

## PEDAGOGY

# Adapted Physical Education Teachers' Sources of Stress and Coping Strategies

*Minhyun Kim, José A. Santiago,  
Chan Woong Park, and Mike Stocz*

### Abstract

*Grounded in role stress theory, this study aimed to examine the sources of stress and coping strategies among adapted physical education (APE) teachers. A total of 15 (10 female, five male) APE teachers with six to 31 years of teaching experience participated in this study. Data were collected by conducting semi-structured interviews and collecting personal narratives. As a result of data analysis, the following five themes emerged: (a) highly demanding workloads, (b) meeting the needs of students with disabilities, (c) the shortage of paraprofessionals, (d) a lack of understanding and recognition of APE, and (e) supportive colleagues. Implications for minimizing APE teachers' stressors and future research directions are also discussed.*

---

Minhyun Kim, Associate Professor, Sam Houston State University; José A. Santiago, Professor, Sam Houston State University; Chan Woong Park, Assistant Professor, California State University; and Mike Stocz, University of New Hampshire. Please send author correspondence to [mxk056@shsu.edu](mailto:mxk056@shsu.edu)

## Introduction

Teachers leaving the profession is a growing global concern (Sutcher et al., 2016). It is estimated that in the United States alone, 8% of teachers leave the profession each year, which is the primary contributor to national teacher shortages (Carver-Thomas & Darling-Hammond, 2019). The administrative costs, the time required for hiring and training new teachers, and the costs associated with investing in teachers who eventually leave the field are alarming. According to Sutcher et al. (2019), the estimated financial cost of teachers leaving the profession in the United States is approximately \$8 billion annually.

One motivating factor for teachers to leave the teaching profession is the high levels of work-related stress (Agyapong et al., 2022). Teacher stress has been defined in different ways. Kyriacou (2001, p.28) conceptualized stress as the “experience by a teacher of unpleasant, negative emotions, such as anger, anxiety, tension, frustration or depression, resulting from some aspect of their work as a teacher.” Maslach et al. (2001) defined stress as when a teacher perceives an external demand as exceeding their capability to deal with it. A considerable amount of literature has been published on sources of teacher stress. Skaalvik and Skaalvik (2015) interviewed 30 Norwegian teachers at different stages in their careers, focusing on school-related sources of stress and found that workload, time pressure, lack of time to meet students’ needs, student misbehavior and discipline problems, lack of status of the teaching profession, conflicting teachers’ values with school educational goals, lack of autonomy, and conflicts in teacher teams were significant sources of teacher stress. In another study, Ryan et al. (2017) surveyed 1,886 teachers in the United States to examine the relationship between test-based accountability policy at the state level, teacher test stress, teacher burnout, and teacher turnover intentions. The findings of this study showed that high-stakes testing accountability policies significantly predicted teacher stress, attrition, and burnout.

Bottiani et al. (2019) examined the association between job demands, teacher stress and burnout, and effective classroom practices in a sample of 255 teachers from low-income urban middle schools. They found that teachers in schools with primarily low-income student enrollment experienced elevated levels of stress, and female

teachers showed significantly higher levels of stress than male teachers. The COVID-19 pandemic worsened the problem of teacher work-related stress (Klapporth et al., 2020). The drastic and rapid changes and demands brought about by the COVID-19 pandemic in K-12 schools added additional stress and anxiety to the teachers. Recently, Pressley et al. (2021) examined how returning to teaching during the COVID-19 pandemic impacted teachers' levels of stress and anxiety. They found that providing students with 100% virtual instruction and communication (e.g., communication with parents) within the school environment were significant predictors of teacher stress.

Over the last 30 years, research has focused on teacher work-related stress, which may result in poor job performance, low motivation, dissatisfaction, disengagement, absenteeism, emotional exhaustion, and burnout (Goddard et al., 2019). In addition, teacher stress has been found to be associated with mental health and physical problems, including depression, anxiety, muscle pain, chronic fatigue, colds, and headaches (Klusmann et al., 2016). These factors can influence teachers' decisions to leave the teaching profession. Therefore, in efforts to retain qualified teachers, schools, school districts, policymakers, and other education stakeholders are challenged with mitigating sources of teacher work-related stress and implementing strategies to improve teachers' well-being. These efforts are particularly critical for teachers working in the "non-core" subjects (e.g., special education, adapted physical education) who are at higher risk of leaving the profession compared to other groups of teachers (Hester et al., 2020).

The working conditions of adapted physical education (APE) teachers have been found to be unique as they travel between multiple schools, develop individualized education plans (IEP), and work with general physical educators (Obrusnikova & Kelly, 2009). Ješinová et al. (2014) reported that 39% of adapted physical education (APE) teachers in the United States were seriously considering another job outside of special education, and 26% were actively searching for a job outside of special education. Inappropriate working conditions, including inadequate equipment, large class sizes, and traveling time, contributed to the most dissatisfying factors in APE teachers' jobs (Ješinová et al., 2014). They also often face additional stressors, such as marginalization (McNamara et al., 2022).

