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Adapted Physical Educators' Social Media Usage for Professional Learning

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Physical educators report a multitude of benefits from accessing informal learning opportunities *via* social media. However, a lack of research has been conducted on adapted physical education (APE) teachers' usage of social media for professional learning (PL) purposes. Thus, the purpose of this study was to explore how APE teachers use social media to learn about APE content. A survey was used to identify APE teachers' (n = 73) social media usage patterns. Descriptive statistics were reported, and multiple t-tests were used to compare how participants perceived the usefulness of social media vs. conferences for PL purposes. Multiple linear regression analyses were also used to identify variables that predicted the participants' likelihood of attending conferences and using social media for PL purposes. Results demonstrated many participants used an array of social media platforms to learn about topics such as activities and equipment. However, participants indicated that conferences were significantly more useful in gaining information about APE related topics compared to social media. Following multivariate analysis, personal and professional usage of social media for PL purposes was associated with conference attendance. The potential of APE teachers and organizing bodies to use social media for PL purposes and future research recommendations are discussed.

Keywords: conference, professional development, informal learning, technology, online learning

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INTRODUCTION

Social media are virtual platforms that enable users to share and exchange information. Increasingly, these platforms are being used by educators to learn and grow professionally (Harvey and Hyndman, 2018; Hyndman and Harvey, 2020; McNamara et al., 2021a). Within educational fields, such as physical education, preliminary research suggests social media is being used within teacher education programs and as a medium for professional learning (PL; Goodyear et al., 2019; Richards et al., 2020). For instance, Goodyear et al. (2014) examined seven physical educators' professional interactions on Twitter and Facebook. It was determined that social media acted as an emerging community of practice for instructors. The authors also suggested that social media was recognized as a new method for PL and provided opportunities for physical educators to collaborate and improve pedagogy.

Scholars have begun to categorize the learning that occurs within social media as informal learning (Carpenter and Krutka, 2014; Krause et al., 2017; McNamara et al., 2021a). Informal learning has been described as learning that occurs outside of formal learning environments, such as college courses or in-person conferences, and often transpires within more casual settings where one would interact with their colleagues outside of the "normal" work environment (Nelson et al., 2006; Latchem, 2014). Historically informal learning often occurs within the teachers' lounge or in between conference sessions. Within recent years, informal learning is occuring increasingly within online spaces, such as social media platforms (Risser, 2013). The objectives that guide these informal learning experiences are often determined by the learner or a group of learners (Latchem, 2014). It is estimated that 70–90% of a teacher's work-related learning can be considered informal learning (Latchem, 2014). Informal learning is an important form of PL for educators, as many scholars have long held that these learning experiences may be foundational to one's professional knowledge and skills (Clardy, 2018; Jeong et al., 2018). It has been suggested that some modes of informal PL, such as social media, may be perceived as a "waste of time" or distraction to learning among educators and educational researchers; however, some scholars have cautioned against this conclusion as research has indicated that social media affords educators and college students alike the benefits that can amplify informal learning such as access to large networks of people and self-directed learning (Greenhow and Lewin, 2016; Tang and Hew, 2017; Goodyear et al., 2019).

Social media may be an ideal medium for informal learning for physical educators given this group of educators has often reported feelings of marginalization and a lack of PL opportunities tailored to their needs (Richards et al., 2018, 2020). Indeed, physical educators have reported a multitude of benefits of using social media to acquire professional specific information (Goodyear et al., 2019; Hyndman and Harvey, 2020; Richards et al., 2020). Through studies presented within a recent monograph (Carpenter and Harvey, 2020; Harvey and Carpenter, 2020), it was reported that although physical educators often benefit from traditional in-person conferences, many feel that social media allows them to engage with PL daily and visually see how teachers are conducting their lessons in real-time. In addition, physical educators reported that they perceived Twitter to be an effective platform to improve one's practices through sharing resources and developing communities of practices that allow them to feel less isolated and marginalized (Richards et al., 2020).

