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Master thesis

“Jeugklimaataktiwisme in Suid-Afrikaanse lande: What literature is available on youth climate activism in South Africa, Botswana, Lesotho, and Namibia from 2018-2023”.

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Groningen, January 2024

Phylischa

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Abstract

Youth climate activism emerged globally as a response to failed global leaders' efforts to address climate change. However, media coverage of campaigns like Fridays for Future lacks information on Global South youth climate activism. This study aims to inventorize what literature is available on youth climate activism in South Africa, Botswana, Lesotho and Namibia between 2018-2023. The question was answered through a systematic literature review. In EBSCO, the databases ERIC, MEDLINE, SocIndex, PsycInfo, GreenFILES, and Academic Search Premier were utilized. A mixed deductive and inductive analysis was conducted. For the initial deductive analysis, text segments were labeled into codes, and then grouped into existing categories. For one of these categories, additional inductive analysis was done. The five studies were by three activist researchers, one journalist and one postgraduate researcher, There we only articles from South Africa, and no findings from Botswana, Lesotho, or Namibia. All authors were from the Global South, except for one UK-affiliated academic. Youth activists were involved in education and raising awareness, protesting and advocacy. Social dynamics played a huge role in all five studies, oftentimes hindering youth from successfully participating in climate change debates and making an actual change. Colonial structures were still embedded in people's everyday lives and impeded youth climate activism in the Global South. This study shows that in order to respect the demands and activism of young people in the Global South, there needs to be a greater acknowledgement of their involvement in global climate change debates.

Keywords: youth climate activism, global south, southern african countries, climate change, climate racism

Samenvatting

Door de mislukte pogingen van wereldleiders om de klimaatverandering aan te pakken, zijn jongeren opgestaan om actief te worden tegen de klimaatverandering. Media en onderzoekers richten zich echter nauwelijks op het klimaatactivisme van jongeren in het Mondiale Zuiden. Deze studie heeft tot doel te inventariseren welke literatuur beschikbaar is over klimaatactivisme onder jongeren in Zuid-Afrika, Botswana, Lesotho en Namibië tussen 2018-2023. De vraag werd beantwoord middels een systematisch literatuuronderzoek. Bij EBSCO werd gebruik gemaakt van de databases ERIC, MEDLINE, SocIndex, PsycInfo, GreenFILES en Academic Search Premier. Er werd een deductieve en inductieve analyse uitgevoerd. Voor de initiële deductieve analyse werden tekstsegmenten in codes gelabeld en vervolgens in bestaande categorieën gegroepeerd. Voor één van deze categorieën werd een aanvullende inductieve analyse uitgevoerd. De vijf onderzoeken zijn uitgevoerd door drie activistische onderzoekers, een journalist en een postdoctorale onderzoeker. Alle auteurs kwamen uit het Mondiale Zuiden, behalve één in het Verenigd Koninkrijk aangesloten academicus. Uit het onderzoek bleek dat er alleen onderzoeken waren over jeugdklimaatactivisme in Zuid-Afrika, niet in Botswana, Namibië en Lesotho. Jeugdactivisten waren betrokken bij onderwijs en bewustmaking, protesten en belangenbehartiging. De sociale dynamiek en nog bestaande koloniale structuren speelden een grote rol in alle vijf onderzoeken. Hierdoor werd het jongeren moeilijker gemaakt om succesvol deel te nemen aan debatten over klimaatverandering en om een daadwerkelijke veranderingen te bewerkstelligen. Deze studie toont aan dat om de eisen en het activisme van jongeren in het Mondiale Zuiden te respecteren, er een grotere erkenning nodig is van hun betrokkenheid bij hun klimaatactivisme.

Introduction

Since the 2nd September 1990, the Convention on the Rights of the Child has been in effect. It imposes a vast array of articles to safeguard children and secure their status as unique members of society with rights (UNICEF, nd). Next to protection against maltreatment (Committee on the Rights of the Child, 1989, Art 19), it promotes children to participate in society and voice their opinions (Committee on the Rights of the Child, 1989, Art. 12).

Global warming debates started to increase around the same time (UN, 2007). The general population believed that industrialization was directly responsible for it and that gas emissions were the main driver of it. (United Nations Climate Change, nd). As a result, in 1992, the United Nations Convention on Climate Change (UNFCCC) was founded (Sokona & Denton, 2001). They established that the effects of climate change could put humankind at risk (United Nations Climate Change, nd). Consequently, the 198 member countries pledged to keep the global temperature at 1.5 C above pre-industrial levels (United Nations Climate Change, nd).

Unfortunately, despite the efforts of the Convention and other global actors, the global temperature has continued to rise (Rahsmtorf et al., 2017), leading to disastrous effects. Changes in the ecosystem (Weisskopf et al., 2020) and health problems are some of the repercussions that can already be seen today (Rocque et al., 2021).

In the last decade, this critical situation has inspired children and adolescents to speak up and raise awareness of the climate crisis, as they were worried about their future and future generations. This is evidenced by, for example, the protest Fridays for Future, with participants from 185 countries (Cologna et al., 2021). On Friday, the 20th of August 2018, the then-15-year-old Swedish girl Greta Thunberg protested in front of the Swedish government and continued to protest every Friday during school time. Many children and adolescents were motivated to go on the streets and do the same, resulting in a global protest (Parth et al., 2020; Kühne, 2019). Children and adolescents claimed that authorities had not done enough to combat the climate crisis, and thus, they felt compelled to take action (Gorman, 2021).

Youth activism does not only lead to global protests. Young people also learn many skills through participation, such as the ability to speak up and a sense of belonging (Montague & Eiroa-Orosa, 2018). Youth participation has many advantages, such as a positive effect on children's personal and social development (Checkoway, 2011). In addition, the Committee on the Rights of

the Child claims that “children’s voices are a powerful global force for environmental protection, and their views add relevant perspectives and experience concerning decision-making on environmental matters at all levels” (Committee on the Rights of the Child, 2023).