## **Role Stress Theory**

The role stress theory developed by Khan and Quinn (1970) is a theoretical framework, focusing on understanding workplace stress sources. The role stress encompasses strain and tension while individuals attempt to fulfill their roles in the workplace. The aim of role stress theory is to examine how individuals experience stress in the workplace due to organizational roles, job demands, and job characteristics (Matteson & Ivancevich, 1987). The theory emphasizes three dimensions of role stress: role ambiguity, role conflict, and role overload. Role ambiguity occurs when individuals are unsure about their goals, responsibilities, and performance for their assigned jobs (Leigh et al., 1988). Research suggests that there is a strong relationship between role ambiguity and emotional exhaustion and burn out on teachers (Ryan et al., 2017).

Role conflict is when individuals perform multiple roles and conflict demands and expectations from different roles (Kahn et al., 1964). Given that APE teachers experience increased roles and responsibilities (Wilson et al., 2020), it may result in role conflict. Role overload arises when an individual receives an overwhelming amount of role responsibilities, and expectations (Khan & Quinn, 1970). It also involves both the quality and quantity of tasks to be performed. The role stress theory proposes that the dimensions of role stress can lead to feelings of job dissatisfaction, exhaustion, and low self-esteem.

Furthermore, role stress can reduce individuals' productivity and overall well-being and increase their employment turnover rate. While there are growing efforts to investigate the role of stress in APE teachers, limited research has been conducted to determine the sources of stress and coping strategies of APE teachers within schools. This study aimed to examine the sources of stress and coping strategies for APE teachers framed in role stress theory. The following research questions guided this study: How APE teachers perceive their roles, expectations, or responsibilities, (b) how APE teachers feel about their work assignments, and (c) the strategies APE teachers employ to cope with their stress.

## **Method**

### **Participants**

The participants were 15 APE teachers (10 female, five male) from different regions (West = 5, South = 5, Midwest = 3, and

Northeast = 2) in the United States. The participants' ages ranged from 33 to 56 years ( $M = 47$ ,  $SD = 1.4$ ). Fourteen participants self-identified as Caucasian/white and one as Black/African American. The years of teaching experience of the participants range from six to 31 years ( $M = 16.5$ ,  $SD = 6.3$ ). Of the 15 participants, 11 were certified to teach APE, and eight had a master's degree. The caseload of students among participants ranged from 23 to 67 ( $M = 51$ ,  $SD = 22.6$ ). For confidentiality, the authors assigned a pseudonym to each participant.

Following institutional review board (IRB) approval to conduct this study, 80 APE teachers were invited via email to participate. The email included the purpose of the study, research methods, and participation agreement. The information of APE teachers, such as name and email, was collected by searching the websites of randomly selected school districts. Of the 80 APE teachers, 15 (18.7%) agreed to participate in this study. Therefore, participants agreed to participate in the study based on their interest, availability, and willingness, representing a convenience sample.

## **Data Collection**

The primary data source was semi-structured interviews conducted via Zoom between March 2022 and April 2022. Consent was obtained before conducting interviews. The interviews ranged from 38 to 74 minutes in length. All of the interviews were audio recorded and transcribed verbatim. Demographic information such as gender, age, ethnicity, and years of teaching experience was collected at the beginning of the interview. The interview focused on the sources of participants' stress and coping strategies. The semi-structured interview guide consisted of 13 open-ended questions: "Could you please describe the working conditions that make you feel stressed?" "Could you please describe what types of job responsibilities make you feel stressed?" "Could you please share your strategies to help you cope with the stress at work?" Additionally, personal narratives were collected to expand information regarding stress further. Specifically, the participants were asked to provide specific situations or examples that made them feel stressed while working as an APE teacher and the strategies employed to reduce stress.

## **Data Analysis and Trustworthiness**

Thematic analysis was employed to identify, describe, and organize the themes (Nowell et al., 2017). Marks and Yardley (2004) suggested that thematic analysis allows researchers to understand diverse perspectives, interpret behaviors and thoughts, and discover in-depth insights. Two of the authors of this study reviewed and analyzed the interview and personal narrative data independently to develop themes (Braun & Clarke, 2006). This involved conducting line-by-line coding, scrutinizing categorization, noting patterns, and finding similarities and differences in the codes. In the next stage, we identified various precise codes and grouped similar codes. Finally, we discussed and identified a reasonable and logical chain to verify the themes. As a result of the data analysis, five themes related to participants' sources of stress and coping strategies were constructed.

Trustworthiness and credibility were ensured by employing peer debriefing. Regarding member checking, the participants of this study were asked to review the interview transcription and ensure information accuracy (Lincoln & Guba, 1985). Nine participants confirmed that the results accurately described their sources of stress and coping strategies. Peer debriefing was conducted at the end of the analysis stage by inviting a qualitative research expert who was not involved in this study (Denzin & Lincoln, 1994). The peer debriefer reviewed and evaluated the data, analysis techniques, findings, and interpretations.

