

'Everybody is sick and there won't be a cure': The Power of Privileging U.S. Student Voices through COVID-19 Drawings

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Abstract

The COVID-19 pandemic and the subsequent lockdown was particularly challenging for elementary students who experienced disruptions in almost all aspects of their daily activities. Our study addressed a dearth of U.S. studies documenting the adverse effects the pandemic created and continues to have for children by analyzing their drawings. This study was conducted post-lockdown after students resumed normal school operations. The Mosaic Approach framed this case study research that was conducted using drawings created by sixteen students in grades prekindergarten through fifth grade (ages 4 to 10 years old). Students drew what came to mind when thinking of COVID-19. We conducted a content analysis of the data and determined four dominant themes: (1) symptoms related to COVID-19, (2) evidence of psychological or emotional responses, (3) health and safety precautions, and (4) depictions of the virus cell. We assert children's drawings as a useful tool for educators to create opportunities to connect with students and potentially reduce their anxieties about issues, including those beyond the pandemic. This will be of interest to educators who may not have considered the power of children's drawings as a means to provide voice about current issues. It will also add to the global knowledge base about children's perceptions of COVID-19 and the resulting lockdown.

Keywords:

Children's Drawings, COVID-19, Social Emotional Support

Introduction

In this article, we explore the use of children's drawings as a means of communicating meaning assigned to the pandemic, a very confusing time for many school-aged children. First, we explore the existing global literature related to the pandemic, and then discuss children's drawings as a data source, which has long been used in the health care industry but is less prevalent in the educational community. Using the Mosaic Approach (Clark & Moss, 2001) to frame the study, we employed an adapted Draw and Write Technique (Pridmore & Bendelow, 1995) to analyze the drawings of sixteen participants in the United States, aged



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4-10 years old. Content analysis of the data revealed four overarching themes which included: Symptoms, Psychological, Health and safety precautions, and Virus cell depiction. We discuss the implications of providing drawing as a means for students to powerfully express their voice.

Literature Review

During the COVID-19 pandemic, researchers worldwide studied children's perceptions via their drawings. In Spain, researchers (e.g., González-Carlo, Varea, & García-Monge, 2022; Mondragon et al., 2022) investigated children's drawings about the lockdown and social distancing. Both studies found that children had major disruptions to their routines during lockdown that led to isolation, negatively impacting their social well-being. González-Carlo et al. noted children reported they missed playing outside with their friends and visiting their grandparents the most. Mondragon et al. call for more attention to children's voices by placing greater emphasis on social and inclusive policies to alleviate possible effects of isolation during future lockdown situations. Cornaggia et al. (2021) conducted a similar study on children's drawings during the pandemic lockdown in Italy. In their study, children experienced tranquility and emotional well-being while spending time with family during the pandemic. However, children also expressed feelings of sadness and loneliness due to not being able to interact with their friends (Cornaggia). In France, in a study of children aged 5-17, researchers (Martinierie et al., 2021) found that children had relatively accurate depictions of COVID-19 and concluded that they had developed coping mechanisms for fears of COVID-19. Researchers in South Africa explored children's well-being and safety due to social isolation through drawings during the pandemic (Haffejee & Levine, 2020). In the United Kingdom, Bhandari (2021) explored areas of worry in children's drawings during the pandemic. Finally, in Sweden, Rydström et al. (2022) explored how children accessed and perceived information during the COVID-19 pandemic. Through all of these studies, it is evident that using children's drawings to illuminate the artist's perceptions of how they assign meaning to the world is useful. To our knowledge, very little research has been conducted in the United States. This study adds to this growing body of international research on children's drawings during the COVID-19 pandemic.

Children's Drawings as a Data Source

Drawing is a common activity for elementary children. What may appear to some as a simple by-product of passing time, to others it can offer a tool for unlocking children's communication about their worlds and the meanings they assign to these worlds. Children's drawings go well past the production of art, and instead, interweave their thoughts and emotions

(Deguara, 2019), providing insights into children's way of thinking and how they make sense of the world around them. Drawing provides a child-centered approach to sharing those lived experiences that provide a window into a child's emotional and cognitive states (Bland, 2012; Mitchell, 2006; Zlateva, 2019). Drawing has been described as an effective means for children to reveal the complexities of their lived experiences (Mitchell, 2006; Walker, 2007) and is a natural way for children to express themselves without the typical filters of language. Children's drawings, however, are sometimes missed as a resourceful tool in understanding their social and emotional development in the elementary years. Children may be asked to draw as part of a formal lesson, for example a science lesson, or in lessons with the school's art teacher, but these drawings have a different focus. Such activities emphasize academic performance.

