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The Effects of COVID-19 School Disruptions on Social, Emotional, and Behavioral Skills

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THE EFFECTS OF COVID-19 SCHOOL DISRUPTIONS ON SOCIAL, EMOTIONAL,
AND BEHAVIORAL SKILLS

By

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THE EFFECTS OF COVID-19 SCHOOL DISRUPTIONS ON SOCIAL, EMOTIONAL,
AND BEHAVIORAL SKILLS

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ABSTRACT

School disruptions, closure of school buildings and online learning, in response to the coronavirus disease in 2019 (Covid-19) pandemic impacted students in unique ways (Azmat & Ahmad, 2022; Hosszu et al., 2022; Hussong et al., 2021; Patrick et al., 2020; Spitzer, 2020) and possibly had long-term effects on the social, emotional, and behavioral skills students normally establish and practice within the school setting (Steedly et al., 2008; Taylor & Larson, 1999; Zins et al., 2007). The lack of research related to the effects of school closures during the Covid-19 pandemic on social, emotional, and behavioral skills was addressed in this research study through analyzing student discipline referral data from pre-Covid school closures and after schools reopened (Welsh, 2022). During the Covid-19 pandemic, school disruptions likely had an impact on students and the development of their social, emotional, and behavioral skills (Hosszu et al., 2022; Spitzer, 2020). This research study identified the effects of school disruptions on the social, emotional, and behavioral skills of students and hypothesized that school disruptions resulted in decreased social, emotional, and behavioral skills in students.

Keywords: COVID-19, social, emotional, behavioral skills, school disruptions, pandemic, schools, students, SDRs, ODRs

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CHAPTER I

Introduction

The coronavirus disease in 2019 (Covid-19) pandemic resulted in many

challenges for schools, students, and families. School disruptions in response to the

Covid-19 pandemic impacted students in unique ways (Azmat & Ahmad, 2022; Hosszu

et al., 2022; Hussong et al., 2021; Patrick et al., 2020; Spitzer, 2020) and may have had

long-term effects on the social, emotional, and behavioral skills students normally

established and practiced within the school setting (Steedly et al., 2008; Taylor & Larson,

1999; Zins et al., 2007). School closures occurred across the United States of America

impacting 48 states, the District of Columbia, four United States territories, and millions

of public-school students (Decker et al., 2020). As schools prepared for return to in-

person learning, administrators considered the recommendations and guidelines from

health organizations and professionals. Recommendations for decreasing the transmission

of the virus included washing hands often, covering coughs, wearing face masks covering

the nose and mouth, social distancing by maintaining a 1-meter distance from others, and

monitoring for symptoms (World Health Organization [WHO], 2022). These behaviors

were also largely implemented in schools after the height of the pandemic creating a

culture and environment different than what students and staff were used to.

When looking at research related to major life events such as pandemics and

natural disasters, research on the effects of Hurricane Katrina served as a comparison for

the Covid-19 pandemic as they shared similar long-term impact and destabilized communities. The Covid-19 pandemic may have had similar social, emotional, and behavioral impacts on current students. Hurricane Katrina had a large-scale impact on students in multiple states and over a significant period of time (Abraham et al., 2010; McLaughlin et al., 2009). Previous research on the impact of Hurricane Katrina on children showed negative social, emotional, and behavioral outcomes (Abraham et al., 2010; McLaughlin et al., 2009; Kronenberg et al., 2010). Heightened reports of social, emotional, and behavioral issues were documented in the months and years after the initial storm (Abraham et al., 2010; McLaughlin et al., 2009; Kronenberg et al., 2010).

Social, emotional, and behavioral skills were skills that helped an individual attain desired social outcomes (Seal et al., 2010). These skills included but were not limited to emotional regulation, cooperative engagement, problem-solving knowledge, and competencies in learning from experience (McClelland et al., 2007; Napolitano et al., 2021). As children spent a majority of their time in schools, the school environment was important in establishing and shaping social, emotional, and behavioral skills (Steedly et al., 2008; Taylor & Larson, 1999; Zins et al., 2007). These skills helped students succeed academically as well as socially (Denham, 2006; Zins et al., 2007). Due to school disruptions during Covid-19, students may have lacked opportunities to learn and practice these skills.

School disruptions can have a lasting impact on students especially in relation to social, emotional, and behavioral skills (Azmat & Ahmad, 2022; Denham, 2006; Hosszu

et al., 2022; Steedly et al., 2008; Taylor & Larson, 1999; Zins et al., 2007). Understanding what the impacts of school closures were on student well-being and development of social, emotional, and behavioral skills can help identify supports that can be utilized in the school to aid students as they adapt to the world post-Covid-19 (Brooks et al., 2020; Hosszu et al., 2022; Spitzer, 2020). Addressing student needs during a pandemic may be important for schools as identification of several variants have occurred indicating that the virus may continue to impact society and the way individuals interact (Spitzer, 2020).

Existing research on the effects of Covid-19 on children focused on social, emotional, and behavioral effects of large-scale community lockdowns during the height of the pandemic (Orgilés et al., 2020; Patrick et al., 2020; Zhou et al., 2020). Many of the studies surveyed parents and/or children to determine levels of symptoms of depression or anxiety and behavioral changes during lockdown (Bhogal et al., 2021; Xie et al., 2020). There was a lack of research focusing on student's social, emotional, and behavioral skills upon return to in-person learning after schools reopened. This research study will attempt to address the lack of research in schools related to the effects of school closures during the Covid-19 pandemic on social, emotional, and behavioral skills through analyzing school discipline referrals of students pre-Covid school closures and after schools reopened. It will attempt to identify the effects of school disruptions on the social, emotional, and behavioral skills of students and hypothesizes that school disruptions have resulted in decreased social, emotional, and behavioral skills in students.

CHAPTER II

Literature Review

Covid-19

Covid-19, also known as coronavirus 2019, was a disease stemming from the SARS-CoV-2 virus and impacted both the young and the old (World Health Organization [WHO], 2022). Respiratory illness caused by Covid-19 was usually experienced with mild to moderate symptoms (WHO, 2022). Older individuals and those, including school-aged children, with preexisting conditions such as diabetes, asthma, cancer, cardiovascular disease had a higher risk of developing serious illness (WHO, 2022). Symptoms of the virus included sore throat, cough, difficulty breathing, fever, fatigue, loss of taste and/or smell, and headache (Chen et al., 2020; Pantelis et al., 2021; WHO, 2022). More severe cases occurred with labored breathing and reduced white blood cells (Chen et al., 2020). Individuals were infected by the virus if they were in close proximity with someone who had the virus (Pantelis et al., 2021; WHO, 2022). The virus propagated through liquid particles when infected individuals coughed, sneezed, talked, or spoke (Perez et al., 2021; WHO, 2022). As of March 12, 2022, there were over 400 million confirmed cases and over 6 million confirmed deaths across the world (WHO, 2022). As pandemics were unique experiences, schools and students were flexible in responding to the challenges created both at home and in the school by the Covid-19 pandemic.

Timeline

The first concerns of a disease outbreak occurred in Wuhan, China at the end of 2019 and beginning of 2020 (WHO, 2022). In early January of 2020, Chinese authorities confirmed a new coronavirus linked to the outbreak (WHO, 2022). In the same month, reports of positive cases in other countries such as Japan, Thailand, and the United States of America were documented. In late January of 2020, the World Health Organization (WHO) labeled the outbreak a public health emergency and provided containment guidance in February of 2020. To prevent the spread of Covid-19, school closures occurred in late February of the 2019-2020 school year either as mandatory or recommended prevention efforts (Decker et al., 2020). School closures began as a temporary response to growing concerns of Covid-19 but became a long-term response as many schools remained closed for the remainder of the 2019-2020 school year and offered a choice between in-person and remote learning for the 2020-2021 school year (Decker et al., 2020). In March of 2020, the WHO published guidance for schools, parents, and students which included suggestions for social distancing, mask wearing, washing hands, and flexibility in instruction for continuity (i.e., face-to-face and online options).

Local Responses

Initial responses to Covid-19 included a focus on quarantine, lockdown, isolation, and individual's behaviors. One of the large-scale initial responses taken by local governments was lockdowns which shut down local communities in an attempt to prevent

movement of individuals within and between communities. School closures occurred

across the United States of America impacting 48 states, the District of Columbia, four

United States territories, and ultimately directly impacting around 51 million public

school students (Decker et al., 2020). Recommendations were to wash hands often, cover

coughs, wear face masks covering the nose and mouth, social distance by maintaining a

1-meter distance from others and monitor for symptoms (WHO, 2022). Other responses

included isolation of individuals who showed symptoms or had tested positive and

quarantine of individuals who were in close contact with someone who either tested

positive or had symptoms of Covid-19 (Brooks et al., 2020; WHO, 2022). Due to these

recommendations, school life upon return to schools during the 2020-2021 school year

took on a different tone. Many schools offered a choice of in-person or remote learning

for a few weeks at the beginning of the school year and the option for remote learning if

sick with Covid-19 or isolating. School recommendations for students and teachers were

to wear masks in the classroom and social distance by having desks spaced at least six

feet away from each other (Centers for Disease Control and Prevention [CDC], 2022a).

Social interactions were not the same as those experienced pre-pandemic which possibly

led to skill deficits in identifying social cues such as facial expressions due to face mask

wearing. With community reactions to the pandemic, routine life events were disrupted.

Major Life Events

Hurricane Katrina

Major life events that disrupt life included natural disasters and pandemics. One well-known example of a natural disaster with long-term life disruption similar to the Covid-19 pandemic was Hurricane Katrina, which occurred in August of 2005. The hurricane impacted coastal regions and many cities in Alabama, Louisiana, and Mississippi (McLaughlin et al., 2009). After the initial storm, many families displaced from their original homes lost nearly all of what they had before. These families relocated to new communities or attempted to rebuild in their original communities. These circumstances included disruptions in schooling, community ties, and financial instability, among others (Abraham et al., 2010; McLaughlin et al., 2009) mirroring to some extent the situation faced by students during the Covid-19 pandemic.

In a study conducted by Abraham et al. (2010), the families of 283 children from Louisiana and Mississippi completed interviews to determine the prevalence of serious emotional disturbance and the long-term effects of Hurricane Katrina. Data collection occurred at four different points of time between 2006 and 2010 with the Strengths and Difficulties Questionnaire (Goodman, 1997) utilized to measure emotional problems, hyperactivity, conduct problems, peer problems, and prosocial behavior. At the third round, Abraham et al. found that 32% of children were at least one year behind in age for their grade which was twice the regional pre-Katrina average. Parents reported emotional and behavioral problems at the fourth wave of interviews. Mental health condition

diagnoses made in children as reported by parents decreased over time, but the overall cumulative prevalence stayed around 37% of children. A higher number of children impacted by Katrina than national averages reported having serious emotional disturbance (SED). Factors that impacted SED in children included the child's prior mental health problems, low levels of prosocial behaviors in children, poor parental mental health, low parental life recovery scores, low parental sense of community, financial stressors on the family, poor family functioning, parental perception of unsafe schools and communities, and parental sense of social disorder (Abraham et al., 2010). Both Hurricane Katrina and the Covid-19 pandemic destabilized student's day to day experiences and sense of normalcy and safety (Decker et al., 2020). Similar to how Hurricane Katrina resulted in elevated emotional and behavioral problems as well as declined educational advancement, impacts of Covid-19 school closures on the academic and social functioning of students likely resulted in declined skills important for student success within the classroom.

Although the main effects of the Covid-19 pandemic were largely felt at the end of the 2019-2020 school year, schools and students continued to be impacted by the pandemic into the 2020-2021 and 2021-2022 school years such as the continued use of face masks by some teachers and students as well as heightened absences due to exposure or contraction of Covid-19. Similarly, Hurricane Katrina had long ranged effects on children and families as schooling, community, and financial challenges and instability plagued the population directly affected by the storm. Within the months after the initial

storm, researchers who collected data from parents and children reported higher levels of depression, anxiety, post-traumatic stress symptoms, and SED in parents and especially in children (Abraham et al., 2010; Kronenberg et al., 2010). Follow-up studies conducted two to three years after the initial storm indicated continued issues in children with depression, anxiety, post-traumatic, and SED (Abraham et al., 2010; McLaughlin et al., 2009; Kronenberg et al., 2010). Researchers related children's risk for long-term impairment to hurricane related stressors (such as physical adversity or experience of death), a family history of psychopathology, and being from a lower socioeconomic background (McClaughlin et al., 2009). Although the levels of the previous symptoms and diagnosis decreased over time in young individuals impacted by the storm, concerning levels existed as a number of children experienced emotional and behavioral concerns above national averages (Abraham et al., 2010; Kronenberg et al., 2010). Especially of concern was that younger individuals around the ages of 9 to 11 reported higher numbers of emotional and behavioral symptoms when compared to individuals around the ages of 12 to 18 (Kronenberg et al., 2010). Children who continued experiencing family-related and school-related worry were more likely to show symptoms of distress three years after the hurricane (Kronenberg et al., 2010). As the effects of Hurricane Katrina lasted years after the initial storm, the Covid-19 pandemic likely had similar long-term impacts on students as they maneuvered the constantly changed recommendations and requirements of schools and society related to the Covid-19 pandemic.

Other Pandemics (H1N1, Ebola, MERS, SARS, etc.)

