

Article

Informing Policy and Practice: The Impact of COVID-19 on Adults with Physical Disabilities in Taiwan

Yi-Fan Li ^{1,*}, Chih-Tsen Liu ², Yingying Zhao ³ and Melissa Cornelius-Freyre ¹¹ Department of Interdisciplinary Learning and Teaching, The University of Texas at San Antonio, San Antonio, TX 78249, USA² Department of Educational Psychology and Counseling, National Taiwan Normal University, Taipei 106308, Taiwan³ School of Education, Calvin University, Grand Rapids, MI 49546, USA

* Correspondence: yi-fan.li@utsa.edu

Abstract

The COVID-19 pandemic has significantly changed the way we work and live. For people with disabilities, the pandemic has differentially affected their healthcare experiences in several ways. Although existing studies have investigated health-related experiences during COVID-19 with individuals with disabilities, fewer research studies have explored the specific impact of the pandemic on individuals with disabilities in Taiwan. In Taiwan, the government implemented unique COVID-19 policies and measures, such as contact tracing. For individuals with disabilities, many of whom were influenced by the Independent Living Movement and in the process of exploring the possibilities of living on their own with support from others, the impact of the pandemic on their daily lives remained mostly unknown. Therefore, this study explored the perspectives of individuals with physical disabilities regarding COVID-19 control measures and how the pandemic affected their daily experiences, particularly their health-related experiences. We conducted semi-structured one-on-one interviews with 10 participants from Taiwan. After analyzing the participants' experiences during the pandemic, three themes emerged: (1) concerns about COVID-19 policies; (2) emotional responses to the pandemic; (3) healthcare experiences during COVID-19. These themes guided our discussion of practice and policy implications.

Keywords: COVID-19; disabilities; Taiwan; inclusive emergency management

1. Introduction

Over recent years, the Coronavirus disease of 2019 (COVID-19) pandemic has significantly changed the way we work and live. Notably, the social distancing requirements led to more challenges and created a new normal in various facets of our lives. In Taiwan, the pandemic has significantly impacted people's lifestyles, business practices, education, and healthcare experiences due to social distancing measures [1–3]. For individuals with disabilities, the pandemic has differentially affected their health-related issues. COVID-19 has caused ongoing healthcare challenges for people with disabilities. People with disabilities often have pre-existing health conditions and rely on the assistance of caregivers, making them more susceptible to contracting the virus and consequently worsening their health outcomes [4–6]. People living with disabilities also had limited access to routine health care and rehabilitation services during the pandemic [7].



Academic Editor: Jong Hyock Park

Received: 16 April 2026

Revised: 24 June 2026

Accepted: 25 June 2026

Published: 29 June 2026

Copyright: © 2026 by the authors.

Licensee MDPI, Basel, Switzerland.

This article is an open access article distributed under the terms and conditions of the [Creative Commons Attribution \(CC BY\)](https://creativecommons.org/licenses/by/4.0/) license.

To prevent and control the transmission of COVID-19 in Taiwan, the government implemented a variety of strategies, including increasing face mask production to support mandatory mask wearing, promoting handwashing with soap, enforcing border controls, quarantining individuals diagnosed with COVID-19, and imposing travel and gathering restrictions [8]. To further prevent the spread of the pandemic, some of these policies required citizens to provide personal contact information before entering public spaces and mandated quarantine for individuals identified as having contact with confirmed or suspected COVID-19 cases. In addition, the Centers for Disease Control reported the daily number of confirmed COVID-19 cases to keep the public informed about the pandemic situation. The government also established a vaccination policy that prioritized certain populations.

Although these measures effectively slowed virus transmission, they raised significant concerns for the disability community. Scholars argued that COVID-19 control measures disproportionately affected vulnerable populations, especially those with disabilities [9,10]. In particular, quarantine-related policies exacerbated the challenges faced by this community, because they failed to adequately consider their needs and left people unable to access the necessary support for daily life [5]. To provide inclusive community support in times of crisis, such as a global pandemic, studies have emphasized the importance of considering the needs of individuals with disabilities in emergency preparedness efforts [11,12]. It is imperative for relative stakeholders to thoroughly examine the concerns of disabled communities regarding emergencies and actively engage them in the process of emergency preparedness.

The pandemic also caused disruptions that challenged the practice of independent living, which emphasizes autonomy, community participation, and self-directed management of daily life. In Taiwan, recent disability research and advocacy efforts have actively promoted the Independent Living Movement [13]. The movement considers that individuals with disabilities have the right to make decisions about their own lives, take responsibility for those decisions, and live independently within the community with appropriate support [14]. It is important to note that the Independent Living Movement does not mean that individuals with disabilities are expected to live without support; rather, it recognizes the legitimacy of seeking support from others and emphasizes collaboration and shared responsibilities to enable daily living and work to function effectively [15]. Through the Independent Living Movement, the principle of “Nothing about us without us” has been emphasized, which underscores the importance of involving individuals with disabilities in decision-making processes. However, Chou [16] revealed that in Taiwan, disability service decision-making has rarely reflected and included the voices of the individuals it serves. Similarly, most COVID-19 policies did not reflect the voices or needs of individuals with disabilities. This gap draws attention to understanding how COVID-19 affected this population and highlights how future emergency preparedness efforts should meaningfully incorporate the perspectives of individuals with disabilities.

