Systematic Review of Study Designs and Methods of Research on Disability in South African Higher Education Institutions Amidst COVID-19 (2020-2021)

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ABSTRACT
The purpose of the study was to assess the study designs and methodological approaches of published works on disability in South African higher education institutions from 2020 to 2021. A systematic review was performed as a method to achieve this. The reporting of this systematic reviews was guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses standards. Electronic searches of Bielefeld Academic Search Engine, EbscoHost, ScienceDirect, Scopus and Wiley Online Library were conducted of electronic works published in English from January 2020 to December 2021. Publications of empirical research on disability in any South African higher education institution where data were collected during COVID-19 were included. Non-peer-reviewed publications, which explicitly indicated that data were collected before March 2020, did not have a South African higher education institution as a study site and were a desktop-only research or conceptual papers were excluded. Three studies were included ultimately. Ten elements were chosen for analysis based on the research purpose. The findings show that disability research has predominantly used qualitative designs and methods; an exploration that involves people with disabilities throughout the research process is limited and the inclusion of researcher positionality is limited. Arguably, this study is the first systematic review of empirical studies on disability in South African higher education since the start of the COVID-19 pandemic. The results support the need for a trajectory towards the use of more diverse research designs and methods.

KEYWORDS
Disability; higher education; research design; research method; systematic review.
INTRODUCTION

Over the years, global disability discourse, practice and research have highlighted many complex issues about disability. Presently, it is estimated that about one in five people across the world have a disability, thus the matter warrants policy, practice and research interest. Regarding disability and higher education, literature points to evidence of increased global concern on ways to create and promote disability-inclusive higher education spaces. Several countries have committed themselves to realise inclusive and equitable higher education outcomes expressed in international instruments through their domestic legislative, policy and institutional mechanisms. For instance, Article 24 of the United Nations Convention on the Rights of People with Disabilities (UNCRPD) states that persons with disabilities should be assured of the right to inclusive education at all levels (UN General Assembly, 2007). Also, Sustainable Development Goal (SDG) 4 is to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all” (UN General Assembly, 2015, p. 14). These have implications for how disability is approached by countries.

Considering international instruments, higher education institutions in various countries have put in place different interventions such as the universal design of buildings, use of the universal design of learning principles, broad disability support services and strategies to realise national disability imperatives aligned to international commitments. Prior to COVID-19 being declared a pandemic on 11 March 2020 by the World Health Organisation (WHO), the nature and extent of the success of these interventions to address disabling or negative experiences at higher education institutions varied. Achieving inclusive education has proven to be complex and challenging (Mullins, 2019; Snounu, 2019). After COVID-19 was declared a pandemic, higher education institutions had to make adjustments to teaching and learning strategies for safety purposes. Present research is capturing numerous disability-related experiences under the pandemic (Buchnat & Wojciechowska, 2020; Meleo-Erwin, et al., 2021; Scott & Aquino, 2020; Sutton, 2020; Wilson et al., 2020).

In South Africa, before COVID-19, studies on disability in South African higher education institutions investigated several matters such as staff and students with disabilities’ experiences of disability support (Lyner-Cleophas, 2016), students with disabilities learning needs and lecturers’ perspectives on students with disabilities’ academic lives (Mutanga & Walker, 2017). Since COVID-19, there have been numerous changes in institutional operations to facilitate modes of remote and online forms of teaching and learning. These circumstances have created challenges and opportunities in terms of how to respond to disability. Scholarly research has given attention to topics such as the impacts of COVID-19 on access to higher education for students with disabilities (Ndlovu, 2020), opportunities created by the pandemic (Ntombela, 2021) and forms of exclusion being created (Ngubane-Mokiwa & Zongozzi, 2021). This research contributes to an enhanced understanding of disability experiences in higher education since the pandemic began. However, systematic reviews on the pieces of evidence these works generate have yet to be completed. In particular, arguably, not enough reviews have been done.
on the research designs and methods being adopted. Such reviews seem necessary as COVID-19 has pushed researchers to make shifts in the manner in which they conduct their studies, for example, to minimise physical contact. Also, disability research is taking place in a broader context where it is recognised that the pandemic has led to enhanced vulnerabilities and marginalisation of people with disabilities (Felt et al., 2021; Jesus et al., 2020; Jesus et al., 2021).

Under the present circumstances where the government is responding to COVID-19 in different and changing ways, it is beneficial to review the study designs and methods used to generate knowledge on disability. This can assist researchers to identify how disability is being and can be further investigated. Already, prior to COVID-19, it was recognised that traditional well-known research methods such as qualitative methods, for example in-depth interviews and case studies, can be narrow and problematic for vulnerable groups (Baker et al., 2016; Mulder et al., 2015). Sometimes, these traditional methods can miss the nuances and insights of real life experiences, especially when the groups directly affected by the issue are not involved in research processes beyond being subjects of investigation and where the researcher is not intentional in adopting innovative research methodologies.

Within disability research, there have been calls for the use of innovative and transformative methods (Munger & Mertens, 2011; Mutanga & Walker, 2017; Sullivan, 2009). This call still applies under the current pandemic circumstances where social distancing practices are creating challenges for face-to-face interviews and focus group discussions for example. Alternative ways of approaching research such as the increased use of online data collection methods are being witnessed and are affecting research in various fields (Dodds & Hess, 2021; Traxler & Smith, 2020; Webber-Ritchey et al., 2021). With these shifts in methodological preferences, opportunities to use innovative ways to gain new insights into disability in higher education institutions exist.