McNamara et al. (2020) recently surveyed 124 adapted physical educators, a subset of physical educators who provide individualized instruction to students with disabilities and found that over half used social media to access educational research. Further, other descriptive survey research has found that surveyed physical educators who taught students with disabilities about their usage of social media reported multiple benefits for PL, with the highest rated uses being knowledge exchange, networking, and posting or viewing motivational content, respectively (McNamara et al., 2021a). These findings provide preliminary evidence that suggests that social media can support the growth and development of physical educators in relation to learning about adapted physical education (APE) content. Although researchers have recently demonstrated that social media can support the growth and development of physical educators (Goodyear et al., 2019; Carpenter and Harvey, 2020; Harvey and Carpenter, 2020; McNamara et al., 2021a) more research is needed to understand how specialized groups of physical educators, such as APE teachers, perceive social media as a PL tool.

There are significant and persistent shortages of trained APE teachers in the United States of America (United States; Healy et al., 2014). The lack of adequately prepared personnel is due to several factors, including a lack of adequate college preparation programs dedicated to APE (McNamara et al., 2021b) and a lack of relevant PL opportunities dedicated to APE content (McNamara et al., 2021a). For example, many physical education college programs only require one course in APE that provides a broad overview of the knowledge content needed to effectively teach students with disabilities (Piletic and Davis, 2010; McNamara et al., 2021b). McNamara et al. (2021a) found that approximately 40% of physical educators who taught students with disabilities stated they had never attended a conference related to APE content. This is problematic, as attending PL opportunities is known to be more effective when it is tailored to the specific needs of an educator (Armour and Yelling, 2004). Even though it has been suggested that social media allows educators to engage with PL in between traditional in-person conferences (Carpenter and Harvey, 2020), it may be that in the absence of sufficient PL opportunities for APE teachers (McNamara et al., 2021a), social media-based PL may play a pivotal role in their professional growth. In addition, as APE teachers need very specialized content and have unique workplace experiences compared to general physical educators (Wilson et al., 2020), the need to engage with a specific online community may be more pronounced compared to less specialized groups of educators.

Although research is being conducted on the utilization of social media for professional growth among general physical educators (Goodyear et al., 2014; Richards et al., 2020), APE teachers' usage of social media, and its' PL benefits, remains undetermined (Healy, 2020). In addition, it is unknown to what degree social media meets APE teachers' PL needs in comparison to more formal opportunities, such as in-person conferences. Thus, the purposes of this study were to (a) examine how frequently APE teachers use social media to acquire information related to APE, (b) explore how APE teachers use social media to learn about APE content, and (c) compare how APE teachers perceive social media and conferences as being useful for their PL. More specifically, two research questions guided this investigation:

1. To what extent do APE teachers use social media to acquire information related to APE?
2. How APE teachers perceive the effectiveness of social media as a PL tool compared to traditional conferences?

MATERIALS AND METHODS

Research Design and Sampling

A cross-sectional research design was used to characterize APE teachers' social media usage patterns. APE teachers were recruited using convenience sampling, a form of non-random sampling that targets members of a specific population and allows for ease of access (Etikan et al., 2016). More specifically, the survey was distributed to potential participants through email and posts on the researchers' personal social media profiles (i.e., Facebook and Twitter). In addition, nine United States state and national APE associations e-mailed the survey to their membership, and 24 former United States APE teachers of the year were emailed an invitation to complete the survey and were asked to forward the message to their APE colleagues. Inclusion criteria for this study were APE teachers who used social media for PL. Participants had to indicate on a survey item that they used social media for PL purposes to be included within this study. All procedures were approved by the lead investigator's Institutional Review Board committee prior to data collection. The studies involving human participants were reviewed and approved by University of Northern Iowa. The participants provided their written informed consent to participate in this study.