2. Research Gap and Research Purpose

Recent international studies have examined the impact of the COVID-19 pandemic on healthcare experiences among individuals with disabilities [17]. Scholars suggested studies related to the pandemic should be thoroughly conducted in various regions and countries, considering their unique policies and responses to the crisis [17]. In Taiwan, limited research has examined the impact of COVID-19 on individuals with disabilities. Given Taiwan’s unique COVID-19 policies, including contact tracing and mandatory hotel quarantine, it is crucial to gain a better understanding of the experiences of individuals with disabilities while these policies were in place. Using a qualitative research method, this

article aims to discuss the impact of COVID-19 on individuals with physical disabilities as they navigated the pandemic. This group was selected because its members often actively participate in the Independent Living Movement or may be in the process of realizing the possibility of living independently within the community. However, the COVID-19 pandemic created additional barriers for them as they tried to make health-related decisions and manage their own physical and emotional well-being. It is important to understand their perspectives on the COVID-19 control measures and how COVID-19 has affected their daily lives, particularly their healthcare experiences and emotional responses to the pandemic.

This study also highlights emergency preparedness for individuals with disabilities. Through examining the experiences of individuals with physical disabilities during the COVID-19 pandemic, this study aims to provide actionable and practical implications for practitioners and emergency managers to enhance emergency preparedness for individuals with disabilities. A specific research question guided this article: How did adults with physical disabilities who were actively pursuing independent living experience the COVID-19 pandemic in Taiwan?

3. Methods

This study was part of a larger project in which participants were interviewed about their experiences with self-determination. Because the interviews were conducted during the COVID-19 pandemic, participants were also asked a set of questions regarding how the pandemic affected their daily lives and health-related experiences.

Using a qualitative approach can help researchers to dig into the meaning and understanding of a specific issue. We used qualitative research to explore the subjective experiences of individuals with physical disabilities during the pandemic. A qualitative research approach helped us to investigate specific issues, such as the impact of COVID-19 control measures on individuals' health-related life experiences.

3.1. Participant Recruitment

After this study received ethics approval from the University of Texas at San Antonio under application number FY22-23-27, the researchers began to recruit participants. Detailed recruitment procedures have been reported elsewhere [18]. Briefly, we recruited participants through snowball sampling. Snowball sampling was chosen as the recruitment strategy because trust plays a critical role in participants' decisions to participate. The use of peer referrals increased eligible individuals' willingness to participate in the study, as they were approached through trusted personal connections. Through this approach, participants assisted the research team in identifying additional eligible individuals by inviting their friends or acquaintances to participate in the study. Before joining the interview, participants were provided with a consent form and a list of interview questions. The final sample consisted of 10 individuals. Although the sample size was relatively small, given the exploratory nature of the study and the available resources, the interviews provided rich and detailed accounts of participants' experiences during the COVID-19 pandemic.

Eligible participants met the following inclusion criteria to participate [18]: (a) participants possessed an official Taiwanese Disability Identification Card indicating a physical disability; (b) they were willing to share their healthcare experiences or challenges during the pandemic; (c) they were available for a 60 to 90 min interview; and (d) they met the technology requirements, such as Wi-Fi connection, and were able to use Zoom. A total of 10 participants from Taiwan participated in this study. Two of them were female, and eight were male. Participants ranged in age from 22 to 44 years. Their disability levels ranged from severe to profound. All participants were wheelchair users. All participants' speech

was understandable. Four participants were diagnosed with cerebral palsy and three with spinal muscular atrophy. Three other participants each had a unique condition: one was diagnosed with muscular dystrophy, another with arthrogryposis multiplex congenita, and the final individual with Charcot–Marie–Tooth disorder. Please see Li et al. [18] for the participant information table. To maintain confidentiality and minimize the risk of participant identification, pseudonyms were assigned to all participants and are used throughout this paper.

3.2. Data Collection

3.2.1. Research Team

This study consisted of four investigators. A description of the researcher positional-ity of the first three investigators has been reported elsewhere [18]. To provide additional context for the present study, the first investigator self-identified as female. She was an assistant professor when she conducted this study. She grew up in Taiwan and worked as a special education teacher for five years, mainly teaching students with moderate to profound disabilities. Although she was familiar with Taiwan’s disability culture and issues, she still needed to be careful when interpreting participants’ experiences because she had lived in the United States for several years. Recently, Taiwan had experienced changes in disability-related issues, such as the independent living movement. Therefore, the first investigator asked follow-up questions during interviews and carefully interpreted participants’ experiences while facilitating the interviews and conducting data analysis. She formed a data analysis team with the second and third investigators.

The second investigator self-identified as female and grew up in Taiwan. She had a background as an elementary school teacher. At the time of the study, she was working as a research assistant at a university and assisting with disability-related research. The third investigator also self-identified as female. She grew up in China and had a background as a teacher. At the time of the study, she was a doctoral student conducting education research.

The fourth investigator self-identified as female. She grew up in the United States and had worked as a teacher and transition specialist for many years. In this study, she served as an outsider who reviewed the results and themes.