Children's drawings have been described as a means of gaining "informed insight" (Bradding & Horstman, 1999, p. 175), and are powerful tools for qualitative research, particularly when interpreted by the child instead of adults (Bradding & Horstman; Leonard, 2006; Günindi, 2015). Meanings are often attached to drawings and though sometimes more is drawn than can be described or translated into words, children can convey significant meaning to their drawings through writing or dictation (Dyson, 1986).

Several disciplines have used children's drawings in a variety of ways to better understand them. In education, children's drawings have been used to measure intelligence such as with the Draw-a-Person tests. In psychology, they have been used as therapeutic devices to access children's innermost feelings to assess their reactions to stress. In sociology, researchers have turned more frequently to the use of children's art as a means of visual communication (Leonard, 2006). In the field of health care, children's drawings have been used to reveal their perceptions of their own health issues and those of others (Bradding & Horstman, 1999), and their narratives offer valuable insights into children's wants and needs (Burgess et al., 2022).

Though certainly not universal, most children do seem to enjoy drawing and are considered competent in the activity (Leonard, 2006). Generally, drawing is viewed as an engaging, non-threatening and autonomous activity for children (Bradding & Horstman, 1999), while at the same time, it is also recognized as a reliable means to gather data (Zlateva, 2019). It is considered a developmentally appropriate means of collecting data with children as opposed to more common means of data collection such as surveys or interviews (Farmer et al., 2018). This study made use of children's drawings to better understand how they were making

sense of the COVID-19 virus post lockdown and upon reentry to school in 2022. Though the immediate threat of COVID-19 has significantly subsided, the information gleaned from these data provide important insight to educators and caregivers who continue to work with children who were indelibly marked by these events.

How Children Conceptualize Sickness

The health industry has long turned to children's drawings to better understand how children perceive illness. Children generally seem to categorize illness based on three characteristics or bodies of information: biomedical (e.g., the absence or presence of diseases); psychosocial (e.g., healthy people are happy and sick people are sad); and representations of healthy lifestyles (e.g., smoking is not a healthy lifestyle, but exercising is), (Mouratidi et al., 2015). Undoubtedly, a child's age plays an important factor in their perception of health and illness, and with increased maturity comes more complex, abstract, and scientific explanations of illness (Mouratidi).

Children's perceptions are shaped not only by their personal experiences and contexts of illness, but also by social context. Some research (e.g., Zaloudikova, 2010) suggests that children find it easier to define illness, which they typically see as a short-term condition, rather than health, which they typically view as a more permanent state.

Lasting Effects of COVID-19

In many aspects, the pandemic can be characterized as a trauma. Trauma describes those events that overwhelm a person's ability to adapt to life that leads to strong negative emotions that translate to perceptions of threat to self (Phelps & Sperry, 2020). Many facets of the COVID-19 pandemic and the lockdowns affected children and inflicted significant stress. Children's responses to trauma are largely determined by the surrounding adults' reactions and supports, as well as proximity to the traumatic event, and stability of the day-to-day routine (Fernandez, 2020). While many may believe that the pandemic is in the "rearview mirror," we assert that understanding children's perceptions of the COVID-19 virus is imperative to our current work with them in academic settings. Just because the threat of COVID-19 has subsided in most parts of the world, it is important to understand the lasting effects that COVID-19 may have on the mental, academic, and physical health of children, particularly as they are continually exposed to the news of emerging virus strands, new viruses such as Monkeypox, and continued attention and debate on immunizations and boosters. The effects of the pandemic, though still unraveling, are beginning to be documented.

Mental Health

For both children and adults, COVID-19 represents an interesting departure from many other forms of medical trauma. Even children who did not experience actual illness with COVID-19 often experienced anxiety, from mild to debilitating, about anything from contracting the illness (either themselves or a loved one) to interruptions of social time with their friends (Samji et al., 2022).