Demographics

Data were gathered from 73 APE teachers (M age = 43.65 y, SD = 11.41) with teaching experience ranged from 1 to 40 years (M = 15.91 y, SD = 10.58). The duration of participants' usage of social media for PL ranged from a few weeks to 18 years, with 3 years being the most frequently (n = 15) reported duration. Nearly half of the participants (48%, n = 35) used social media for PL a few times a week. In addition, more than half of the participants worked in suburban school districts (53%, n = 39). See **Table 1** for an overview of sample characteristics by level of social media experience.

TABLE 1 | Sample demographics by social media experience (Chi-square test).

	Total % n = 73	Novice % n = 25	Experienced % n = 48	p
Gender				0.49
Male	23.3	28.0	20.8	
Female	76.7	72.0	79.2	
Age				0.01
18–39	39.4	20.0	50.0	
40+	60.6	80.0	50.0	
Education				0.87
Associate or bachelor	19.8	20.7	19.2	
Master or doctoral	78.1	84.0	77.1	
Ethnicity				0.87
Caucasian	84.9	84.0	85.4	
Asian Pacific Islander	1.4	–	2.1	
Black, not Hispanic	4.1	4.0	4.2	
Hispanic, not white	6.8	12.0	4.2	
2 or more races	2.7	–	4.2	
School District		1.4		0.37
Urban	34.2	24.0	39.6	
Suburban	53.4	64.0	47.9	
Rural	12.3	12.0	12.5	

Novice = Once a day for 2 years or less, Experienced = A few times a day for more than 3 years.

Survey Development

Two surveys created to explore educators' social media usage (Carpenter and Krutka, 2014; McNamara et al., 2021a) were used to develop a survey for the purposes of the present study. Both surveys had undergone face validity measures similar to those employed in the present study. More specifically, these surveys were reviewed, revised, and compiled into one single survey to better suit this investigation's guiding research questions (e.g., minor alterations in wording and sentence structure, checking for redundancy). After the initial revisions, the survey was sent to seven experts with experience with researching social media usage among physical educators (n = 4) or APE (n = 3) for feedback on content relevance and question structure. After receiving feedback, we examined and revised the survey until all changes were unanimously agreed upon. The final survey consisted of 44 items (8 demographic items, 10 items related to reasons to use social media; 14 items related to the usefulness of conferences vs. social media, and 12 items querying the frequency and type of social media usage).

Background and Professional Learning

Data were collected on the participants' demographic characteristics included their gender, age, ethnicity, level of education, and years of experience as a teacher. Participants were also asked how long they had used social media for personal and professional purposes. Participants also rated their frequency of engagement in two sources of PL (social media and conferences) related to APE in the past 12 months through a seven-point scale (1 = Never, 7 = Frequently). There was a section on the frequency (e.g., hourly, daily, weekly) of social media used in general to learn about APE, as well as for each specific type of social media platform (e.g., Facebook, Pinterest).

Two items were used to determine the level of experience the participants have in using social media. The first item was a measure of the time they have been using social media "How long have you been using social media for personal purposes?" Response options ranged from less than a year to more than 3 years. The second item included a question on the frequency of use: "Typically, how frequently do you use social media for personal purposes?" Response options were on a seven-point scale from "multiple times a day" to "once a month or less frequently." A composite score of time and frequency of social media use was created as an *a priori* cutoff to group participants into two groups: novice social media users (2 years or less and once a day or less) or experienced social media users (a few times a day and more than 3 years). Participants' responses to the two questions related to the amount of time and frequency of social media was used with responses dichotomized into two groups: novice users (2 years or less and once a day or less) and

experienced users (a few times a day and more than 3 years). There were no cases outside of these two groups.

Impact of Social Media on Professional Skills

There were eight items querying the impact of social media networks on participants' professional skills and knowledge related to APE content. A principal component analysis with a Varimax rotation was used to explore potential factors related to the reasons APE teachers use social media for PL purposes (see **Table 2**). Three factors were identified, which were represented as impact on collaboration (alpha = 0.89) with four items, communication (alpha = 0.78) with two items, and teaching (alpha = 0.76) with two items.