3.2.2. Interviews

All the interviews were conducted in Mandarin Chinese and recorded with participant permission. We conducted interviews with the participants via Zoom. The first author was the interview facilitator to conduct the virtual interviews. She began each interview with a self-introduction and introduced the purpose of the interview. After the introduction, the first author used a list of interview questions to guide the interview process. Relevant sources from COVID-19 related literature were reviewed to form interview questions [19–23]. The following is an example of the interview questions: Could you please share your thoughts on the COVID-19 control measures, and how has COVID-19 affected your daily life?

3.2.3. Transcription and Translation

A detailed of transcription and translation process can be found in Li et al. [18]. Briefly, we took several steps to transcribe and translate the interview data. First, we used transcription software to convert the audio recordings in Mandarin Chinese into a draft transcript in Word and then corrected the transcript sentence by sentence in Chinese by referring to the original recordings. Second, we used a combination of methods to translate the transcripts from Mandarin Chinese to English. Initially, translation software was used to generate an English version. Afterward, a native English speaker reviewed the trans-

lations in collaboration with the research team to ensure that the intended meaning was accurately conveyed.

For translating Taiwanese local policies or regulations, we consulted local English newspapers, such as Taipei Times, as well as international journal articles. Additionally, the team engaged in discussions to determine the most appropriate translations for phrases or expressions that reflect local cultural and linguistic nuances. Once this process was complete, the web-based program Dedoose was used for storage of transcripts and to facilitate data analysis with the research team.

3.3. Data Analysis

The data analysis procedures were consistent with those described in Li et al. [18]. Briefly, we used thematic analysis to analyze the data. In the present study, we analyzed the data based on the steps from Braun and Clarke [24]. Using thematic analysis, we identified, analyzed and reported themes from the data. Braun and Clarke [24] explained what counts as a theme, suggesting that researcher judgment is crucial to determine a theme. We used the following steps to identify and analyze data: familiarizing yourself with your data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report [24].

The data analysis process was iterative across two coding rounds. Before beginning the first round of coding, we thoroughly read the transcripts to familiarize ourselves with the data. We then practiced how to generate initial themes using two transcripts. After the practice, we analyzed all subsequent transcripts using coding dyads. The first author coded all subsequent transcripts with the second author and third author, respectively. The second author coded six transcripts with the first author. Considering time constraint, the third author coded two transcripts with the first author. When the research team worked as a dyad, they reviewed and coded each transcript independently and met to establish consensus weekly. After completing the first-round of coding, we revisited the transcripts to examine if patterns were captured using the initial codes and to determine if the initial codes effectively conveyed the participants' experiences based on the coded excerpts. Following the two rounds of coding process, we collated initial codes into potential themes, defined, and named each theme accordingly.

3.4. Trustworthiness

Throughout the study data collection and analysis, we used several strategies to strengthen credibility and trustworthiness [25]. First, we used reflexive memos to record notes and ideas about the participants' experiences and researchers' thoughts during the interviews and data analysis process. The memos also helped researchers to collate initial codes into potential themes. Second, to minimize biases during data analysis, we implemented a team-based approach to achieve consensus on coding. We met weekly to discuss the coding, potential themes, and possible misinterpretations and biases.

4. Results

After analyzing the participants' healthcare experiences during the pandemic, three interconnected themes emerged: (1) concerns about COVID-19 policies; (2) emotions and perspectives on life, death, and the pandemic; (3) healthcare experiences during COVID-19. The overarching point is that the participants voiced their worries and concerns about healthcare issues during the pandemic. Specifically, they discussed worries about either themselves or their caregivers contracting the virus and the potential absence of available healthcare resources to assist them if they tested positive.

4.1. Concerns About COVID-19 Policies

Despite having access to COVID-19 information through various online sources, such as social media, news outlets, and the Internet, the participants expressed concerns and confusion regarding COVID-19 policies. This included pandemic-related requirements such as wearing masks, quarantine and isolation, the polymerase chain reaction (PCR) testing process, and COVID-19 vaccination distribution. When asked how COVID-19 policies impacted their experiences, the participants frequently expressed feelings of stress and concern, sharing that policies often failed to consider the specific needs of individuals with disabilities. One of the participants, Abel, described his concerns about quarantine and isolation. He specifically underscored uncertainty about emergency measures and a lack of access to support for individuals with disabilities if they were to contract the virus. As he explained:

“My anxiety arises from a lack of clarity in the COVID-19 policies. The government has not provided a good system, and the helpline they offer is extremely difficult to reach. I wanted to ask what would happen if a person with disabilities needed to be isolated, but there was no way to ask the question.”

John expressed similar concerns about quarantine and isolation. He said, “The primary issue for individuals with disabilities is about who can assist them if they test positive.” Participants reported significant concerns regarding the shortage of available caregivers during this time. They relied on caregivers for assistance with daily routines, including eating, bathing, and changing clothes.

They were also concerned about the requirements of purchasing and wearing a mask. Abel shared that individuals who use wheelchairs experienced some challenges in purchasing masks. He described:

“It is not feasible for me to join a long queue for a mask purchase. Many pharmacies have inaccessible entrances, and I am often cut in line by others when the queue extends to a staircase. Who will help me purchase masks? This situation makes me anxious.”