## **Results and Discussion**

The following five themes emerged from the data analysis regarding participants' sources of stress and coping strategies as APE teachers. The first four themes describe the sources of stress, and the last theme is associated with the participants' coping strategies. The themes included (a) highly demanding workloads, (b) meeting the needs of students with disabilities, (c) the shortage of paraprofessionals, (d) a lack of understanding and recognition of APE, and (e) supportive colleagues.

### **Highly Demanding Workloads**

All participants in this study expressed that the primary source of stress was the highly demanding workload. For instance, Shelby commented,

One situation that made me feel stressed as an APE teacher is trying to find a way to balance all my things like schedule, travel time, IEP meetings, and evaluations. It is often stressful to find a good balance to cover all the job criteria (Narrative).

A substantial amount of literature highlighted the significant impact of the high workload on teachers' stress and burnout (Chang, 2013; Shernoff et al., 2011). The exceeding workload of teachers may reduce their teaching quality, job commitment, and accomplishment (Bettini et al., 2017). According to Wilson et al. (2021), APE teachers face a series of heavy workloads as the number of students with disabilities has steadily increased over the last decade. The APE teachers in this study expressed that high caseloads were a source of stress. Joseph also stated:

I have a caseload of 60-65 students in grades K-8. I started the school year with about 45 students. There are constant evaluations needing to be completed for possible new students for APE services as well as new students to the district that adds to my caseload. With the new students come more planning, instruction time, and schedules that need to be figured out. The new students, caseload, and the extra logistics that accompany them make it stressful. I just can't operate that same way with my caseload and the type of work we do (Narrative).

Previous research suggests that APE teachers are concerned with high caseloads mainly because their quality of instruction, performance, and student services are affected (Obrusnikova & Kelly, 2009). As a result of the increased caseloads, the participants of this study were required to take on additional responsibilities, such as attending more IEP meetings. Sarah acknowledged,

I would say that the biggest stressor with the caseload comes with a lot of IEP meetings, you know? Like, sometimes you'll have no IEP meetings for a few weeks or even close to a month, and then suddenly you have IEP meetings slammed into one week, five of them (Interview).

Given the high caseloads and work schedule, the participants claimed that it was inevitable for them to face scheduling conflicts, resulting in a stressful situation. Lauren explained,

You will have an IEP meeting that you must attend, but it may fall during a session for a student. So, what do you do, right? You need to make up some of those sessions or use another time. So, it all just piles on to one another” (Interview).

Additionally, the participants reported that the amount of paperwork was strongly related to their stress levels. For example, Simon noted, “Paperwork, yes, it’s always an ever going. You constantly have a new flow of evaluation and reports to do. So, it’s kind of never-ending and stressful” (Interview). The participants also indicated that the tasks associated with paperwork were bearable; however, they were stressful because of the quantity of paperwork and time pressure. Kelly commented,

Once you learn how to write the paperwork, you can go through it. It’s just the magnitude has increased. It’s just always difficult to keep up with because it is time-consuming. I don’t have enough time to do it (Interview).

Previous literature suggests that excessive paperwork is a major source of stress among special education teachers (Hester et al., 2020). Paperwork is particularly stressful as it involves a series of requirements mandated by the Individuals with Disabilities Education Act (IDEA) and the No Child Left Behind Act (Billingsley, 2004). According to Vannest et al. (2011), special education teachers spent more time completing paperwork than any other job responsibilities, including lesson planning, grading, and meetings.

The participants expressed feelings of stress as they are responsible for various extracurricular events and activities such as the Special Olympics and after-school programs. Organizing and supervising extracurricular activities can be time-consuming and create an additional workload. Sydney explained a series of events in which she was involved. As she noted:

We have big events, such as the Special Olympics bowling and basketball. We also do a huge secondary tournament,

and then there's regional and then there's state competition. It's just yeah, any special event is a big stressor. We also do something here in our district called "APE Showcase" And, you still have to continue teaching but don't forget to get all those. So, it's about once a month that there is a stressful event that is tied to increasing our stress" (Interview).

## **Meeting the Needs of Students With Disabilities**

The participants indicated that it was stressful to meet the needs of students with disabilities. Mark described, "Our job is super fun. You get to make connections with the students, and you get to really change lives. So it's a fantastic job. But, it is more about being able to meet the needs of all the children. That's the biggest stress" (Interview). Sydney provided a similar experience, "Yeah, I think it can be stressful definitely when we have varying disabilities. You could have a student who is severely impaired and using a wheelchair. And, you could have a high functioning student. So, it's kind of stressful to plan instruction to teach them at the same time" (Interview). Literature suggests that teachers serving students with disabilities tend to be at risk of experiencing high levels of stress and burnout (Nichols & Sosnowsky, 2002).