This study sought to yield systematically obtained information on the study designs and methodological approaches of peer reviewed electronically published works of empirical studies on disability in South African higher education institutions over the period 2020 to 2021. The review does not seek to discuss the findings of these different studies but the designs and methods used. Using an analytical framework where 10 items were used to extract information from the publications, the review provides an account and overview of designs and methods being used for research on disability in South African higher education institutions in the context of COVID-19.

**Researching disability in South African higher education**

Disability is a complex, multifaceted and evolving concept. Definitions vary. According to the UNCRPD, disability results “from the interaction between persons with impairments and attitudinal and environmental barriers that hinder their full and effective participation in society on an equal basis with others” (UN General Assembly, 2007, p. 2). The South African government has adopted a definition of disability contained in the White Paper on the Rights of Persons with
Disabilities, which recognises these aspects of disability while recognising that the term is complex and evolving (Department of Social Development, 2016). According to the South African Human Rights Commission, while “disability is often used as an umbrella term that includes impairments, activity limitations and participation restrictions...there is a need for more clarity regarding what constitutes a disability” (2017, p. 11). Disability is both “a social phenomenon as well as a civil/human rights issue” (Baglieri et al., 2011, p. 269) which leads to socially set restrictions and human rights violations of students with disabilities (Brenes et al., 2018; Denning & Moody, 2013; Karisa et al., 2021; Kelly & McKenzie, 2018). Any ventures to enhance inclusive education ought to adopt broad understanding of disability in education contexts and research on disability in these contexts should, likewise, indicate the definitions of disability adopted as lenses of investigations.

As Stoneman (2007, p.35) argued, “One of the first tasks that disability researchers face is to define the group of people selected for study”. Definitions of disability have methodological importance. Despite definitional challenges researchers may encounter, research undertaken has been able to capture diverse experiences of disability in South African higher education. Some researchers have followed conventional ways of investigating disability while others have followed innovative paths such as using emancipatory research (Bucholz, 2017; Mthethwa, 2017; Rule & Modipa, 2013) or transformative research. According to Barnes (2003, p. 6), emancipatory disability research refers to “the empowerment of disabled people through the transformation of the material and social relations of research production”. It positions the researcher as a member of or party to the research as opposed to being a distant, ‘alienating’ and ‘oppressive’ expert.

Oliver (1997) observed that the emancipatory research process can facilitate emancipatory processes. Consequently, as a choice of methodology, it covers a wider scope of issues compared to conventional methodologies and meaningfully involves all involved in the research and those the research should influence (for example, policy makers). Research that uses the transformative paradigm seeks the engagement of groups with a focus on increasing social justice (Mertens, 2010). These types of research point to the complex relationship between disability research and politics as alluded to by Shakespeare (1996). Some studies on disability in South African higher education have brought out these tensions. Overall, there are methodological opportunities that exist for research, which reflect transformational ways of thinking about disability (Snounu, 2019) and for all levels of social systems linked to disability to be changed (Parmenter, 2004). Systematic reviews have been done on issues and challenges of disability research in higher education (Jaafar et al., 2019). However, opportunities exist for more reviews of disability research in South African higher education, which has taken place since COVID-19, hence this study. The research question for this review is what research designs and methods have been used to research disability in South African higher education institutions since COVID-19 from 2020 to 2021?
METHODS

The study sought to investigate the study designs and methods used in research on disability in South African higher education institutions published in 2020 and 2021. What was specifically examined is the definition of disability adopted, research approach, research design, location of the study, sampling technique, sample size, data collection technique and data analysis techniques. These aspects were used as an analytical framework so that information on the nature of the design and methods could be drawn.

The reporting of this systematic review has been guided by the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) statement. Electronic searches of Bielefeld Academic Search Engine, EbscoHost, ScienceDirect, Scopus and Wiley Online Library were conducted by the author in November 2021, December 2021 and January 2022. These databases were selected taking into account their suitability for systematic reviews as presented by Gusenbauer and Haddaway (2020). The search limits were electronically available publications published between 2020 and 2021. Table 1 below provides the search terms used for the different databases and the number of hits these produced. Search parameters were that the publications were in English and published between 2020 and 2021.

Table 1. Database hits for keyword searches

| Database                  | 2020   | 2021   |
|---------------------------|--------|--------|
| Bielefeld Academic Search Engine | 95     | 1      |
| EbscoHost                 | 3      | 135    |
| ScienceDirect             | 1534   | 917    |
| Scopus                    | 11     | 18     |
| Wiley Online Library      | 1286   | 776    |
| Total hits                | 2929   | 1869   |

1 Sites last consulted 14 January 2022
Google scholar, South African Academic Libraries System and WorldCat were also used as supplementary sources of information. Quotation marks were used for the terms to focus the searches. The search terms were: “South Africa” “university” “disability; “South Africa” “higher education” “disability”; “South Africa” “tvet” “disability”; and “South Africa” “college” “disability”. The term ‘disability’ and not impairment was used. A custom year range of 2020 to 2021 was set for the searches. Only the first up to ten pages of the searches were reviewed to identify publications possibly excluded from the database searches. Once identified, these publications were screened to see if they met the inclusion criteria. No additional articles from these supplementary sources were included for full text analysis. The following journal sites were also visited: Disability and Society; African Journal of Disability and Studies in Higher Education. No additional articles from these supplementary sources were included for full text analysis.

**Inclusion criteria**
Studies that indicated that data were collected after March 2020 were included. Publications included in the review were empirical studies where only primary data or primary and secondary data were collected and analysed. There are numerous definitions and understandings of disability. All definitions and understandings were included. Studies undertaken by researchers based in South Africa or elsewhere were included. The South African higher education sector includes universities (public and private), Training and Vocational Education and Training (TVET) colleges and private colleges, thus any studies which had the study site as one of these classifications were included. Studies on disability from the perspectives of authors with or without disabilities were included. Electronically available peer reviewed journal articles, book chapters, masters dissertations and PhD theses were included. Studies with sufficient information that data were collected during the COVID-19 pandemic were included.