Other participants expressed concerns about wearing a mask, as they could not wear a mask by themselves due to their disabilities. Gary said, “I already have a hard time breathing due to my disabilities. Wearing a mask further exacerbates the difficulty.” Brandon also stated that wearing a mask was challenging for him. He said:

“For persons with cerebral palsy like me, we have issues with drooling that we cannot control. The mask always gets wet. We cannot simply change it whenever we want. I am not able to change masks all the time, so I often find myself in an uncomfortable situation.”

John also described the issues of individuals with disabilities wearing masks, saying, “Individuals with disabilities were forced to wear masks, but some needed to use a respirator. How were they supposed to wear a mask in such circumstances?” While participants acknowledged that face masks can help slow the spread of the pandemic, they had concerns regarding the challenges certain individuals face in independently wearing masks.

They also voiced concerns about the PCR testing process and COVID-19 vaccination distribution. They described how the workforce and PCR testing facilities were unable to cope with the increasing number of new cases, which resulted in a long queue of people standing outside testing stations. John said, “In fact, there was a wheelchair user who had to wait for 15 to 16 h to do the PCR testing. That was a very painful experience for that person.”

The next concern was the availability of vaccination. The Taiwanese government divided the public into nine priority groups for receiving COVID-19 vaccines. Individuals with rare diseases, despite having a higher risk of experiencing severe outcomes if infected, were not placed at the top of the vaccination distribution list. One of the participants, Andrea, expressed her anxiety, stating, "Taiwan did not prioritize people with rare diseases. I found myself in the ninth position." Because individuals with rare diseases were not prioritized for vaccination, she was worried and eager to receive the vaccine as soon as possible to protect herself from contracting the virus.

4.2. *Emotions and Perspectives on Life, Death, and the Pandemic*

The pandemic itself brought an overall fear to participants, not only due to isolation measures, but also due to the possibility of prolonged hospitalization or even death. This section focuses on participants' emotional responses to both the possibility of contracting COVID-19 and the measures used to mitigate its spread. One of the participants, Gary, described that his friend with muscular dystrophy died due to the pandemic. He expressed concerns about the risk of severe health outcomes because he also suffered from muscular dystrophy. He said, "We worry because our condition affects our respiratory function. It makes us more vulnerable to infection. If we were to contract the virus, it could have severe consequences." Andrea also expressed anxieties and worries about contracting the virus. She said, "I was deeply concerned that people who did not care about COVID-19 precautions could potentially transmit the virus to me."

Participants' emotional responses to quarantine and isolation provide additional insight beyond the policy description presented in the first theme. Many expressed anxiety, fear, or frustration related to these measures. Some participants worried that being quarantined seemed like being placed in an institution again. As Carol stated, "Isolation means I cannot go out. It makes me feel like I am being isolated to an institution again." Similarly, Colin, who lives in a nursing home, expressed his frustration with the strict stay-at-home orders implemented by the facility. He was unable to spend time with his friends outside the nursing home. He felt helpless and said, "What should I do? I can only leave it in God's hands!" Other participants' main concerns revolved around the potential absence of caregiving support if either they or their primary caregivers contracted the virus. Gary said with worry, "My mother is also my primary caregiver, so it would be a trouble if she got infected." Jeff, another participant, also expressed anxiety and frustration, saying, "We are individuals with disabilities. If we were to test positive, we would be taken to quarantine hotels. Who would come to help us?"

To our surprise, participants expressed additional personal feelings toward COVID-19. They approached the pandemic with a less fearful attitude, demonstrating resilience and adaptation to adversity given the pain and hardships they had already endured due to their disabilities or illnesses. As Denis said:

"I was hospitalized during and after high school. I went through various medical examinations and treatments. I felt like I had walked through the gates of hell. I have endured extreme physical pain. Therefore, I am not as afraid of this pandemic."

Denis continued, "I feel that the pandemic has given me a sense of relaxation. People are no longer working so hard. Finally, the world is waiting for me to catch up a little."

Sharon also experienced tremendous pain due to spinal muscular atrophy, a genetic disease that affects the central nervous system and causes a progressive loss of muscle control. She described her attitude toward the pandemic and said, "If my family members were diagnosed with COVID-19 and transmitted it to me, it would be a relief for me. I would not have much to worry about." She continued, "My vital capacity is only 23%

compared with that of a typical 44-year-old woman. If I were to be diagnosed, I would have already passed away. Perhaps I am overthinking, but I simply do not want to suffer.”

4.3. Healthcare Experiences During COVID-19

The pandemic shaped participants’ healthcare decisions. Participants reported avoiding medical visits because they feared being identified as COVID-19 cases, which in turn limited their ability to address their health concerns. As Abel said: When I check my body temperature, I worry that if I go to a clinic, they might say, “Hey, you have a fever and you need to be isolated.” Hence, I’ve been hesitant to see a doctor. Jeff also experienced the same healthcare challenges. He said: Even a common cold might be mistaken for a COVID-19 infection. As a result, I am hesitant to go to the hospital and have to rely on over-the-counter medication instead.

Other participants mentioned the closure of health-related services. Denis expressed that his rehabilitation care was interrupted, which caused a potentially detrimental effect on his health conditions. He said, “My family members were not worried about me contracting the virus. Their main concern was my physical and health conditions because my regular rehabilitation care was disrupted”. Similarly, Jeff, who has cerebral palsy, described that his muscles became stiff again due to the interruption in his rehabilitation care. He said, “I feel completely weak, and my muscles have become stiff. Some parts of my body had improved through rehabilitation, but my leg muscles became tight again after the interruption of rehabilitation.”