Perceived Usefulness of Social Media

There were two near-identical sets of Likert-style items to examine participants' perceived usefulness of social media for PL and conferences for PL. The first set consisted of seven Likert-style items (1 = strongly disagree, 7 = strongly agree) focused on participants' perceptions on the usefulness of social media as a source of PL for specific areas related to teaching APE. The second set of items focused on the participants' perceptions of the usefulness of conferences as a source of PL for the same specific areas related to teaching APE.

Data Analysis

Descriptive statistics were reported for demographic and social media usage information. A chi-square test of independence was conducted using sample participant characteristics and their frequency and length of time using social media (novice vs. experienced). A pair-wise *t*-test was used to determine the differences between the perceived usefulness of social media use and attending conference to detect statistically significant difference between each individual Likert scale item. Effect sizes were calculated and reported using Cohen's *d*, with values interpreted as small (0.2), medium (0.5), and large (0.8; Cohen, 1988). Correlations between independent variables were examined. Variables with statistically significant correlations with social media or conference attendance were entered into linear regression analyses. To identify the variables that predicted conference attendance or using social media for PL, separate multiple linear regression analyses were performed with variables that were significantly correlated, as controlled for age and experience in social media use. All analyses were conducted using IBM SPSS 27, with an alpha level set at 0.05.

TABLE 2 | Coefficients on three factors on the impact of social media on professional skills.

	Collaboration	Communication	Teaching
Resource sharing	0.729		
Collaboration with other educators	0.838		
Networking	0.851		
Participate in professional conversations	0.826		
Communication with students		0.884	
Communications with parents		0.868	
In-class activities for students			0.895
Out-of-class activities for students			0.780

RESULTS

Frequency of Professional Use and Types of Social Media

Reports from participants indicated there was a considerable range for how long they had used social media to acquire information related to APE, with one participant explaining they had only used social media for this purpose for a few weeks, while another indicated they had used social media for 18 years. Three years (n = 15) was the most frequently cited amount of time they had used social media to acquire information related to APE, which was followed by 2 years (n = 11) and 5 years (n = 9). Regarding frequency of social media usage to acquire information related to APE, more than half of the participants (47.8%, n = 35) reported they used social media for this purpose a few times a week. This was followed by once a week (11.0%, n = 8) and a few times a month (9.6%, n = 7). Respondents also reported the frequency at which they used an array of social media platforms to acquire information related to APE. YouTube and Facebook were the most widely reported platforms used. In addition, less than 10% of the participants indicated they used any of the following social media platforms for PL related to APE: TikTok, Snapchat, and ResearchGate. Further details on the types of social media platforms used can be seen in **Figure 1**.

Perceptions of Differences Between Social Media and Conferences

Participants' perceived the information gained from conferences to be statistically significantly more useful than social media, [$t(65) = -2.443$, $p = 0.017$, $d = 0.38$], demonstrating a medium effect size. More specifically, participants perceived conferences to be more useful than social media for gaining information about four APE-related topics, including assessment ($p = 0.001$, $d = 0.42$), collaborative strategies ($p = 0.16$, $d = 0.32$), behavior management ($p = 0.002$, $d = 0.47$), and working with students with specific types of disabilities ($p = 0.019$, $d = 0.29$). **Table 3** provides an overview of the differences in the perceived usefulness of social media compared to traditional conferences for PL purposes.

Social Media Predictors

Table 4 provides the correlation coefficients between the variables. Correlation coefficients were statistically significant between social media and collaboration impact ($r = 0.52$, $p < 0.01$), communications impact ($r = 0.32$, $p < 0.01$), and teaching impact ($r = 0.55$, $p < 0.01$). There were