With the onset of the lockdown, social interactions and networks dissolved almost overnight and many children found this a devastating departure from their established support networks of peers and teachers (Pečja et al., 2021). Studies (e.g., Günindi, 2022) are beginning to document the ill-effects the lockdown had on socialization skills. In regard to mental health, children and adolescents are more likely to experience higher rates of depression and anxiety during and after periods of enforced isolation and this proved true following COVID-19 lockdown periods (Segre et al., 2021). Some research (Gupta & Jawanda, 2020) indicates that children reported increased anxiety and frustration about the future. There are clear associations between loneliness and mental health problems, mostly depression, even up to nine years later (Segre et al., 2021).

Other concerning findings from Günindi (2022) found that the pandemic adversely affected the social skills of preschool children, and that even though parents were able to spend more time with their children, these experiences were negatively overshadowed by worry over financial, health, and psychological issues, and decreased social and physical activities. At a time when children perhaps most needed the limited mental health services afforded to them in public schools, they were suspended due to school lockdowns.

Academic Health

Academic consequences from the pandemic are equally as concerning. Gupta and Jawanda (2020) summarize the negative effects on education as the following (p. 2): "Loss of quality, deprivation of education, inadequate learning, lack of digital access, fall in educational outputs, wide learning gap between low and high socioeconomic group." Just as social networks were removed abruptly with the lockdown, so were established in-person pedagogies and peer learning opportunities (Kamei & Harriott, 2021). The pandemic and subsequent school closures and online learning disproportionately affected the academic development of vulnerable populations: students living in poverty, those requiring special learning services, and those who speak English as an additional language (Hoofman & Secord, 2021). Important services were interrupted, and existing

challenges confounded. UNESCO (2020) indicates these devastating impacts hit low-income females the hardest, particularly in underdeveloped countries, as the risk increases for school drop-out, sexual exploitation, and early pregnancy.

Physical Health

Even though children were not as affected by the physical ailments of COVID-19 they are not free from impacts of the lockdown and the pandemic. Researchers (Gupta & Jawanda, 2020) express a variety of concerns related to physical wellbeing. These include the lack of outdoor space to which some children had access for physical activity, nutritional deficiency (particularly children who depend on school food programs), as well as routine health care visits that were often suspended as a result of overwhelmed health care facilities. They also point to negative effects that increased online learning at a computer may have on children, including back pain, eye strain, and insomnia.

Theoretical Framework

This study relies on the Mosaic Approach developed by Clark & Moss in 2001, which describes a strength-based approach for viewing children as experts in exploring and making meaning of their environments. It relies on positive, established relationships, and privileges active listening. Eskandari et al. (2021) denote that using the Mosaic Approach with children to understand their views can empower children to help shape their environment. The approach holds six key elements (Clark, 2017, p. 24), all of which were employed in this study. These elements include: multimethod, participatory, reflexive, adaptable, lived experiences, and embedded in practice (see Table 1).

Purpose of Current Study

The purpose of this study was to understand the perceptions of school-aged children (grades prekindergarten- fifth grade) about the COVID-19 through their drawings and dictations. We believed that by examining their drawings, we could gain a better sense of how children were processing these traumatic experiences, thus providing teachers and families with important insights as to how to help them cope. We note that the insights we gleaned apply to a specific snapshot in time, and that children continue to process, react, and reflect on their experiences.

Methods

We employed a variation of the draw-and-write technique, or DWT, (Pridmore & Bendelow, 1995), which came to prominence in the UK in the 1980s and became more popular around 2006 (Hartel et al., 2018). Known largely in association with the children’s health care industry (Hartel et al.), the technique can assume many forms, but in essence, as the name suggests, involves the child drawing in response to a theme, topic, or research question, and the child (or an adult) writing down their associated ideas. Such a technique is effective because it recognizes the rights of children and views the child as the expert of their experiences and involves children as participants in the research, instead of just using them as objects of research (Horstman et al., 2008). This type of research answers the call for less intrusive, child-friendly methods of collecting data (Machenjedze, 2019). Understanding children’s perceptions is paramount to improving the effectiveness of educational interventions. The DWT emphasizes the need for the child to feel valued, respected, and equal, at the end of the data collection (Horstman et al.).