In addition to the disruption of rehabilitation services, the participants explained that several community activities they regularly engaged in were discontinued because of the pandemic. As a result of the discontinued community activities, their health condition and functionality deteriorated. One of the participants, Gary, had been playing boccia for many years. Boccia is a competitive sport specifically designed for individuals with severe physical disabilities. Before the pandemic, Gary actively participated in many boccia competitions. Gary said:

“In 2020, I was able to go out and practice boccia. I used to go out and play boccia regularly; however, I was unable to go out recently due to the impact of the pandemic. Now, I am unable to go out due to my weak physical endurance.”

Another participant, Denis, used to drive to engage in volunteer work. He described his volunteer work as an opportunity to interact with people. However, the pandemic negatively impacted his daily routine and driving abilities. He said, “Due to the outbreak of the pandemic, my weekly volunteering activity stopped. As a result, my driving abilities are not good as before. I realized the importance of constantly engaging in community activities.” Although staying home was the best approach to avoid crowds and prevent the spread of the pandemic, being homebound for so long can cause physical ailments and weaken health conditions and functionality.

5. Discussion

This study demonstrates the impact of COVID-19 and emergency control measures on individuals with physical disabilities. People with physical disabilities are members of society and have the right to live well and remain healthy in a community, even during a pandemic. Despite this, participants in this study expressed concerns about being disproportionately affected by COVID-19 policies.

Consistent with these concerns, existing literature emphasizes the importance of considering the needs of individuals with disabilities when planning and implementing emergency policies during a pandemic. For example, Schuengel, Tummers [26] found that the lockdown policy probably had a negative impact on behavioral functioning for people with

disabilities. They proposed developing a more inclusive approach to pandemic control in the future that takes the need for caregiver assistance into account. This would allow individuals with disabilities to get the support they require for tasks such as food preparation, medication management, and other personal care if they were to be quarantined.

Previous research from Finkelstein and Finkelstein [27] indicated a complete disconnect between people with disabilities and the authorities, and the authors suggested involving people with disabilities in preparing for emergency situations. Echoing these findings, the participants in this study expressed their vulnerability and concern for reliance on support from authorities, often sharing how they had to fend for themselves in the battle against the pandemic. Policymakers and legislators must understand the needs of people with disabilities so they do not go unnoticed in future emergency preparedness [12].

Along with creating policies that are inclusive of people with disabilities, Jumreornvong [7] highlighted the importance of clear communication regarding the implementation of policy measures. Policy information should be conveyed in ways that are accessible and understandable to the broader community. In the present study, participants expressed confusion and concern about how to comply with Taiwan's protocols for COVID-19. This indicates that people with disabilities should have access to appropriate resources and support systems to both understand policy and effectively communicate their needs.

The participants had different emotional responses to the pandemic, including being worried and anxious about the higher risk of severe COVID-19 outcomes, which supports findings from previous literature [20,23]. Surprisingly, other participants in the present study demonstrated their ability to adapt to adversity associated with pandemic restrictions and potential severe health outcomes. They revealed that, because they had endured significant pain and challenges related to their disability conditions, there was little that could concern them. This less fearful attitude helped these individuals remain calm and care for themselves.

However, Sharon's account also raises important questions regarding quality of life and social inclusion for individuals with significant physical disabilities. Although her comments may reflect resilience developed through years of living with pain and health challenges, they may also suggest the cumulative impact of chronic physical suffering and limited opportunities to fully participate in society. When individuals perceive death as a relief from ongoing hardship, it prompts reflection on whether society is providing adequate supports, resources, and opportunities to promote well-being and meaningful participation. Consistent with disability studies perspectives, the barriers created by society may cause them to feel like a burden. For example, capitalism has contributed to the increasingly fast-paced nature of modern society [28]. Such a society may create pressure and reinforce assumptions about what is considered "normal." When independence is regarded as the societal ideal, how does this influence the ways individuals with physical disabilities view themselves? Disability-related challenges arise also from social and environmental barriers that restrict inclusion and quality of life. Therefore, Sharon's expressions highlight the importance of creating communities in which individuals with physical disabilities are not only supported in meeting basic needs but are also encouraged and empowered to pursue meaningful and fulfilling lives.

Another major healthcare issue participants experienced during the pandemic was limited access to services and activities that helped them maintain physical health. Accessing rehabilitation care during the pandemic posed significant challenges for individuals with physical disabilities, which is consistent with previous research. For instance, D'souza [17] reported that individuals with neurological disorders experienced barriers to accessing rehabilitation services and telemedicine. Similarly, Nicholas [22] found that individuals with neurodevelopmental disabilities and their families experienced service

gaps, which increased the risk of service delays within an already vulnerable healthcare support system. Aside from medical and rehabilitative care, participants also reported a decline in their health conditions and functional abilities due to their inability to engage in community activities, such as driving and socializing.