However, while Greta Thunberg, a young climate activist living in the Global North¹, has received a lot of attention and was even nominated for the Nobel Peace Prize in 2019 (Kühne, 2019), the same does not count for youth climate activists in the Global South. They are, for instance, facing more media harassment. In January 2020, in Davos at the World Economic Forum, a female activist from Uganda, Vanessa Nakate, was cut out of a photo in an article about her climate activism (Barnes, 2021). Only her white companions were pictured (Barnes, 2021). Schreiber (2021) concluded that children in the Global North receive more media attention than children in less privileged countries. Barnes (2022) followed up with another paper, reporting on the same topic, categorizing the incidents as “climate racism”. Next to the denial of youth climate activists in African countries in the media, academics write and research less on youth climate activists living in less privileged countries (Walker & Bowmann, 2022). Even less attention is given to female young activists, which is a result of sociocultural factors. Compared to their male peers, they are less frequently acknowledged as activists in their community due to cultural expectations, such as the idea that they should solely focus on raising children. (Sweet, 2020). In other words, in addition to the climate racism already discussed, girls and women experience sexism, which makes it harder for them to gain an audience, locally and, ultimately, globally (Spitzer, 2023).

Yet, children in Africa face more disastrous effects from the climate crisis than children from the Global North (Eide & Kunelius, 2021). The weather changes, for example, lead to more drought (Chersich et al., 2018), putting African agriculture at risk. Agriculture remains one of the most important ways to secure food resources in developing countries (Nhemachena et al., 2020). However, Nhemachena et al. (2020) stated that “the region [Southern Africa] is projected to experience reductions of between 15% and 50% in agricultural productivity, a scenario that would exacerbate food insecurity in the region” (p.1). In other words, drought has a tremendous effect on food insecurity and, as a result, on people’s health. Apart from that, there is an ongoing debate

¹ According to Dados et Conell (2012),”The phrase “Global South” refers broadly to the regions of Latin America, Asia, Africa, and Oceania. (...)The use of the phrase Global South marks a shift from a central focus on development or cultural difference toward an emphasis on geopolitical relations of power”(p.12). Respectively, Europe and North America are referred to as the Global North.

about the consequences of climate change on migration; Zickgraf (2019) stated that, although more factors need to be taken into account when it comes to migration due to climate change, such as topographic, economic, and political factors, climate change does contribute to the migration of African people to countries in the Global North.

In addition, African countries differ from the Global North politically and historically. African 26 to 32-year-olds today are called the “born frees” (Mpongo, 2016), meaning the first generation born after Apartheid. Generation Z will be the second generation “coming of age” who do not live under the colonialism regime anymore. However, almost four decades after the end of the Apartheid in 1994, the consequences of colonialism can still be felt, putting indigenous people at a disadvantage. Colonists made Africa subordinate to other countries in their trading system, disadvantaging them in technological progress (Settles, 1996). As a result, nowadays, it is harder for people in Africa to achieve wealth and economic growth independently (Ocheni & Nwankwo, 2012). Even today, Africa remains subordinate to other global actors and is being exploited. For example, many Africans are impoverished and face massive education inequalities (Spaull, 2015); and education inequalities might hinder children from actively participating in climate change debates.

It is crucial to note the difference between colonialism and coloniality in this context. During colonialism, values, ways of knowing, and power structures dominated indigenous beliefs and knowledge production. These are referred to as forms of coloniality. While colonialism, as an “episodic event” stopped in 1994 after the Apartheid, coloniality survived and is still influencing African people's everyday lives (Ndlovu, 2018), and other parts of the world in general (Mignolo, 2021). Noteworthy, for this paper is the coloniality of knowledge, where Western forms of knowledge production (universities as a place of acquiring and spreading knowledge, English as an academic language,...) dominate other forms of knowledge production (Maldonado-Torres, 2016). On top of that, universally accepted definitions, such as labeling countries in the Global South as “developing countries”, are based on a Western point of view, which is also referred to as the so-called “white gaze” (Pailey, 2020). How a specific topic is framed can have various effects on further decision-making in academia and, consequently, can have a lot of consequences for people's everyday lives (Levin et al, 1988). At the same time, the result of coloniality in knowledge and existence is the erasure of alternative realities and forms of resistance (for example, the activism of youth in the Global South fighting climate change).

Objectives

Within this discussion, it is crucial to explore how and why young people participate in climate change movements and the possible limitations in their specific country and context. Extra attention should be directed toward countries in the Global South, such as the Southern African countries. Until recently, academia and media have been focusing mainly on the Global North, while the Global South is most affected by the effects of the climate crisis.

Therefore, in this master's thesis, I focus on youth climate activism in Africa. As African countries' policies and living situations differ, I focus on Southern African countries with similar living conditions. South Africa, Botswana, Lesotho, and Namibia all have similar vegetative and political systems, which is why these four countries are chosen for this research. These living conditions are further elaborated on in the methodology section of this study.

The research question guiding this study is the following:

“Jeugklimaataktivisme in Suid-Afrikaanse lande: What literature is available on youth climate activism in South Africa, Botswana, Lesotho, and Namibia from 2018-2023”.

The main goal of this study is to achieve an overview of the most recent literature on youth climate activism in Southern Africa. It can help to better understand youth climate activism in Southern African countries and provide recommendations for both research and policy making. For instance, it can give implications for policy makers and educators on how youth can be best included in the climate change debates. Additionally, the results of this study can be used for further research, such as comparing the findings with youth climate activism in other countries.

Methodology

Study design

According to Paul & Criado (2020), literature reviews “provide readers with a state-of-the-art understanding of the research topic, help identify research gaps and signal future research avenues”(p 1.) . In this vein, the present study aims to answer the research question *“Jeugklimaataktivisme in Suid-Afrikaanse lande: What literature is available on youth climate*

activism in South Africa, Botswana, Lesotho, and Namibia from 2018-2023". Eligible inclusion and exclusion criteria have been designed in order to select the articles for this review.