Table 1
Elements of the Mosaic Approach in Study

Element	Characteristics of Mosaic Approach as Applied to Current Study
Multimethod	Recognizes different voices of children and creative strategies (Blaisdell, 2012). Students were free to draw their perceptions of COVID-19 without limitation. Children were viewed as collaborators in the study.
Participatory	Children are seen as experts in their own experiences and interpretations (Huser, 2015). No “right” or “wrong” determinations were made about their interpretations but rather appreciated as the child’s reality.
Reflexive	Adults include the child’s interpretation and reflect on that interpretation (Greenfield, 2011). Dictation was provided by the adult to explain the drawing, and both dictation and drawings informed results.
Adaptable	Can be applied in a variety of other settings (Clark & Moss, 2001). Children’s drawings are recommended as a strategy for teachers in a variety of other settings
Lived experiences	Values lived experiences over knowledge (Rogers, 2020). As researchers, we were more interested in what children experienced as a result of COVID-19, instead of what they knew about the virus.
Embedded into practice	Listening framework that can be an evaluative tool and potential to be used in practice (Botsoglou, 2019).

Participants

The study was conducted with 16 participants in grades pre-kindergarten through fifth grade across the state of North Carolina. In the United States, these grade levels include children ages four to ten years old. We used convenience sampling based on adult students enrolled in a graduate early childhood education class, taught by the first author. Students enrolled in a Diverse Children and Families course were invited to submit children's drawings as part of a class assignment on children's understanding of the COVID-19 pandemic. Children who participated were family members and friends of the adult university students. Through the class, students were informed of the aims of the assignment and were reminded that submissions were purely voluntary and would not affect their grade in the class in any way. They were also reminded that the child, once asked to participate, could withdraw their participation at any time without consequence. Children who agreed to participate in the drawings were directed, "Draw me a picture of what you think about when you think of COVID-19." We encouraged the adults to provide little elaboration on the prompt and to allow children as much time as needed to complete the drawing. Upon completion of the picture, the adult or child wrote a verbatim caption of the drawing. Annotating children's expressions about their drawing is a practical way of gaining insight into what the child is focused on in their representation of a particular experience (Halpenny, 2021). Prior to submission, the adults were asked to include the child's current grade level. Some also included the child's age. The child's name and gender were not collected.

Drawings were collected during March 2022, at the late onset of COVID-19 as the lockdown was eased, and children returned to school, with the initial goal of the assignment being solely exploratory for the purposes of a graduate teacher preparation class. Based on the quality of the drawings, the descriptions, and the emergence of themes, the idea of analyzing the drawings as data surfaced. Parents were contacted again and asked if their child's drawing could be used for a research study. Thereafter, the second author joined the study and participated in all phases of the research. In March 2022, the omicron variant of COVID-19 was widespread across North Carolina and the United States (Fowler & Jasper, 2022). Although children had largely returned to in-person learning at school and state mask mandates had been lifted in February, COVID-19 remained a prominent issue on local and national news and in daily discourse both among families and the broader society.

Analysis of Drawings

We used content analysis to explore children's drawings and annotations of experiences related to

COVID-19. Content analysis was chosen to analyze drawings because it keeps the participant's message as the focus rather than adults' interpretations (Merriman & Guerin, 2006). At the onset of data analysis, we independently reviewed the drawings and noted initial impressions of each picture. Next, we independently looked for and noted focal points of drawings such as situations, people, objects, and missing items (Halpenny, 2021). This led to our initial codes and categories. To ensure inter-rater reliability we analyzed the pictures and discussed our notes and initial impressions and focal points of the drawings together. Examples of codes included sickness, COVID-19 illustrations, precautions, emotional facial features, and personification. The codes were then grouped into four themes that are discussed below: (1) Symptoms, (2) Psychological, (3) Health and safety precautions, and (4) Virus cell depiction.

Results and Discussion

Analysis revealed four themes in children's drawings and depictions. Themes included Symptoms, Psychological, Health and safety precautions, and Virus cell depiction. Each theme is discussed below with supporting quotes and examples of children's drawings of each theme. While most drawings fit into one theme, some fit into multiple themes due to the content of the drawing and description.