According to Park and Shin (2020), teaching students with disabilities has become increasingly demanding because there are highly diverse students with a wide range of disabilities, characteristics, and severities. Some participants indicated that addressing the needs of various students with disabilities was a source of stress as it required a substantial amount of planning, preparation, resources, and knowledge. For example, Trevor stated, "Some kids are so specific, and you're trying to make sure that you are getting to find the right professionals or resources or looking on the right websites to find things that work for them. That can be a little bit stressful" (Interview).

In this study, participants indicated that managing students with severe disabilities was a prominent source of stress. Michelle illustrated, "I have individual plans for all our students, but teaching students with severe disabilities needs additional time and support. That's gonna pull away from the other students and how I am going to make sure they're getting the service. That is a major

source of stress for me” (Interview). Moreover, the participants expressed stress when they managed students with severe disabilities who exhibited profound behavioral disturbances. Macey explained, “Managing student behavioral problems that’s a big deal for me. That’s not my strong suit and oftentimes the aides will come to the student in the gym and they take care of the behavior problems” (Interview). Simon also stated:

It’s the students with very severe disabilities that show unpredictable behaviors. That is probably my one source of stress during my 10<sup>th</sup> year of teaching. I’ve been dealing with extreme and aggressive behaviors toward my peers and me. I could say that the greatest source of stress is the increased number of students that I’m seeing with very severe disabilities (Interview).

It has been shown that teaching students with severe disabilities involves a significant intensity of emotional exhaustion (Chang, 2013). The risk of stress and burnout is even higher when teachers instruct students with severe emotional and behavioral disabilities because they tend to display unpredictable, violent, and disruptive behaviors (Billingsley et al., 2004).

### **The Shortage of Paraprofessionals**

The APE teachers in this study acknowledged that paraprofessionals played a vital role in assisting them with their classes. However, they all felt stressed due to the current critical shortage of paraprofessionals. Emma explained, “The thing that gives me the most stress is that there are not enough paraprofessionals. I definitely need more paraprofessionals in my classes. But it’s one of those things where I just don’t feel like there’s enough of them” (Interview).

The participants also discussed that the lack of paraprofessionals resulted in less support during their instruction, which was stressful and impacted student learning. Lauren commented, “When you don’t have paraprofessionals, you have more behavior problems in the class. More trouble with transitioning the students. My duties have changed; I’ve had to change things that I normally do. I’ve had to give up some lesson planning. It affects how I service the kids” (Interview). Given that teaching students with disabilities involves

a series of difficulties and challenges, IDEA requires schools to hire paraprofessionals to assist special education teachers (Shyman, 2010). The benefits of paraprofessionals assisting teachers in special education settings have been well documented (Jones et al., 2014). For example, paraprofessionals help enhance the quality of instruction by providing one-to-one or small-group instruction, modifying materials, and working with the most challenging and intensive student behaviors (Fisher & Pleasants, 2012). The participants in this study also described that it was stressful to work with paraprofessionals who were unfamiliar with APE and lacked professionalism. Michelle commented, “I’m dealing with paraprofessionals who don’t know APE and what to do with the children and don’t know how to handle them. They don’t know how to modify anything for individual children, no matter what I’m doing in the class. And that can be stressful” (Interview). Concomitant with a shortage of paraprofessionals, paraprofessionals receive limited training and professional development to identify their roles and learn the necessary knowledge and skills (e.g., behavioral management) (Mason et al., 2019). Although minimum qualifications for hiring paraprofessionals have been established by federal policies, such as acquiring a high school diploma and having at least two years of working experience at schools, these guidelines are not always enforced or followed in school settings (Brock et al., 2017). In other words, paraprofessionals may not have the recommended knowledge, skills, and experiences that could prevent them from properly assisting teachers (Maggin et al., 2012).

### **A Lack of Understanding and Recognition of APE**

All participants in this study indicated that their stress was strongly associated with a lack of understanding and recognition of APE by school administrators, teachers, and staff members. Kelly explained, “Probably the most source of stress is how colleagues and administrators don’t understand my job. My colleagues think I’m going home when I’m going to another school. Some IEP members don’t think I’m a service provider and have to do formal assessments. It is stressful” (Narrative). This was also echoed by Amy,

The perception is that APE teachers don’t work hard and it is so easy. The contrary is that it is challenging and takes a lot

of effort, foresight, critical thinking, and creativity in order to develop a sound lesson plan that creates student success (Narrative).

Over the last few years, studies have examined the notion of marginalization in the context of APE as it is viewed as a “low-status or unvalued subject” in schools (Richards et al., 2020; Richards & Wilson, 2020). Such marginalization is most manifested when there is a lack of understanding of what APE entails, how it contributes to students with disabilities, and the overall mission of the school (Park & Curtner-Smith, 2018).

In particular, participants in this study were stressed due to marginalization by school administrators. Michelle commented,

The lack of administrative support comes from when the principal doesn't know about what goes on in the APE world on their campus. Your world is just more stressful and there isn't any real support. I just think that we're the last priority (Interview).

