating sheets, descriptive statistics, including frequency counts, percentages, weighted means, and standard deviations, were computed to summarize the perceived effectiveness of social media platforms, assessment reliability levels, and digital privacy concerns among students and teachers. To examine group and method differences, independent samples t-tests were applied at the 0.05 level of significance to determine whether (1) students and teachers differed significantly in their perceived effectiveness and privacy concern ratings, and (2) reliability scores from social media-based performance assessments differed significantly from those obtained through traditional in-person evaluation. All computations were performed using standard statistical software to ensure accuracy, consistency, and objective interpretation of results.

3 Results

The study found that social media platforms were perceived as highly effective tools for performance-based assessment in Physical Education. Specifically, students registered a very high effectiveness rating ($M = 4.21$), while teachers likewise reported a very effective rating ($M = 4.09$). Although students rated the platforms slightly higher, the statistical comparison showed no significant difference in perceptions between the two groups at the 0.05 level. This indicates that both students and teachers share a consistent and positive view of social media as a supportive assessment environment, particularly in terms of accessibility, engagement, and ease of performance submission and feedback.

Moreover, when assessment reliability was compared across modes of evaluation, social media-based performance assessment produced stronger reliability outcomes than traditional in-person assessment. The mean reliability score for tasks evaluated through social media platforms was higher ($M = 4.13$) than that of in-person evaluation ($M = 3.86$). In addition, inferential analysis confirmed that this difference was statistically significant ($p < 0.05$). This suggests that social media platforms' ability to record, replay, and document performances enables teachers to apply rubrics more consistently, thereby reducing scoring variability and strengthening fairness and objectivity in performance grading.

However, despite these favorable results, the study also identified substantial concerns about digital privacy among participants. Overall, respondents reported a high level of privacy concern ($M = 4.00$), with teachers expressing slightly higher apprehension than students. In particular, concerns centered on unauthorized sharing, public exposure of performance videos, and risks to the confidentiality of personal data. Therefore, while social media platforms were validated as effective and reliable for PE performance-based assessment, the elevated privacy concerns highlight the need for controlled platform use, informed consent, and clear institutional safeguards to ensure ethical and responsible implementation.

4. Discussion

The study's finding that both students and teachers perceived social media platforms as very effective for performance-based assessment in PE corroborates a growing body of research on the instructional affordances of social networks in movement-based learning. For instance, a case study on the use of Edmodo in secondary PE reported that both teachers and students

evaluated the platform positively because it improved participation, allowed flexible submission of performance tasks, and enhanced the teacher's ability to observe skills beyond class time (Hernández-Ramos & Martínez-García, 2023). Similarly, PE-focused research on TikTok shows that students actively engage with fitness and movement content and often translate what they view into practice, suggesting that short-form video platforms align naturally with PE task demonstration and motivation (Garcia, 2024). Taken together, these studies support the present result that social media environments can function as authentic, engaging spaces for documenting and assessing performance tasks.

Moreover, the absence of a significant difference between students' and teachers' effectiveness ratings is consistent with the literature, which indicates converging attitudes toward digital media in PE when these tools align with pedagogical needs. A recent systematic review of PE teachers' and preservice teachers' attitudes toward digital media found that acceptance increases when technologies directly support learning goals, such as feedback, modeling, and student engagement, resulting in generally positive perceptions across stakeholder groups (Tzifopoulos et al., 2025). In the current study, both groups similarly recognized that social media supports accessibility and interaction, reinforcing the idea that shared utility drives shared approval. Thus, the finding suggests a readiness among teachers and learners to adopt social media for assessment, provided its use remains instructionally grounded.

In addition, the study's evidence that social media-based assessments yielded significantly higher reliability than traditional in-person evaluation aligns with assessment scholarship emphasizing the role of recorded performance evidence and structured rubrics. Research on scoring rubrics indicates that reliability improves when assessors can revisit performance artifacts and apply clearly defined criteria consistently (Jonsson & Svingby, 2007). Social media platforms enable repeated viewing of student outputs, reducing time pressure and missed observations common in live PE classes. Therefore, the reported reliability advantage likely reflects the same mechanism identified in rubric and performance-assessment literature—namely, that documentation and replay support more objective, consistent scoring.