Symptoms

Analysis of children's drawings and verbal descriptions indicated some drawings (n=7) centered on the symptoms related to COVID-19 such as coughing or sneezing. Some children spoke vaguely about "being sick" without discussing specific symptoms. For example, a child in first grade stated, "All the kids are sick." Another child in kindergarten stated, "COVID-19 is not good for people. It may cause passing germs and making people sick." Other children were more specific about symptoms in their depictions and drawings. One pre-kindergarten child shared, "COVID is cough. He got COVID because he was sneezing. COVID is not good." Interestingly, several children drew and described vomiting as a symptom of COVID-19. A pre-kindergarten child described COVID-19 symptoms by stating, "COVID is throwing up. It's like blue throw up. You can't breathe." Similarly, another pre-kindergarten child shared [Figure 1], "This is me throwing up. Vomit is coming through my teeth." We found this very interesting in that vomiting was not a common symptom of COVID-19. We wondered if some young children may automatically associate being "sick" with vomiting, particularly if this has been their own experience in the past.

Figure 1
You Can't Breathe



Finally, another pre-kindergarten child noted their drawing [Figure 2] shows, "My brother throwing up because he got sick. He was at school and got sick." Such statements are reflective of Chu et al.'s (2021) findings from research conducted with students aged 6-17 who were asked to write about their thoughts and feelings regarding COVID-19. Over 20% of the participants mentioned family concerns.

Figure 2
My Brother Throwing Up Because He Got Sick



Psychological

The Psychological theme captured drawings and/or verbal depictions with identifiable emotions or moods. This could be illustrated in the drawing of people or anthropomorphic characteristics given to the virus cell. They assigned psychological aspects to their drawings which included fear, death and destruction, clearly defined emotions and moods, and anthropomorphic features to the virus cell, often depicted as angry faces. For example, one second grader noted [Figure 3], "Sad days. Everybody is sick and there won't be a cure." The picture was drawn in black, which as Zlateva (2019) notes, can often be interpreted as a cry for help. While we do not know if the sole use of the black marker was intentionally or merely convenient, the limited use of color in this picture, and others from our data, are similar to

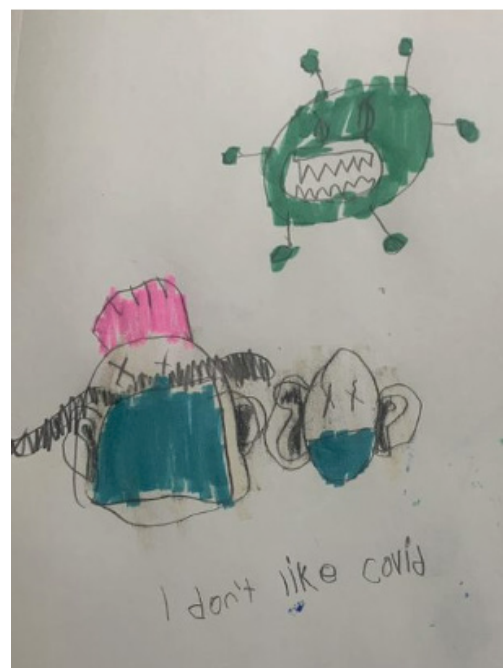
Cornaggia et al.'s (2022) study of children's drawings of "Before" and "During" COVID-19 lockdown. In their study, children used less color in drawings of "During" lockdown than "Before" drawings. Mandrapa (2015) notes that children who feel anxious often include clouds, rain, and flying birds in their pictures. This was also found in Linder et al.'s (2017) study of drawings of children who are undergoing cancer treatment. Dark and stormy weather was associated with drawings that depicted "sick days."

Figure 3
Sad Days



In one first grader's drawing [Figure 4] the virus cell was drawn somewhat realistically and had an angry face above two people. The people were drawn with the letter "x" in place of their eyes. Zlateva (2019) indicates that the drawing of eyes is the most important detail of the face, and that closed eyes represent "a desire to hide from the world, avoiding visual contact" (p.92). We interpreted the teeth as an aggressive depiction, also confirmed by Zlateva. The fact that the faces are close together may suggest there is close communication between people (Edwards, 2016).

Figure 4
I Don't Like Covid



Two first graders drew pictures of people dying (although they did not specifically say they died from COVID-19). Finally, one fifth grader captioned their picture, "Coronavirus destroying a plant." In their picture [Figure 5], the cell is depicted with slanted eyebrows and something orange dispelled from the mouth. This picture also denotes the bold strokes drawn close together that are associated with stress, strong feelings, and even anger (Mandrapa, 2015).

Figure 5
Coronavirus Destroying A Plant



This stood out to us as a psychological trait given the anthropomorphic features and the use of the word "destroy."