**Exclusion criteria**
Studies that explicitly indicated that data were collected prior to March 2020 were excluded. Studies where secondary data only were used or desktop only research and conceptual papers were excluded. Studies where it was unclear whether a South African higher education institution was the study site or did not have a South African higher education institution as a study site were excluded. Studies that did not focus on disability and rather had disability related matters as part of broader findings were excluded. The following kinds of documents were excluded: printed versions of documents, blogs, government documents, study reports and online media publications. Studies that did not have sufficient information on whether data were collected during the COVID-19 pandemic were excluded. Two independent researchers (NK and TC) assisted with excluding articles from three (BASE, Scopus and WileyOnline Library) of the five databases used, based on the titles and abstracts.
Data extraction
Information on 10 predefined items was used in the extraction of data on the design and methods. These were:

- Study focus
- Definition of disability
- Research approach
- Research design
- Study site
- Sampling technique
- Sample size
- Participants
- Data collection technique
- Data analysis technique

Studies were divided between 2020 and 2021. The study focus was taken from the expressed or implied study objectives or purpose. The research approach (or paradigm) was noted. The expressed or implied research designs were captured. The study site was noted. The sampling technique and sample size were also noted. Details of the participants were captured, which included whether or not they were identified as having disabilities or not. Data collection techniques were stated. These could be face-to-face or online. The final category of information captured was the data analysis technique. Overall, the categories captured different designs and methods used in studies.

Data analysis
Whilst there were aspects in the review which were objectifiable information (for example, research approach, data collection techniques), some information had to be determined using the researcher’s judgment. A pragmatic approach was adopted in handling the publications and extracting information from the full texts. Data has been summarised narratively as the studies are very heterogeneous.

RESULTS
The initial search produced the total number of publications represented in Table 1. After duplicates were identified and removed, titles and abstracts were screened by two independent researchers (NK and TC) and the author, 19 publications were found to qualify for full text analysis.
Figure 1. Systematic review flow diagram

Identification of studies via databases

Records identified from:
Electronic databases
searches: Bielefeld Academic
Search Engine (n= 69 386)
(see Table 1)

Records removed before
screening:
Records manually identified
as ineligible (n = 58776)

Titles/abstracts screened
(n = 1591)

Records manually excluded
(n = 1378)

Reports sought for retrieval
(n = 213)

Reports not retrieved
(n = 2)

Reports assessed for eligibility
(n = 19)

Reports excluded:
Data from prior March 2020
(n = 12)
Data collection period not
explicit (n = 3)
Focus of paper not applicable
(n = 1)

Studies included in review
(n = 3)
### Table 2: Articles set aside for full text analysis

| No. | Article |
|-----|---------|
| 1.  | Isaacs, D. (2020). ‘I Don’t Have Time For This’: Stuttering and the Politics of University Time. *Scandinavian Journal of Disability Research*, 22(1). |
| 2.  | Ndlovu, L. M. (2019). *Access with success: a case of students with learning disabilities at a technical and vocational education and training college* [Doctoral dissertation, University of KwaZulu Natal]. University of KwaZulu Natal. |
| 3.  | Makwembere, S. (2021). Disability Sensitivity and Sensibility: A Nondisabled Lecturer Perspective on Inclusive Lecturing Opportunities. *Research in Social Sciences and Technology*, 6(2), 52-75. |
| 4.  | Manase, N. (2021). Disguised Blessings amid Covid-19: Opportunities and Challenges for South African University Students with Learning Disabilities. *Journal of Student Affairs in Africa*, 9(1), 107-118. |
| 5.  | Tekane, R., & Potgieter, I. (2021). Insights from training a blind student in biological sciences. *South African Journal of Science*, 117(5-6), 1-7. |
| 6.  | Müller, J., & Couper, I. (2021). Preparing graduates for interprofessional practice in South Africa: the dissonance between learning and practice. *Frontiers in Public Health*, 9, 93. |
| 7.  | Mbuvha, T. (2019). Kinds of Support Offered by the Disability Unit to Students with Disabilities at Institutions of Higher Learning in South Africa: A Case Study of the University of Venda. *Journal of Student Affairs in Africa*, 7(2). |
| 8.  | Sipuka, O. (2019). Exploring a framework for decolonised disability-inclusive student walk support practices in an open and distance learning institution. [Doctoral thesis, University of Cape Town]. University of Cape Town. |
| 9.  | Mostert, F. (2021). *The role impairment associated with common mental disorders among first-year university students in South Africa*. [Masters thesis, Stellenbosch University] Stellenbosch University. |
| 10. | Lister, H. E., Mostert, K., & Pillay, M. (2021). Teaching about disability and food security in the School of Health Sciences, University of KwaZulu-Natal, South Africa. |
| 11. | Vergunst, R., & Swartz, L. (2021). ‘He doesn’t understand that he’s struggling with the way I felt’—university students, psychosocial disability and disclosure in the Western Cape, South Africa. *Disability & Society*, 36(2), 226-239. |
| 12. | Vergunst, R., & Swartz, L. (2020). Experiences with supervisors when students have a psychosocial disability in a university context in South Africa. *Teaching in Higher Education*, 1-14. |
| 13. | Lourens, H. (2021). Supercripping the academy: the difference narrative of a disabled academic. *Disability & Society*, 36(8), 1205-1220. |
|   | Authors                                      | Title                                                                 | Journal                                                                 | Volume | Issue | Pages       |
|---|---------------------------------------------|----------------------------------------------------------------------|-------------------------------------------------------------------------|--------|------|-------------|
| 14 | Bobat, S., Reuben, S., & Devar, T. (2020)   | Representation and methods of normalisation: Narratives of disability within a South African tertiary institution. | *African Journal of Disability*, 9(1), 1-10.                           |        |      |             |
| 15 | Lyner-Cleophas, M., Apollis, L., Erasmus, I., Willems, M., Poole, L., Minnaar, M., & Louw, P. (2021) | Disability Unit Practitioners at Stellenbosch University: Covid-19 Pandemic Reflections. | *Journal of Student Affairs in Africa*, 9(1), 223-234.                  |        |      |             |
| 16 | McKinney, E. L., & Swartz, L. (2020)        | Integration into higher education: experiences of disabled students in South Africa. | *Studies in Higher Education*, 1-11.                                    |        |      |             |
| 17 | Munyaradzi, M., Arko-Achemfuor, A., & Quan-Baffour, K. (2021) | An Exploration of Comprehensive Student Support Systems in Technical Vocational Education and Training Colleges for Students with Disability. | *Community College Journal of Research and Practice*, 1-17.          |        |      |             |
| 18 | Zongozzi, J. N. (2020)                     | Accessible quality higher education for students with disabilities in a South African open distance and e-learning institution: Challenges. | *International Journal of Disability, Development and Education*, 1-13. |        |      |             |
| 19 | Ndlovu, S. (2021)                          | Provision of Assistive Technology for Students with Disabilities in South African Higher Education. | *International Journal of Environmental Research and Public Health*, 18(8), 3892. |        |      |             |