Diseases such as influenza a virus subtype H1N1 (H1N1), Ebola virus disease (Ebola), Middle East respiratory syndrome (MERS), severe acute respiratory system (SARS), and others triggered communities to implement containment procedures such as quarantine and isolation as preventative measures to slow the spread of the disease. These procedures not only impacted students' ability to participate in school once schools reopened for in-person learning but likely also had an emotional and behavioral impact on students. Quarantine during an outbreak or pandemic appeared to influence psychological well-being even a long-lasting impact (Brooks et al., 2020). In relation to H1N1 quarantine and isolation implementation in the United States, Mexico, and Canada, a study conducted by Sprang and Silman (2013) reported a higher likelihood of parents and children to meet criteria for post-traumatic stress disorder post-quarantine. Children from families who experienced isolation or quarantine were commonly diagnosed with acute stress disorder, adjustment disorder, and grief (Sprang & Silman, 2013). Families not exposed to these containment procedures had children who were commonly diagnosed with generalized anxiety disorder and adjustment disorder (Sprang & Silman, 2013). School-aged children likely experienced emotional and behavioral instability due to pandemic mitigation efforts observed in the school setting.

Existing Covid-19 Research on Youth

Around the World

        Students were impacted by their emotional responses to their environments. At the beginning of the Covid-19 pandemic, China was at the epicenter of the disease. As researchers looked to adolescents to determine the psychological effects of the pandemic, elevated depressive symptoms, anxiety symptoms, and a combination of both symptoms were expressed by high school aged Chinese students during the Covid-19 outbreak (Zhou et al., 2020). Through an online survey between March 8 to March 15, 2020, Zhou et al. (2020) found a prevalence rate of 43.7% for depressive symptoms, 37.4% for anxiety symptoms, and 31.3% for a combination of depressive and anxiety symptoms. Females were at higher risk for depressive and anxiety symptoms as well as students in higher grades (Zhou et al., 2020). Students from rural areas of China reported experiencing higher rates of depressive and anxiety symptoms which Zhou et al. (2020) attributed to poor economic conditions for rural families. In another study conducted by Xie et al. (2020), the researchers surveyed children in grades two through six who experienced lockdown, restricted to their home, for about 33.7 days. Depressive symptoms and anxiety symptoms were reported in 22.6% and 18.9% respectively of the students who completed the survey (Xie et al., 2020). Students who reported more worry related to being affected by Covid-19 and those who were not optimistic were at higher risk of depressive symptoms (Sarkadi et al., 2021). Depressive and anxiety symptoms

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likely impacted students in the school setting which led to decreased attention and focus on academic learning and increased difficulty in social interactions.

For youth in Italy and Spain, parents reported a change in their children's behaviors and emotional state during quarantine (Orgilés et al., 2020). Symptoms that parents reported about their children included irritability, concentration issues, uneasiness, worries, nervousness, and restlessness (Orgilés et al., 2020). Behavioral changes reported by parents included children getting more sleep, less physical activity, and more time spent on technology (Orgilés et al., 2020). Families that experienced higher levels of stress and had less cohesion throughout the quarantine period were related to higher levels of parent reported emotional problems (Orgilés et al., 2020).

Children in Bangladesh also experienced mental health issues during the pandemic. In a study conducted by Yeasmin et al. (2020), parents of children between the ages of five and fifteen filled out a questionnaire about their child's mental health with a focus on depression, anxiety, and behavior/emotional problems. Parent responses classified children into one of four categories: subthreshold, mild, moderately, and severe mental disturbances (Yeasmin et al., 2020). Results found that 43% of the children fell into the subthreshold category while 30.5% fell into mild, 19.3% fell into moderately, and 7.2% fell into severe categories (Yeasmin et al., 2020). Children who lived in urban areas had higher parent reported mental health problems (Yeasmin et al., 2020). During the height of the pandemic and specifically school closures, students dealt with emotional and behavioral concerns with continued receipt of education. Their focus likely was

spread thin (Raffaele et al., 2021) and the usual resources for support such as teachers and peers were likely not easily attainable (Brom et al., 2020). Online interactions allowed for some forms of connection yet in-person interactions such as nonverbal cues and proximity to others were not entirely replicated (Hosszu et al., 2022; Azmat & Ahmad, 2022).

Unlike many other countries that implemented large-scale mitigation efforts such as lockdowns or enforced quarantines, Sweden opted to continue functioning normally and relied on individual efforts to decrease the spread of the Covid-19 virus through the promotion of social distancing, wearing face masks, and washing hands often (Sarkadi et al., 2021). Many schools remained open throughout the pandemic. Elementary schools in particular remained opened while many secondary schools opted to move to distance education rather than use face-to-face teaching (Sarkadi et al., 2021). Despite students minimal school disruption due to lockdown procedures, many school-aged children expressed worry as a response to the pandemic. Common worries centered around family members becoming sick or dying from Covid-19 (Sarkadi et al., 2021). Older students also expressed worries oriented towards the future such as future employment opportunities, the world economy, and the state of democracy (Sarkadi et al., 2021).

With the changes that occurred in schools moving from in-person to online and then back to in-person learning and the use of face masks within the schools upon reopening, students might have experienced an emotional and behavioral response as they adapted to recommendations and requirements (Schwartz et al., 2021; Spitzer, 2020).

When students returned to school using face masks, students and staff were less able to identify emotions such as happiness while more easily identifying fear and sadness leading to diminished perceived happiness when interacting with others within the school setting (Spitzer, 2020). Schwartz et al. (2021) conducted surveys with students aged 12 to 18 during their first few weeks returning to school in the fall of 2020. A majority of students functioned well while returning to school. Females and older students scored higher on measures for negative affect (i.e., attention, depression) and cognitive/attention (i.e., attention, focus, organization, planning, memory). Younger students reported more conduct behaviors (i.e., anger management, bullying behaviors, substance abuse, deviance) than older students, and females reported higher conduct scores than males. Being male was a significant predictor of high conduct scores. Results indicated stress as an important predictor for the mental health of these students as they returned to school (Schwartz et al., 2021).

In the United States of America

Schools offered a variety of services and supports to students and their families such as food security and an environment to practice social skills, cooperative behavior, and emotion regulation (Patrick et al., 2020; Spitzer, 2020). Children and families were impacted by the various effects of the Covid-19 pandemic. In a national survey conducted in the United States, parents reported worsening mental health for both the parent and child (Patrick et al., 2020). Families with younger children reported worsening mental health more than families with older children (Patrick et al., 2020). Other factors reported

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by parents included loss of regular childcare, food insecurity, and decreased insurance coverage for children (Patrick et al., 2020). The pandemic destabilized various aspects of normal living for many families which created additional stress on families and particularly children during the Covid-19 pandemic as indicated by heightened levels of mental health concerns.

In school-aged children, the pandemic's effects were viewed through the mental health status of children. When comparing mental health symptoms expressed in children from pre-Covid to post-Covid-19 outbreak, there was an increase in mental health symptoms reported (Hussong et al., 2021). In a majority Black American sample of schoolchildren between the ages of 7 and 10, children reported increased fears related to the pandemic over time (Bhogal et al., 2021). Fear stemmed from social distancing requirements (Bhogal et al., 2021). This fear was possibly brought into schools especially during reopening of buildings and return to in-person learning. Student's fears likely impacted their ability to interact positively with peers and teachers and possibly manifested in distracting behaviors within the classroom.

While some negative outcomes were associated with the Covid-19 pandemic on mental health status of students, for some, there were positive outcomes as well. For children from lower socioeconomic status backgrounds, in a study conducted with a majority Black American sample of schoolchildren, internalized symptoms (i.e., anxiety, depression) decreased over time during lockdown procedures (Bhogal et al., 2021). For early adolescents in North Carolina, specific types of coping strategies were either

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helpful in mitigating or exacerbating mental health symptoms (Hussong et al., 2021). Problem-focused engaged coping utilized problem solving skills and cognitive restructuring to address a problem such as tackling a problem directly (Hussong et al., 2021). Emotion-focused engaged coping occurred when individuals sought social support and emotional expression such as when someone sought to talk to about feelings (Hussong et al., 2021). Emotion-focused disengaged coping involved social withdrawal and self-criticism (Hussong et al., 2021). Problem-focused engaged coping for example mitigated increases in symptomology while emotion-focused coping, both engaged and disengaged, related to increased symptomology during the pandemic (Hussong et al., 2021). For some students during school closures, practicing coping strategies they had previously learned or were learning at the time aided them in adapting to the stressors of the pandemic. For students who had not previously had practice with the implementation of coping skills prior to the pandemic, students possibly struggled identifying appropriate coping skills and implementing coping strategies for effective use.

School Disruptions During Covid-19 Pandemic

With school closures for the majority of the second half of the 2019-2020 school year, many schools implemented remote learning to finish the school year (Decker et al., 2020). The rapid shift to online learning resulted in challenges for both teachers and students. Teachers increased their daily and weekly interactions with students from March 2020 through May 2020 but continued to have concerns over these interactions (Decker et al., 2020). The 2020-2021 school year resorted to a mix of in-person and

remote options, and students were again placed in an odd situation for schooling. The interactions experienced during school closures were not the same as those experienced prior to the pandemic and the interactions after the height of the pandemic also differed from pre-pandemic interactions.

During the Covid-19 pandemic many schools moved to distance education which relied heavily on online platforms. Concerns stemming from the effectiveness of online classes due to attention issues related to being on a computer were considered throughout the pandemic. In a study utilizing a flanker task, a conflict processing task where selective regulation of attention is necessary for selecting a target flanked by conflicting stimuli, to determine the impact of social and emotional information on attention in children, Raffaele et al. (2021) found that attention in children was sensitive to social and emotional stimuli. During the task, children paid more attention to negative social stimuli and positive nonsocial stimuli when compared to positive social stimuli and negative nonsocial stimuli (Raffaele et al., 2021). Attention to emotional and social stimuli in online classes possibly placed an additional burden on children as it was likely more difficult for children to attend to emotional and social cues in addition to the academic material covered. This possibly led to deficits in interpretations of that information in social situations which negatively impacted the child's social-emotional behavioral skills.

Upon return to in-person learning once schools reopened, many students and teachers wore face masks and remained physically distant following recommendations for social distancing (CDC, 2022a). Spitzer (2020) indicated that face mask use might

impact student's ability to identify and recognize faces as well as facial and nonverbal cues. Interpreting facial expressions was important in understanding social interactions and meanings beyond the words communicated (Spitzer, 2020). Smiles, frowns, and other facial expressions were important clues for individuals during communication and masks hindered a person's ability to view these facial expressions (Spitzer, 2020). In addition, wearing face masks possibly made it difficult for young students to pick up on language. Spitzer pointed out how face masks made it difficult for speech to be heard and obstructed visual signals from the lips that aided in understanding speech. In addition, the eyes and mouth were important in discriminating between positive and negative emotions (Spitzer, 2020). Spitzer suggested that face masks covering the mouth possibly led to miscommunication of emotions such as less accuracy in identifying a smile or viewing fear more often based solely on the eyes. Positive social interactions and communications were possibly harder to experience and empathizing with others might have become difficult as emotional cues from the face were hidden by a face mask (Spitzer, 2020).

Social, Emotional, and Behavioral Skills

Interactions between individuals were important in establishing lifelong skills for living in society (Zins et al., 2007). Knowing how to regulate emotions, interact cooperatively, and problem solve for example were important for creating positive interactions and managing issues throughout life (Zins et al., 2007). These skills broadly fell into social, emotional, and behavioral categories which influence each other

(Napolitano et al., 2021). Schools were environments in which students were provided opportunities to practice social, emotional, and behavioral skills (Zins et al., 2007).

With the disruption to in-person learning due to the Covid-19 pandemic, students were not afforded the same opportunities to practice these skills as remote learning provided a different environment for learning than in-person interactions (Azmat & Ahmad, 2022; Hosszu et al., 2022). In a survey study conducted by Azmat and Ahmad (2022), students and teachers at a university that implemented online classes indicated a lack of interaction between students, a lack of social context cues, a lack of student collaboration, and a lack of ability to see facial expressions. Hosszu and colleagues (2022) found that identities related to teacher and student roles had been challenged and opened to re-negotiation as classes moved online. They also found that there were new presentations of oneself through webcams where some individuals felt that they had less control over how they expressed themselves or whether or not the home environment was conducive to online education (Hosszu et al., 2022).

Zieher et al. (2021) found that some schools and teachers utilized social and emotional programming or content through online platforms for students to continue to learn about social and emotional skills during school closures. School and/or district guidance for implementing SEL programming related to higher implementation of SEL programming with students (Zieher et al., 2021). Their results indicated schools and/or districts that supported the social and emotional needs of teachers were related to teacher reports of lower levels of challenge when implementing social and emotional learning

content through distance learning. Lack of technology or internet access created difficulties in exposing students to the SEL programming provided by schools (Zieher et al., 2021).