Amy further elaborated,

We do feel like we're on our own. I'd say there is little support. We are just like other teachers spending time in the classroom. Getting a good understanding of what we do so that they can support us better, getting curious instead of judgmental (Interview).

Research suggests that school administrators are essential to the effective functioning of a school (Woods, 2004). For instance, school administrators are responsible for distributing resources, guiding teachers, and developing school culture (Beisser et al., 2014). Richards et al. (2020) identified that school administrators are a critical factor related to the socialization experiences of APE teachers. Unfortunately, it has been found that school administrators marginalize and undervalue APE, stemming from the negative impression of general physical education (McNamara et al., 2022). As a result, APE teachers tend to confront inadequate support, unfavorable working conditions, isolation, and negative perceptions (Wilson et al., 2021). According to McNamara et al. (2022), marginalization is exacerbated when school administrators focus on the basic require-

ment of compliance with educational policies, resulting in reduced quality of service and practice of APE. The participants in this study reported a lack of involvement of school administrators in APE unless there was an immediate problem or issue. Macey explained,

Oftentimes, school administrators don't get involved or want to know about our world until there's an emergency or a parent is very upset or whatever. And we're not a source of stress to the administrator until something goes wrong (Interview).

In this study, the participants were stressed when they had little input in the IEP. Amy commented:

I've been attending a lot of IEP meetings for students moving from Pre-K to high school and it's a little bit scary because they don't take my input. They ask me questions sometimes. They don't seek me out too often, though; they just kind of do what they do. Yeah. So, I just, I stress about that (Interview).

This is consistent with the findings of Wilson et al. (2020), in which APE teachers' voices were merely heard to make decisions in educational policies such as IEP and the Least Restrictive Environment. Participants also discussed that they experienced high stress levels when school administrators did not include them in important school communication. APE teachers expressed frustrations as the lack of communication prevented them from obtaining critical information about schedules, meetings, and announcements. Trevor commented:

I would definitely say communication. And just trying to make sure I get all the information from anything that the superintendent sends out to my program supervisor, to these principals, and even to the case manager. I feel like a lot of time I get left out of communication logs, and that stresses me. I look pretty bad because you didn't tell me that this was coming. Just to include us (Interview).

## **Supportive Colleagues**

All participants in this study emphasized that supportive colleagues whom they can reach out to "when in need" positively impact alleviating and coping with their stress. Amy noted:

Well, I think if you all share your stress, then I'm able to call you because I've established that relationship with you, and I'm able to vent. I think I've set a good example for my team that there's a difference between complaining and venting. Venting means you just need to listen to me for a few minutes. I have a problem and I really need another brain to help me figure it out and talk through it. It really does help me cope with stress. We need other humans to help us (Interview).

Research has identified various coping strategies teachers utilize to reduce work-related stress, such as exercise, meditation, and rest (Richards, 2012). According to Tomfohr et al. (2015), one of the well-accepted coping mechanisms is having a social support system. Specifically, supportive colleagues provide positive feelings, emotional relaxation and support, and sympathy (Johnson et al., 2014). Le Cornu (2013) suggested that teachers who receive positive social support from their colleagues are less vulnerable to stress and burn-out. The study participants discussed that their colleagues and other professionals serve as critical resources of support to cope with their stress and find solutions to problems. Joseph described:

I have a good support group such as OTs, PTs, and speech therapists. I always have someone to deal with my stress and frustrations. It helps with the stress level. Oftentimes talking with my close colleagues about the stress help vent my frustrations. I also talk with my special education team about my concerns and how we can find solutions. They all have been a great help this school year (Narrative).

Supportive colleagues in schools can also provide mentorship, instructional strategies, and professional resources (Jones et al., 2013). According to Kim et al. (2021), APE teachers perceived that their APE colleagues are the most valuable resource for building a positive attitude, influencing their professionalism, and providing guidance. Park and Curtner-Smith (2018) also found that receiving support from APE colleagues provides feelings of belonging and allows them to stay connected. Such connections increase APE teachers' job satisfaction and help them combat negative emotions, unfavorable working conditions, and attrition (Kim et al., 2021). Participants recognized the value of socializing with APE teachers and supportive colleagues to relieve stress. Macey highlighted:

Personally, with my APE team, we just communicate with each other all day. It might be lighthearted stuff. It might be something funny. And, then we're a small enough team. We can still get together and have lunch. That's vital to me is just our team, the five, just being cohesive like that. So, that's probably my biggest stress reliever. Just to tell somebody hey, this happened. And, then they commiserate with me or whatever (Interview).

Amy further elaborated,

Yeah, definitely talking with my APE teams helps because we're talking about the same things. So, it's that camaraderie with the other APE teachers, and it's really great. I think definitely talking with them has helped a lot and that has been my stress coping strategy at work" (Interview).

Windle (2011) pointed out that colleagues who share common work experiences are more likely to understand a peer's situation, reduce feelings of isolation, and mitigate the sources of stress.