The full text analysis revealed that 16 articles did not meet the inclusion criteria, though the title and abstract were screened. Reasons for their exclusion included that data were not collected after March 2020, the actual dates of the publications were earlier than the ones captured on the database, data were collected prior to March 2020 and insufficient detail of when data were collected was provided. The final analysis included three papers (listed in Table 2 as numbers 3, 4, 15). For one study (number 15 in Table 2), 15 participants were reached during 2019 and then four were contacted after March 2020. Therefore, this study was included. The studies represent different research designs and methods. They are presented in Table 3. Numbers in square brackets have been assigned to the three studies (that is, [1], [2] and [3]). These are used to refer to the studies during discussions in the article.
| Article | Study Focus | Definition of disability | Research approach | Research design | Study site | Sampling technique | Sample size | Participants | Data collection method | Data analysis method |
|---------|-------------|--------------------------|-------------------|----------------|-----------|-------------------|-------------|--------------|------------------------|---------------------|
| [1] Lyner-Cleophas et al. (2021) | Provides reflections on what has been learnt from shifts to online teaching and learning as well as how progress can be made under the changed academic environment circumstances | None provided | Qualitative *(implied)* | Ethnographic design *(Autoethnography, implied)* | 1 public university (Stellenbosch University) | n/a | 7 | Staff members of the Stellenbosch University Disability Unit – not stated if members have a disability | Reflections | Content analysis *(implied)* |
| [2] Makwembere (2021) | Uses a disability perspective to present lecturing practices during the move to emergency remote teaching and learning in | None provided | Qualitative *(stated)* | Ethnographic design *(Autoethnography, stated)* | 1 public university (historically disadvantaged institution) (not stated) | n/a | 1 | The author – lecturer without a disability | Self-reflection | Content analysis *(stated)* |
| [3] Manase (2021) | Presents challenges and opportunities associated with online and remote learning for university students with learning disabilities | None provided Capability approach to learning experience used | Qualitative \(^{(stated)}\) | Narrative inquiry research design \((stated)\) | 1 public university (University of the Free State) | Snowballing convenience | 15 | 15 students with disabilities | Semi-structured interviews | Thematic analysis \((implied)\) |

*Note:* Information generated by author using 10 items of a devised analytical framework.
Study focus
The analysis revealed that all the studies focused on different matters. One study focused on disability unit practitioners’ reflections on what has been learnt since shifts have been made to online teaching and learning and how progress can be made under these circumstances [1]. One study focused on reflections on lecturing practices during the move to emergency remote teaching and learning in response to COVID-19 using a disability perspective [2]. One study gave attention to the challenges and opportunities associated with online and remote learning for students with learning disabilities [3].

Definition of disability
All the studies did not provide the definition of disability which they adopted. Instead, they acknowledged the complexities and different understandings of disability as well as the broad range of disability experiences.

Research approach
All the studies used a qualitative approach. In two articles, it was explicitly stated that they were qualitative [2, 3] and in one [1] it was implied that a qualitative approach was used.

Research design
One study followed a narrative inquiry research design [3]. One study used retrospective autoethnography, thus, it was inferred that an ethnographic research design was followed [2]. For one study, it was not indicated which research design was followed [1]. However, given the fact that it mentioned that information was drawn from reflections, it was also inferred that an ethnographic research design was followed.

Study site
Two of the studies [1, 3] mentioned the sites where the studies took place, Stellenbosch University and the University of the Free State. These two are public universities. The study site of one study [3] was not indicated, only that, it was a historically disadvantaged institution. According to the description of historically disadvantaged institution provided, these are public institutions. Thus, it was deduced that the study site for [3] was a public university.

Sampling technique
One study [3] used convenience and snowball sampling techniques. For the other two studies [1,2], as the authors were both the researchers and the researched, sampling techniques were not indicated nor did they seem to apply.