The study uses specific keywords, a certain period, and accepted databases. In other words, the literature review of this research has a systematic approach. Systematic literature reviews "involve a detailed and comprehensive plan and search strategy derived a priori, with the goal of reducing bias by identifying, appraising, and synthesizing all relevant studies on a particular topic", according to Uman (2011, p.57). According to Wright et al. (2017), the systematic review includes the following steps: 1) find a suitable research question, 2) establish a research protocol, 3) start the literature search, 4) data extraction, 4) quality appraisal, 5) data analysis and results, 6) interpretation of the results. The six steps, if thoroughly done, constitute high-quality systematic reviews, according to Gopalakrishnan & Ganeshkumar (2013).

To make sure that the review includes all relevant steps, the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) has been used in this study (Page et al., 2020). The *PRISMA for Systematic Reviews* provides a checklist that makes every review step clear and easy for other researchers to reproduce. Additionally, PRISMA provides a flow diagram for the eligibility criteria, the *PRISMA for Systematic Review Flow diagram*. It illustrates the identification and screening processes of the articles (Rethlefsen & Page, 2022).

Eligibility criteria

Types of studies

To ensure that the study is of high quality, only level 1 up to and including level 4 studies, derived from the level of evidence table by Melnyk & Fineout-Overholt (2023), are accepted, which are randomized controlled trials, meta-analyses, quasi-experimental studies, case-control studies, and cohort studies.

Population

Africa has many countries with different characteristics, such as divergent vegetative systems, political systems, and different levels of freedom of speech. All these characteristics may influence the availability of literature on youth climate activism. To avoid obfuscation and complexity in this paper, countries with similar characteristics are selected. Additionally, it is

important to define the term “youth” in this study, as the definition of “youth” varies across countries. (UNESCO, nd).

In the following, the definition of “youth”, as well as some key characteristics, “political system”, “vegetative system” and “freedom of the press”, are further elaborated on.

Youth. In the literature, “youth” covers a wide array of age ranges, most commonly referring to children aged 15 to 24-year-olds (United Nations, 2013). The African Youth Charter, however, includes adults up to 35 years (African Union, 2007). According to the United Nations (2013), “Youth is best understood as a period of transition from the dependence of childhood to adulthood’s independence. That’s why, as a category, youth is more fluid than other fixed age-groups”. The phenomenon of “waithood”, defined as a prolonged transition from childhood to adulthood due to poverty and unemployment, might be one of the reasons why people in Africa remain in the category for longer (Honwana, 2014). There are differences between “older” and “younger” youth, such as different rights and responsibilities between minors and youngsters of 18 years and older. Although this difference is not always taken into account/treated separately in the literature (Kosciulek, 2020), all youth have something crucial in common: They all are in a transition process to an independent life, with all the struggles that come with it. The challenges they face might form a basis for how they make decisions. For example, young people might be more likely to take a job vacancy in industries that are harmful to the environment than to protest against them if they need employment (Stricklin, 2020). This decision might be different for people with a stable income. To include all people in this transition process, all young people defined in the literature as “youth” are accepted in the study.

Political system. Since the decolonization process, all African countries have had different political systems: while some countries, such as South Africa, developed into countries with democratically elected governments, others now have a monarchy, such as Swaziland, or other authoritarian regimes (Siegele, 2021). These differences in political systems may reflect the courage and freedom people have to go on the streets to protest.

Freedom of the press. Additionally, there are differences in freedom of the press. Lichtenberg (1987) stated that freedom of speech and freedom of the press are sometimes used

synchronously. Restrictions on the freedom of the press might affect the degree to which information on climate crisis demonstrations spreads within the country and other countries worldwide.

Vegetation. African countries have different vegetations, ranging from savannah to steppe to dessert (White,1983). Differences in the vegetation could ultimately mean that they face different consequences from climate change, depending on in which region the country is.

Selected countries. The main focus of this article is to highlight the available data on youth climate activism in African countries. Less freedom of the press and more authoritarian regimes could lead to a higher risk of confounding bias due to censorship by politicians, which is crucial to rule out for this study.

South Africa, Lesotho, Namibia, and Botswana all have a democracy (Siegele, 2021), with the latter two belonging to one of the five most politically stable African countries (In on Africa, 2018). Additionally, they are all free or partly free in their freedom of the press (World 101, nd). Lastly, they all have similar vegetation (Cowling et al., 1997).

That is why, in this study, all young people who grew up in South Africa, Botswana, Lesotho, and Namibia and who the literature labels as “youth”, are included in the search.

Context

This systematic review examines the participation of youth climate activism in the abovementioned Southern African countries. Participation ranges from street protests to more institutional ways to participate, such as youth advocacy, from 2018 to 2023.

Ethical consideration and positioning

According to Shaw et al. (2020) “(..)we suggest that researcher positionality and the researcher’s status as an insider/outsider has implications for the topics we choose to study, the way we do research and engage with our research participants, how we analyse our data, and how we communicate our findings”(p. 290). This research aims to fulfill the requirements of the

master's degree in *Pedagogical Sciences: Special Needs Education* at the Rijksuniversiteit Groningen. Apart from the study, I am not an active youth climate activist in one of the countries, nor do I have any personal or professional network in any African countries. I am a white female student, brought up and living in the Global North. The motivation for this study is a genuine interest in the topic. The South of the Netherlands and Germany are already seeing increased floods as a result of the climate problem. This is the residence of my family. Thus, I find climate change to be a significant issue. Apart from the aforementioned catastrophic occurrences however, I haven't noticed much of a climatic shift yet. Above all, I feel protected by the system I live in since I can still get warm in the winter and the shower still has water running. This is very different from youth in Southern African countries, where the consequences of the climate catastrophe are significantly larger and living conditions more difficult. Not to be overlooked is the research's format. The study is carried out at Groningen. It is told from the perspective of a Dutch-born woman who was raised and educated in Germany and who speaks English, Dutch, and German. I will always miss a crucial part of knowledge, which is personal experience. The aim is merely to provide an overview of available data on the topic with the tools that I have. Referring to the abovementioned "Coloniality of knowledge", there might be other forms of logic, not in the realms of Western knowledge, that portray the issue from another point of view. Readers should be aware through which *eyes* this thesis is conducted, and the limitations that might come with it.

