



What Knowledge and Strategy for Teachers about How they Reduce Post-Traumatic Stress Disorder for Children and Adults?

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Abstract

Post-traumatic stress disorder is commonly a mental and emotional disorder caused by many factors such as scary, dangerous events and the Covid-19 pandemic. This study aims to investigate what knowledge and strategy teachers use to support students with PTSD for their holistic growth. Specifically, this study answers two questions: (1) what knowledge do teachers need to know about PTSD for children and adults? and (2) what strategy should teachers develop in serving children with PTSD in creating a hospital educational environment for their whole-person growth? With my previous 15 year-teaching and administration experiences in the western and eastern schools, along with classroom observation and shadowing, and interviews with teachers, this study found that teachers need to sharpen three types of knowledge, including (1) understanding the factor and basic understanding of PTSD; (2) determining the risk factors for developing PTSD; and (3) building a partnership and communication skills for service engagement. This study also found that teachers could effectively use three strategies, including (1) cognitive-behavioral-based therapy, (2) evidence-based strategy, and (3) family relationship-building strategy. Finally, teachers' classroom practices were recommended.

Keywords: *Posttraumatic Stress Disorder, Students with Disability, Special Education, Teacher Educators, Therapy*

Introduction

Post-traumatic stress disorder (PTSD) is an emotional and mental health disorder that develops from traumatic events, such as war, natural disaster, death of loved one in the family or relative, or severe injury (Leung & Shen, 2022). Obuobi-Donkor, Oluwasina, Nikire, and Agyapong (2022) stated that PTSD is commonly a mental and emotional disorder among military personnel and firefighters. This PTSD might be developed due to a shocking, scary, or dangerous event, which causes them sadness, fear, anger, detachment, or isolation from other people (Friedman, Schnurr, & Keane, 2021; Kauffman & Landrum, 2018; Zhang & Koshmanova, 2021a). An, Wang, ye, and Chen (2022) stated that PTSD might be caused by the direct victims of the disaster, firefighters, earthquake, war, or other traumatic events. Harper, Moshier, Ellickson-Larew, et al. (2022) claimed that PTSD is a common psychiatric disorder with an estimated lifetime prevalence rate of 6.8% in the United States.

In addition, the previous studies showed that PTSD has been increased and caused by many risk factors, such as war,

natural disasters, especially the COVID-19 pandemic currently. For example, the Michigan Medicine (MM) at Michigan University (2021) discovered that PTSD is up to a 15% rate due to the COVID-19 (World Health Organization, 2020). Fan, Fu, Li, Li, and Zhu (2021) stated that using the evidence-based strategy for children and adults with PTSD alleviates such adverse impacts, especially the COVID-19 pandemic. The COVID-19 pandemic causes PTSD cases to reach a 15% rate. They also indicated that the COVID-19 pandemic resulted in a high incidence of PTSD (24.55%) among college teachers in Wuhan, and the average level was low ($M=1.06$, $SD=0.72$). They just pointed out how PTSD impacts teachers, students, and other school stakeholders (Zhang, 2022). However, few studies show that educators, such as teachers, could receive a well-preparation and provide support for students with PTSD in teaching, classroom management, and school improvement for your integrity growth (Xie & Zhang, 2022; Zhang & Koshmanova, 2021 b).

Although the previous studies pointed out that PTSD has a common impact on people for their lifetime, there still is a gap of no literature to use the qualitative studies from teachers'

perspectives in offering support to the students with PTSD in the education field. Therefore, this study could fill the gap in the literature through literature review, my personal 15 years of teaching experiences in the Asian and Western countries, classroom teaching observation, school shadowing, and two interviews with teachers in the Midwest state of Michigan. Specifically, this study explores how teachers could offer support to students with PTSD for their holistic growth and whole school improvement. Thus, two specific research questions were guided in this study, including (1) what knowledge do teachers need to know about PTSD, children, and adults with PTSD to deliver a holistic education? and (2) What strategies or disciplines should teachers develop in serving children with PTSD in creating a hospital educational environment for their holistic growth?

Knowledge for Teachers of Serving Students with PTSD in K-12 School Settings

Three types of knowledge for teachers need to be developed and then offer support to children with PTSD in delivering a holistic education.