Sample size
The sample sizes of all the studies varied. One study had a sample size of one [2], another of seven [1] and another of 15 [3].
Participants
Two of the three studies [1, 2] had the authors as the participants of the studies. For the one study, the author indicated that they were non-disabled [2]. In another study [1], the authors indicated that they were staff members of the Stellenbosch University Disability Unit but did not disclose whether or not any of them had any disabilities. One study [3] had 15 participants. These participants were full-time university students with learning disabilities.

Data collection method
All three studies were based on primary data collected in different ways. One study used semi-structured interviews [3]. One study collected data from slides, recordings, WhatsApp messages as well as their typed and handwritten notes [2]. One study was not explicit about how data were collected [1]. The article seemed to display combined reflections on the topic of interest as opposed to a write up of information collected at a particular point in time from the authors and then combined into the article. However, while the article might not have indicated the data collection methods used for the study, this did not necessarily mean no particular methods were used.

Data analysis method
One out of three articles explicitly indicated that a qualitative data analysis method, content analysis, was used in the study. One study [3] indicated that “data were analysed descriptively” (Manase, 2021, p. 109). One deduced that thematic analysis was used for the study [3]. It was also deduced that content analysis was used for the other study [1].

DISCUSSION
This study sought to review the evidence of empirical studies on disability in South African higher education institutions between 2020 and 2021. Particular attention was paid to those studies which collected data from higher education institutions during the time after COVID-19 was declared a pandemic. Overall, the findings reveal that there is little empirical research on disability in higher education institutions over the period chosen. Three studies that qualified for inclusion were analysed. Generally, the articles in the review showed that there is a methodological leaning towards qualitative research. When one looks at the diverse focus of the studies, they reinforce the complex realities of disability and point to issues that may be best investigated through qualitative means. However, the findings also point to the need for methodological pluralism where qualitative, quantitative and mixed methods approaches are used in research on disability in higher education institutions. In terms of research design, the findings follow from the findings of the approaches. Qualitative research designs seemed to be preferred but only one study specified the research design that was followed. Research designs act as important frameworks for researchers; thus, researchers should clearly present the research designs they follow. This can enhance understanding of how research outcomes were
achieved as the guide for the choice of research methods and techniques would be more apparent.

Concerning study sites, the findings demonstrate that there is a lack of empirical studies on disability at South African TVET colleges, private universities and private colleges. Emphasis has been given to public universities yet higher education includes the aforementioned institutions. It will be essential for research on disability in higher education institutions to be undertaken in all categories of higher education institutions for disability in South African higher education to be fully understood. A continued lack of investigation of disability at non-public universities during the pandemic will be problematic.

The findings on sampling techniques reflect the methodological flexibility offered by qualitative research. For two out of the three studies, the authors chose themselves for observation. One study used two sampling techniques, convenience and snowball sampling. The vastness of disability means that it would not be feasible to draw representative samples. Challenges to gaining information populations exist. For example, it has been found that when universities require students to declare or register with them that they have a disability, often, they do not disclose the information (Lynner-Cleophas et al., 2021) meaning that suggested population numbers of students with disabilities could be inaccurate. Representativeness does not have to be a primary goal though. What appears more important is that the sampling method facilitates access to experiences of or views on disability of the researchers (who may or may not be persons with disabilities) or those who will be researched (who also may or may not be persons with disabilities).

The sample sizes of the studies ranged from one to 15. Stoneman (2007) points out that disability research has typically involved small sample sizes. Qualitative research typically allows for as small a number as one. This can be useful to discover what may be unique or untold experiences. Contextual nuances of disability experiences can be captured through small samples. Where possible though, large samples in research on disability in higher education institutions can be explored to see what new understandings can be offered.

The studies included participants with and without disabilities. For two studies, the authors were the participants. Some information relating to their positionality was included in their reflections but including clearer positionality statements could have enhanced how the researchers are positioned in relation to the context of the studies. For one study, the researcher detailed that participants were students with learning disabilities but not their positionality. Beauchamp-Pryor (2013) emphasised that including the voices of people with disabilities provides opportunities to oppose those who traditionally hold power and challenge dominant perceptions held by policymakers, politicians and professionals (including researchers). Reflexivity in research on disability in higher education institutions would be valuable to capture during the knowledge production process. The benefits of reflexivity in qualitative studies are widely acknowledged (Crooks et al., 2012). As disability is socially...
constructed, the researchers’ positions cannot be removed from how knowledge on disability in South African higher education is being produced during the pandemic.

Qualitative data analysis methods were used in the studies. For the one study which drew information from students with learning disabilities, it is unclear whether the participants had an opportunity to see how their experiences were represented before publication. For the other two studies, they analysed data that they had produced themselves. There are opportunities for researchers to present details on processes followed to ensure that findings truly represent the participants’ and researchers’ disability experiences.

Limitations
Some limitations of the study need to be acknowledged. While two independent researchers assisted with screening titles and abstracts, no information specialists were used to conduct the searches. Publication processes can take time and studies completed during 2020 and 2021 which may appear from 2022 onwards could not be included. Also, a quality evaluation tool was not used to assess the quality of the evidence of studies. Nevertheless, since the study is exploratory, the information that was extracted from the studies is arguably justified.

CONCLUSION
A great deal of disability research reveals that many South African higher education institutions still face challenges addressing disability inclusion. Considering this, researchers of disability in South African higher education institutions ought to consider how their research contributes to a more inclusive higher education sector. They should not neglect some of the injustices taking place in higher education spaces but ought to look to pursuing research processes and outputs which are socially relevant and do not become forms of inquiry that inadvertently reproduce experiences of social oppression and marginalisation. This exploratory study is arguably the first systematic review of empirical studies on disability in higher education institutions since COVID-19. Research on disability in South African higher education can diversify the use of research approaches, designs, sampling and data collection techniques, broaden sites of investigation and enhance reflexivity in research. As the impacts of COVID-19 on higher education continue to be investigated, disability researchers should broaden their outlook on what, where and how topics are investigated.