6. Limitations and Pathways for Future Research

The current study has some limitations that could provide opportunities for future research. First, we had limited sample size ($N = 10$). Although we did not aim to apply the results of this study to a broader context, a larger sample size would be helpful to provide perspectives from different angles. Future research should explore the perspectives from a diverse and larger sample size. In addition, participants were all adults between the ages of 22 and 44. The findings may not reflect the experiences of younger or older individuals with physical disabilities. Most of the participants were male, which may limit the transferability of the findings to individuals with different gender identities.

Second, because our participants actively participated in the independent living movement and pursued self-determined lives, the findings may reflect the perspectives of a specific group of individuals. Therefore, readers should be mindful that the participants in this study may have been more familiar with expressing their needs, preferences, and experiences than other individuals with disabilities.

Third, since our goal was to understand the impact of COVID-19 on adults with physical disabilities, we only recruited participants who had a “physical disability” or “multiple disabilities” based on their disability identification. All participants in this study used a wheelchair. Their specific needs may be centered around mobility and accessibility issues. People with other disabilities may have different needs [27]. Thus, future research should seek to recruit participants with different disabilities to discuss their specific needs for emergency preparation.

Fourth, we only collected data from adults with physical disabilities. To develop an inclusive emergency preparation for people with disabilities, it is imperative to hear perspectives from different stakeholders, such as legislators and policymakers. As previously mentioned, there is a lack of communication between people with disabilities and the authorities. Future researchers should explore the perspectives of different relevant stakeholders and bridge the communication gap between people with disabilities and the authorities.

Fifth, as previously mentioned, although we did not aim to apply the results of this study to a broader context, we encourage future researchers to approach the same topic with participants from a different culture or society. Participants from a different culture or society may have different attitudes toward pandemic control measures, and how they respond to the pandemic may also be different.

7. Implications for Practitioners and Emergency Managers

Our findings reveal several important implications for practitioners and emergency managers involved in crisis and emergency management. Because our participants were individuals with physical disabilities, their lived experiences during the COVID-19 pandemic offer valuable insights into how emergency responses can better consider and accommodate their unique needs. These insights highlight the necessity for inclusive planning and responsiveness. The following are key implications for practice.

7.1. Inclusive Policy Development

Because the COVID-19 outbreak occurred so rapidly, many of the policies were not inclusive. Participants expressed concerns about quarantine rules, mask mandates, test-

ing procedures, and vaccination policies. Emergency managers must take into account the needs of individuals with physical disabilities. For instance, services that require individuals to wait in long lines for extended periods should provide alternatives that accommodate limited mobility. Since the outbreak came suddenly, for future preparation, we suggest that technological applications on smartphones can be used to purchase and pick up masks from stores or schedule testing appointments.

Additionally, social distancing and quarantine policies should be modified and flexible enough to consider many individuals who need caregivers or close-contact assistance for essential daily activities such as eating, bathing, and medication management. Appropriate accommodations should be in place to support their safety, independence, and well-being during crises.

7.2. Accessible Communication Strategies

We recommend that practitioners and emergency managers ensure that communication strategies are accessible to all individuals. Given the critical importance of emergency-related information, communication products must be accessible to everyone, including individuals with physical disabilities. For example, in addition to providing hotlines for the public, we suggest that communication be offered in multiple formats, such as online chats, text messaging, and community or group forums, to make healthcare and pandemic-related information more accessible. In this way, individuals can obtain information not only from the government but also from their communities and neighbors.

7.3. Collaboration with the Disability Community

To better understand the diverse needs of individuals with physical disabilities, we encourage practitioners and emergency managers to actively collaborate with these individuals and genuinely listen to their input. As described earlier, our participants shared that their voices were often ignored, and the available communication methods were so limited that they had no way to express their concerns (for example, the phone line was always busy).

In Taiwan, the government has provided opportunities for individuals with disabilities to discuss their rights and disability-related issues. More opportunities of this kind should be offered so that the government can collaborate with representatives of individuals with physical disabilities in planning and decision-making related to public health emergencies. Such collaboration would realize the principle of “Nothing About Us Without Us” and align with the Independent Living Movement, an ongoing disability rights movement in Taiwan.

7.4. Continuity of Essential Health Services

Health care systems are essential for all populations, including individuals with physical disabilities. During the COVID-19 pandemic, we observed a breakdown in health care systems, which led to the disruption of critical services such as rehabilitation services for individuals with disabilities. Crisis and emergency management teams should collaborate with health care providers to develop alternative service delivery models, such as in-home care or remote/telehealth services, when in-person care is not feasible. In addition, providing mental health resources that address anxiety and worry is essential. According to participants in this study, some experienced heightened anxiety and concern about the status of COVID-19 and the unavailability of certain services. Therefore, offering mental health support through virtual options can help reduce mental health issues among individuals with disabilities.

8. Conclusions

In conclusion, the global pandemic created unprecedented challenges for everyone and dramatically changed how we live and work. This study's primary contribution is to illustrate the perspectives of individuals with disabilities regarding COVID-19 control measures, and the worries or concerns associated with these measures. Participants described challenges and experiences during the pandemic, including healthcare service disruptions, quarantine policies, vaccination prioritization, and other uncertainties. These findings suggest the importance of emergency preparedness plans that explicitly address the needs of individuals with disabilities during future public health emergencies. The needs of individuals with disabilities should not go unnoticed. We retrospectively explored the participants' experiences during the pandemic. The results of this study can inform future policymakers and legislators in developing inclusive emergency preparedness practices and minimizing vulnerability among people with disabilities.