Reminiscent of this study, other studies (Martinerie et al., 2021; McGellen et al. 2021) have explored children's drawings of COVID-19 and found them to include anthropomorphic features in the virus cell. They note how this can be from the messaging they receive through media or news. In studies that have examined children's drawings related to the COVID-19 pandemic, other researchers have also found children include clear emotions in their drawings. In Thompson, Spencer, and Curtis' (2021) study on children's perspectives on COVID-19 within the United Kingdom found fear and sadness to be a primary theme of their findings. Children in their study reported being scared of getting the virus, anxiety over loved ones dying, and an abrupt change to their daily lives. Undoubtedly, COVID-19 elicits strong emotions in children which may continue to be conjured when discussed or heard on the news.

Health and Safety Precautions

The third theme, Health and Safety Precautions, included drawings and/or verbal depictions specific

to the public messaging during the pandemic. Five drawings and descriptions illustrated specific precautions related to the pandemic including wearing masks, social distancing and lockdown procedures, and getting vaccinated. One fourth grader said, "Going to school, but have to wear a mask." In the picture [Figure 6], the child labeled the person "me" and added, "mask to be safe." Another fourth grader drew a picture [Figure 7] of a mask and a needle, adding the caption, "My picture is a shot and mask. You should always wear your mask. You should get the vaccine which is the needle shot."

Figure 6
Going to School But Have to Wear A Mask

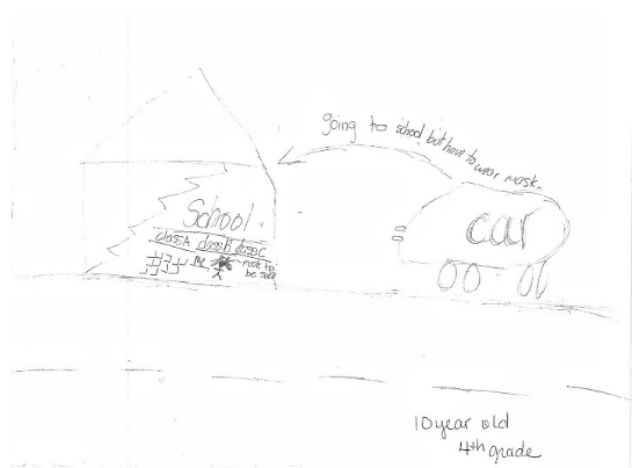
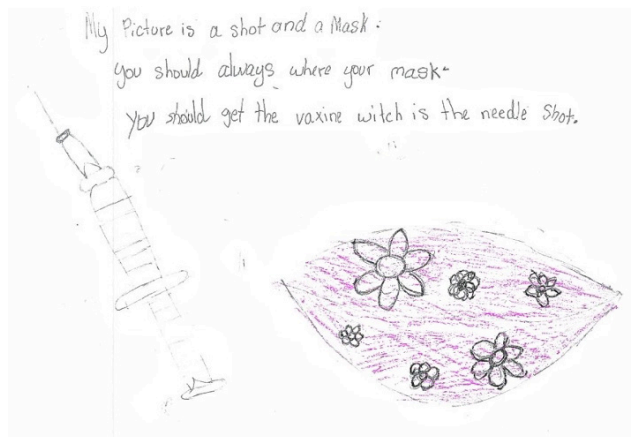


Image 7
A Shot And A Mask



Finally, a pre-kindergarten child also drew a picture of masks and noted, "You wear a mask so you don't get COVID-19. You have to go to the store and buy stuff and stay home." We found it interesting that in all sixteen drawings, no child drew a picture of handwashing. We speculated that children may have been more exposed to this health habit, and thus did not mention it because it was less novel than wearing masks, social distancing, or isolating.

Virus Cell Depiction

The Virus Cell Depiction theme included drawings that had a representation of the actual coronavirus cell that was circulated widely in the media. It is recognized as a gray spherical mass with red triangle-tipped spikes. Several children included their interpretations of the virus cell with a sphere and protruding spikes. For example, Figure 8 illustrates a fifth grader's representation of COVID-19, with a caption that reads, "COVID spreading COVID."

Figure 8
COVID Spreading COVID



These findings are supported by other studies (e.g., Bonoti et al., 2022; Joubert & Wasserman, 2020) in which children illustrated an accurate understanding of the virus cell. This has been attributed to the abundance of information and pictures shared via the news, social media, and health and safety resources (Bonoti et al., 2022). While access to information is helpful, it may also cause additional stress to children who are also processing the overwhelming amount of information or do not have an understanding of molecular cells.