Languages

All articles written in English, Dutch, and German will be included. It is important to note that this might rule out papers in other languages, such as Afrikaans. This is also further elaborated on in the discussion section of this paper.

Database and period of the review

EBSCO provides articles from leading research databases, such as ERIC (Education Resource Information Center), MEDLINE, SocINDEX, and PsycInfo, which all focus, amongst other research fields, on pedagogy, sociology, and psychology (EBSCO, 2023). In EBSCO, the abovementioned databases are used for the search. Additionally, GreenFILE and Academic Search Premier are used. GreenFILE provides articles about the influence of humans on environmental changes (EBSCO, 2023), whereas in Academic Search Premier articles covering several topics/research areas can be found (Langer, 2006). During the search, ERIC, MEDLINE,

SocINDEX, PsycInfo, GreenFILES, and Academic Search Premier will be selected in EBSCO and the same search string will be run in all databases.

The study aims to inventorize available literature on youth climate activism in Southern African countries. The Fridays for Future event generated significant media attention, particularly in the Global North, and youth climate activism has garnered considerable attention from the media and academics ever since, which is also known as the "Greta-Effect" (Ryalls & Mazarella, 2023, p.143). Additionally, Hayes & O'Neill (2021) reported that today's climate activism is portrayed and received differently compared to earlier years. They say that "the visual discourse of climate protest has shifted away from the protest paradigm to instead depict climate change as an issue of intergenerational equity"(Hayes & O'Neill, 2021, p.1). To gain an understanding of modern youth activism in Southern African countries, it is imperative to examine literature from the period of 2018-2023.

Articles search and inclusion criteria using keywords

In the following, the search terms will be explained. Overall, the search terms can be divided into three "subgroups", namely *youth*, *climate activism*, and *countries*.

Youth. As aforementioned, "youth" in the literature covers a wide age range. Therefore, the study accepts all papers using the search term "youth". Apart from that, the search terms "children", "youngsters", "adolescents" and "young adults" are included.

Climate activism. For the search term activism, two approaches are used. Firstly, words that cover climate activism are chosen. Additionally, a combination of activism and climate change will reveal supplementary findings.

Activism. To cover climate activism, the search term "Climate activism", as well as other terms that cover the same topic, "climate action", "climate justice" and "climate strikes", are included.

Combination of activism and climate change. Global warming and activism will be

combined to allow for additional publications on related subjects. Thus, terms covering climate change, and words covering activism are used. Climate change broadly refers to the causes and consequences of global warming, such as carbon emissions and environmental changes. The following search terms are chosen for climate change, which is “climate change”, “environmental change”, “global warming”, and “carbon emissions”, and for activism, which are “activism”, “advocacy”, “social movements”, and “protests”. respectively. The search terms will be combined in one search, using the boolean operator AND.

Countries. Similar to climate activism, supplementary search terms are chosen to find more articles that might help to answer the research question.

Specified countries. To find available data on youth climate activism in the mentioned countries, “South Africa”, “Botswana”, “Lesotho” and “Namibia” are used in the search string.

Africa. It is possible that articles refer to these countries but are not found through the aforementioned search. That is why, additionally, “Africa”, “Sub Saharan countries” and “African countries” will be used in the search string.

Complete search query. The search terms of every subtopic will be filled in with quotation marks and, if possible, truncations. The latter allowed for more word variety, such as searches with various endings (youngster, youngsters). Quotation marks were used to make the search string replicable, as no similar search terms were automatically selected by EBSCO. The search terms will be combined with the boolean operator OR before the search command is run. Articles including the search terms in either the abstract (AB), subject(SU) and/ or title(TI) will be accepted. This can be installed in EBSCO at the search bar. The results of each subtopic (*youth, climate activism, and countries*) are then merged using the operator AND. This process will be completed for every database.

A complete presentation of the search is portrayed in Table 1.

Table 1*Search query*

#	Query	Information on	
		Query	Run Via
S11	S1 AND S6 AND S7	Final Combination	Interface- EBSCOhost Research Databases Search Screen- Basic Search Database*
S10	S1 AND S3 AND S7	Final Combination	Interface- EBSCOhost Research Databases Search Screen - Basic Search Database*
S9	S1 AND S2 AND S6	Final Combination	Interface- EBSCOhost Research Databases Search Screen- Basic Search Database*
S8	S1 AND S2 AND S3	Final Combination	Interface- EBSCOhost Research Databases Search Screen - Basic Search Database *

		Combination	Interface- EBSCOhost Research
		Activism and	Databases
		Climate Change-	Search Screen- Basic Search
S7	S4 AND S5	Combined	Database*
	TI ("africa" or "sub saharan africa" or "african countries") AND AB ("africa" or "sub saharan africa" or "african countries") AND SU (Interface- EBSCOhost Research Databases
	"africa" or "sub saharan africa" or "african countries")	Subgroup Africa	Search Screen - Basic Search Database*
S6			
	AB ("activism*" or "advocacy" or "social movement*" or "protest*") OR TI ("activism*" or "advocacy" or "social movement*" or "protest*")	Subgroup	Interface- EBSCOhost Research Databases
	OR SU ("activism*" or "advocacy" or "social movement*" or "protest*")	Combination of Activism and climate Change	Search Screen - Basic Search Database*
S5			

S4	<p>AB (“climate change*” or “environmental change*” or “global warming” or “carbon emission*”) OR TI (“climate change*” or “environmental change*” or “global warming” or “carbon emission*”) OR SU (“climate change*” or “environmental change*” or “global warming” or “carbon emission*”)</p>	<p>Subgroup Combination of Activism and Climate Change</p>	<p>Interface- EBSCOhost Research Databases Search Screen- Basic Search Database*</p>
S3	<p>AB ("South Africa" or "Botswana" or "Lesotho" or "Namibia") OR TI ("South Africa" or "Botswana" or "Lesotho" or "Namibia") OR SU ("South Africa" or "Botswana" or "Lesotho" or "Namibia")</p>	<p>Subgroup Specified Countries</p>	<p>Interface- EBSCOhost Research Databases Search Screen Basic Search Database*</p>
S2	<p>AB (“climate action*” or “climate justice” or “climate strike*” or "climate activism") OR TI (“climate action*” or “climate justice” or “climate strike*” or "climate activism") OR SU (“climate action*” or “climate justice” or “climate strike*” or "climate activism")</p>	<p>Interface- EBSCOhost Research Databases Search Screen- Basic Search Database*</p>	