Author Contributions: Conceptualization, Y.-F.L.; methodology, Y.-F.L.; software, Y.-F.L., C.-T.L. and Y.Z.; validation, M.C.-F.; formal analysis, Y.-F.L., C.-T.L. and Y.Z.; investigation, Y.-F.L.; resources, Y.-F.L.; data curation, Y.-F.L.; writing—original draft preparation, Y.-F.L.; writing—review and editing, M.C.-F.; visualization, not applicable.; supervision, Y.-F.L.; project administration, not applicable; funding acquisition, not applicable. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki, and approved by the Institutional Review Board of the University of Texas at San Antonio (FY22-23-27, 12 October 2022).

Informed Consent Statement: Informed consent was obtained from all participants involved in the study. This study obtained participants' verbal consent rather than written consent because most participants had limited hand function. The use of verbal consent was approved by the Institutional Review Board (IRB). In addition to providing verbal consent, participants were given an informed consent form before participating in the study. We also confirmed participants' willingness to participate through social media communication (e.g., Facebook or LINE) before the interview and again verbally at the beginning of the interview. Participants were able to review informed consent both in English and Chinese versions.

Data Availability Statement: Data are available upon request due to privacy and confidentiality considerations.

Acknowledgments: During the preparation of this manuscript/study, the authors used GPT-5.3 for the purposes of language improvement. The authors have reviewed and edited the output and take full responsibility for the content of this publication.

Conflicts of Interest: The authors declare no conflicts of interest.

Disability Language/Terminology Positionality Statement: The authorship team primarily consists of educators who are interested in disability-related research and advocacy. The participants in this study also expressed a preference for person-first language. In addition, our professional training in education has emphasized the use of person-first language. Therefore, we chose to use person-first language consistently throughout the manuscript. We sought to acknowledge participants' contributions by sharing and learning from their experiences. We ensured that all participants were treated with respect and dignity throughout the research process. Participants were provided with an informed consent form before they participated in the study. We also confirmed participants' willingness to participate through social media communication (e.g., Facebook or LINE) and again before the interview began.