There are several limitations in the present study. First, convenience sampling was employed in this study. Despite the efforts of recruiting participants from a wide range of regions in the U.S., the participants' responses did not represent all APE teachers. Second, no novice APE teachers were recruited in this study. According to Kim and Roth (2011), a novice teacher is defined as a teacher with less than five years of experience. As previous research examined, the intensity level and sources of stress may differ between novice and experienced teachers (Brouwers & Tomic, 2000). Specifically, novice teachers tend to report high stress levels (Embich, 2001). Therefore, future research should examine the sources of stress and coping strategies among novice APE teachers. Despite the limitations, this study makes an important contribution to understanding the working experiences and conditions that lead to stress in APE teachers and the mechanisms they employ to cope with such stress.

## **Conclusion and Implications**

Framed in role stress theory, this study examined the sources of stress and coping strategies among APE teachers. The findings

of this study indicated that all participants felt stressed while working as APE teachers, and multiple factors influenced their stress. A heavy workload, including caseload, IEP meetings, and paperwork, was found to be related to the stress of APE teachers. Despite the feeling of exhilaration in working with students with disabilities, APE teachers expressed that addressing the needs of various characteristics of students with disabilities caused stress. A major source of stress was the shortage of paraprofessionals, as APE teachers relied heavily on them. Additionally, APE teachers were stressed and frustrated when school administrators, colleagues, and staff demonstrated a lack of understanding and recognition of APE. While the participants described a series of sources of stress, this study found that supportive colleagues played a critical role in coping with stress. Supportive colleagues allowed APE teachers to feel empathy, humility, and belonging.

There are several implications based on the findings of the current study. School districts and school administrators are responsible for promoting their teachers' well-being. Therefore, they should be more proactive in providing helpful information or strategies about emotional wellness, self-management, and coping strategies to reduce stress related to job dissatisfaction, burnout, or other negative feelings. Furthermore, the participants in this study discussed a series of difficulties in teaching and managing students with severe disabilities (e.g., autism spectrum disorder). It is recommended that professional development be provided to help APE teachers acquire information about behavior intervention programs, differentiated instructional strategies, and appropriate curricula targeting students with severe disabilities. While paraprofessionals assisted and supported APE teachers significantly, this study found that APE teachers were stressed due to insufficient paraprofessionals. Therefore, school administrators should consider allocating more paraprofessionals to APE classes. More importantly, proper training in the context of APE is necessary for paraprofessionals to understand their roles, responsibilities, and professional dispositions.

## References

- Agyapong, B., Obuobi-Donkor, G., Burbach, L., & Wei, Y. (2022). Stress, burnout, anxiety, and depression among teachers: A scoping review. *International Journal of Environmental Research*

- and Public Health*, 19(7), 2–42. <https://doi.org/10.3390/ijerph191710706>
- Ansley, B. M., Houchins, D., & Varjas, K. (2016). Optimizing special educator wellness and job performance through stress management. *Teaching Exceptional Children*, 48(4), 176–185.
- Beisser, S. R., Peters, R. E., & Thacker, V. M. (2014). Balancing passion and priorities: An investigation of health and wellness practices of secondary school principals. *NASSP Bulletin*, 98(3), 237–255.
- Bettini, E., Jones, N., Brownell, M., Conroy, M., Park, Y., Leite, W., Crockett, J., & Benedict, A. (2017). Workload manageability among novice special and general educators: Relationships with emotional exhaustion and career intentions. *Remedial and Special Education*, 38(4), 246–256. <https://doi.org/10.1177/0741932517708327>
- Billingsley, B. S. (2004). Special education teacher retention and attrition: A critical analysis of the research literature. *The Journal of Special Education*, 38, 39–55.
- Billingsley, B. S., Carlson, E., & Klein, S. (2004). The working conditions and induction support of early career special educators. *Exceptional Children*, 70(3), 333–347.
- Blanton, L. P., Boveda, M., Muñoz, L. R., & Pugach, M. C. (2017). The affordances and constraints of special education initial teacher licensure policy for teacher preparation. *Teacher Education and Special Education*, 40(1), 77–91.
- Bottiani, J. H., Duran, C. A. K., Pas, E. T., & Bradshaw, C. P. (2019). Teacher stress and burnout in urban middle schools: Associations with job demands, resources, and effective classroom practices. *Journal of School Psychology*, 77, 36–51. <https://doi.org/10.1016/j.jsp.2019.10.002>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Brock, M. E., Seaman, R. L., & Downing, C. (2017). Promoting learning for a student with a severe disability through paraprofessional training. *Research and Practice for Persons with Severe Disabilities*, 42(3), 211–224.
- Brouwers, A., & Tomic, W. (2000). A longitudinal study of teacher burnout and perceived self-efficacy in classroom management. *Teaching and Teacher Education*, 16(3), 239–253.
- Carver-Thomas, D., & Darling-Hammond, L. (2019). The trouble with teacher turnover: How teacher attrition affects students