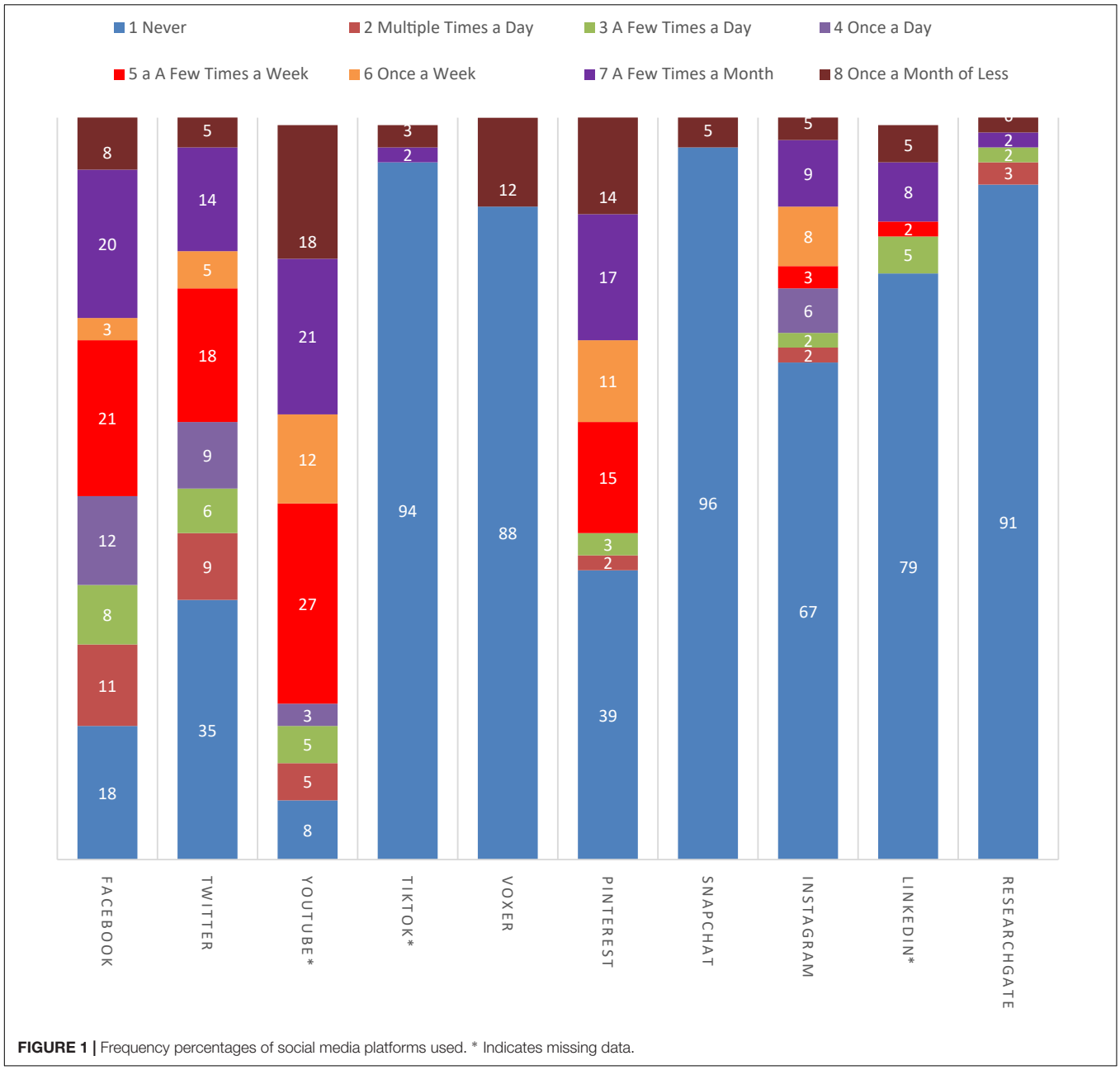

FIGURE 1 | Frequency percentages of social media platforms used. * Indicates missing data.

statistically significant correlations between conference purposes and collaboration impact ($r = 0.41$, $p < 0.01$).