Firstly, teachers need to understand what factors and situations of PTSD affect their service to the children with PTSD in teaching. The previous studies showed that PTSD is a common emotional and mental disorder within people's lifetime. For example, Obuobi-Donkor et al. (2022) indicated that there is an estimated for men (6%) and women (10%) to experience PTSD within their lifetime. However, they stated that psychological trauma is widespread and an estimated up to 60 to 85% of them experience trauma within their lifetime (Leung & Shen, 2022; Zhang & Koshmanova, 2021b). Radstaak, Huning, Lamers, and Bohlmeijer (2022) found that PTSD is a complex and debilitating disorder resulting from experiencing a traumatic event. The lifetime prevalence of PTSD is around 8% in the general population. This PTSD is also associated with a higher risk of suicide and intentional self-harm, decreased quality of life, and elevated rates of substance use disorders (Zhang & Koshmanova, 2021c). Webb, Ward, Mathew, et al. (2022) said that approximately 20% of individuals who experience a traumatic injury would subsequently develop PTSD such as physical pain, self-harm, and lower self-efficacy (Zhang & Koshmanova, 2021d). Their studies showed that PTSD is a big issue that needs to be addressed.

Besides, Bryang (2022) found approximately 10% to 11% of first responders to experience PTSD. The first responders, such as police officers, firefighters, and ambulance personnel, are among the community's most regularly trauma-exposed groups of workers. Janiri, Carfi, and Kotzalidis (2021) discovered that 30.2% of people experienced PTSD in their quantitative study. They also found that women with PTSD are 55.7% reported a higher rate of PTSD than men (Zhang & Koshmanova, 2021e). Therefore, PTSD could be defined as a common issue that affects teachers in delivering holistic teaching for students' holistic growth. With this condition in mind, teachers need to develop their knowledge of children and adults with PTSD in providing a whole-person education

in 21st-century education, especially the post-COVID-19 pandemic (Chan & Chan, 2022; Zhang & Koshmanova, 2021e; Zhang & Koshmanova, 2022a).

Secondly, teachers need to develop their knowledge in determining what potential risk factors cause children and adults with PTSD and offer support for children and adults with PTSD in service. The previous studies pointed out that many factors cause PTSD, such as accidents, wars, terrorism, natural disasters, and other community violence (Kauffman & Landrum, 2018, p. 214) and COVID-19 pandemic (Fan et al., 2021). For example, Fan et al. (2021), in their cross-sectional study, showed that the COVID-19 pandemic resulted in a high incidence of PTSD (24.55%) among college teachers in Wuhan, and they also confirmed that there was a significance in PTSD and their loved death from COVID-19 causing PTSD. They said that people with COVID-19 were 2.8 times more likely to develop PTSD than those without symptoms (Fan et al., 2021; Zhang & Koshmanova, 2022b). Also, the Michigan Medicine at the University of Michigan (2021) found that the COVID-19 causes PTSD up to 15%, and there are 35% of people with COVID-19 received their intensive care units (ICUs).

Besides, the COVID-19 pandemic has dramatically affected the healthcare system around the globe, including maternal and childbirth practices. For example, Yakupova, Suarez, and Kharchenko (2022) found that the participants among 1123 US perinatal women have a significant level of depression (36.4%), generalized anxiety (22.7%), and PTSD (10.3%) during the pandemic. Yakupova et al. (2022), in their Italian sample, discovered that there were 61.9 of pregnant women who had high scores for depression after delivery during the pandemic in their cross-national study of 64 countries within 6,894 participants. Specifically, they found many factors are causing PTSD, such as the restrictions of visitors after delivery (59%), the baby contracting COVID-19 (59%), lack of support during delivery (55%), and changes in the delivery plan due to COVID-19(41%) (Zhang & Koshmanova, 2021e). Agyapong et al. (2022), in their comparative study, also found that the COVID-19 causes children and adults with PTSD (21.5%), anxiety (21.7%), and depression (22.1%) among healthcare workers in the 1,481 active cases of COVID-19 in the city of 66,500 excluding infections detected at work camps outside the city. They concluded that the COVID-19 pandemic has been a challenge to everyone's mental stability, including depression (29.6%), anxiety (33.7%), and sleep disturbance (31.9%)(Zhang & Koshmanova, 2020a; Zhang & Koshmanova, 2020b). However, the previous studies have not pointed out what teachers should do during and post-COVID-19 pandemic in education for students with PTSD in developing their whole person integrity.