Social-emotional intelligence and competence were important for understanding social-emotional behavioral skills. Social intelligence focused on social interactions and was defined by the ability to successfully maneuver these situations utilizing emotional understanding of others (Seal et al., 2010). Interpersonal and intrapersonal knowledge were important factors related to social intelligence. Interpersonal intelligence depended on one's understanding of others such as their motivations and desires (Seal et al., 2010). Related to social intelligence was emotional intelligence. Within the social context, emotional intelligence was the use of emotional information for thoughts and behaviors (Seal et al., 2010). Being able to identify, differentiate, and monitor one's own emotions and the emotions of others were key aspects of emotional intelligence (Seal et al., 2010). Lastly, competence was defined as the ability to reach an outcome (Seal et al., 2010). Competence was the result of behaviors directed by intent towards a particular goal (Seal et al., 2010). The effectiveness of the behaviors within the context of the situation was determined by how well the behaviors met the intended purpose. Competence was developed through experience and environmental changes (Seal et al., 2010). Competence in social and emotional intelligence developed over time such as in the school setting.

Social emotional development (SED) was defined as the use of emotional information, behaviors, and traits to gain desired social outcomes (Seal et al., 2010). Aspects of SED included self-awareness, how one relates to others, creating change in the self and others, and consideration of others (Seal et al., 2010; Zins et al., 2007). These main areas covered a wide range of information from social interactions. Being aware of individual preferences, how one's actions impact others, being familiar with and recognizing one's emotional states, effective relationship creation and maintenance, and ability to influence others were some specific considerations when discussing SED (Seal et al., 2010; Zins et al., 2007). For example, behavioral self-regulation required the individual to choose appropriate behaviors that helped them reach their desired goal (McClelland et al., 2007). Within the school context for example, students needed to plan what behaviors were necessary to comply with academic demands such as independent task completion and monitor emotions and behaviors throughout this process (McClelland et al., 2007). Essentially, SED connected research and information from social-emotional intelligence and competence into one model (Seal et al., 2010). SED focused on harnessing skills related to emotional understanding in social interactions to create more effective and positive behaviors in this context (Seal et al., 2010).

Social, emotional, and behavioral (SEB) skills included competencies related to creating and maintaining relationships with others, awareness of and managing emotions, learning from experiences, and determining and implementing steps to achieve goals (McClelland et al., 2007; Napolitano et al., 2021). Within the classroom these

competencies included being able to listen and comply with instructions, ability to problem solve without assistance, ability to work in groups on a task and selection of appropriate workspace for a task (McClelland et al., 2007). Rather than focusing on characteristics of individuals, skills emphasized what a person could do within context such as social interactions (Napolitano et al., 2021). Skills also emphasized the idea that these factors could be learned and developed over time (Napolitano et al., 2021). In a model of SEB created by Napolitano et al. (2021), five main skill domains were described: self-management, innovation, social engagement, cooperation, and emotional resilience. Specific skills that fell under these five domains included leadership skills, abstract thinking skills, stress regulation, teamwork skills, and task management to name a few (Napolitano et al., 2021). A mixture of behaviors showing an individual's abilities to effectively maneuver social interactions provided information on how the individual understood emotional and social stimuli. A more effective understanding and implementation of social and emotional information influenced selection of appropriate behaviors which allowed the student to focus more on learning academic material and positive interactions provided motivation to engage in the school environment.

Measuring Social, Emotional, and Behavioral Skills

Ways to measure social, emotional, and behavioral skills and competencies included direct observation of behaviors or skills (Denham, 2006). These observations were recorded or objectified through using inventories, scales, surveys, and questionnaires (Monnier, 2015). These measurement tools utilized observations and

knowledge of teachers, parents, or caregivers who spent time around the child of interest and provided information about behaviors and skills witnessed. Some measurement tools utilized self-reported information from children. These tools asked specific questions related to target skills, competencies, and behaviors identified with the social, emotional, and behavioral skills of interest. Scales provided information on a range of areas which created an overall picture of student behaviors in relation to social, emotional, and behavioral skills within the school setting. Other methods of recording behaviors included office discipline referrals (ODRs), school discipline referrals (SDRs), and disciplinary consequences.

Examples of some tools included the 2022 National Health Interview Survey (NHIS; National Center for Health Statistics, 2021) Questionnaire, Panorama Education Social-Emotional Learning Measures (Gehlbach, 2015), and Brief Impairment Scale (BIS; Bird et al., 2005). For the NHIS Questionnaire, phone interviews were conducted with parents to gather information about themselves and their children. The questions posed during the interview offered open ended, yes and no, and multiple-choice response types. Answers were recorded by the interviewer. The NHIS Questionnaire covered areas such as Upper Body, Motor Skills and self-care, Communication, Cognition, Anxiety, Depression, Behavior, Schooling, Social Support, Mental health care, and Bullying (National Center for Health Statistics, 2021). For the Panorama Education Social-Emotional Learning Measures, there was an online student version and an online teacher survey. This provided multiple sources of information to gain a better understanding of

the student's state. All questions offered a Likert scale as the response option. The Panorama Education Social-Emotional Learning Measures explored areas such as Grit, Self-management, Social Awareness, Self-Efficacy, Learning Strategies, Classroom Effort, Social Perspective Taking, Emotion Regulation, and Engagement (Gehlbach, 2015). The BIS was utilized in an interview style with the parent or caregiver for a child of interest. Each question provided a Likert scale as a response option such as 0 – No problem, 1 – some problem, 2 – a considerable problem, 3 – a serious problem. The BIS assessed interpersonal relations, school/work functioning, and self-care/self-fulfillment domains (Bird et al., 2005).

These various measures offered differing identification rates in relation to student social, emotional, and behavioral risk. For example, ODRs appeared to provide conservative identification rates in comparison with screeners based on ratings from observers (i.e., teachers) (Miller et al., 2015). While researchers indicated concerns about utilizing ODRs for identifying mental health concerns within the school environment, research findings indicated that ODRs better served as an indicator of externalizing problems such as at a systems level (school-wide) (Miller et al., 2015). Symptoms and concerns reported through research for school aged youth during the pandemic such as irritability, concentration issues, uneasiness, worries, nervousness, and restlessness (Bhogal et al., 2021; Orgilés et al., 2020) possibly presented themselves as external behaviors captured through ODRs/SDRs within the school setting upon return to in person schooling.

School Discipline Referrals. Discipline referrals were used for prevention, screening, intervention, monitoring, and detecting behavior problems within the school setting (Clonan et al., 2007; Hawken et al., 2007; McIntosh et al., 2010; Rusby et al., 2007). School discipline referrals (SDRs) and office discipline referrals (ODRs) served as an indicator of behavior for individual students and as a school wide measure of managing student behavior (Clonan et al., 2007; Hawken et al., 2007; Irvin et al., 2004; Rusby et al., 2007). Additionally, SDRs and ODRs provided useful information for intervention and when to intervene such as trends in behavior concerns for an individual student or across the school (i.e., where behavioral infractions were occurring, when they occurred, most common behavioral infractions, which students were presenting behavioral concerns, etc.) (Clonan et al., 2007; Rusby et al., 2007). SDRs served to predict teacher ratings and parent ratings of disruptive behavior in students in first grade (Rusby et al., 2007).

SDRs and ODRs as a measure of behavior had benefits and limitations. Benefits included a standardized reporting format for data collection, usually completed shortly after the incident, and included teacher-generated information further describing the behavior (Clonan et al., 2007). A few limitations included a lack of objectivity captured by the information reported, bias in reporting and documenting behavior infractions, as well as differences in perspective and tolerance of student behaviors deemed as infractions (Clonan et al., 2007). Multiple stake holders were likely involved in the process of reviewing and making determinations based on this data (Irvin et al., 2004).

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ODRs/SDRs were useful for decision making such as discipline outcomes (i.e., suspension, contact parents, etc.) (Irvin et al.,2004). With more people involved in the review and decision-making process, bias and subjectivity were further added establishing more concerns with objectivity (Irvin et al., 2004). Other concerns related to utilizing ODRs included reported high false positive and negative rates of ODRs when compared to standardized social skills, academic achievement, self-concept scales, and clinical cutoff scores (Irvin et al., 2004). On the individual level, there were likely over or under-identification of behavioral concerns solely based on ODRs/SDRs (Irvin et al., 2004). School-wide analysis of ODRs/SDRs were likely not as influenced by false positive and negative rates related to utilizing this type of data (Irvin et al., 2004).

In a research study conducted by Rusby et al. (2007) physical aggression was the main referral reason and predominantly resulted in time out as a consequence. The researchers also reported that students received more SDRs when their teacher indicated the child presented with more challenging behaviors than peers (Rusby et al., 2007). Additionally, ODRs/SDRs correlated with academic outcomes for students. Students with higher GPAs had less ODRs than students with lower GPAs (Irvin et al., 2004).

Najaka et al. (2001) found that as social competency skills improved, problem behavior exhibited by students also improved. The authors included crime and delinquency, alcohol and other drug use, school attendance problems, and conduct problems as "problem behavior." This relationship was stronger when observations by a researcher, parent, or teacher were considered in comparison to self-reports. Najaka et al.

also found that the bond to school (attachment and commitment) was a predictor for problem behavior where an increased bond to school resulted in decreased behavioral problems.

In researching the relationships between aggressive or withdrawn behaviors in children aged 5 through 12 years old, peer rejection, and psychological maladjustment, Ladd (2006) found peer rejection was a distinct predictor of externalizing and internalizing problems. Externalizing problems were defined as an emotional/behavioral under-control pattern including being angry, explosive, impulsive, distractible, or overactive. Within the classroom setting, Ladd identified classroom disruptiveness, hyperactive-distractible behavior, and delinquent behavior as the emotional/behavioral under-control pattern of behaviors. Internalizing problems included measures of anxiety and depression. Peer and teacher ratings determined peer group rejection. Ladd reported that peer rejection in conjunction with aggressive behavior was a strong predictor of externalizing problems for younger children when compared to older children. When considering internalizing problems, peer rejection and withdrawn behavior were important predictors across the age range which increased in significance as age increased (Ladd, 2006).

Hemmeler (2011) conducted a study that explored the relationship between exclusionary discipline and social and emotional competency. The author found that demographic variables (gender, ethnicity, and disability status) were unable to account for the number of discipline referrals for students. Exclusionary discipline included in-

school suspension, out-of-school suspension, detention, and expulsion. The variance in exclusionary discipline was better explained by the social and emotional competencies of the students as reported by teachers (Hemmeler, 2011).

Tan et al. (2021) analyzed ODR trends and students' social, emotional, and behavioral needs ratings to determine the relationship between these variables. ODR data were collected for 9th graders at an American high school in the Midwest. Both teachers and students provided ratings for the social, emotional, and behavioral needs of students. Overall, instances of disobedience, disruptive behaviors, and verbal abuse of staff involved ODRs. Tan et al. found that students with repeated ODRs had the lowest scores for social skills and the highest scores for problem behavior when compared to students who had one or no ODRs. For students with two or more ODRs, lower scores occurred for communication, cooperation, responsibility, empathy, and self-control based on student ratings. Teacher ratings of social skills were similar with the addition of a significantly lower score in engagement. Students with two or more ODRs also reported the highest levels of externalizing, bullying, and hyperactivity when compared to students who had one or no ODRs. Teachers reported high levels of externalizing, bullying, hyperactivity, and internalizing for students with two or more ODRs (Tan et al., 2021).

A recent research study conducted by Welsh (2022) explored the patterns, policies, and considerations that influenced school discipline during the COVID-19 pandemic. Both disciplinary referrals (ODRs) and disciplinary consequences (suspensions) were analyzed. After analyzing the data, Welsh (2022) documented

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decreased suspensions during the 2020-2021 school year and increased suspensions during the 2021-2022 school year. Exclusionary discipline (i.e., ODRs, removal from classrooms) decreased while non-exclusionary discipline increased (i.e., parent notification) during the 2020-2021 school year. Due to the unique experiences of schools and students during the COVID-19 pandemic, disciplinary practices impacted reporting of infractions (Welsh, 2022).

Importance for Children in School

SEB screeners in early childhood likely predicted SEB problems in later school functioning. Young children between the ages of twelve to thirty-six months who were screened with the Brief Infant-Toddler Social and Emotional Assessment which resulted in a positive screen later demonstrated elevated risk for SEB problems once they were in elementary school (Briggs-Gowan & Carter, 2008). In addition, teacher's perspectives of children's ability to be taught and to learn reflected children's effective interaction skills, emotional and behavioral regulation skills, and expressiveness within the classroom environment (Denham, 2006). Children who had more social-emotional competence had more positive social interactions (with both peers and teachers) in the classroom, experienced a more positive outlook on school, earned higher grades, had a better self-image, and were less likely to drop out of school (Denham, 2006; Zins et al., 2007). In contrast, children who lacked social-emotional competence were at risk for lower grades, were more likely to drop out, experienced more negative social interactions, and experienced more emotional and behavioral issues (Denham, 2006; Zins et al., 2007).

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Social and emotional development in preschoolers was similar across cultures as LaFreniere et al. (2002) identified three factors across preschoolers in Austria, Brazil, Canada, China, Italy, Japan, Russia, and the United States. The three factors identified were social competence, anger-aggression, and anxiety-withdrawal (LaFreniere et al., 2002). Across these countries, boys were more likely to be rated higher for anger-aggression and lower for social competence than female counterparts (LaFreniere et al., 2002). In addition, competence ratings increased with age (LaFreniere et al., 2002). Children who lacked social and emotional competence possibly struggled to think clearly within the school setting as they were likely overwhelmed by emotions and had difficulty effectively utilizing problem solving skills for day-to-day occurrences (Taylor & Larson, 1999). This was a concern for students who had experienced school disruptions during the Covid-19 pandemic.