Frequency of social media use for personal reasons predicted use of social media for PL, after controlling for age (Model 1). In Model 2, two factors from the impact of social media on professional skills section of the survey (i.e., collaboration and teaching) were included, leading to personal social media use no longer being a significant predictor of use of social media for PL. However, the amount of variance increased from 18.7% in Model 1–43.8% in Model 2, to suggest an increased fit of the predictors over the covariates. In examining the factors that predict attendance of conference for PL, two separate linear regression analyses were conducted. In Model 3, neither age group nor personal social media use were statistically significant predictors of conference attendance. In Model 4, increases in conferences attendance resulted in a decrease in the perceived usefulness of social media on collaboration. The regression coefficients accounted for 21.5% of the variance in Model 4. **Table 5** provides an overview of the regression analyses conducted.

DISCUSSION

The purpose of this study was to explore how APE teachers use social media to acquire information related to APE, as well as compare how they perceive PL on social media vs. traditional

conferences. The current study indicates that APE teachers use social media regularly to access PL experiences, reflecting previous research with physical educators (Goodyear et al., 2014; Hyndman and Harvey, 2020; Richards et al., 2020). APE teachers use of social media for PL may be related to the scarcity of relevant and in-person PL opportunities specifically focused on APE content (Hodge and Akuffo, 2007; McNamara et al., 2021a). Potentially, the lack of PL opportunities may push APE teachers to alternative sources of PL, such as using social media to access much needed knowledge and connect with colleagues and experts. Indeed, most participants in this study were engaging with one form of social media at least once a week, with the most frequently used social media platforms used included YouTube, Facebook, and Twitter, respectively. These findings support the assertation that physical educators may use social media to stay connected to PL in between conference attendance, as conference attendance can be sporadic and infrequent whereas social media use can occur daily (Carpenter and Harvey, 2020; Harvey and Carpenter, 2020). Future researchers should seek to qualitatively explore the motivations of APE teachers to use social media for PL purposes and focus on the array of platforms being used.

TABLE 3 | Differences in perceptions of social media and conference attendance for professional learning.

. . .to gain information on:	I use social media. . . *M* (*SD*)	I attend conferences. . . *M* (*SD*)	*p*	*r*	*t*	*D*
APE equipment	5.36 (1.54)	5.32 (1.69)	0.865	0.109	0.171	0.02
APE activities and games	5.83 (1.43)	5.98 (1.25)	0.494	0.225	–1.391	0.09
APE instructional strategies	5.41 (1.57)	5.73 (1.41)	0.169	0.213	–3.629	0.17
APE assessment strategies	4.47 (1.79)	5.42 (1.61)	0.001	0.111	–0.687	0.42
APE collaborative strategies	4.53 (1.75)	5.21 (1.89)	0.016	0.241	–2.472	0.32
Behavior management strategies for students with disabilities	4.18 (1.95)	5.17 (1.81)	0.002	0.363	–3.769	0.47
Working with students with specific types of disabilities in a PE setting	4.79 (1.96)	5.41 (1.65)	0.019	0.328	2.400	0.29

M, Mean; SD, Standard deviation; APE, Adapted physical education; PE, Physical education; p, significance; r, Correlation coefficient; t, t-statistic; D, Cohen's d.

TABLE 4 | Correlations with independent variables.

	1	2	3	4	5	6
1. Social media means	0.202	0.053	0.354**	0.521**	0.322**	0.545**
2. Conference means	–	0.420**	0.210	0.408**	0.150	0.207
3. Freq conferences	–	–	0.469**	0.406**	–0.052	0.093
4. Freq social media	–	–	–	0.453**	–0.015	0.204
5. Collaboration impact	–	–	–	–	0.405**	0.575**
6. Communication impact	–	–	–	–	–	0.350**
7. Teaching Impact	–	–	–	–	–	–

Freq Conference, Frequency of attending conferences to gain APE related information; Freq Social Media, Frequency of attending conferences to gain APE related information.