Thirdly, teachers need to develop their knowledge of PTSD in working with colleagues to provide comprehensive support to students and adults with PTSD in teaching. As we know, the US school campus is a dynamic multicultural school community. Students may migrate from different countries

and states (Zhang & Koshmanova, 2020c). Some of the previous studies showed that immigrants and refugees might face their challenges in PTSD. For example, Mancini (2020) indicated that immigrant and refugee children often experience stressful or traumatic events, significantly impacting their ability to function in schools, such as lack of confidence, isolation, anxiety, fear, and anger. This life condition causes them to have PTSD symptoms (Zhang & Koshmanova, 2020d). However, the previous studies have minor literature about what knowledge teachers need to develop for holistic student growth with their PTSD intervention. Although some quantitative studies, cross-sectional, and survey studies indicated that children and adults with PTSD have increased and impacted their lifetime, there is still a gap in delivering support for children and adults with PTSD in a qualitative research design (Zhang & Koshmanova, 2020e).

For instance, Bryant (2022) found that 10% of the first responders, such as police officers, firefighters, and ambulance personnel, have PTSD (p. 2) in their quantitative clinical study. Fan et al. (2021), in their survey studies with participants of teachers (N=1650), found that teachers with PTSD were a high rate of 24.55%, and the COVID-19 causes PTSD increased by 181%. If those who had family members or relatives died of COVID-19, causing the ratio of PTSD is up to 459% higher than those who had no one who died. However, there is no literature about how teachers need to have a well-preparation for children and adults with PTSD intervention in teaching through qualitative research design. Therefore, this study indeed fills in the gap of using my teaching experiences, observation, and interview in the eastern and western schools to give a clue to the teachers for their preparation in working with other school stakeholders for student holistic whole-person education after the COVID-19 pandemic. This study surely could help teachers pay attention to the students with PTSD in need and support other school members such as psychologists, social workers, behavior and emotional specialists, or other specialists.

Strategies and Disciplines for Teachers of Serving Students with PTSD in a post-COVID-19 Pandemic in Education 4.0 Era

Teachers need to develop their three strategies or disciplines through reviewing the previous literature.

First, teachers need to establish their cognitive-behavioral-based therapy in referring students with PTSD for their holistic growth in schools. Some of the earlier studies indicated that the cognitive-based intervention program effectively supports students with PTSD. For example, Mancini (2020), in the pilot study for immigrant and refugee youth, found that the cognitive-based intervention program could improve students with PTSD through their treatment for them in recovering their challenging emotions. This study confirmed that cognitive-based intervention is successful in youth (Mancini, 2020, p. 296). Ranger, Bedard, and Taler (2021), in their Canadian longitudinal study with participants with PTSD group (N=1,096) and participants in the

comparison group (N=22,158), found that children and adults with PTSD need to understand that social support is adequate for their recovery through cognitive impairment.

Besides, Kankaanpaa et al. (2022) and Gilhooly, Bergman, Stieber, and Brown (2018) also supported their viewing that children and adults with PTSD, such as immigrant children and refugees, could use the cognitive-behavioral treatment in making their life in better condition. Dobson and Dozois (2019) and Dobson (2010) stated similar viewings that children and adults with PTSD could use the cognitive-behavioral therapies in helping them to build a better life cognitively. These viewings showed that cognitive-behavioral therapy is effective for children and adults with PTSD recovery (Zhang & Koshmanova, 2020f). However, the previous studies still have a gap in using cognitive-behavioral therapy to support the students with PTSD recovery and intervention (Zhang & Koshmanova, 2020g). Therefore, teachers or future studies must explore the teachers' viewing about how they could use the cognitive-behavioral therapy in daily conversation with students with PTSD for your positive reaction and life quality improvement.

Second, teachers could use the evidence-based strategy to ease students with PTSD for recovery with a better life condition. For example, Fan, Fu, Li, Li, & Zhu (2021) stated that the evidence-based strategy could ameliorate children and adults with PTSD impacts, especially during and after coronavirus disease 2019 (COVID-19) pandemic period (World Health Organization, 2020). Kaplan, Somohano, Eddy, Oken, and Wahbeh (2022) also stated that an evidence-based strategy is effective for children and adults with PTSD. Harper, Moshier, Ellickson-Larew, et al. (2022) also supported their viewing. They stated that using an evidence-based strategy could reduce a symptom of PTSD and suggested that future study needs to examine the cost-effectiveness of evidence-based PTSD treatment on reducing mental health and non-mental health care. However, there are no articles about how teachers could use the evidence-based strategy to guide the students with PTSD for their recovery. This literature review indicated that teachers need to improve their evidence-based approach, which could help them effectively communicate with other school staff and students' parents for their support in helping students with PTSD recover (Ylimaki & Brunderman, 2022; Zhang, 2022). Therefore, I confirmed that the evidence-based school treatment could help students with PTSD recover and have a better learning outcome.