These competencies were demonstrated to develop throughout childhood, but they could continue to develop as a child matured (Taylor & Larson, 1999). As children became adolescents, these skills continued to be important as they transitioned into adulthood with new responsibilities and more complex social interactions (Taylor & Larson, 1999). The school setting in which children spent a majority of their time provided the social setting needed for children to build and practice social, emotional, and behavioral skills to succeed academically (Steedly et al., 2008; Taylor & Larson, 1999; Zins et al., 2007). Teachers likely helped students learn how to deal with frustration, depression, and low self-esteem within the school setting which aided

student's ability to focus on academic material and prevented distractions by these factors (Taylor & Larson, 1999). Social and emotional skills not only aided in maneuvering social contexts but also aided the student in managing academic material such as the ability to set goals to study and to improve their engagement in academic tasks (Zins et al., 2007). Young students were likely most impacted by a lack of exposure and experience to social, emotional, and behavioral skills during Covid-19 school closures.

Rationale, Purpose, and Research Questions

SED skills provided children with the skills necessary to interact appropriately and successfully with others within their environments such as the school setting (Denham, 2006; Zins et al., 2007). Children with better SED skills generally experienced better academic and social outcomes than children who lacked SED skills (Denham, 2006; Zins et al., 2007). Early screeners for social, emotional, and behavioral problems aided in the identification of later school functioning (Briggs-Gowan & Carter, 2008).

Research indicated ODRs as indicators of externalizing problems at the school-wide level (Clonan et al., 2007; Hawken et al., 2007; Irvin et al., 2004; Rusby et al., 2007). Research reported a pattern of receiving ODRs and a lack of social skills (Tan et al., 2021). Additionally, poor social skills with peers related to internalizing and externalizing behaviors which possibly led to behavioral concerns which resulted in ODRS (Ladd, 2006; Tan et al., 2021).

Previous research indicated negative impacts of major life events such as natural disasters and pandemic isolation (Abraham et al., 2010; Kronenberg et al., 2010; Sprang

& Silman, 2013). Reported changes in mental health and behavior were of concern for youth (Abraham et al., 2010; McLaughlin et al., 2009; Kronenberg et al., 2010). Long term impacts of natural disasters and pandemics were also documented with youth as their communities were destabilized (Abraham et al., 2010; McLaughlin et al., 2009; Kronenberg et al., 2010).

School disruptions, closure of school buildings and online learning, in response to the Covid-19 pandemic uniquely impacted students (Azmat & Ahmad, 2022; Hosszu et al., 2022; Hussong et al., 2021; Patrick et al., 2020; Spitzer, 2020). Researchers documented the early impacts of the Covid-19 pandemic on youth which indicated emotional and behavioral changes (Bhogal et al., 2021; Hussong et al., 2021; Orgilés et al., 2020; Yeasmin et al., 2020; Zhou et al., 2020). In addition, school instruction provided a different environment for interactions which possibly impacted students' opportunities to practice social, emotional, and behavioral skills (Hosszu et al., 2022; Spitzer, 2020). Therefore, students were likely negatively impacted by the Covid-19 pandemic. Students returning to schools after the Covid-19 disruptions possibly faced difficulties acclimating to the school environment which resulted in ODRs (Schwartz et al., 2021).

The current study added to the literature on the effects of the Covid-19 pandemic on youth. Focus was on the pandemic's impact on the social, emotional, and behavioral skills of students in elementary school as recorded through ODRs. This study provided

information about the reported concerns of teachers, parents, and staff in schools related to the well-being of children post-pandemic school closures.

The research questions addressed in this study included:

1) Did school disruptions, such as the move from in person to online learning during the Covid-19 pandemic, impact students' social, emotional, and behavioral skills?

2) To what degree did the Covid-19 school closures impact the number of school reported office discipline referrals upon school reopening?

The hypotheses assessed through this study included:

1) School disruptions caused by the Covid-19 pandemic decreased students social, emotional, and behavioral skills which resulted in more disciplinary referrals for acting-out behaviors such as aggressive assault, fighting/mutual combat, assault, violated local code of conduct, permanent removal by teacher, harassment against an employee of the school district, and bullying upon return to full in-person instruction.

CHAPTER III

Method

School disruptions due to natural disasters or pandemics affected students (Abraham et al., 210; Loades et al., 2020; Sprang & Silman, 2013). Social, emotional, and behavioral well-being was impacted by changes related to the disaster or pandemic (Chew et al., 2020; Loades et al., 2020; Sprang & Silman, 2013). When studying the wide-reaching effects of hurricane Katrina, studies found increased depressive, anxiety, post-traumatic stress, and serious emotion disturbance symptoms in youth as well as behavioral concerns (Abraham et al., 2010; McLaughlin et al., 2009). The Covid-19 pandemic ushered in a new type of disruption in schools as many schools moved from in-person learning to online learning and eventually back to in-person learning. Isolation and quarantine during pandemics effected both adults and children through heightened depressive, anxiety, and post-traumatic stress symptom expression (Loades et al., 2020; Sprang & Silman, 2013). The sudden change to students and their family's lives could have been a catalyst for emotional concerns, social skills issues, and behavioral concerns (Loades et al., 2020).

Do school disruptions, such as the move from in person to online learning during the Covid-19 pandemic impact students' social, emotional, and behavioral skills? Further research into the social, emotional, and behavioral impact of school disruptions during the Covid-19 pandemic on students may indicate how these disruptions have impacted

students' well-being and how these effects can be addressed for negatively impacted students. This study hypothesizes that school disruptions caused by the Covid-19 pandemic have decreased students social, emotional, and behavioral skills resulting in more disciplinary referrals for acting-out behaviors such as aggressive behaviors.

Participants & Setting

Participants will include Texas schools. A random sample of 200 schools in Texas (elementary schools with grades kindergarten through fifth grade) will be identified from a list of schools in Texas created by the Texas Education Agency (TEA, 2020b). Inclusion criteria will include schools that completely or partially closed (utilized online and/or teleconference methods for teaching) during the height of the COVID-19 pandemic during the 2019-2020 and 2020-2021 school years. Schools that have disciplinary records for the 2017-2018, 2018-2019, 2019-2020, 2020-2021, 2021-2022 school years will be included. Exclusion criterion will be schools that do not have disciplinary records for the school years listed previously. Schools that did not fully or partially close during the 2019-2020 and 2020-2021 school years or did not return to fully in-person learning will be included in the sample and discussed in the analysis and limitations of this study. Utilizing the TEA website (TEA, 2022b), archived discipline referral data for each of the schools selected will be utilized. These annual reports are public data.

Variables

IV_1 = School closures due to COVID-19

DV_1 = Behaviors recorded in disciplinary referrals

The independent variable is defined as school closures during the COVID-19 pandemic. School closures may be partial or complete, meaning that students were provided with online or teleconferencing platforms for learning and were not required to physically attend classes in the school building. The COVID-19 pandemic time frame is defined as the 2019-2020 and 2020-2021 school years. Data will be collected for the school years before school closures (2017-2018 and 2018-2019), during school closures (2019-2020 and 2020-2021) and after schools fully returned to in-person teaching (2021-2022 school year). Data collected will include schools that offered a partial reopening or optional return to in-person instruction during the 2021-2022 school year and will be discussed in the analysis and limitations of this study. A partial reopening or optional return is defined as schools providing options for instruction through online or teleconferencing platforms and not requiring physical attendance in the school building.

The dependent variable is defined as behaviors recorded in school disciplinary records. ODRs have been documented for a variety of behaviors within the school setting such as property damage, harassment, physical aggression, fighting, major noncompliance, disruptions, non-serious physical contact, drug use, possession of alcohol, defiance, dress code violation, tardy, and noncompliance with adult requests (Hawken et al., 2007; Irvin et al., 2004; McIntosh et al., 2010; Rusby et al., 2007). Behaviors recorded for this study will include aggressive assault, fighting/mutual combat, assault, violated local code of conduct, permanent removal by teacher, harassment against

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an employee of the school district, and bullying as defined by the Texas Education Code and Texas Education Agency.

Violated code of conduct is defined as a violation of student code of conduct not included under TEC §§ 37.002(b), 37.006, or 37.007 (Texas Education Agency [TEA], 2022e). TEC §§ 37.002(b), 37.006, or 37.007, include acts where a student would be removed from class for "interfere[ing] with the teacher's ability to communicate effectively with students" and unruly behavior, where behavior is punishable as a felony, where the behavior has elements of an assault, where drugs are involved, and where serious conduct concerns are involved (those containing elements of aggravated assault, arson, murder, indecency with a child, aggravated kidnapping, aggravated robbery; Texas Education Code [TEC], 2005). Acts of "bullying, harassment, and making hit lists" as well as "reasons not specifically identified in TEC Chapter 37 that are adopted by the local school board" and included in the local student Code of Conduct are part of this category (TEA, 2022e).

Assault is a combination of Assault – District Employee and Assault – Nondistrict Employee. Both are defined as assault under the penal code §22.01(a)(1) which states that assault occurs when bodily injury is caused "intentionally, knowingly, or recklessly" (TEA, 2022e). A victim and a perpetrator must exist where the victim receives the bodily injury (TEA, 2022e). Assault – District Employee further identifies an assault against a school employee or volunteer ("a person providing services for or on behalf of a school district, on the premises of the district or at a school-sponsored or school-related activity

on or off school property, who does not receive compensation in excess of reimbursement for expenses") – TEC §37.007(b)(2)(C) (TEA, 2022e). Assault – Nondistrict employee further identifies an assault against someone other than a school district employee or volunteer - TEC §37.006(a)(2)(B) (TEA, 2022e).

Aggressive assault is a combination of Aggressive Assault – District Employee and Aggressive Assault – Nondistrict Employee. Both are defined as aggravated assault under Penal Code §22.02 which states it is an offense where serious bodily injury occurs to another person (including a person's spouse) and includes a deadly weapon being used or shown during the assault (TEA, 2022e). Aggressive Assault – District Employee further identifies an assault against a school employee or volunteer ("a person providing services for or on behalf of a school district, on the premises of the district or at a school-sponsored or school-related activity on or off school property, who does not receive compensation in excess of reimbursement for expenses") – TEC §37.007(d) (TEA, 2022e). A victim and a perpetrator must exist where the victim receives the bodily injury (TEA, 2022e). Aggressive Assault – Nondistrict employee further identifies an assault against someone other than a school district employee or volunteer - TEC §37.007(a)(2)(A) (TEA, 2022e).

Fighting/Mutual Combat excludes all offenses under Penal Code §22.01 such as actions including elements of assault (TEA, 2022e). This category is further defined as the occurrence of "physical combat using blows or force to strive to overcome" another

person and occurs between two or more individuals who mutually engage in combat (TEA, 2022e).

The disciplinary action reason code titled permanent removal by teacher is defined by TEA by referencing TEC §37.002(c) which indicates that "a teacher may permanently remove a student from the classroom (1) who has been documented by the teacher to repeatedly interfere with the teacher's ability to communicate effectively with the students in the class or with the ability of the student's classmates to learn; or (2) whose behavior the teacher determines is so unruly, disruptive, or abusive that it seriously interferes with the teacher's ability to communicate effectively with the students in the class or with the ability of the student's classmates to learn (2022b).

The TEA references the Texas Penal Code Section 42.07(a)(1), (2), (3), and (7) when defining behaviors falling into the category of harassment against an employee of the school district. The behavior is defined in part as intending to "harass, annoy, alarm, abuse, torment, or embarrass another" (TEA, 2022e). Particular behaviors include "initiat[ing] communication and in the course of the communication makes a comment, request, suggestion, or proposal that is obscene; threatens, in a manner reasonably likely to alarm the person receiving the threat, to inflict bodily injury on the person or to commit a felony against the person, a member of the person's family or household, or the person's property; conveys, in a manner reasonably likely to alarm the person receiving the report, a false report, which is known by the conveyor to be false, that another person has suffered death or serious bodily injury; sends repeated electronic communications in

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a manner reasonably likely to harass, annoy, alarm, abuse, torment, embarrass, or offend another" (TEA, 2022e).

Bullying as defined by TEC §37.0052(b) includes "engag[ing] in bullying that encourages a student to commit or attempt to commit suicide; incit[ing] violence against a student through group bullying; release[ing] or threaten[ing] to release intimate visual material of a minor or a student who is 18 years of age or older without the student's consent" (TEA, 2022e).

Procedures

Using TEA reports, a random number generator will be used to select 200 schools in Texas from a list of schools provided by TEA (2020b). If the randomly selected school does not meet inclusion criteria (i.e., offered a partial reopening or optional return to in-person instruction during the 2021-2022 school year), the random number generator will be utilized to randomly select another school from the TEA list. Archived annual discipline summary reports for the schools selected retrieved from the TEA website that meet inclusion criteria will be found for the 2017-2018, 2018-2019, 2019-2020, 2020-2021, 2021-2022 school years (TEA, 2022b). Archived annual discipline summary reports provide school determined summary totals for coded categories of office referrals resulting in disciplinary action such as aggressive assault based on definitions created by the Texas Education Code and Texas Education Agency (TEA, 2022e). Schools make determinations on how to code office disciplinary referrals and the Texas Education Code provides schools freedom in further refining certain coding terms such as violation of

student code of conduct. The number of aggressive assault, fighting/mutual combat, assault, violated local code of conduct, permanent removal by teacher, harassment against an employee of the school district, and bullying occurrences for each of the listed school years will be recorded and the percent of each office referral type determined through dividing the total number of referrals by the total number of enrolled students will be analyzed. The assault and aggressive assault each will be determined by combining the number for both district employees and non-district employees for an overall total of aggressive assaults and assaults.