REFERENCES
Baglieri, S., Valle, J. W., Connor, D. J., & Gallagher, D. J. (2011). Disability studies in education: The need for a plurality of perspectives on disability. *Remedial and Special Education, 32*(4), 267-278. https://doi.org/10.1177/0741932510362200

Baker, S.M., LaBarge, M., & Baker, C.N. (2016). Consumer vulnerability: foundations, phenomena, and future investigations. In K. Hamilton, S. Dunnett & M. Piacentini (Eds.), *Consumer Vulnerability* (pp. 13-30). Routledge.
Beauchamp-Pryor, K. (2013). Disabled Students in Welsh Higher Education: A Framework for Equality and Inclusion. Rotterdam: Sense Publishers.

Bobat, S., Reuben, S., & Devar, T. (2020). Representation and methods of normalisation: Narratives of disability within a South African tertiary institution. African Journal of Disability, 9(1), 1-10. https://doi.org/10.4102/ajod.v9i0.629

Brenes, M., Gronenberg, P., Henniges, J., Pfoertner, K., Robinson, P., Tesni, S., & Ullucci, R. (2018). My right is our future: The transformative power of disability-inclusive education. Christian Blind Mission.

Buchnat, M., & Wojciechowska, A. (2020). Online education of students with mild intellectual disability and autism spectrum disorder during the COVID-19 pandemic. Interdyscyplinarne Konteksty Pedagogiki Specjalnej, (29), 149-171. https://doi.org/10.14746/ikps.2020.29.07

Bucholz, A. W. (2017). The experiences of a student with cerebral palsy at a higher education institution: a case study [Doctoral dissertation, Stellenbosch University] Stellenbosch University. https://scholar.sun.ac.za/handle/10019.1/101026

Crooks, V. A., Owen, M., & Stone, S. D. (2012). Creating a (more) reflexive Canadian disability studies: Our team’s account. Canadian Journal of Disability Studies, 1(3), 45-65. https://doi.org/10.15353/cjds.v1i3.56

Denning, C. B., & Moody, A. K. (2013). Supporting students with autism spectrum disorders in inclusive settings: Rethinking instruction and design. Electronic Journal for Inclusive Education, 3(1), 6. https://corescholar.libraries.wright.edu/cgi/viewcontent.cgi?article=1153&context=ejie

Department of Social Development (2016). White Paper on the Rights of People with Disabilities. Department of Social Development

Dodds, S., & Hess, A. C. (2021). Adapting research methodology during COVID-19: lessons for transformative service research. Journal of Service Management, 32(2), 203-217. https://doi.org/10.1108/JOSM-05-2020-0153

Felt, A. B., Mitcham, D., Hathcock, M., Swienton, R., & Harris, C. (2021). Discrimination and Bias in State Triage Protocols Toward Populations With Intellectual Disabilities During the COVID-19 Pandemic. Disaster Medicine and Public Health Preparedness, 1-3. https://doi.org/10.1017/dmp.2021.81

Gusenbauer, M., & Haddaway, N. R. (2020). Which academic search systems are suitable for systematic reviews or meta-analyses? Evaluating retrieval qualities of Google Scholar, PubMed, and 26 other resources. Research Synthesis Methods, 11(2), 181-217. https://doi.org/10.1002/jrsm.1378

 Isaacs, D. (2020). ‘I Don’t Have Time For This’: Stuttering and the Politics of University Time. Scandinavian Journal of Disability Research, 22(1), 58-67. http://doi.org/10.16993/sjdr.601
Jaafar, S. M. R. S., Maarof, R., Hisam, M. J., & Husin, N. N. F. A. (2020, September). Inclusion Setting for Disabilities in Higher Education: A Systematic Review of Issues and Challenges in Disabilities Research. In Proceedings of the International Conference on Student and Disable Student Development 2019 (ICoSD 2019) (pp. 184-190). Atlantis Press. https://doi.org/10.2991/assehr.k.200921.030

Jesus, T. S., Bhattacharjya, S., Papadimitriou, C., Bogdanova, Y., Bentley, J., Arango-Lasprilla, J. C., & Kamalakannan, S. (2021). Lockdown-Related Disparities Experienced by People with Disabilities during the First Wave of the COVID-19 Pandemic: Scoping Review with Thematic Analysis. International Journal of Environmental Research and Public Health, 18(12), 6178. https://doi.org/10.3390/ijerph18126178

Jesus, T. S., Kamalakannan, S., Bhattacharjya, S., Bogdanova, Y., Arango-Lasprilla, J. C., Bentley, J., Gibson, B.E., Papadimitriou & Refugee Empowerment Taskforce, International Networking Group of the American Congress of Rehabilitation Medicine. (2020). People with disabilities and other forms of vulnerability to the COVID-19 pandemic: study protocol for a scoping review and thematic analysis. Archives of rehabilitation research and clinical translation, 2(4), 100079. https://doi.org/10.1016/j.arrct.2020.100079

Karisa, A., McKenzie, J., & De Villiers, T. (2021). ‘It’s a school but it’s not a school’: understanding father involvement in the schooling of children with intellectual disabilities in Kenya. International Journal of Inclusive Education, 1-16. https://doi.org/10.1080/13603116.2021.1980123