Third, teachers need to develop their skills of making a relationship with parents of students with PTSD for their support. The previous studies showed that without parents or relatives' support causes a higher rate of PTSD (Johnson, Hoskote, Rolin, & Kesler, 2021). Within this concern, Gilhooly et al. (2018) suggested that making a family relationship is effective for educators to guide the students with PTSD for their recovery and better performance in their learning. However, the previous studies have no studies about

how teachers could effectively build a relationship with parents to engage with children with PTSD recovery. Therefore, this review points out that teachers need to figure out the different ways of making a relationship with parents of students with PTSD. Some scholars support my viewings, such as Rittenmeyer (2022), Lo and Xu (2019), and Vangelisti (2022). They indicated that family dialogue and support could help their relatives, such as children, face their life challenges. Therefore, family support and making a better relationship between teachers and parents of students with PTSD is practical for teachers to deliver a service to students with PTSD for their recovery.

From what I have reviewed above, the previous scholars claimed that cognitive-behavioral-based therapy, evidence-based strategy, and the family relationship could help teachers offer support to students with PTSD for better performance and life conditions. However, the previous studies still have a gap of using qualitative research about how teachers could use the different strategies or intervention programs to develop their professional knowledge and work with other school stakeholders in delivering a whole-person education for students with PTSD integrated growth.

Classroom Perspective

Regarding what I have reviewed above, together with my personal teaching experiences in China and Midwest State Michigan, classroom observation, and interview with one of the classroom teachers in the elementary K-5 school in Michigan, I would describe two classroom perspectives below.

First, classroom teachers need to develop their awareness of students with PTSD for their support. The previous studies such as Mancini (2020) pointed out that teachers need to pay attention to the four major themes, including (1) improved behavior of students with PTSD; (2) lack of clear program impact; (3) therapeutic qualities of the program for students with PTSD; and (4) the need for improved communication (p. 294)." Specifically, Mancini (2020) suggested that teachers need to use culturally tailored, individualized, one-on-one attention and high-quality supportive therapist interaction for students with PTSD for their recovery. However, I observed that classroom teachers may still need to develop their knowledge of PTSD and other knowledge such as psychological knowledge to offer better support to the students with PTSD for their learning improvement. In general, teachers may not receive their training about how they could deal with cases for students with PTSD.

Instead, I suggested that teachers need to refer those students with PTSD to the psychologist, social worker, school counselors if needed to help their growth. Taking the example from my classroom observation in March 2022 in Midwest Michigan, I realized that students with PTSD often cause them isolated from their peers in the classroom, and they might reject to do something because they are afraid and scary. Within this condition, teachers have difficulty giving whole classroom instruction (Zhang & Koshmanova, 2022a).

As a result, teachers might need to ask for help from other colleagues such as behaviorists, psychologists, psychiatrists, or social workers.

Second, teachers need to understand that they need to foster students with PTSD positively by letting them build their self-efficacy to face their anxiety, depression, and PTSD, especially the immigrant and refugees (Radstaak et al., 2022). Gilhooly et al. (2018) also suggested that teachers could use the communicative strategy to connect with parents of students with PTSD for their support. Specifically, Leung and Shen (2022) said that teachers could use the Plan-Do-Study-Act (PDSA) cycle to work with other school stakeholders such as parents, colleagues, and students in helping students to build their confidence for their better life function. However, teachers might have difficulty helping students with PTSD or big emotional and behavioral students for their recovery if they have less professional knowledge like psychologists, social workers, and psychiatrists. In this manner, Durbeej et al. (2021), in their study about how teachers could use school-based intervention to promote mental health for refugee youth in Sweden, showed that teachers could develop their intervention skills of PTSD for children through two programs. The two program includes (1) Teaching Recovery Techniques (TRT) and (2) In-service Teacher Training (INSETT) for their self-preparation in their professional development in offering adequate support to students with PTSD for their whole personal integrity in life.

Therefore, I supported their view that teachers need to develop their knowledge and work with other school colleagues to support the students with PTSD for their improvement. I cited the statement from my interview with one of the teachers to support this viewing. She said: "When I studied in my teaching program, and I am not a special education major, I think that I need to improve my knowledge such as some of the special education, skill, and intervention strategies to give an effective suggestion to students with PTSD or other students with mental health issues for their growth." As for this viewing, I also supported her viewings based on my teaching experiences in the eastern and western k-12 school setting. Teachers could effectively refer students with PTSD for further help from other school specialist such as psychologists and social workers.