Subgroup

Activism

<p>AB ("youth*" OR "children" OR "youngster*" OR "adolescent*" or "young adult*") OR TI ("youth*" OR "children" OR "youngster*" OR "adolescent*" or "young adult*") OR SU ("youth*" OR "children" OR "youngster*" OR "adolescent*" or "young adult*")</p>	<p>Interface- EBSCOhost Research Databases Search Screen- Basic Search Database*</p>
S1	Subgroup Youth Database*

Note. The databases PsycInfo, SocInfo, MEDLINE, GreenFILES, Academic Search Premier, and ERIC are selected for the search individually, The shown search history is therefore run six times via EBSCO.

Eligibility and Quality Assessment

This step aims to determine the relevance and significance of the articles for the study. A total of three screenings will be carried out. Initially, attention will be given to the title and abstract, eliminating papers that proved irrelevant to the study. Papers are deemed relevant if they focus on youth climate activism in the mentioned Southern African countries. During the second screening, a thorough evaluation of the entire text takes place, assessing the study's relevance. For the third screening, Joanna-Briggs-Institute Critical Appraisal Tools (JBI) are used(nd). According to the JBI (nd) “JBI’s critical appraisal tools assist in assessing the trustworthiness, relevance, and results of published papers”(para 1). The tools have a certain amount of questions that can be

answered with: Yes/No/Unclear/Not Applicable. At the end of the questionnaire, the researcher can either tick the box: Include/Exclude/Seek further information and, if desired, further explain the decision.

JBI tools stem from healthcare-related research (JBI, nd). However, the tools still prove useful for this research. That is why the tool was still utilized. The tools JBI can be found in their completeness in appendix A and appendix B.

The PRISMA Flow Diagram will be used for this screening process.

Data extraction analysis

Previous research uses the spreadsheet software Excel (Microsoft Corporation, 2018) in their systematic literature review to create a table with information on the studies found (Potrč et al., 2020).

Initially, an Excel table (Microsoft Corporation, 2018) is created with information on the author, date of publication, publisher, methodology, key findings, the relevance of the study, and the limitations of the study. The purpose is to get an overview of the findings. A presentation of the table is included appendix C of this paper.

In the next step, a content analysis will be conducted.

Harwood et al. (2003) describe content analysis as “a method for analyzing the content of a variety of data, such as visual and verbal data. It enables the reduction of phenomena or events into defined categories to better analyze and interpret them.”(p.479). Diving deeper into this, Drisko & Mashi (2016) outline three forms of content analysis, which are basic, interpretive, and qualitative content analyses. Where basic content analysis uses quantitative analyses, such as counting existing words in the text, the interpretative content analysis also focuses on the so-called *latent content*- The researcher opts to *read in between the lines*, to interpret the meaning of the text. The third form “is a bundle of text analysis procedures integrating qualitative [interpretative] and quantitative [such as counting] steps of analysis, which makes it an approach of mixed methods.”(Mayring, 2015, p.365), which is the method that is used in this research.

For this, an inductive as well as a deductive analysis will be done. This was done by researchers before (Anderssoon et al., 2015) and allows for both the structure of the deductive analysis, as

well as the “openness” of the inductive analysis. According to Greco et al. (2001), “Inductive techniques are used for generating hypotheses from data whereas deductive techniques are used to derive knowledge and to verify hypotheses.” (p.69). Using both approaches will allow for the utilization of existing knowledge on the subject matter, while also integrating any pertinent information that may be lacking.

Analyzing data using ATLAS.ti. The analysis will make use of the software ATLAS.ti 23.2.1 (2023). Text segments can be coded using ATLAS.ti, and these codes can then be merged into groups. Codes may also be arranged into pre existing groups. According to Finfgeld-Connett (2014), writing notes during the analysis aids in documenting the researcher's views and thoughts and reduces the possibility of validity bias. In ATLAS.ti, the user can make memos. The coding trees for both forms of content analysis are shown in Figure 1.

Step I: Deductive Analysis. Referring to the beginning of this paper, certain categories are of interest to this study. As mentioned, academics and the media from the Global North do not often portray youth climate activists from the Global South. Additionally, it is interesting to learn about the frameworks of youth participation.

According to Finfgeld-Connett (2014) “Using a deductive approach, the reviewer begins data analysis with a coding template in mind, and data is organized according to an existing, though alterable, structure”(p.342). In conclusion, a deductive analysis can be used for this study.

Two main themes are interesting for this study: *1. Where* and *how* are the studies conducted? and *2. What* is said about youth climate activism?

For each theme, two categories are created: location of the study and information on the author(s) (eg indigenous, academic from the Global North, activist-researcher) for the first theme, and framework of youth participation, and social dynamics of youth activism, for the second theme.