***Correlation is signification at the 0.01 level (2-tailed).*

In alignment with previous research (McNamara et al., 2021a), the present sample of APE teachers are using a range of social media platforms to access PL. One of the lowest ranked social media platforms used for PL is ResearchGate, as this platform specializes in allowing researchers to disseminate and discuss their research. This may suggest the persistent research-to-practice issues that permeate many fields where researchers often do not effectively disseminate their findings with practitioners (Montgomery and Smith, 2015; McNamara et al., 2020) endures within virtual spaces. Conversely, preliminary research suggest that scholars do not see a tremendous amount of benefit from using ResearchGate (Muscanell and Utz, 2017); hence, the finding that APE teachers are not using this platform may suggest that it does not offer much benefit to their PL experiences. Regardless, the literature has demonstrated that there is a research-to-practice gap that exists among APE teachers (McNamara et al., 2020), which the infrequent use of ResearchGate highlights. Researchers should make concerted efforts to use social media platforms to share their research findings with practitioners, especially platforms that appear to be most frequently used amongst the current sample such as YouTube, Facebook, and Twitter.

Although it appears that APE teachers often use social media for PL, the results indicated that participants predominantly prefer learning about APE related content within more formal conference settings. This reflects data showing that APE teachers most commonly attend conferences, as opposed to other sources such as social media and textbooks, to access educational research (McNamara et al., 2020). APE teachers' perceptions that conferences are more useful for them to learn about APE content may also be due to how educators often use social media for PL. Scholars have indicated that educators often use social media to promote an image of themselves and their teaching practices that put them in the best possible light, rather than focusing on the validity and authenticity of the information (Carpenter and Krutka, 2014). Erwin (2016) suggested that although social media allows for greater ease to share resources and information, this may be to the determinant of the quality and accuracy of information. Erwin elaborated by explaining that it is essential for those engaged in social media for PL need to hold themselves and others accountable for posting quality and accurate resources and information. Although a plethora of benefits have been linked to social media PL for educators

TABLE 5 | Results of linear regression analyses for social media (models 1 and 2) and conferences (Models 3 and 4).

	Standardized beta	*p*-value	*F*	*P*	R2
Model 1			2.91	0.06	0.187
Age	0.12	0.34			
Personal social media use	0.31	0.02			
Model 2			7.29	<0.001	0.438
Age	0.05	0.66			
Personal social media use	0.09	0.45			
Freq social media	0.22	0.06			
Collaboration	0.22	0.11			
Communications	0.13	0.27			
Teaching	0.31	0.02			
Model 3			0.08	0.92	0.003
Age	0.05	0.73			
Personal social media use	−0.02	0.91			
Model 4			6.13	0.005	0.215
Age	−0.04	0.75			
Personal social media use	−0.08	0.50			
Freq conferences	0.30	0.02			
Collaboration	0.27	0.04			

Freq Conference, Frequency of attending conferences to gain APE related information; Freq Social Media, Frequency of attending conferences to gain APE related information; F, f-statistic; p, Significance; R2, R-squared.

(Richards et al., 2020; McNamara et al., 2021a), conferences may provide a venue that ensures increased validity of information. Further research is needed to better understand why APE teachers perceive conferences to be more useful than social media for PL.

Participants' high frequency of social media use for personal and professional purposes was a statistically significant predictor for attending conferences. This suggests those that are motivated to engage in PL *via* social media are also more motivated to attend conferences. This engagement with multiple types of PL mediums, as well as multiple forms of social media, is not surprising. Professionally engaged teachers have been found to be often very interested in various ways to improve their practice (Montgomery and Smith, 2015; McNamara et al., 2020), as both PL within conference and social media settings has been noted as being driven by intrinsic motivation (Harvey and Carpenter, 2020). It may also be that adapted physical educators engaging in PL on social media and through conference attendance have created a community of practice with shared repertoires and experiences that allows them to share information that is often very specific to their needs. This may be ideal, as it has been suggested that APE teachers' needs and experiences are quite unique compared to general physical educators (Wilson et al., 2020). Future research should seek to understand whether APE teachers view social media as a supplemental tool for their PL experiences, or as a replacement for conferences that often do not focus on APE content.