Additional information about the schools selected will be collected including but not limited to the socio-economic status of the students served, the total number of students enrolled, and classification of the school such as an urban or rural school. Socio-economic status data will be collected from data provided through the TEA website and archived TEA reports providing a percentage of economically disadvantaged students by campus (TEA, 2023; TEA, 2020a). Classification of the school is based on National Center for Education Statistics (NCES) classifications that have been adopted by the TEA (TEA, 2022a; TEA, 2022c). NCES school classifications "classif[y] campuses into categories based on population size and proximity to urban areas" (TEA, 2022a; TEA, 2022c). The twelve classifications include City-Large, City-Midsize, City-Small, Suburban-Large, Suburban-Midsize, Suburban-Small, Town-Fringe, Town-Distant, Town-Remote, Rural-Fringe, Rural-Distant, and Rural-Remote (TEA, 2022a; TEA, 2022c). This additional information will be analyzed in connection with the disciplinary

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referrals through a regression analysis to further determine factors impacting changes in disciplinary referrals.

To verify the modality of school learning during the 2021-2022 school year currently defined as the first school year post-pandemic and signaling a return to full in person learning, the 2021-2022 School Learning Modalities dataset will be analyzed (CDC, 2022b). This dataset focuses on three learning modalities (in-person, remote, hybrid) for public and independent charter school districts. The data reported is for the timeframe of August 2021 through December 2022. Weekly modeled estimates for the modality utilized in districts were reported and may not accurately represent the learning modality used by the district at the time. Four different sources of data were combined to produce the 2021-2022 School Learning Modalities dataset including data from Burbio, MCH Strategic Data, the AEI/Return to Learn Tracker, and state dashboards (CDC, 2022b).

The data will be analyzed to determine whether a change in the total disciplinary referrals occurred over the years, whether a change in disciplinary referrals for specific behaviors occurred, and whether a significant change occurred when comparing each year to the 2021-2022 school year. The data will be analyzed using a MANOVA as the dependent variable includes multiple variables. If the MANOVA is significant, then a repeated measures ANOVA will be conducted for each of the dependent variables. In addition, a Post-Hoc analysis will be conducted. A Linear Regression model will also be conducted to determine if the socio-economic status of the students served, and the total

number of students enrolled have a relationship with the number of reported discipline referrals.

CHAPTER IV

Results

Demographics

Demographic information from the schools was analyzed prior to the MANOVA and ANOVA analyses. Information recorded for each school during the five-year period included the number of total enrolled students, school type, and the percentage reported of low socio-economic status students.

The number of total enrolled students was reported on the annual referral summary document for each school year providing a count of all the students enrolled in the school for that year (TEA, 2022b). A total of 200 schools were randomly selected within Texas. The 200 schools had a mean number of students enrolled of 607 over the five-school year period. The smallest school had a total of 42 students enrolled while the largest school had a total of 1,861 students enrolled. When considering each of the five-school years, the mean number of total enrolled students decreased from the 2017-2018 school year ($M = 621.74$) to the 2021-2022 school year ($M = 590.55$) as presented in Table 1. The largest change of school enrollment in consecutive school years occurred between the 2019-2020 school year ($M = 608.94$) and the 2020-2021 school year ($M = 594.15$). These patterns indicate that total school enrollments have decreased over the five selected school years with the largest decrease occurring during the height of the Covid-19 pandemic.

Table 1

Yearly Reported Number of Enrolled Students

Year	Total Number of Enrolled Students			
	M	SD	Minimum	Maximum
2017-2018	621.74	196.07	58	1861
2018-2019	619.60	194.99	63	1730
2019-2020	608.94	195.51	59	1668
2020-2021	594.15	192.75	42	1507
2021-2022	590.55	198.25	44	1395

School type describes the location and size of the physical area the school served. Labels developed by NCES (TEA, 2022a; TEA, 2022c) were utilized to classify schools into 12 categories (City-Large, City-Midsize, City-Small, Suburban-Large, Suburban-Midsize, Suburban-Small, Town-Fringe, Town-Distant, Town-Remote, Rural-Fringe, Rural-Distant, and Rural-Remote). A city is defined as a "[t]erritory inside an Urbanized Area and inside a Principal City" (TEA, 2022a). Suburban is defined as a "territory outside a Principal City and inside an Urbanized Area" (TEA, 2022a). The NCES defines a Town as a "territory inside an Urban Cluster" (TEA, 2022a). For city and suburban classifications, large, midsize, and small relate to describing the population size of the Principal city or Urbanized Area where Large relates to a Principal City or Urbanized Area with a "population of 250,000 or more," Midsize relates to a Principal City or Urbanized Area with a "population less than 250,000 and greater than or equal to 100,000," and Small relates to a Principal City or Urbanized Area with a "population less than 100,000" (TEA, 2022a). For towns, the classifications of Fringe, Distant, and

Remote describe the distance of the town from an Urbanized area as "less than or equal to 10 miles from an Urbanized area," "more than 10 miles and less than or equal to 35 miles from an Urbanized area," and "more than 35 miles from an Urbanized Area" respectively (TEA, 2022a). The last three classifications, Rural-Fringe, Rural-Distant, and Rural-Remote, are defined as a "[c]ensus-defined rural territory that is less than or equal to 5 miles from an Urbanized Area, as well as rural territory that is less than or equal to 2.5 miles from an Urban Cluster," "[c]ensus-defined rural territory that is more than 5 miles but less than or equal to 25 miles from an Urbanized Area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an Urbanized Cluster," and "[c]ensus-defined rural territory that is more than 25 miles from an Urbanized Area and also more than 10 miles from an Urban Cluster" respectively (TEA, 2022a).

As of the 2021-2022 school year, the 200 schools selected represented all 12 classifications of school types with the largest percentage falling in the Suburban-Large classification (21%). Suburban-Midsize (14.5%), City-Large (12.5%), City-Small (12.5%), and Rural-Fringe (10.5%) were also highly represented. The rest of the classifications each represented less than 10% of the sample. Rural-Distant (1.0%) and Rural-Remote (1.5%) had the smallest percentages. Over the span of the five school years, there were changes in the classification of the school types as depicted in Table 2. For example, City-Small represented 10.5% of the sample for the 2017-2018 school year increasing to 12.5% during the 2019-2020 school year. Overall, percentages stayed

consistent over the five school years with differences ranging from 2.0% to 2.5%

between school years for City-Small and Suburban-Small.

Table 2

Yearly School Type Classification

| School Type | Year | | | | |
| | 2017-2018 | 2018-2019 | 2019-2020 | 2020-2021 | 2021-2022 |
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)
City-Large	25 (12.5%)	25 (12.5%)	25 (12.5%)	25 (12.5%)	25 (12.5%)
City-Midsize	17 (8.5%)	17 (8.5%)	17 (8.5%)	17 (8.5%)	17 (8.5%)
City-Small	21 (10.5%)	21 (10.5%)	25 (12.5%)	25 (12.5%)	25 (12.5%)
Suburban-Large	42 (21.0%)	42 (21.0%)	42 (21.0%)	42 (21.0%)	42 (21.0%)
Suburban-Midsize	30 (15.0%)	29 (14.5%)	29 (14.5%)	29 (14.5%)	29 (14.5%)
Suburban-Small	8 (4.0%)	8 (4.0%)	4 (2.0%)	4 (2.0%)	4 (2.0%)
Town-Fringe	7 (3.5%)	7 (3.5%)	7 (3.5%)	7 (3.5%)	7 (3.5%)
Town-Distant	16 (8.0%)	17 (8.5%)	17 (8.5%)	17 (8.5%)	17 (8.5%)
Town-Remote	8 (4.0%)	8 (4.0%)	8 (4.0%)	8 (4.0%)	8 (4.0%)
Rural-Fringe	21 (10.5%)	21 (10.5%)	21 (10.5%)	21 (10.5%)	21 (10.5%)
Rural-Distant	2 (1.0%)	2 (1.0%)	2 (1.0%)	2 (1.0%)	2 (1.0%)
Rural-Remote	3 (1.5%)	3 (1.5%)	3 (1.5%)	3 (1.5%)	3 (1.5%)

The percentage of reported low socio-economic status students was retrieved from

TEA (2020a; TEA, 2023). Economically disadvantaged students are defined in a number

of ways. The TEA classifies students as economically disadvantaged if they meet one of

the following criteria: "eligible for free meals under the National School Lunch and Child

Nutrition Program," "eligible for reduced-price meals under the National School Lunch

and Child Nutrition Program," or other economic disadvantage" (TEA, 2022e). Other

economic disadvantage includes situations in which students are "from a family with an

annual income at or below the official federal poverty line, eligible for Temporary

Assistance to Needy Families (TANF) or other public assistance, received a Pell Grant or

comparable state program of need-based financial assistance, eligible for programs

assisted under Title II of the Job Training Partnership Act (JTPA), or eligible for benefits

under the Food Stamp Act of 1977" (TEA, 2022e).

The 200 schools had a mean percentage of students considered economically

disadvantaged of 50.05% for the five-school year period. The smallest percentage

recorded was 0.7% of students at one school while the largest was 100%. When

considering each of the five-school years, the mean percentage of economically

disadvantaged students increased from the 2017-2018 school year (M = 48.11) to the

2021-2022 school year (M = 51.52). These patterns indicate that the percentage of

students reported as economically disadvantaged has increased over the five selected

school years. Each year's mean percentage of economically disadvantaged students was

lower than the state percentage reported by TEA (2022d) for each of the five school years

selected. Table 3 summarizes the data for economically disadvantaged students.

Table 3

Yearly Reported Socio-Economic Status of Students

| Year | Percent of Economically Disadvantaged Students | | | | |
	M	SD	Minimum	Maximum	State Average
2017-2018	48.11	29.46	0.80	100.00	58.70
2018-2019	49.87	28.85	1.60	98.6	60.60
2019-2020	49.89	29.05	1.60	99.0	60.20
2020-2021	50.87	28.82	0.70	97.5	60.20
2021-2022	51.52	28.35	1.60	97.7	60.60

Note: State Average is based on TEA's report for all schools within the state of Texas (TEA, 2022d).

School Modalities for the 2021-2022 school year

To verify that schools had completely reopened with in-person learning following the height of the Covid-19 pandemic for the 2021-2022 school year, data was collected from the 2021-2022 School Learning Modalities dataset (CDC, 2022b). As the 2021-2022 school year is currently defined as the year post-pandemic with full return to in-person teaching, it was necessary to verify the learning modalities implemented especially at the beginning of this school year. Therefore, weekly modeled estimates for the weeks from 08/01/2021 through 09/26/2021 (a total of 9 weeks) for the learning modalities utilized by the selected school districts included in the sample were collected.

The 2021-2022 School Learning Modalities identified three learning modalities: In person, Hybrid, and Remote. In-person was defined as "all schools within the district offer face-to-face instruction 5 days per week to all students at all available grade levels" (CDC, 2022b). For the dataset, Hybrid was defined as "schools within the district offer a

combination of in-person and remote learning; face-to-face instruction is offered less than 5 days per week, or only to a subset of students" (CDC, 2022b). Lastly, Remote learning was defined as "schools within the district do not offer face-to-face instruction; all learning is conducted online/remotely to all students at all available grade levels" (CDC, 2022b).

The 200 schools selected represented 50 different districts. Of the 50 districts sampled, 44 districts were included in the 2021-2022 School Learning Modalities dataset. The following summary of the data collected reflects the 44 districts included in the 2021-2022 School Learning Modalities dataset.

Out of the 44 districts two districts were reported as having one or three weeks of hybrid learning during the nine-week timeframe. 98.99% of the weeks sampled from districts were classified as utilizing an in-person learning modality with 1.01% utilizing a hybrid modality. When considering the school districts represented, 99.76% of the schools utilized an in-person learning modality while 0.24% utilized a hybrid modality. Overall, the dataset indicated that a majority of school districts utilized an in-person modality between 08/01/2021 and 09/26/2021 indicating a full return to in-person learning during the 2021-2022 school year.

Preliminary Analysis

Prior to conducting the analyses, assumptions were considered through a variety of preliminary analyses of the data. Scatterplots indicated that the data was not linear. The assumption of normality is violated based on the histograms of the data. The percent

of code of conduct violation and fighting/mutual combat data displayed skew (positive skew) across the five years in the histograms created. The Q-Q plots further indicated a departure from normality for code of conduct violation and fighting/mutual combat. The box plots for code of conduct violation, assault, and fighting/mutual combat indicated outliers across the five years. The Kolmogorov-Smirnov test of normality indicated that scores for percent code of conduct violation and percent fighting/mutual combat were significantly non-normal across the five school years. This test also indicated that scores for percent assault for the 2019-2020, 2020-2021, and 2021-2022 school years were significantly non-normal.