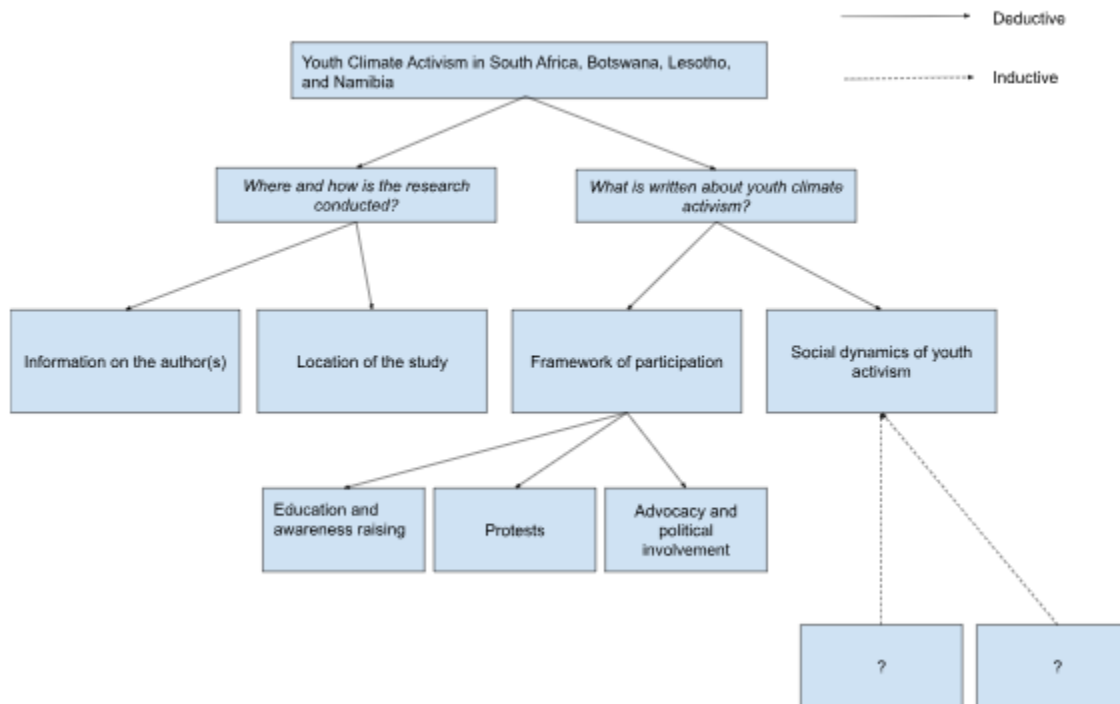
Presenting information about authors shows their different views and forms of knowledge production and presentation. An activist researcher might offer different perspectives and might

use different methods than an academic researcher from the Global North, for instance. Additionally, it gives insight into what kind of academics are studying this topic and where they come from. Locations indicate the regions and countries actually surveyed in the studies and may provide insight into where further research could be conducted.

The column social dynamics in youth activism shows the success stories and difficulties youth activists experienced during their activism work, due to ,for instance, the reactions of their family and the government.

Some categories do not necessarily need a subcategory. On the other hand, one category, the framework of youth participation, can be split up into subcategories. The decisions to split the groups into certain categories are made based on previous research about activism (Schwedler & Kevan, 2016). Ultimately, three subgroups are chosen: education and awareness raising, protests, and political involvement and advocacy.

Step II: Inductive Analysis. The social dynamics of young people's climate actions are a broad category, and a lot is still unclear from the existing literature. Predefined groups may inadvertently leave out crucial information on the social dynamics of youth activism. Ideas for classification and subcategorization will come to mind while reading and coding the articles. Because of this, an inductive method will be used for this part. After reading the papers, codes will be produced. After that, relevant codes can be grouped to create subcategories (Kynngäs, 2020).

Figure 1*Coding tree***Ethical approval**

Systematic literature utilizes pre-existing papers, ensuring participants have agreed to the terms of their initial studies, making them not direct participants in this study. According to Suri (2020), “Institutional Review Boards for ethical conduct of research do not typically include guidelines for systematic reviews”(p.41). However, it is crucial to note the possible impact of systematic reviews in, for example, the implementation of future policies (Tseng, 2012). Different ethical movements, such as deontology and utilitarianism, help with ethical decision-making (Aguinis & Henle, 2004). One of the newer approaches, the Ethics of Care, implies that emotions and relationships are crucial for ethical decision-making (Held, 2006). This form of ethics is in line with my general personal view on how to conduct research. Doing research on the topic has

an impact on how I view climate activism in different countries. It triggers various emotions and motivates me to stay informed and updated about the topic.

Ethics of care presents challenges for systematic reviews due to the need for participant approval for each article, which can be time-consuming and potentially impossible to contact from previous studies. Systematic reviews, however, might provide valuable knowledge and, consequently, might potentially lead to political and societal changes. So one could argue that this study utilizes earlier research results for a higher purpose.

This reasoning aligns with consequentialism/utilitarianism, where decisions are made based on serving the highest utility for the majority of people. (Wolff, 2020) Owing to the aforementioned factors, I adopt a "utilitarian approach" and forgo obtaining each research participant's agreement from earlier studies.

Search strategy - Analysis

The analysis started on 25 November 2023 and ended on 11 December 2023. The researcher got support from the University of Groningen Library (UG bibliotheek) in search strategy development and optimization.

Search string

In EBSCO one of the six mentioned databases was selected, which were MEDLINE, ERIC SocIndex, PsycInfo, GreenFILES, and Academic Search Premier.

For every database, a search command was run, as described in the previous section.

Initially, it was stated that articles that were not level 1 to level 4 studies, according to the level of evidence by Melnyk & Fineout-Overholt (2023), should be eliminated. However, as a result, none of the articles would have been left. Aim of this study is to get an overview of all data available on the research topic. Although studies with a higher level of evidence are preferred, other types of study, such as interviews and commentaries, might have useful information on the issue. Therefore, the decision was made to include all types of papers. The researcher was aware of the possible bias resulting from this decision.

The publication period remained between 2018- 2023 as it may be argued that certain types of engagement, such as the usage of social media, could be less represented in earlier years. This

might give rise to a misconception about modern youth activism and their forms of participation. Since the type of participation is a crucial part of the study topic, it was decided to not change the publication period. Three articles were excluded in this step.

In total, twenty articles were found during this process. Table 2 shows the final search history with results from each search string and database. However, the aforementioned search phrase combinations occasionally returned identical articles.