- and schools. *Education Policy Analysis Archives*, 27. <https://doi.org/10.14507/epaa.27.3699>
- Curtner-Smith, M. (2017). Acculturation, recruitment, and the development of orientations. In K. A. R. Richards & K. L. Gaudreault (Eds.), *Teacher socialization in physical education: New perspectives* (pp. 33–66). Routledge.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (1994). *Handbook of qualitative research*. Sage Publications, Inc.
- Embich, J. L. (2001). The relationship of secondary special education teachers' roles and factors that lead to professional burnout. *Teacher Education and Special Education*, 24(1), 58–69.
- Fisher, M., & Pleasants, S. L. (2012). Roles, responsibilities, and concerns of paraeducators: Findings from a statewide survey. *Remedial and Special Education*, 33(5), 287–297.
- Goddard, R., O'Brien, P., & Goddard, M. (2006). Work environment predictors of beginning teacher burnout. *British Educational Research Journal*, 32, 857–874. <https://doi.org/10.1080/01411920600989511>
- Hester, O. R., Bridges, S. A., & Rollins, L. H. (2020). “Overworked and underappreciated”: Special education teachers describe stress and attrition. *Teacher Development*, 24(3), 348–365.
- Ješinová, L., Spurná, M., Kudláček, M., & Sklenářiková, J. (2014). Job dissatisfaction among certified adapted physical education specialists in the USA. *Acta Gymnica*, 44(3), 175–180. <https://doi.org/10.5507/ag.2014.018>
- Johnson, B., Down, B., Le Cornu, R., Peters, J., Sullivan, A., & Pearce, J. (2014). Promoting early career teacher resilience: A framework for understanding and acting. *Teachers and Teaching: Theory and Practice*, 20(5), 530–546.
- Jones, C. R., Ratliff, N. J., Sheehan, H., & Hunt, G. H. (2014). An analysis of teachers' and paraeducators' roles and responsibilities with implications for professional development. *Early Childhood Education Journal*, 40(1), 19–24.
- Jones, N. D., Youngs, P., & Frank, K. A. (2013). The role of school-based colleagues in shaping the commitment of novice special and general education teachers. *Exceptional Children*, 79(3), 365–383.
- Kahn, R. L., & Quinn, R. P. (1970). Role stress: A framework for analysis. In A. McLean (Ed.), *Occupational mental health* (pp. 41–65). Rand-McNally.
- Kahn, R., Wolfe, D., Quinn, R., Snoek, J. D., & Rosenthal, R. (1964). *Organizational stress: Studies in role conflict and ambiguity*. Wiley.

- Kim, K., & Roth, G. L. (2011). Novice teachers and their acquisition of work-related information. *Current Issues in Education, 14*(1), 3–28.
- Kim, M., Santiago, J., Park, C., & Roper, E. (2021). Adapted physical education teachers' job satisfaction. *Adapted Physical Activity Quarterly, 38*(4), 661–680.
- Klapproth, F., Federkeil, L., Heinschke, F., & Jungmann, T. (2020). Teachers' experience of stress and their coping strategies during COVID-19-induced distance learning. *Journal of Pedagogical Research, 4*(4), 444–452.
- Klusmann, U., Richter, D., & Lüdtke, O. (2016). Teachers' emotional exhaustion is negatively related to students' achievement: Evidence from a large-scale assessment study. *International Journal of Modern Education Studies, 108*(8), 1193–1203.
- Kyriacou, C. (2001). Teacher stress: Directions for future research. *Educational Review, 53*(1), 27–35. <https://doi.org/10.1080/00131910120033628>
- Le Cornu, R. (2013). Building early career teacher resilience: The role of relationships. *Australian Journal of Teacher Education, 38*(4), 1–16.
- Leigh, J. H., Lucas, G. H. Jr., & Woodman, R. W. (1988). Effects of perceived organizational factors on role stress–job attitude relationships. *Journal of Management, 14*, 41–58.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications.
- Maggin, D., Johnson, A., Chafouleas, S., Ruberto, L., & Berggren, M. (2012). A systematic evidence review of school-based group contingency interventions for students with challenging behavior. *Journal of School Psychology, 50*, 625–654.
- Marks, D. F., & Yardley, L. (2004). *Research methods for clinical and health psychology*. Sage Publications.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology, 52*(1), 397–422. <https://doi.org/10.1146/annurev.psych.52.1.397>
- Mason, D., Mackintosh, J., McConachie, H., Rodgers, J., Finch, T., & Parr, J. R. (2019). Quality of life for older autistic people: The impact of mental health difficulties. *Research in Autism Spectrum Disorders, 63*, 13–22.
- Matteson, M. T., & Ivancevich, J. M. (1987). *Controlling work stress: Effective human resource management strategies*. Jossey-Bass.
- McNamara, S. W. T., Richards, K. A. R., Trad, A. M., Abdallah, S., & Hill, L. (2022). Adapted physical educators' experiences with