MANOVA

A repeated measures MANOVA was conducted to determine the relationship between type of discipline referral and year reported. While collecting data, the researcher noticed that some ODR categories had low values (i.e., no reported ODRs for a specific category) reported for the annual summaries. Therefore, the six ODR categories with the lowest values (Percentage of Assault, Aggressive Assault, Fighting/Mutual Combat, Permanent Removal, Harassment against an Employee, and Bullying) were combined into one category (Combination of 6 ODR). Wilks' Lambda is significant $F(1, 995) = 239.10$, $p < 0.001$, $w = 0.81$, partial eta squared $= 0.19$. Mauchly's test of sphericity indicated that the assumption of sphericity has been violated, $X^2(0) = 0.00$, $p = 0.00$. The variances of the differences between groups are not equal indicating that the results of the repeated measures MANOVA may be unreliable as the F-ratio may

be inflated. Therefore, Greenhouse-Geisser estimates of sphericity ($\varepsilon = 1.00$) were used to correct the degrees of freedom.

There was a significant main effect of referrals, $F(1.00, 995.00) = 239.10$, $p < 0.001$, partial eta squared $= 0.19$. If we ignore the year of reported referrals when looking at reported discipline referrals, the number of referrals reported for each type of referral significantly differed. There was a significant main effect of report year, $F(4.00, 995.00) = 4.59$, $p = 0.001$, partial eta squared $= 0.02$. If we ignore the type of referral, the number of referrals made for the five years of reported data significantly differed.

There was a significant referral x year interaction, $F(4.00, 995.00) = 5.16$, $p < 0.001$, partial eta squared $= 0.02$. This effect indicated that the number of referrals made for each type of referral was significantly different in the five selected years of reports. The number of referrals for each type differed based on the report year. There was a significant difference between the 2020-2021 school year and the 2021-2022 school year reports, $p < 0.05$.

The percentage of Code of Conduct Violation had an overall decrease from the 2017-2018 school year to the 2021-2022 school year (see Table 4). There was an increase in the mean percentage of referrals between the 2017-2018 school year ($M = 5.86$) to the 2018-2019 school year ($M = 6.88$). Then a decrease was reported for the 2019-2020 school year ($M = 4.08$) and the 2020-2021 school year ($M = 2.74$). An increase was reported for the 2021-2022 school year ($M = 5.05$).

An overall decrease in the percentage of the combination of Assault, Aggressive

Assault, Fighting/Mutual Combat, Permanent Removal, Harassment Employee, and

Bullying referrals occurred over the five school years (see Table 4). The percentage

decreased from the 2017-2018 school year (M = 0.16) to the 2018-2019 school year (M =

0.13). An increase in percentage occurred between the 2018-2019 school year (M = 0.13)

and the 2019-2020 school year (M = 0.17). A decrease in percentage occurred between

the 2019-2020 (M = 0.17) and the 2020-2021 (M = 0.07) school years. Finally, an

increase occurred between the 2020-2021 (M = 0.07) and 2021-2022 (M = 0.09) school

years. The largest decrease occurred between the 2019-2020 school year (M = 0.17) and

the 2020-2021 school year (M = 0.07).

Table 4

Means and Standard Deviations of Referral Type Percentage based on School Year

	Conditions	
	Code of Conduct Violation	Combination of 6 ODR
Variable (Year of report)	M (SD)	M (SD)
2017-2018	5.86 (10.57)	0.16 (1.05)
2018-2019	6.88 (14.63)	0.13 (0.79)
2019-2020	4.08 (8.10)	0.17 (1.12)
2020-2021	2.74 (6.27)*	0.07 (0.61)*
2021-2022	5.05 (9.58)	0.09 (0.51)

Note: * indicates statistical differences at alpha <0.05 using Simple contrast to 2021-2022 school year; Combination of 6 ODR = Percentage of Assault, Aggressive Assault, Fighting/Mutual Combat, Permanent Removal, Harassment Employee, and Bullying for the annual report

Repeated Measures ANOVA

A repeated measures ANOVA was conducted to determine the relationship between type of discipline referral and year reported. While collecting data, the researcher noticed that some ODR categories had low values (i.e., no reported ODRs for a specific category) reported for the annual summaries. Therefore, the six ODR categories with the lowest values (Percentage of Assault, Aggressive Assault, Fighting/Mutual Combat, Permanent Removal, Harassment Employee, and Bullying) were combined into one category (Combination of 6 ODR). Wilks' Lambda is significant $F(1.00, 999.00) = 235.19$, $p < 0.001$, $w = 0.81$, partial eta squared $= 0.19$. Mauchly's test of sphericity indicated that the assumption of sphericity has been violated, $X^2(0) = 0.00$, p $= 0.00$. The variances of the differences between groups are not equal indicating that the results of the repeated measures ANOVA may be unreliable as the F-ratio may be inflated. Therefore, Greenhouse-Geisser estimates of sphericity ($\mathcal{E} = 1.00$) were used to correct the degrees of freedom. The results indicated a significant effect of type of referral on the school year reported, $F(1.00, 999.00) = 235.19$, $p < 0.001$, partial eta squared $= 0.19$. The percent of combined referrals for Assault, Aggressive Assault, Fighting/Mutual Combat, Permanent Removal, Harassment Against an Employee, and Bullying is significantly different from Code of Conduct Violation referrals. A summary of the results is found in Table 5.

There was a significant difference between Code of Conduct Violation and the combined reported percentage of Assault, Aggressive Assault, Fighting/Mutual Combat,

Permanent Removal, Harassment Against an Employee, and Bullying referrals (F(1.00, 999.00) = 235.19, p < 0.001, partial eta squared 0.19). The Code of Conduct Violation referrals (M = 4.92) had a larger mean than the combined reported percentages of Assault, Aggressive Assault, Fighting/Mutual Combat, Permanent Removal, Harassment Against an Employee, and Bullying referrals (M = 0.12). The percent of Code of Conduct Violation referrals were more highly reported than the combined reported percentage of Assault, Aggressive Assault, Fighting/Mutual Combat, Permanent Removal, Harassment Against an Employee, and Bullying referrals.

Table 5

Means and Effects of Referral Type

Conditions				
Code of Conduct Violation	Combination of 6 ODR			
M (SD)	M (SD)	F	P	η_p^2
4.92 (10.30)	0.12 (0.85)*	235.19	< 0.001	0.19

Note: * indicates statistical differences at alpha <0.05 using Simple contrast to Code of Conduct Violation; Combination of 6 ODR = Percentage of Assault, Aggressive Assault, Fighting/Mutual Combat, Permanent Removal, Harassment Employee, and Bullying for the annual report

Post-Hoc Analysis

Due to unequal variances, the Games-Howell post-hoc test was utilized. Mean referral percentage was significantly larger for the 2017-2018 school year when compared to the 2020-2021 school year (p = 0.005). Mean referral percentage was also larger for the 2018-2019 school year when compared to the 2020-2021 school year (p =

0.003). The mean referral percentage for the 2020-2021 school year was significantly

smaller than the 2021-2022 school year (p = 0.043). The 2020-2021 school year during

the height of the COVID-19 pandemic had a significantly smaller mean referral

percentage when compared to the 2017-2018 (pre-pandemic), 2018-2019 (pre-pandemic),

and 2021-2022 (post-pandemic) school years (see Table 6).

Table 6

Multiple Comparisons for Referrals

Year (A)	Year (B)	Mean Difference (A – B)	p
2020-2021	2017-2018	-1.61*	0.005
	2018-2019	-2.10*	0.003
	2019-2020	-0.72	0.349
	2021-2022	-1.17*	0.043

Note: *Indicates significant at p = 0.05.

Linear Regression

A linear regression analysis was conducted to determine the relationship between

the percentage of students considered economically disadvantaged, the total number of

enrolled students, and the total percentage of all ODR referrals made for each year. A

total of five linear regression analyses were conducted for each of the five school years as

data from the same schools were collected across five school years. The following table

(Table 7) provides a summary of the results.

For the 2017-2018 school year, the percentage of students considered to be

economically disadvantaged appeared to significantly predict the total percentage of all

ODR referrals made for this school year (b = 0.160, Beta = 0.419, t = 6.495, p = <0.001).

The number of total enrolled students did not appear to significantly predict the total percentage of all ODR referrals made for this school year (b = 0.005, Beta = 0.089, t = 1.371, p = 0.172). The standardized beta value for the percentage of economically disadvantaged students (Beta = 0.419) indicated a positive relationship with the total percentage of all ODR referrals. The percentage of economically disadvantaged students accounted for 17.6% (R2 = 0.176) of the variance in the total percentage of all ODR referrals.

For the 2018-2019 school year, the percentage of students considered to be economically disadvantaged appeared to significantly predict the total percentage of all ODR referrals made for this school year (b = 0.193, Beta = 0.371, t = 5.624, p = <0.001). The number of total enrolled students did not appear to significantly predict the total percentage of all ODR referrals made for this school year (b = 0.007, Beta = 0.090, t = 1.359, p = 0.176). The standardized beta value for the percentage of economically disadvantaged students (Beta = 0.371) indicated a positive relationship with the total percentage of all ODR referrals. The percentage of economically disadvantaged students accounted for 13.8% (R2 = 0.138) of the variance in the total percentage of all ODR referrals.

Table 7

Linear Model of Predictors of Total Referrals Annually

Year		Predictor	b	SE B	β	p
2017-2018						
	Step 1					
		Constant	-1.64	1.40		0.241
		SES Percentage	0.16	0.03	0.42	<0.001
	Step 2	Constant	-5.01	2.82		0.078
		SES Percentage	0.164	0.03	0.43	<0.001
		Total Enrolled	0.00	0.00	0.09	0.172
2018-2019						
	Step 1					
		Constant	-2.69	1.98		0.177
		SES Percentage	0.19	0.03	0.37	<0.001
	Step 2	Constant	-7.21	3.88		0.064
		SES Percentage	0.20	0.03	0.38	<0.001
		Total Enrolled	0.01	0.01	0.09	0.176
2019-2020						
	Step 1					
		Constant	-0.75	1.17		0.522
		SES Percentage	0.10	0.02	0.33	<0.001
	Step 2	Constant	-4.89	2.29		0.034
		SES Percentage	0.11	0.02	0.35	<0.001
		Total Enrolled	0.01	0.00	0.14	0.037
2020-2021						
	Step 1					
		Constant	-0.84	0.91		0.353
		SES Percentage	0.07	0.02	0.313	<0.001
	Step 2	Constant	-4.13	1.73		0.018
		SES Percentage	0.08	0.02	0.33	<0.001
		Total Enrolled	0.01	0.00	0.15	0.027
2021-2022						
	Step 1					
		Constant	-0.61	1.36		0.655
		SES Percentage	0.11	0.02	0.33	<0.001
	Step 2	Constant	-3.56	2.54		0.164
		SES Percentage	0.12	0.02	0.34	<0.001
		Total Enrolled	0.01	0.00	0.09	0.172

For the 2019-2020 school year, the percentage of students considered to be economically disadvantaged appeared to significantly predict the total percentage of all ODR referrals made for this school year (b = 0.110, Beta = 0.331, t = 4.939, p = <0.001).

The number of total enrolled students appeared to significantly predict the total

percentage of all ODR referrals made for this school year (b = 0.006, Beta = 0.141, t =

2.096, p = 0.037). The standardized beta value for the percentage of economically

disadvantaged students (Beta = 0.331) and for total enrolled students (Beta = 0.141)

indicated a positive relationship with the total percentage of all ODR referrals. The

percentage of economically disadvantaged students and total enrolled students accounted

for 12.9% (R2 = 0.129) of the variance in the total percentage of all ODR referrals.

For the 2020-2021 school year, the percentage of students considered to be

economically disadvantaged appeared to significantly predict the total percentage of all

ODR referrals made for this school year (b = 0.072, Beta = 0.313, t = 4.636, p = <0.001).

The number of total enrolled students did appear to significantly predict the total

percentage of all ODR referrals made for this school year (b = 0.005, Beta = 0.150, t =

2.225, p = 0.027). The standardized beta value for the percentage of economically

disadvantaged students (Beta = 0.313) and for the total enrolled students (Beta = 0.150)

indicated a positive relationship with the total percentage of all ODR referrals. The

percentage of economically disadvantaged students and total enrolled students accounted

for 12.0% (R2 = 0.120) of the variance in the total percentage of all ODR referrals.

For the 2021-2022 school year, the percentage of students considered to be

economically disadvantaged appeared to significantly predict the total percentage of all

ODR referrals made for this school year (b = 0.112, Beta = 0.325, t = 4.829, p = <0.001).

The number of total enrolled students did not appear to significantly predict the total

percentage of all ODR referrals made for this school year (b = 0.005, Beta = 0.093, t = 1.370, p = 0.172). The standardized beta value for the percentage of economically disadvantaged students (Beta = 0.325) indicated a positive relationship with the total percentage of all ODR referrals. The percentage of economically disadvantaged students accounted for 10.5% (R2 = 0.105) of the variance in the total percentage of all ODR referrals.

For all five school years, the percentage of economically disadvantaged students was a significant predictor for the total percentage of ODR referrals. The percentage of economically disadvantaged students increased from the 2017-2018 school year (M = 48.67%) to the 2021-2022 school year (M = 51.52%). The positive relationship between percentage of economically disadvantaged students and the total percentage of ODR referrals indicated that an increase in the percentage of economically disadvantaged students related to an increase in the total percentage of ODR referrals.