Table 2

Results of the Search History EBSCO

#	Query	Information on search	Run Via	Results
S11	S1 AND S6 AND S7	Combination	Interface - EBSCOhost	ERIC (n=0)
			Research Databases	MEDLINE (n=0)
			Search Screen - Basic	PsycInfo (n=0)
			Search	SocInfo (n=1)
			Database*	GreenFILES (n=0)
S10	S1 AND S3 AND S7	Combination	Interface - EBSCOhost	ERIC(n=0)
			Research Databases	MEDLINE (n=4)
			Search Screen - Basic	PsycInfo (n=0)
			Search	SocInfo (n=0)
			Database*	GreenFILES (n=0)
S9	S1 AND S2 AND S6	Combination	Interface - EBSCOhost	ERIC(n=0)
			Research Databases	MEDLINE (n=0)
			Search Screen - Basic	PsycInfo (n=0)
			Search	SocInfo (n=1)
			Database*	GreenFILES(n=0)
S8	S1 AND S2 AND S3	Combination	Interface - EBSCOhost	ERIC(n=0)
			Research Databases	MEDLINE (n=0)
			Search Screen - Basic	PsycInfo (n=1)
			Search	SocInfo (n=1)
			Database *	GreenFILES(n=0)

Twelve items remained after those were identified as duplicates.

To summarize, one article was found via APA PsycInfo, zero in ERIC, one in SocIndex, five in MEDLINE, five in Academic Search Premier, and zero in GreenFILES.

The twelve remaining articles were exported to Zotero, a reference management program. Duplicate material could be quickly located and eliminated with Zotero, and a comprehensive list of all discovered literature was provided (Vanhecke, 2008). Throughout this procedure, two duplicates were found and eliminated.

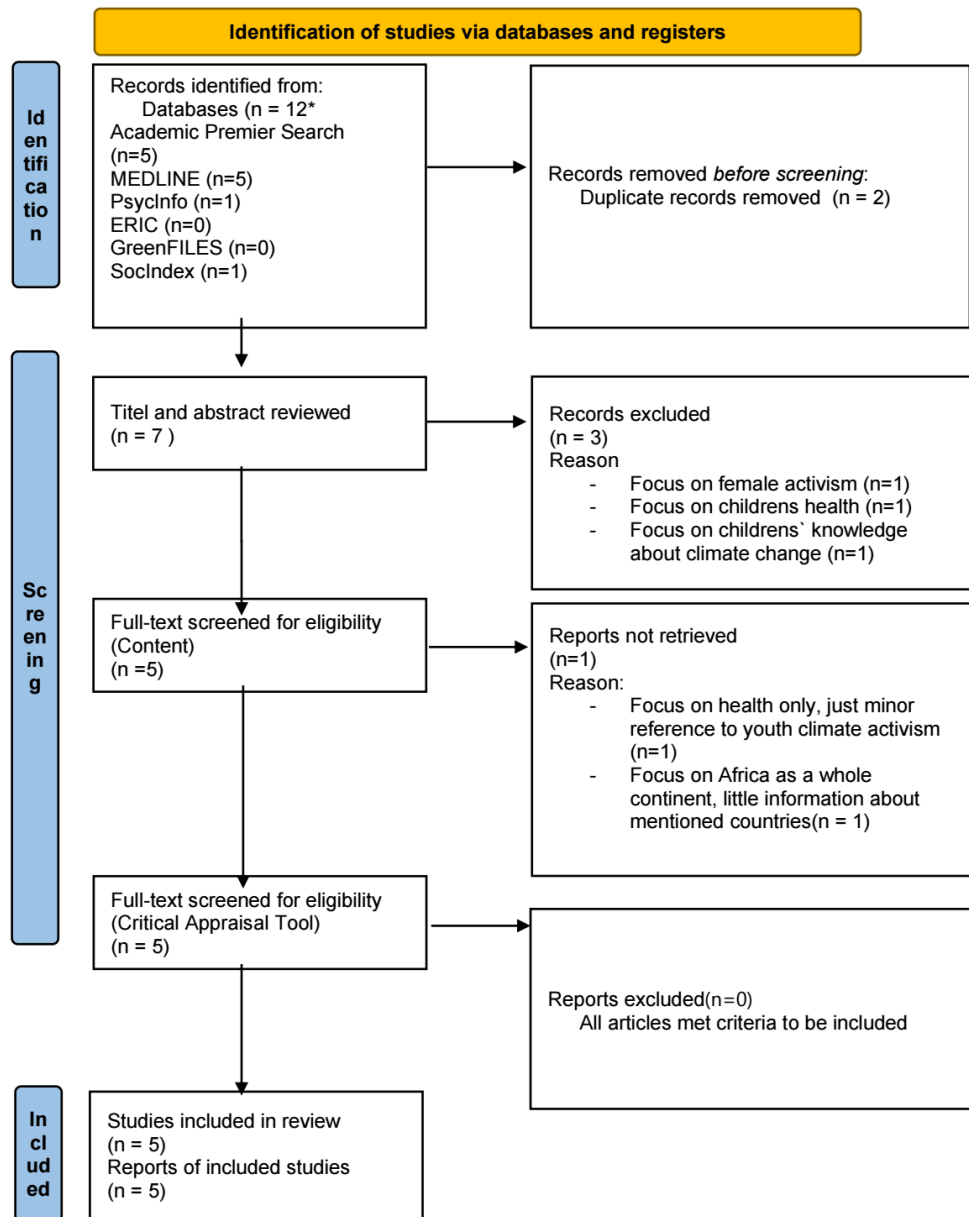
A total of ten (10) articles remained.

Eligibility and quality assessment

After retrieving the articles and outsourcing the duplicates, the papers were critically assessed. Quality Assessment was carried out as explained in the previous section. During the first screening, three articles were outsourced. Two additional articles were eliminated during the second assessment. As the studies showed mostly qualitative studies, the JBI Critical Appraisal Tools for Qualitative Studies was used (Moola et al., 2020). The results showed one case study that was assessed by the JBI Critical Appraisal Tool for Case Reports (Lockwood et al., 2015). Two questions were modified, changing *medical interventions* to *social intervention*, and the *clinical condition of the patient* to the *personal situation of the youth activists*, respectively. The case study assessment had 8 questions and the assessment for qualitative studies 10 questions. All articles met the criteria from the critical appraisal tools, which is why during the last screening, no more articles were excluded.