In consideration of these findings, APE teacher-educators and organizations should seek to enhance the quality of social media-based PL and not view PL on social media, in its current form, as a replacement for more traditional PL opportunities. As professional associations begin to develop more sophisticated knowledge and skills with using social media, the line between formal PL (e.g., conferences) and PL on social media may becoming blurred. For example, some professional organizations have content experts lead discussions, as well as regularly share resources specific to a group of teachers (Goodyear et al., 2019). National organizations should consider providing additional PL opportunities through online mediums and through collaborating with state and local APE organizations. In addition, physical education professional organizations should make more concerted efforts to emphasize APE related topics within the PL they provide at all local, regional, and national levels.

Limitations

This study involved a relatively small sample of APE teachers, thus limiting the ability to generalize these results to all adapted physical educators. The sample was quite homogenous with regards to race (Caucasian), gender (identify as woman), and level of education (graduate level). Future research should seek to examine a larger, more heterogenous sample, or specifically focus on a target group of APE teachers, such as those serving as consultant to general physical educators or those who work primarily with a specific group of children with disabilities. Another limitation is the lack of definition applied to the term conference used in the survey, we did not differentiate between types of conferences (e.g., research or practitioner focused) and the array of levels at which they can occur. More in-depth information about the conferences participants attended and the frequency of their attendance would have allowed for a greater understanding of the participants conference experiences. The sampling methods employed in this study must also be considered. Because participants were recruited *via* social media and emails through physical education and APE associations, only APE teachers who were already engaged with social media and APE related content and those who were more likely to be connected to their field would have participated in this study. Thus, this sample may have been inherently more engaged and passionate about the use of social media and the field of APE. Future researchers should consider employing sampling methods that would reduce the likelihood of sampling bias. Finally, the lack of theoretical framework applied to this investigation limits our ability to comprehend APE teachers' experiences and perspectives of navigating social media for PL purposes. Future researchers need to use well-established theories to drive forthcoming investigations centered around APE and social media, such as the community of practice framework, which is a social learning that asserts that groups of professionals with shared experiences and repertoire are a fundamental medium for knowledge creation and sharing (Lave and Wenger, 1991). A theory such as the community of practice will allow for greater comprehension on how APE teachers leverage the unique set of relationships found within a social media context to further extend their PL experiences.

CONCLUSION

The findings from this study suggest that APE teachers appear to use and value social media PL experiences for a variety of purposes, especially related to collaboration. However, participants perceived conference PL experiences as more valuable for learning about specific APE content. Although, with data suggesting there is a lack of conferences with content tailored to APE teachers (Hodge and Akuffo, 2007; McNamara et al., 2021a), additional efforts are needed to provide this group of professionals with adequate and frequent PL opportunities related to their specialty. Social media can build a bridge between the infrequent PL opportunities, although caution is needed in the quality of content, as it has been expressed that often information shared on social media may manipulate facts, making it increasingly difficult to assess the validity of social media content (Hajli, 2018). Scholars should explore how those that are using social media for PL and the creators of social media PL navigate issues of validity of content.

PL organizations should also consider using a blend of these different forms of PL, as APE teachers appear to benefit from both sources of PL, including a wide spectrum of social media platforms (e.g., Twitter, Facebook). Indeed, it has been suggested that using social media to reinforce and supplement information often introduced at conferences is ideal (Liu et al., 2016). Future research should examine how professional organizations and schools can best utilize social media to assist APE teachers' PL experiences. More specifically, scholars should examine the impact of social media PL on specific learning domains, such as content and pedagogical knowledge.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by the University of Northern Iowa. The patients/participants provided their written informed consent to participate in this study. Written informed consent was obtained from the individual(s) for the publication of any potentially identifiable images or data included in this article.

AUTHOR CONTRIBUTIONS

SM created the research design and purpose of this study, contributed to the data analysis conducted, and led the manuscript preparation. KN assisted with the research design and led the data analyses, as well as assisted with the manuscript preparation. SH provided critical feedback throughout the research process and assisted with the manuscript preparation. All authors contributed to the article and approved the submitted version.

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Conflict of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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