Future Perspectives, Impact on the Field

From what I have reviewed above, two future perspectives for children with PTSD in a post-COVID-19 pandemic are discussed below.

First, the previous studies showed that the COVID-19 pandemic causes a higher rate of PTSD for children and adults, which calls for teachers to support children with PTSD for their life improvement. For example, Deeba, Rapee, and Prvan (2014) said that teachers need to address how they could understand the cumulative stressors and traumas through their pre-service or in-service teacher preparation. Specifically, they said that 70% of children have PTSD, and up to 20 to 30% of them meet full diagnostic criteria for PTSD within the first 12 months because of COVID-19.

Ainamani et al. (2022), in their study in Uganda with participants of children (N=223) in two primary and one secondary school, found that children under adverse conditions are at a higher risk of developing PTSD. Therefore, teachers need to integrate their knowledge, such as PTSD for children, and partner with another colleague in leading students with PTSD growth.

Second, teachers need to extend their knowledge beyond their teachings, such as dialogue skills, special education knowledge, psychological intervention, and leadership skills, to deliver practical, transformative teaching to students with PTSD or other emotional or mental health disorders. The previous studies pointed out that teachers need to develop their comprehensive knowledge to deliver highly effective teaching. For example, Tarrant (2017) claimed that teachers could use meditation interventions to help students to reduce their anxiety, depression, and PTSD. Since PTSD is becoming a common issue in the post-COVID-2019 era, teachers need to sharpen their knowledge, such as PTSD, for children in school for their effective teaching and support (Rothbaum & Rauch, 2020; Zhang & Koshmanova, 2022b). In addition, Markowitz (2021) stated the similar viewing that educators such as teachers need to develop their skills of making an interpersonal relationship with other school stakeholders in offering support to the students with PTSD in a post-COVID-19 pandemic in the 21st century of education 4.0 era (Jones & Sharma, 2021).

As a result, the COVID-19 pandemic calls for teachers to sharpen their knowledge comprehensively to help students with PTSD for their whole-person education (Chan & Chan, 2022). Some scholars support this view. For example, Reimers (2022) said that the COVID-19 causes many issues in primary and secondary education, thus calling for psychological recovery support for students with PTSD. This viewing shows that teachers need to develop their knowledge, such as psychology or intervention strategy during COVID-19 or post-COVID-19 in education (Kundu & Ngalim, 2021). Therefore, the COVID-19 pandemic opens a new page of education and requires more comprehensive knowledge or teacher preparation in delivering a whole-person education for students with PTSD or another mental, emotional, behavioral, and psychological disorder in educational reform such as online, hybrid, or integrated teaching with AI or machine learning for students' holistic growth in the uncertain community.

Conclusion

What I have discussed above shows how teachers could offer support to students with PTSD in a post-COVID-19 pandemic era. This study discovered that PTSD is a common symptom through literature review, and the COVID-19 becomes a new risk factor causing more cases of PTSD for children and adults. Specifically, teachers need to improve their three types of knowledge in offering responsive support to the students with PTSD, including: (1) Understanding the factor and basic understanding of PTSD; (2) Determining the risk factors for developing PTSD; and (3) Building a partnership and

communication skills for service engagement. To offer better support to the students with PTSD, teachers need to sharpen their three strategies, including (1) cognitive-behavioral-based therapy, (2) evidence-based strategy, and (3) family relationship-building strategy.

Besides, this study points out two classroom perspectives for teachers to support students with PTSD in school through whole-person education. The two perspectives are (1) teachers need to be aware of their students with PTSD if needed, and (2) teachers need to sharpen their skill of helping students to build their self-efficacy for making a better life condition. Therefore, this study focuses explicitly on PTSD, which may be caused by many symptoms, especially the COVID-19 pandemic, as I emphasized in this study. With the uncertainty of educational change in a post-COVID-19, along with the higher rate of PTSD for children, the COVID-19 makes an enormous educational impact. Also, it requires educators to continuously develop their knowledge for school reform through pedagogy, teacher training, curriculum design, leadership, partnership, and cultural community engagement in the 21st-century educational community in the industry 4.0 era (Massaro, 2022; Upadrista, 2021).

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