References

- Shih, M.; Guan-Ying, L.; Wei-Shun, C. Keeping Things Normal During an Uncommon Time: A Lesson from National Taiwan University. *J. Teach. Learn. Technol.* **2021**, *10*, 103–116.
- Yu, S.-Y.; Chen, D.C. Consumers' Switching from Cash to Mobile Payment under the Fear of COVID-19 in Taiwan. *Sustainability* **2022**, *14*, 8489. [\[CrossRef\]](#)
- Chuang, H.-M.; Liao, Y.-D. Sustaining the Benefits of Social Media on Users' Health Beliefs Regarding COVID-19 Prevention. *Sustainability* **2022**, *14*, 4809. [\[CrossRef\]](#)
- Brandenburg, J.E.; Fogarty, M.J.; Sieck, G.C.; McLaughlin, M.; Vercler, C. Why individuals with cerebral palsy are at higher risk for respiratory complications from COVID-19. *J. Pediatr. Rehabil. Med.* **2020**, *13*, 317–327. [\[CrossRef\]](#) [\[PubMed\]](#)
- Hewitt, S.M. The Impact of the COVID-19 Pandemic on the Scientific Community. *J. Histochem. Cytochem.* **2022**, *70*, 271–272. [\[CrossRef\]](#) [\[PubMed\]](#)
- Lunsky, Y.; Durbin, A.; Balogh, R.; Lin, E.; Palma, L.; Plumptre, L. COVID-19 positivity rates, hospitalizations and mortality of adults with and without intellectual and developmental disabilities in Ontario, Canada. *Disabil. Health J.* **2022**, *15*, 101174. [\[CrossRef\]](#) [\[PubMed\]](#)
- Jumreornvong, O.; Tabacof, L.; Cortes, M.; Tosto, J.; Kellner, C.P.; Herrera, J.E.; Putrino, D. Ensuring equity for people living with disabilities in the age of COVID-19. *Disabil. Soc.* **2020**, *35*, 1682–1687. [\[CrossRef\]](#)
- Lai, C.-C.; Lee, P.-I.; Hsueh, P.-R. How Taiwan has responded to COVID-19 and how COVID-19 has affected Taiwan, 2020–2022. *J. Microbiol. Immunol. Infect.* **2023**, *56*, 433–441. [\[CrossRef\]](#) [\[PubMed\]](#)
- Wu, H.-H.; Chen, C.-W. A Critical Analysis of Legal and Policy Responses to the COVID-19 Pandemic and its Long-term Impacts in Taiwan. *J. Undang-Undang Dan Masy.* **2021**, *SI*, 3–10. [\[CrossRef\]](#)
- Lee, T.-L. The Rise of Technocracy and the COVID-19 Pandemic in Taiwan: Courts, Human Rights, and the Protection of Vulnerable Populations. *Ger. Law J.* **2021**, *22*, 1115–1132. [\[CrossRef\]](#)
- Fifolt, M.; Wakelee, J.; Eldridge-Auffant, L.; Carpenter, R.; Hites, L. Addressing the Needs of Adults and Children with Disabilities through Emergency Preparedness and Organizational Improvisation. *Nonprofit Manag. Leadersh.* **2017**, *27*, 423–434. [\[CrossRef\]](#)
- Qi, F.; Hu, L. Including people with disability in the COVID-19 outbreak emergency preparedness and response in China. *Disabil. Soc.* **2020**, *35*, 848–853. [\[CrossRef\]](#)
- Chou, Y.-C.; Chen, B.-W.; Lin, C.-C. Our Choices, Ourselves: Disabled People Living in the Institution and Independent Living. *NTU Soc. Work. Rev.* **2023**, *48*, 69–114. [\[CrossRef\]](#)
- Independent Living Association, T. 台灣自立生活服務（運動）推展 [The Development of the Independent Living Movement in Taiwan]. Available online: http://www.ciltt.artcom.tw/ap/cust_view.aspx?bid=35 (accessed on 7 February 2026). (In Chinese)
- 周怡君; 林君潔; 林珀如; 台灣人權學刊編輯小組. 「自立生活在台灣」座談會 [Public Forum on Living Independently in Taiwan]. Available online: <https://www.taiwanhrj.org/contents/525> (accessed on 7 February 2026). (In Chinese)
- Chou, Y.-C.; Chen, B.-W.; Chang, C.-N. "Is Personal Assistance a Supplement to Homecare?" Myths and Barriers Related to the Provision of Personal Assistance by Local Authorities to People with Disabilities. 台灣社會福利學刊 *Taiwan. J. Soc. Welf.* **2019**, *15*, 1–56. (In Chinese) [\[CrossRef\]](#)
- D'souza, J.; Biswas, A.; Gada, P.; Mangroliya, J.; Natarajan, M. Barriers leading to increased disability in neurologically challenged populations during COVID-19 pandemic: A scoping review. *Disabil. Rehabil.* **2021**, *44*, 7693–7706. [\[CrossRef\]](#) [\[PubMed\]](#)
- Li, Y.-F.; Liu, C.-T.; Zhao, Y. Understanding Self-determination Learning Experiences Among Taiwanese Adults with Severe Disabilities. *J. Dev. Phys. Disabil.* **2024**, *36*, 1121–1145. [\[CrossRef\]](#)
- Kim, M.A.; Yi, J.; Jung, S.M.; Hwang, S.; Sung, J. A qualitative study on parents' concerns about adult children with intellectual disabilities amid the COVID-19 pandemic in South Korea. *J. Appl. Res. Intellect. Disabil.* **2021**, *34*, 1145–1155. [\[CrossRef\]](#) [\[PubMed\]](#)
- Amor, A.M.; Navas, P.; Verdugo, M.Á.; Crespo, M. Perceptions of people with intellectual and developmental disabilities about COVID-19 in Spain: A cross-sectional study. *J. Intellect. Disabil. Res.* **2021**, *65*, 381–396. [\[CrossRef\]](#) [\[PubMed\]](#)
- Redquest, B.K.; Tint, A.; Ries, H.; Lunsky, Y. Exploring the experiences of siblings of adults with intellectual/developmental disabilities during the COVID-19 pandemic. *J. Intellect. Disabil. Res.* **2021**, *65*, 1–10. [\[CrossRef\]](#) [\[PubMed\]](#)
- Nicholas, D.B.; Mitchell, W.; Ciesielski, J.; Khan, A.; Lach, L. A Qualitative Examination of the Impact of the COVID-19 Pandemic on Individuals with Neuro-developmental Disabilities and their Families. *J. Child Fam. Stud.* **2022**, *31*, 2202–2214. [\[CrossRef\]](#) [\[PubMed\]](#)
- Sideropoulos, V.; Dukes, D.; Hanley, M.; Palikara, O.; Rhodes, S.; Riby, D.M.; Samson, A.C.; Van Herwegen, J. The Impact of COVID-19 on Anxiety and Worries for Families of Individuals with Special Education Needs and Disabilities in the UK. *J. Autism Dev. Disord.* **2022**, *52*, 2656–2669. [\[CrossRef\]](#) [\[PubMed\]](#)
- Braun, V.; Clarke, V. Using thematic analysis in psychology. *Qual. Res. Psychol.* **2006**, *3*, 77–101. [\[CrossRef\]](#)

25. Brantlinger, E.; Jimenez, R.; Klingner, J.; Pugach, M.; Richardson, V. Qualitative Studies in Special Education. *Except. Child.* **2005**, *71*, 195–207. [[CrossRef](#)]
26. Schuengel, C.; Tummers, J.; Embregts, P.J.C.M.; Leusink, G.L. Impact of the initial response to COVID-19 on long-term care for people with intellectual disability: An interrupted time series analysis of incident reports. *J. Intellect. Disabil. Res.* **2020**, *64*, 817–824. [[CrossRef](#)] [[PubMed](#)]
27. Finkelstein, A.; Finkelstein, I. Emergency preparedness—The perceptions and experiences of people with disabilities. *Disabil. Rehabil.* **2020**, *42*, 2056–2066. [[CrossRef](#)] [[PubMed](#)]
28. Erevelles, N. Thinking With Disability Studies. *Disabil. Stud. Q.* **2014**, *34*. [[CrossRef](#)]

Disclaimer/Publisher’s Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.