For two out of the five school years (2019-2020 and 2020-2021), the total number of enrolled students appeared to be a significant predictor for the total percentage of ODR referrals. The total number of enrolled students decreased from the 2017-2018 school year (M = 621.74) to the 2021-2022 school year (M = 590.55). The positive relationship between the total number of enrolled students and the total percentage of ODR referrals indicated that an increase in the total number of enrolled students related to an increase in the total percentage of ODR referrals.

CHAPTER V

Discussion

The current study attempted to determine if school disruptions, such as the move from in person to online learning during the Covid-19 pandemic, impacted students' social, emotional, and behavioral skills. Annual reports provided by TEA were gathered for the past five years and analyzed using repeated measures ANOVA and MANOVA. A linear regression analysis was also conducted to determine the relationship between the percentage of students considered economically disadvantaged, total number of enrolled students, and the total percentage of all ODR referrals made for each year.

There was a significant difference between the 2020-2021 school year and the 2021-2022 school year reports with the means of referrals being larger for the 2021-2022 school year when compared to the 2020-2021 school year. This indicated a difference between at least one pandemic school year and post-pandemic school year (return to full in-person learning). The Code of Conduct and the combination of the other six ODR categories (Percentage of Assault, Aggressive Assault, Fighting/Mutual Combat, Permanent Removal, Harassment Employee, and Bullying) reported the lowest percentages of referrals during the 2020-2021 school year when compared to the other five years selected.

The percentage of Code of Conduct Violation had an overall decrease from the 2017-2018 school year to the 2021-2022 school year. There was an increase in the mean percentage of referrals between the 2017-2018 school year to the 2018-2019 school year. Then a decrease was reported for the 2019-2020 school year and the 2020-2021 school year. Finally, an increase was reported for the 2021-2022 school year but the value for the 2021-2022 school year was lower than the value for the 2017-2018 school year.

An overall decrease in the percentage of the combined six ODRs occurred over the five school years. The percentage decreased from the 2017-2018 school year to the 2018-2019 school year. An increase occurred between the 2018-2019 school year and the 2019-2020 school year. Another decrease occurred between the 2019-2020 and the 2020-2021 school years. Finally, an increase occurred from the 2020-2021 school year to the 2021-2022 school year. The largest decrease occurred between the 2019-2020 school year and the 2020-2021 school year. This decrease occurred during the height of the COVID-19 pandemic as schools relied more heavily on remote learning.

The combined referrals for Assault, Aggressive Assault, Fighting/Mutual Combat, Permanent Removal, Harassment Against an Employee, and Bullying was significantly different from Code of Conduct Violation referrals. The percent of Code of Conduct Violation referrals was more highly reported than the reported percentages of Assault, Aggressive Assault, Fighting/Mutual Combat, Permanent Removal, Harassment Against an Employee, and Bullying referrals. There was a significant main effect of referrals and report year. This indicated that the number of reported discipline referrals differed, and

the number of referrals made each year differed. There was also a significant interaction between referral and year. This effect indicated that the number of referrals made for each type of referral was significantly different in the five selected years of reports.

The mean referral percentage was significantly larger for the 2017-2018 school year and the 2018-2019 school year when compared to the 2020-2021 school year. The mean referral percentage for the 2020-2021 school year was significantly smaller than the 2021-2022 school year. The 2020-2021 school year during the height of the COVID-19 pandemic had a significantly smaller mean referral percentage when compared to the 2017-2018 (pre-pandemic), 2018-2019 (pre-pandemic), and 2021-2022 (post-pandemic) school years.

The total school enrollments decreased over the five selected school years with the largest decrease occurring during the height of the Covid-19 pandemic between the 2019-2020 school year and the 2020-2021 school year. As of the 2021-2022 school year, the 200 schools selected represented all 12 classifications of school types with the largest percentage falling in the Suburban-Large classification. Rural-Distant and Rural-Remote had the smallest percentages. When considering each of the five-school years, the mean percentage of economically disadvantaged students increased from the 2017-2018 school year to the 2021-2022 school year. Each year's mean percentage of economically disadvantaged students was lower than the state percentage for each of the five school years selected.

For all five school years, the percentage of economically disadvantaged students was a significant predictor for the total percentage of ODRs. The positive relationship between percentage of economically disadvantaged students and the total percentage of ODRs indicated that an increase in the percentage of economically disadvantaged students related to an increase in the total percentage of ODRs. For two out of the five school years (2019-2020 and 2020-2021), the total number of enrolled students appeared to be a significant predictor for the total percentage of ODRs. The positive relationship between the total number of enrolled students and the total percentage of ODRs indicated that an increase in the total number of enrolled students related to an increase in the total percentage of ODRs.

Currently, based on the data and analysis, students do not appear to have been negatively impacted by the Covid-19 school disruptions. Their social/emotional/behavioral skills based on the percentage and type of discipline referral indicated that they have not experienced an increased number of reported referrals that resulted in disciplinary action. The 2021-2022 means for Assault, Aggressive Assault, Fighting/Mutual Combat, Permanent Removal, Harassment Against an Employee, Bullying, and Code of Conduct Violation referrals were similar to the means for the 2017-2018 and 2018-2019 school years indicating that pre-pandemic and post-pandemic means were similar. An increase in referrals occurred as students transitioned from remote learning to in-person learning. This increase resulted in percentages of referrals for the post-COVID school year being similar to pre-COVID percentages. Further trends

in data can help determine if long term impacts from school disruptions during the COVID-19 pandemic continue to have effects on students.

Implications

The unique experience of the COVID-19 pandemic impacted ODRs within the state of Texas. When looking at 200 elementary schools consisting of kindergarten through fifth grade students, unique outcomes and variables should be considered as communities move on from the COVID-19 pandemic. While ODRs significantly declined in the second year of the pandemic (2020-2021 school year) when schools mainly utilized online or remote learning, ODRs returned to levels similar to pre-pandemic reports (2017-2018 and 2018-2019 school years) upon return to in-person learning (2021-2022 school year). Additional research may be necessary to determine what variables may have led to these patterns. For example, many schools utilized physical distancing within classrooms, and this may have led to a decrease in ODRs upon return to in-person learning.

Additional considerations should be made for students moving forward. Across the five years included in this research study, an increase in the percentage of students identified as economically disadvantaged was found. In addition, economic disadvantage levels reported by schools were significantly and positively related to ODR percentages reported. As a larger percentage of students from schools were reported, ODRs appeared to also increase. As families may have financially struggled during the extended lockdown period, families may continue to struggle to return to previous levels of

financial stability from before the COVID-19 pandemic. This may further impact schools and students moving forward.

Lastly, the data collected indicated a decrease in the total number of enrolled students across the five years. For this particular study, data was collected from public schools excluding any information from private schools serving a similar age range. As families may have struggled financially during the COVID-19 pandemic, families may have also struggled to attain education for their children. Students enrolled in schools pre-pandemic may not have consistently stayed at the same school, may have left public school during the pandemic, or may have attended a newly built school. Further research is necessary to determine the factors related to this decline.

Implications for Schools and the Field of School Psychology

As schools continue to deal with the impacts of the COVID-19 pandemic on students and families, schools and the field of school psychology can utilize the results from this study to better plan services for current students. As there has been an increase in economically disadvantaged students in Texas elementary schools and a decrease in student enrollment related to higher levels of ODR occurrences, schools experiencing this can proactively incorporate school wide social, emotional, and behavioral supports for all students. Applying these supports across the school setting may help address any student deficiencies and further develop skills students may already have. This may help stabilize or decrease the number of ODRs across school grades in elementary schools.

Limitations and Future Studies

TEA categories of Reason Incident Counts allow for differences in interpretation between school districts as some categories (i.e., Violation of Student Code of Conduct) are partially defined by the school districts themselves. This can impact interpretation of results of the current study as different schools may report different behaviors under the same category. The disciplinary referral records may not capture the experiences of all students as only those behaviors deemed important enough to result in disciplinary action are represented. Therefore, behaviors that did not result in disciplinary action are not reflected in the data collected. Additionally, schools have the ability to determine which referrals to document in the annual summary reports as the TEA provides schools the opportunity to withhold information to protect student privacy.

Caution should be taken when generalizing the data to the general public such as all schools across the U.S. as only public schools within Texas with grades kindergarten through fifth grade were included within this study. In addition, schools that may not have fully returned to full in-person learning in the 2021-2022 school year were included within the sample. Many schools determined their own timelines for a complete return to in-person learning. In order to verify whether the schools selected had returned to in-person learning, data from the 2021-2022 School Learning Modalities dataset (CDC, 2022b) was utilized. This dataset reported weekly modeled estimates of the learning modality utilized by selected school districts. Therefore, the dataset may not have accurately reflected the modality utilized by the individual schools selected for this study.

In addition, the dataset did not include all 50 of the districts represented by the randomly selected sample used for this study providing limited information on the modality used during the 2021-2022 school year. Reports of ODRs related to Assault, Aggressive Assault, and Fighting/Mutual Combat may have been impacted as students may not have physically attended school leading to lower percentages of these referrals for the 2021-2022 school year.

Teachers may have limited information about the emotional well-being of students as they are only able to observe students and have discussions with them. The emotional experiences of the students will be an indirect estimate of how they are emotionally responding to events through observable behaviors. Likewise, socializing requires observing students and how they interact to come to conclusions about their level of functioning in this area. This can be influenced by the teacher's personal experience and expectations for student's social behavior in relation to reporting behaviors such as assault or code of conduct as a disciplinary referral. The interpretations of the teachers should also be considered when making any conclusions based on the data.

Conclusion

Based on the current data and analysis students do not appear to have been negatively impacted by COVID-19 school disruptions. Their social/emotional/behavioral skills based on the reported percentage and type of discipline referral indicated that they have not experienced an increased number of reported referrals upon return to in-person

learning. The 2021-2022 means for Assault, Aggressive Assault, Fighting/Mutual Combat, Permanent Removal, Harassment Against an Employee, Bullying, and Code of Conduct Violation referrals were similar to the means for the 2017-2018 and 2018-2019 school years as documented by TEA. An increase in referrals resulting in disciplinary action occurred as students transitioned from remote learning to in-person learning which resulted in percentages of referrals for the post-COVID school year being similar to pre-COVID percentages. Further trends in data can help determine if long term impacts from school disruptions during the COVID-19 pandemic continue to have effects on students.

REFERENCES

Abraham, D. M., Park, Y. S., Stehling-Ariza, T., & Redlener, I. (2010). Children as bellwethers of recovery: Dysfunctional systems and the effects of parents, households, and neighborhoods on serious emotional disturbance in children after hurricane Katrina. *Disaster Medicine and Public Health Preparedness, 4*(1), 17-27. https://doi.org/10.1001/dmp.2010.7

Azmat, M., & Ahmad, A. (2022). Lack of social interaction in online classes during covid-19. *Journal of Materials and Environmental Science, 13*(2), 185-196.

Bhogal, A., Borg, B., Jovanovic, T., & Marusak, H. (2021). Are the kids really alright? Impact of covid-19 on mental health in a majority Black American sample of schoolchildren. *Psychiatry Research, 304,* 1-7. https://doi.org/10.1016/j.psychres.2021.114146

Briggs-Gowan, M. J., & Carter, A. S. (2008). Social-emotional screening status in early childhood predicts elementary school outcomes. *Pediatrics, 121*(5), 957-962. https://doi.org/10.1542/peds.2007-1948

Brom, C., Lukavsky, J., Greger, D., Hannemann, T., Strakova, J., & Scaricek, R. (2020). Mandatory home education during the covid-19 lockdown in the Czech Republic: A rapid survey of 1st-9th grader's parents. *Frontiers in Education, 5*(103), 1-8. https://doi.org/10.3389/feduc.2020.00103

Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., &
Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it:
Rapid review of the evidence. *The Lancet, 395*(10227), 912-920.
https://doi.org/10.1016/S0140-6736(20)30460-8

Centers for Disease Control and Prevention. (2022a). Guidance for covid-19 prevention
in K-12 schools. https://www.cdc.gov/coronavirus/2019-
ncov/community/schools-childcare/k-12-childcare-guidance.html

Centers for Disease Control and Prevention. (2022b). *School Learning Modalities, 2021-
2022.* [Data Set]. Centers for Disease Control and Prevention.
https://healthdata.gov/National/School-Learning-Modalities-2021-2022/aitj-yx37

Chen, G., Wu, D., Guo, W., Cao, Y., Huang, D., Wang, H., Wang, T., Zhang, X., Chen,
H., Yu, H., Zhang, X., Zhang, M., Wu, S., Song, J., Chen, T., Han, M., Li, S.,
Luo, X., Zhao, J., & Ning, Q. (2020). Clinical and immunological features of
severe and moderate coronavirus disease 2019. *The Journal of Clinical
Investigation, 130*(5), 2620-2629. https://doi.org/10.1172/JCI137244

Chew, Q. H., Wei, K. C., Vasoo, S., Chua, H. C., & Sim, Kang. (2020). Narrative
synthesis of psychological and coping responses towards emerging infectious
disease outbreaks in the general population: Practical considerations for the
Covid-19 pandemic. *Singapore Medical Journal, 61*(7), 350-356.
https://doi.org/10.11622/smedj.2020046

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Clonan, S. M., McDougal, J. L., Clark, K., & Davison, S. (2007). Use of office discipline referrals in school-wide decision making: A practical example. *Psychology in the Schools, 44*(1), 19-27. https://doi.org/10.1002/pits.20202

Decker, S., Peele, H., & Riser-Kositsky, M. (2020, July 1). The coronavirus spring: The historic closing of U.S. schools (A timeline). *Education Week.* https://www.edweek.org/leadership/the-coronavirus-spring-the-historic-closing-of-u-s-schools-a-timeline/2020/07

Denham, S. A. (2006). Social-emotional competence as support for school readiness: What is it and how do we assess it? *Early Education and Development, 17*(1), 57-89. https://doi.org/10.1207/s15566935eed1701_4

Goodman, R. (1997). The strengths and difficulties questionnaire: A research note. *Journal of Child Psychology and Psychiatry, 38*(5), 581-586.