Kelly, J., & McKenzie, J. (2018). Teacher Education: An Analysis of the Availability of Teacher Education Addressing the Educational Needs of Learners with Severe to Profound Sensory or Intellectual Impairments. Disability Studies Division, University of Cape Town. http://www.dhrs.uct.ac.za/sites/default/files/image_tool/images/147/disability/teachereduction20book_web.pdf

Lister, H. E., Mostert, K., & Pillay, M. (2021). Teaching about disability and food security in the School of Health Sciences, University of KwaZulu-Natal, South Africa. https://repository.up.ac.za/bitstream/handle/2263/83053/Lister_Teaching_2021.pdf?sequence=1

Lourens, H. (2021). Supercripping the academy: the difference narrative of a disabled academic. Disability & Society, 36(8), 1205-1220. https://doi.org/10.1080/09687599.2020.1794798

Lyner-Cleophas, M. M. (2016). Staff and disabled students’ experiences of disability support, inclusion and exclusion at Stellenbosch University [Doctoral dissertation, Stellenbosch University]. Stellenbosch University. https://scholar.sun.ac.za/bitstream/handle/10019.1/100370/lynercleophas_staff_2016.pdf?sequence=1&isAllowed=y
Lyner-Cleophas, M., Apollis, L., Erasmus, I., Willems, M., Poole, L., Minnaar, M., & Louw, P. (2021). Disability Unit Practitioners at Stellenbosch University: Covid-19 Pandemic Reflections. *Journal of Student Affairs in Africa, 9*(1), 223-234. https://doi.org/10.24085/jsaa.v9i1.1440

Makwemere, S. (2021). Disability Sensitivity and Sensibility: A Nondisabled Lecturer Perspective on Inclusive Lecturing Opportunities. *Research in Social Sciences and Technology, 6*(2), 52-75. https://doi.org/10.46303/ressat.2021.11

Manase, N. (2021). Disguised Blessings amid Covid-19: Opportunities and Challenges for South African University Students with Learning Disabilities. *Journal of Student Affairs in Africa, 9*(1), 107-118. https://doi.org/10.24085/jsaa.v9i1.1431

Mbuvha, T. (2019). Kinds of Support Offered by the Disability Unit to Students with Disabilities at Institutions of Higher Learning in South Africa: A Case Study of the University of Venda. *Journal of Student Affairs in Africa, 7*(2). https://doi.org/10.24085/jsaa.v7i2.3825

McKinney, E. L., & Swartz, L. (2020). Integration into higher education: experiences of disabled students in South Africa. *Studies in Higher Education, 1*-11. https://doi.org/10.1080/03075079.2020.1750581

Meleo-Erwin, Z., Kollia, B., Fera, J., Jahren, A., & Basch, C. (2021). Online support information for students with disabilities in colleges and universities during the COVID-19 pandemic. *Disability and Health Journal, 14*(1), 101013. https://doi.org/10.1016/j.dhjo.2020.101013

Mertens, D. M. (2010). Transformative mixed methods research. *Qualitative inquiry, 16*(6), 469-474. https://doi.org/10.1177/1077800410364612

Mostert, F. (2021). *The role impairment associated with common mental disorders among first-year university students in South Africa*. [Masters thesis, Stellenbosch University] Stellenbosch University. https://scholar.sun.ac.za/bitstream/handle/10019.1/123749/mostert_role_2021.pdf?sequence=2&isAllowed=y

Mthethwa, L. J. (2017). *The experiences and challenges of adapting to an inclusive education learning environment: a study of students with disabilities at the University of KwaZulu-Natal, Howard College Campus*. [Doctoral dissertation, University of KwaZulu Natal]. University of KwaZulu Natal. https://researchspace.ukzn.ac.za/xmlui/handle/10413/15609

Mulder, M.R., Rapp, J.M., Hamby, A., & Weaver, T. (2015). “Consumer transformation through volunteer service experiences”, *Service Industries Journal, 35*(15-16), 865-882. https://doi.org/10.1080/02642069.2015.1090981

Müller, J., & Couper, I. (2021). Preparing graduates for interprofessional practice in South Africa: the dissonance between learning and practice. *Frontiers in Public Health, 9*, 93. https://doi.org/10.3389/fpubh.2021.594894
Mullins, R. (2019). Using Dewey's conception of democracy to problematize the notion of disability in public education. *Journal of Culture and Values in Education, 2*(1), 1-17. https://doi.org/10.46303/jcve.02.01.1

Munger, K. M., & Mertens, D. M. (2011). Conducting research with the disability community: a rights-based approach. *New Directions for Adult and Continuing Education, 2011*(132), 23-33. https://doi.org/10.1002/ace.428

Munyaradzi, M., Arko-Achemfuor, A., & Quan-Baffour, K. (2021). An Exploration of Comprehensive Student Support Systems in Technical Vocational Education and Training Colleges for Students with Disability. *Community College Journal of Research and Practice, 1*-17. https://doi.org/10.1080/10668926.2021.1952914

Mutanga, O., & Walker, M. (2017). Exploration of the academic lives of students with disabilities at South African universities: Lecturers’ perspectives. *African Journal of Disability, 6*(1), 1-9. https://doi.org/10.4102/ajod.v6i0.316

Ndlovu, L. M. (2019). *Access with success: a case of students with learning disabilities at a technical and vocational education and training college* [Doctoral dissertation, University of KwaZulu Natal]. University of KwaZulu Natal. https://ukzn-dspace.ukzn.ac.za/handle/10413/19881

Ndlovu, S. (2020). The impact of Covid-19 on students with disabilities' access to education in South Africa. *Journal of Social Development in Africa, 131*-166. https://www.ajol.info/index.php/jsda/article/view/208011