- school administration and marginalization. *Journal of Teaching in Physical Education*, 42(2), 283–292.
- Nichols, A. S., & Sosnowsky, F. L. (2002). Burnout among special education teachers in self-contained cross-categorical classrooms. *Teacher Education and Special Education*, 25(1), 71–86.
- Nowell, L., Norris, J., White, D., & Moules, N. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Research*, 16, 1–13.
- Obrusnikova, I., & Kelly, L. E. (2009). Caseloads and job demographics of adapted physical educators in the United States. *Perceptual and Motor Skills*, 109(3), 737–746. <https://doi.org/10.2466/pms.109.3.737-746>
- Park, C. W., & Curtner-Smith, M. (2018). Influence of occupational socialization on the perspectives and practices of adapted physical education teachers. *Adapted Physical Activity Quarterly*, 35(2), 214–232.
- Park, E., & Shin, M. (2020). A meta-analysis of special education teachers' burnout. *Sage Open*, 10(2), 1–18.
- Pressley, T., Ha, C., & Learn, E. (2021). Teacher stress and anxiety during COVID-19: An empirical study. *School Psychology*, 36(5), 367–376. <https://doi.org/10.1037/spq0000468>
- Richards, J. (2012). Teacher stress and coping strategies: A national snapshot. *The Educational Forum*, 76(3), 299–316.
- Richards, K. A. R., & Wilson, W. J. (2020). Recruitment and initial socialization into adapted physical education teacher education. *European Physical Education Review*, 26(1), 54–69.
- Richards, K. A. R., & Templin, T. J. (2012). Toward a multidimensional perspective on teacher-coach role conflict. *Quest*, 64(3), 164–176. <https://doi.org/10.1080/00336297.2012.693751>
- Richards, K. A. R., Wilson, W. J., Holland, S. K., & Haegele, J. A. (2020). The relationships among perceived organization support, resilience, perceived mattering, emotional exhaustion, and job satisfaction in adapted physical educators. *Adapted Physical Activity Quarterly*, 37(1), 90–111.
- Ryan, S. V., Pendergast, L. L., Saeki, E., Segool, N., & Schwing, S. (2017). Leaving the teaching profession: The role of teacher stress and educational accountability policies on turnover intent. *Teaching and Teacher Education*, 66, 1–11.
- Shernoff, E. S., Mehta, T. G., Atkins, M. S., Torf, R., & Spencer, J. (2011). A qualitative study of the sources and impact of stress among urban teachers. *School Mental Health: A Multidisciplinary Research and Practice Journal*, 3(2), 59–69.

- Shyman, E. (2010). Identifying predictors of emotional exhaustion among special education paraeducators: A preliminary investigation. *Psychology in Schools, 47*(8), 828–841.
- Skaalvik, E. M., & Skaalvik, S. (2015). Job satisfaction, stress and coping strategies in the teaching profession—What do teachers say? *International Education Studies, 8*(3), 181–192.
- Spillane, J. P., Camburn, C., & Stiziel-Pareja, H. (2004). Toward a theory of leadership practice: A distributed perspective. *Journal of Curriculum Studies, 36*(1), 3–34.
- Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2016). *A coming crisis in teaching? Teacher supply, demand, and shortages in the U.S.* Learning Policy Institute.
- Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2019). Understanding teacher shortages: An analysis of teacher supply and demand in the United States. *Education Policy Analysis Archives, 27*, 35. <https://doi.org/10.14507/epaa.27.3696>
- Tomfohr, L. M., Edwards, K. M., Madsen, J. W., & Mills, P. J. (2015). Social support moderates the relationship between sleep and inflammation in a population at high risk for developing cardiovascular disease. *Psychophysiology, 52*, 1689–1697.
- Vannest, K., Hagan-Burke, S., Parker, R., & Soares, D. (2011). Special education teacher time use in four types of programs. *Journal of Educational Research, 104*(4), 219–230.
- Wilson, W. J., Holland, S. K., Haegele, J. A., & Richards, K. A. R. (2021). Workplace experiences of adapted physical educators: A comparison of educators with and without national certification. *Journal of Teaching in Physical Education, 40*(2), 267–275. <https://doi.org/10.1123/jtpe.2019-0239>
- Wilson, W. J., Kelly, L. E., & Haegele, J. A. (2020). “We’re asking teachers to do more with less”: Perspectives on least restrictive environment implementation in physical education. *Sport, Education and Society, 25*(9), 1058–1071.
- Wilson, W. J., Richards, K. A. R., Haegele, J. A., & Holland, S. K. (2020). Perceived workplace experiences of adapted physical educators and physical educators. *Research Quarterly for Exercise and Sport, 91*(4), 618–629. <https://doi.org/10.1080/02701367.2019.1694632>
- Windle, G. (2011). What is resilience? A review and concept analysis. *Reviews in Clinical Gerontology, 21*(2), 152–169.
- Woods, P. A. (2004). Democratic leadership: Drawing distinctions with distributed leadership. *International Journal of Leadership in Education, 7*(1), 3–26.