Hawken, L. S., MacLeod, K. S., & Rawlings, L. (2007). Effects of the behavior education program (BEP) on office discipline referrals of elementary school students. *Journal of Positive Behavior Interventions, 9*(2), 94-101.

Hemmeler, M.R. (2011). *Social and emotional competency and exclusionary discipline*. [Doctoral dissertation, Ohio State University]. ProQuest Dissertations and Theses Global. http://rave.ohiolink.edu/etdc/view?acc_num=osu1301855137

Hosszu, A., Rughinis, C., Rughinis, R., & Rosner, D. (2022). Webcams and social interaction during online classes: Identity work, presentation of self, and well-being. *Frontiers in Psychology, 12.* https://doi.org/10.3389/fpsyg.2021.761427

72

Hussong, A. M., Midgette, A. J., Thomas, T. E., Coffman, J. L., & Cho, S. (2021). Coping and mental health in early adolescence during covid-19. *Research on Child and Adolescent Psychopathology, 49*, 1113-1123. https://doi.org/10.1007/s10802-021-00821-0

Irvin, L. K., Tobin, T. J., Sprague, J. R., Sugai, G., & Vincent, C. G. (2004). Validity of office discipline referral measures as indices of school-wide behavioral status and effects of school-wide behavioral interventions. *Journal of Positive Behavior Interventions, 6*(3), 131-147. https://doi.org/10.1177/10983007040060030201

Kronenberg, M. E., Hansel, T. C., Brennan, A. M., Osofsky, H. J., Osofsky, J. D., Lawrason, B. (2010). Children of Katrina: Lessons learned about postdisaster symptoms and recovery patterns. *Child Development, 81*(4), 1241-1259. https://doi.org/10.1111/j.1467-8624.2010.01465.x

Ladd, G. W. (2006). Peer rejection, aggressive or withdrawn behavior, and psychological maladjustment form ages 5 to 12: An examination of four predictive models. *Child Development, 77,* 822-846. https://doi.org/10.1111/j.1467-8624.2006.00905.x

LaFreniere, P., Masataka, N., Butovskaya, M., Chen, Q., Dessen, M. A., Atwanger, K., Schreiner, S., Montirosso, R., & Frigerio, A. (2002). Cross-cultural analysis of social competence and behavior problems in preschoolers. *Early Education and Development, 13*(2), 201-220. https://doi.org/10.1207/s15566935eed1302_6

Loades, M. E., Chatburn, E., Higson-Sweeney, N, Reynolds, S., Shafran, R., Brigden, A.,
Linney, C., McManus, M. N., Borwick, C., & Crawley, E. (2020). Rapid
systematic review: The impact of social isolation and loneliness on the mental
health of children and adolescents in the context of covid-19. *Journal of the
American Academy of Child & Adolescent Psychiatry, 59*(11), 1218-1239.

McClelland, M. M., Cameron, C. E., Wanless, S. B., & Murray, A. (2007). Executive
function, behavioral self-regulation, and social-emotional competence: Links to
school readiness. In O. N. Saracho & B. Spodek (Eds.), *Contemporary
perspective on social learning in early childhood education* (pp. 83-107). Age
Publishing Inc.

McIntosh, K., Frank, J. L., & Spaulding, S. A. (2010). Establishing research-based
trajectories of office discipline referrals for individual students. *School
Psychology Review, 39*(3), 380-394.
https://doi.org/10.1080/02796015.2010.12087759

McLaughlin, K. A., Fairbank, J. A., Gruber, M. J., Jones, R. T., Lakoma, M. D.,
Pfefferbaum, B., Sampson, N. A., & Kessler, R. C. (2009). Serious emotion
disturbance among youth exposed to hurricane Katrina two years post-disaster.
Journal of the American Academy of Child & Adolescent Psychiatry, 48(11),
1069-1078. https://doi.org/10.1097/CHI.0b013e3181b76697

Miller, F. G., Chafouleas, S. M., Welsh, M. E., Cohen, D., Riley-Tillman, T. C., &
Fabiano, G. A. (2015). A comparison of measures to screen for social, emotional,

and behavioral risk. *School Psychology Quarterly, 30*(2), 184-196.

https://doi.org/10.1037/spq0000085

Monnier, M. (2015). Difficulties in defining social-emotional intelligence, competences

and skills – a theoretical analysis and structural suggestion. *International Journal*

for Research in Vocational Education and Training, 2(1), 59-84.

https://doi.org/10.13152/IJRVET.2.1.4

Najaka, S. S., Gottfredson, D. C., & Wilson, D. B. (2001). A meta-anlaytic inquiry into

the relationship-between selected risk factors and problem behavior. *Prevention*

Science, 2, 257-271. https://doi.org/10.1023/a:1013610115351

Napolitano, C. M., Sewell, M. N., Yoon, H. J., Soto, C. J., & Roberts, B. W. (2021).

Social, emotional, and behavioral skills: An integrative model of the skills

associated with success during adolescence and across the life span. *Frontiers in*

Education, 6, 1-10. https://doi.org/10.3389/feduc.2021.679561

Orgilés, M., Morales, A., Delvecchio, E., Mazzeschi, C., & Espada, J. P. (2020).

Immediate psychological effects of the covid-19 quarantine in youth from Italy

and Spain. *Frontiers in Psychology, 11*.

https://doi.org/10.3389/fpsyg.2020.579038

Pantelis, C., Jayaram, M., Hannan, A. J., Wesselingh, R., Nithianantharajah, J., Wanna,

C. M. J., Syeda, W. T., Choy, K. H. C., Zantomio, D., Christopoulos, A.,

Velakoulis, D., & O'Brien, T. J. (2021). Neurological, neuropsychiatric and

neurodevelopmental complications of covid-19. *Australian & New Zealand*

Journal of Psychiatry, 55(8), 750-762.

https://doi.org/10.1177/0004867420961472

Patrick, S. W., Henkhaus, L. E., Zickafoose, J. S., Lovell, K., Halvorson, A., Lock, S., Letterie, M., & Davis, M. M. (2020). Well-being of parents and children during the covid-19 pandemic: A national survey. *Pediatrics, 146*(4), https://doi.org/10.1542/peds.2020-016824

Perez, L. E., Sinitzyna, S. M., Quinones, M. A., & Dominguez, L. V. (2021). Infección del sistema nerviosos por el coronavirus SARS-CoV-2. *Revista de la Facultad de Medicina de la UNAM, 64*(4), 7-24.

https://doi.org/10.22201/fm.24484865e.2021.64.4.02

Raffaele, C. T., Khosravi, P., Parker, A., Godovich, S., Rich, B., & Adleman, N. (2021). Social-emotional attention in school-age children: A call for school-based intervention during covid-19 and distance learning. *Children & Schools, 43*(2), 107-117. https://doi.org/10.1093/cs/cdab010

Rusby, J. C., Taylor, T. K., & Foster, E. M. (2007). A descriptive study of school discipline referrals in first grade. *Psychology in the Schools, 44*(4), 333-350. https://doi.org/10.1002/pits.20226

Sarkadi, A., Torp, L. S., Perez-Aronsson, A., & Warner, G. (2021). Children's expressions of worry during the covid-19 pandemic in Sweden. *Journal of Pediatric Psychology, 46*(8), 1-11. https://doi.org/10.1093/jpepsy/jsab060

Schwartz, K. D. Exner-Cortens, D., McMorris, C. A., Makarenko, E., Arnold, P., Van Bavel, M., Williams, S., & Canfield, R. (2021). Covid-19 and student well-being: Stress and mental health during return-to-school. *Canadian Journal of School Psychology, 36*(2), 166-185. https://doi.org/10.1177/08295735211001653

Seal, C. R., Naumann, S. E., Scott, A. N., & Royce-Davis, J. (2010). Social emotional development: A new model of student learning in higher education. *Research in Higher Education Journal*, 1-13.

Spitzer, M. (2020). Masked education? The benefits and burdens of wearing face masks in schools during the current Corona pandemic. *Trends in Neuroscience and Education, 20*. https://doi.org/10.1016/j.tine.2020.100138

Sprang, G. & Silman, M. (2013). Posttraumatic stress disorder in parents and youth after health-related disasters. *Disaster Medicine and Public Health Preparedness, 7*(1), 105-110. https://doi.org/10.1017/dmp.2013.22

Steedly, K. M., Schwartz, A., Levin, M., & Luke, S. D. (2008). Social skills and academic achievement. *Evidence for Education*, *3*(2), 1-8.

Tan, K., Yore, C., & Hillen, M. (2021). Ninth grade office discipline referrals: The critical role of teachers in addressing students' social, emotional, and behavioural needs. *Emotional and Behavioral Difficulties, 26*(2), 119-134. https://doi.org/10.1080/13632752.2021.1880731

Taylor, H. E., & Larson, S. (1999). Social and emotional learning in middle school. *The Clearing House, 72*(6), 331-336. https://doi.org/10.1080/00098659909599420

Texas Education Agency. (2020a). *2017-2018 Texas Academic Performance Report.*

https://rptsvr1.tea.texas.gov/perfreprt/tapr/2018/srch.html

Texas Education Agency. (2020b). *2021-2022 Texas School Directory*. AskTED.

https://tealprod.tea.state.tx.us/Tea.AskTed.Web/Forms/tsindex2022.aspx

Texas Education Agency. (2022a, September). *Campus and District Type Data Search.*

Retrieved May 1, 2023, from https://tea.texas.gov/reports-and-data/school-

data/campus-and-district-type-data-search

Texas Education Agency. (2022b). *Discipline Reports*. https://tea.texas.gov/reports-and-

data/student-data/discipline-data-products/discipline-reports

Texas Education Agency. (2022c). *District Type, 2020-2021.*

https://tea.texas.gov/reports-and-data/school-data/district-type-data-

search/district-type-2020-21

Texas Education Agency. (2022d). *Enrollment in Texas public schools, 2021-22.*

https://tea.texas.gov/sites/default/files/enroll-2021-2022.pdf

Texas Education Agency. (2022e). *TSDS Web-Enabled Data Standards: Code Tables*.

https://tealprod.tea.state.tx.us/TWEDS/87/0/0/0/CodeTable/List/11650

Texas Education Agency. (2023). *Find a school for your child.* Txschools.gov. Retrieved

May 1, 2023, from https://txschools.gov/?view=schools&lng=en

Texas Education Code, 2 G § 37 (2005).

https://texas.public.law/statutes/tex._educ._code_section_37.002

Welsh, R. O. (2022) School discipline in the age of COVID-19: Exploring patterns, policy, and practice considerations. *Peabody Journal of Education, 97*(3), 291-308. https://doi.org/10.1080/0161956X.2022.2079885

World Health Organization. (2022). Coronavirus disease (COVID-19) pandemic. Retrieved August 8, 2022, from https://www.who.int/emergencies/diseases/novel-coronavirus-2019

Xie, X., Xue, Q., Zhou, Y., Zhu, K., Liu, Q., Zhang, J., & Song, R. (2020). Mental health status among children in home confinement during the coronavirus disease 2019 outbreak in Hubei Province, China. *JAMA Pediatrics, 174*(9), 898-900. https://doi.org/10.1001/jamapediatrics.2020.1619

Yeasmin, S., Banik, R., Hossain, S., Hossain, N., Mahumud, R., Salma, N., & Hossain, M. (2020). Impact of covid-19 pandemic on the mental health of children in Bangladesh: A cross-sectional study. *Children and Youth Services Review, 117,* 1-7. https://doi.org/10.1016/j.childyouth.2020.105277

Zhou, S. J., Zhang, L. G., Wang, L. L., Guo, Z. C., Wang, J. Q., Chen, J. C., Liu, M., Chen, X., & Chen, J. X. (2020). Prevalence and socio-demographic correlates of psychological health problems in Chinese adolescents during the outbreak of covid-19. *European Child & Adolescent Psychiatry*, *29,* 749-758. https://doi.org/10.1007/s00787-020-01541-4

Zieher, A. K., Cipriano, C., Meyer, J. L., & Strambler, M. J. (2021). Educator's implementation and use of social and emotional learning early in the covid-19

pandemic. *School Psychology, 36*(5), 388-397.

https://doi.org/10.1037/spq0000461

Zins, J. E., Bloodworth, M. R., Weissberg, R. P., & Walberg, H. J. (2007). The scientific

base linking social and emotional learning to school success. *Journal of*

Educational and Psychological Consultation, 17(2-3), 191-210.

https://doi.org/10.10180/10474410701413145

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