However, the high levels of digital privacy concerns reported by both teachers and students strongly corroborate policy realities and international findings on risks in social media-based education. DepEd's Guidance on Posting Learners' Images or Data on Social Media (Region-level memoranda disseminating OM-OUOPS-2024-05-03942) reiterates that parental consent is required before sharing learner-identifiable content online and frames privacy as a protection issue under the Child Protection Policy (Department of Education [DepEd], 2012; DepEd Region VIII, 2024). These official issuances mirror research noting that while social media boosts participation, it simultaneously introduces anxiety about visibility, unauthorized sharing, and data misuse, especially in youth-centered contexts (Pangrazio & Selwyn, 2022). Consequently, the present finding is not an outlier but rather reflects a well-documented tension between digital innovation and learner safety.

Finally, the proposed guidelines developed in this study are strengthened by their close alignment with both DepEd assessment mandates and recent PE-social media scholarship. DepEd Order No. 8, s. 2015 requires that performance tasks be valid, fair, and aligned with standards, while also encouraging appropriate use of digital tools to gather evidence of learning (DepEd, 2015). Meanwhile, recent work on social media and physical activity emphasizes the need for targeted training and institutional policies to enable educators to harness social platforms responsibly (Zhu et al., 2025). Hence, the study's recommendations for ethical protocols, controlled-access submissions, rubric standardization, and privacy safeguards reflect a coherent convergence among empirical results, policy direction, and broader research trends in digitally supported PE assessment.

References

- Department of Education. (2012). *DepEd Order No. 40, s. 2012: Child Protection Policy*. DepEd.
- Department of Education. (2015). *DepEd Order No. 8, s. 2015: Policy guidelines on classroom assessment for the K to 12 Basic Education Program*. DepEd.
- Department of Education. (2019). *K to 12 Physical Education curriculum guide*. DepEd.
- Department of Education. (2020). *DepEd Order No. 31, s. 2020: Interim guidelines for assessment and grading in light of the Basic Education Learning Continuity Plan*. DepEd.
- Department of Education. (2024). *Data privacy notice*. DepEd.
- DepEd Region VIII. (2024). *RM 604, s. 2024: Guidance on posting learners' images or data postings on social media*. Department of Education, Regional Office VIII.
- DepEd Region X, Division of Cagayan de Oro. (2024). *Dissemination of the guidance on posting learners' images or data postings on social media (RM No. 040, s. 2024)*. DepEd
- Garcia, M. (2024). Watching exercise and fitness videos on TikTok for Physical Education learning. *Journal of Teaching in Physical Education*.
- Hernández-Ramos, J. P., & Martínez-García, E. (2023). Social networks and gamification in physical education: A case study. *Journal of Physical Education and Sport Pedagogy*.
- Jonsson, A., & Svingby, G. (2007). The use of scoring rubrics: Reliability, validity and educational consequences. *Educational Research Review*, 2(2), 130–144.
- Khalil, M., & Abdelrahman, R. (2022). Using social media for assessment purposes: Practices and challenges. *Frontiers in Psychology*, 13, 1075818.
- McNamara, S., Richards, K. A. R., & Templin, T. (2022). Adapted physical educators' social media usage for professional learning. *Frontiers in Education*, 7, 849919.
- National Privacy Commission. (2020). *Data Privacy Council Education Sector Advisory No. 2020-1: Data privacy and online learning*. NPC.
- Pangrazio, L., & Selwyn, N. (2022). "It's not like it's life or death": Social media, schooling, and young people's privacy. *Learning, Media and Technology*, 47(1), 1–14.
- Tzifopoulos, M., Lagas, A., & Pournaras, I. (2025). Attitudes of physical education teachers and student teachers regarding digital media in physical education: A systematic review. *International Journal of Digital Literacy and Digital Competence*.
- Zhu, C., Lin, Y., & Wu, J. (2025). Social media as a driver of physical activity: A snapshot from sport and exercise students. *Sports Medicine and Health Science*, 7(1), 1–9.