Limitations

Despite the interesting findings of this study, there are a few limitations that should be noted. For example, because we imposed the research questions after the drawings were collected, we had no influence as to the exact methods used to initiate the drawings. Had we been present for the drawing activity, and known this would lead to research, we would have asked the children additional questions and recorded longer responses to elicit additional context around their assigned meanings. Additionally, we had little to no knowledge as to the drawing materials provided to children for their drawings. This became

particularly relevant as we reviewed pictures drawn with one or limited colors and wondered if this held any significance. Research (e.g., Farolkhi & Hashemi, 2011) suggests that the dark shading of face or body is correlated with both anxiety and depression, as is the choice of dark over light color choices. Not knowing if the color choice was intentional or merely based on available materials meant that we could not draw such conclusions.

Future studies may also wish to more closely note the ages of the artists, as developmental maturity is expected around age 7. As children become more mature in their understanding of biology, it reasons that their conceptualizations of COVID-19 may also be affected. Some research (e.g., Cornaggia, 2022) suggests that older children are more expressive in their drawing. More research is needed, however, as there are also studies (e.g., Bonoti et al., 2022) that suggest age-related themes are not dominant, and that children of all ages produce images with common characteristics.

Implications and Conclusions

This study reaffirms the use of children's drawings as a legitimate data source. We conducted the study to shed light on the perceptions children held about COVID-19 in a way that went deeper than simply asking them to respond verbally to questions. In so doing, we were able to determine common themes that were important to students. We offer this method as a resourceful tool for teachers and families to gain insights into the perceptions of children, particularly when they may not have the vocabulary to properly convey their thinking. Through drawing, children create an important entry to their way of thinking that can provide a trusted adult the opportunity to ask additional questions and clarifications. These windows into a child's thinking provides adults valuable information as to how to better equip them to cope with stressful and anxiety-producing situations. In fact, Kang et al. (2020) suggest art as a specific strategy for mitigating anxiety in children. For example, adults may be able to offer clear explanations about misconceptions, or simply provide additional emotional support, that otherwise may have been missed. Kang et al. report that fear of the unknown is particularly worrisome for children, and thus it serves children well to create opportunities for conversation in age-appropriate terms and increases their trust in the caregivers. While the pandemic may be less threatening now than at the time of this study, there is still a preponderance of situations and events that elicit anxiety in children (and adults). We assert that teachers can use times throughout the day as appropriate, to offer drawing opportunities for students, in order to gauge student well-being. The findings of this study demonstrate the impact that COVID-19 had on children, particularly

the negative associations with the lockdown, illness, and even death. While we may not know the impact this anxiety and negativity will have on children, it does send an important message that it is up to us, as adults, to continue to ask children how they are processing such information.

This study amplifies the need to continue to monitor public messaging. Many children repeated the messaging of wearing masks, getting vaccines, and maintaining social distance. Such findings indicate that public messaging (and perhaps parental reinforcement of this messaging) was effective, and has impacted children, who felt they knew what strategies to adopt to keep safe. It is important to continue public messaging in ways that are appropriate for both children and adults, as it is apparent that children do in fact internalize this messaging.

For researchers, the collection of children's drawings centered on a global pandemic creates a unique opportunity for cross-cultural analysis of children's lived experiences and perceptions. The COVID-19 pandemic created universal experiences across the globe including, but not limited to, possible illness, social isolation, and psychological distress including fear, anxiety, and post-traumatic stress. Examining children's drawings of their experiences during the pandemic allows researchers to compare across cultures during a given time frame. Given the handful of studies that examined children's drawings from the pandemic, there appears to be representation across the globe.

Because of this study, we more fully appreciate the power of drawing and dictation to provide children voice as to how they are interpreting their worlds. Discussions of drawings serve as an inviting way to involve students in sharing their thinking and is less intrusive than asking incessant questions in conversation. Drawings and focused dictations, though certainly not a replacement for other therapeutical strategies, can help empower even young students and provide adults with better understandings of the supports children need as they make sense of their world. One key takeaway from this study is that children are often eager to share their perceptions and understandings through drawing, so as adults, we would be remiss not to use this as a tool for increasing our capability to assist them.

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