Ndlovu, S. (2021). Provision of Assistive Technology for Students with Disabilities in South African Higher Education. International Journal of Environmental Research and Public Health, 18(8), 3892. https://doi.org/10.3390/ijerph18083892

Ngubane-Mokiwa, S. A., & Zongozzi, J. N. (2021). Exclusion reloaded: The chronicles of COVID-19 on students with disabilities in a South African open distance learning context. *Journal of Intellectual Disability-Diagnosis and Treatment, 9*(1), 137-147. https://doi.org/10.6000/2292-2598.2021.09.01.17

Ntombela, S. (2021). Reimagining South African higher education in response to Covid-19 and ongoing exclusion of students with disabilities. *Disability & Society, 1*-6. https://doi.org/10.1080/09687599.2021.2004880

Oliver, M. (1997). Emancipatory research: Realistic goal or impossible dream. *Doing disability research, 2*, 15-31. https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.542.5064&rep=rep1&type=pdf

Parmenter, T. R. (2004). Historical overview of applied research in intellectual disabilities: The foundation years. In E. Emerson, C. Hatton, T. Thompson, & T. R. Parmenter (Eds.), *The international handbook of applied research in intellectual disabilities* (pp. 3–40). Wiley.

Rule, P., & Modipa, T. R. (2013). “We must believe in ourselves”: Attitudes and experiences of adult learners with disabilities in KwaZulu-Natal, South Africa. In P. Mayo (Ed.) *Learning
with Adults: International Issues in Adult Education (pp. 55-76). Brill Sense.
https://doi.org/10.1007/978-94-6209-335-5_5

Scott, S., & Aquino, K. (2020). Covid-19 transitions: Higher education professionals’ perspectives on access barriers, services, and solutions for students with disabilities. Association of Higher Education and Disability, 9. https://ctahead.org/wp-content/uploads/2020/09/AHEAD_COVID_Survey_Report.pdf

Shakespeare, T. (1996). Rules of engagement: Doing disability research. Disability and Society, 11(1), 115–119. https://doi.org/10.1080/09687599650023380

Sipuka, O. (2019). Exploring a framework for decolonised disability-inclusive student walk support practices in an open and distance learning institution. [Doctoral thesis, University of Cape Town]. University of Cape Town. http://hdl.handle.net/11427/34003

Snounu, Y. (2019). Disability and Higher Education in Palestine. Journal of Culture and Values in Education, 2(3), 61-78. https://doi.org/10.46303/jcve.03.02.4

South African Human Rights Commission. (2017). Disability toolkit: A quick reference guide and monitoring framework for employers. South African Human Rights Commission. https://www.sahrc.org.za/home/21/files/20170524%20SAHRC%20Disability%20Monitoring%20Framework%20and%20Guidelines%20Draft%205.pdf

Stoneman, Z. (2007). Disability research methodology: Current issues and future challenges. In S.L. Odom, R.H. Horner, M.E. Snell & J. Blacher (Eds.), Handbook of developmental disabilities, (pp. 35-54). The Guilford Press.

Sullivan, M. (2009). Philosophy, ethics, and the disability community. In D.M. Mertens & P.G. Ginsberg (Eds.), Handbook of social research ethics (pp. 69-84). Sage.

Sutton, H. (2020). Survey reviews COVID-19-based disruptions for students with disabilities. Disability Compliance for Higher Education, 26(3), 9-9. https://doi.org/10.1002/dhe.30921

Tekane, R., & Potgieter, M. (2021). Insights from training a blind student in biological sciences. South African Journal of Science, 117(5-6), 1-7. https://doi.org/10.17159/sajs.2021/8607

Traxler, J., & Smith, M. (2020). Data for Development: Shifting Research Methodologies for COVID-19. Journal of Learning for Development, 7(3), 306-325. https://files.eric.ed.gov/fulltext/EJ1280656.pdf

UN General Assembly. (2007). Convention on the Rights of People with Disabilities: resolution / adopted by the General Assembly, 24 January 2007, A/RES/61/106. https://www.refworld.org/docid/45f973632.html

UN General Assembly. (2015). Transforming our world: the 2030 Agenda for Sustainable development, 21 October 2015, A/RES/70/1. https://www.refworld.org/docid/57b6e3e44.html
Vergunst, R., & Swartz, L. (2020). Experiences with supervisors when students have a psychosocial disability in a university context in South Africa. *Teaching in Higher Education, 1*-14. https://doi.org/10.1080/13562517.2020.1730784

Vergunst, R., & Swartz, L. (2021). ‘He doesn’t understand that he’s struggling with the way I felt’—university students, psychosocial disability and disclosure in the Western Cape, South Africa. *Disability & Society, 36*(2), 226-239. https://doi.org/10.1080/09687599.2020.1730159

Webber-Ritchey, K. J., Simonovich, S. D., & Spurlark, R. S. (2021). COVID-19: Qualitative research with vulnerable populations. *Nursing Science Quarterly, 34*(1), 13-19. doi: https://doi.org/10.1177/0894318420965225

Wilson, L., Conway, J., Martin, N., & Turner, P. (2020). *Covid-19: Disabled Students in Higher Education: Student Concerns and Institutional Challenges Report by the National Association of Disability Practitioners*. National Association of Disability Practitioners https://nadp-uk.org/wp-content/uploads/2020/05/NADP-Report-Covid-19-Disabled-Students-in-Higher-Education-Student-Concerns-and-Institutional-Challenges.docx

Zongozzi, J. N. (2020). Accessible quality higher education for students with disabilities in a South African open distance and e-learning institution: Challenges. *International Journal of Disability, Development and Education, 1*-13.

https://doi.org/10.1080/1034912X.2020.1822518