After this process, five (5) articles remained..

Figure 2 shows the PRISMA Flow Diagram of the critical appraisal.

Figure 2*Prisma Flow Diagram*

* Remaining articles after eliminating duplicates from the search string combinations

Data Extraction and analysis

The remaining articles were read entirely once again. Occasionally, only the youth climate organizations were referenced, with no further information. In those instances, the websites of the

organizations were looked up and their activism program was assessed for their type of activism. This was done on 11.12.2023 for the websites of F4FSA, Earth Child Project Eco Warriors, Extinction Rebellion South Africa, and the African Climate Alliance (Fridays For Future South Africa, nd: Earh Child Project Eco Warriors, 2007; Extinction Rebellion, nd; African Climate Alliance, nd).

An Excel table, as mentioned before, was then filled out, including information on the author, date of publication, publisher, methodology, key findings, the relevance of the study, and the limitations of the study.

Through deductive analysis, the papers were then analyzed according to the previously defined themes and categories. A second inductive analysis provided further information on the social dynamics of youth activism. The inductive analysis revealed three topics: colonial history and modern youth activists, power inequality and accessibility, and social inequality for youth activists. The colonial history and modern youth activists displayed struggles youth activists faced due to their colonial history. Power inequality and accessibility focused on the degree to which global leaders and the media acknowledged the youth activists and included them in their debates. Factors such as limited accessibility made it more difficult for the youth to be heard and recognized, which is also mentioned in this section. Lastly, the social inequality for youth activists revealed the challenges they encountered in their immediate surroundings. For instance, this segment detailed the response of their families to their activism.

Results

The final overview of the findings is displayed in table 3 and 4. The tables are further explained in the following section. From the twenty-three articles that were found at the very outset of this research, five articles were retrieved for further analysis. All articles were qualitative studies, with two case studies, one interview, one literature review, and one ethnographic study. The literature review was conducted via desktop research. Three articles were published in 2021, one in 2022, and the most recent one in 2023. Two articles focused on the age range of 15-24, and one paper on 0-19 year-olds, the journalist interviewed a 19-year-old girl, and one article specified youth as 15-34. The remaining information proved to be important for answering the research question and can therefore be found in the following section.

Synthesis of the Findings

Where and how is research conducted?

Table 3 provides information on this section. Next to general information on the studies, which are the title, publication date and research method, data is provided on the location of the study and information on the authors. The location shows us which areas are studied and which are not, the information on the author(s) gives insight into, for instance, whether researchers from the Global North or from the Global South studied the topic. The findings are further described in the following.

Location. Four papers focused on South Africa (Luckett, 2022; Vogel et al., 2021; Melithafa, 2023; Nkrumah, 2021). Some articles mentioned a specific area in South Africa, such as Lephalale (Luckett, 2022), and Johannesburg (Vogel et al.,2021). Others referred to the country South Africa in general (Melithafa, 2023; Nkrumah, 2021). One article studied the whole continent but used “Southern Africa” in its literature review (Zhanda et al.,2021). No article focused on any of the other countries of this research paper (Namibia, Botswana, Lesotho). Zhanda et al. (2021) included these countries in their search, but revealed only results for South Africa or countries in other regions.

Information on the author(s). The need for more awareness about different forms of logic or knowledge production was a recurrent subject (Luckett, 2022; Vogel et al., 2021). In the article by Vogel et al. (2021), it was even embedded in the youth advocacy work. Following this paper's opening statements regarding the coloniality of knowledge, it is useful to learn more about the papers' authors in this literature review. The interview was written by a journalist from Zimbabwe, with no further information on any involvement in youth climate activism (Melithafa, 2023). Three articles were (partially) written by activists themselves (Luckett, 2022: Voget et al., 2021; Nkrumah, 2021), with the article by Luckett (2022) and Nkrumah (2021) being written by activist researchers and the article by Vogel et al. (2021) written by South African “youth activists, civil society organization leaders, educators and climate scientists.”(p. 1). It is noteworthy to mention that the paper from Luckett (2022) was written by an activist researcher working at the Newcastle University in the United Kingdom, being the only researcher from the Global North studying the topic She mentioned that her long-term work with the people in Lephalale and her

activism had helped her greatly during data gathering and completing her research (Luckett, 2021). The fifth paper was written by a South African academic graduate student, and Ph.D. student, and postdoctoral researcher from Zimbabwe (Zhanda et al., 2021), with no further information on any strings to youth activism.

What is written about youth climate activism?

Next to general information about the research paper, which includes the title, publication and research method, table 4 provides an overview of what is written about youth climate activism in the specific countries. The columns that are important for answering the research questions are divided into the framework of youth participation and social dynamics of youth activism. The first category is divided into three subcategories, which are education and raising awareness, protests, and political involvement and advocacy. Through inductive analysis, the latter category was divided into three subcategories, which are colonial history and modern youth climate activism, power inequality and accessibility and social inequality for youth activists. Each category and subcategory is further explained in the following.

Framework of youth participation. Activism comes in many forms, such as protesting or taking part in political debates. This paper has divided participation into three categories: education and raising awareness, protesting, and advocacy and political involvement. While the latter two are targeted at the government and other leading figures, education and raising awareness focuses on the people living in the area. All forms of activism serve another purpose. They are further elaborated on in the following.

Education and raising awareness. Education on climate change refers to the teaching of fundamental knowledge on the climate crisis, such as how it is caused. Raising awareness, on the other hand, focuses more on the acknowledgment of climate change itself. It was oftentimes used synchronously and mentioned to be an important part of youth participation in Southern Africa (Luckett, 2022; Melithafa, 2023). In one article, it was not specifically touched upon, however, several youth climate organizations were named in this paper that have education interventions in their programs, such as the Earth Child Project Eco Warriors (Zhanda et al., 2021). Climate education and awareness were targeted at everyone living in the area, from schoolchildren to the

elderly. All articles confirmed the low climate literacy in South Africa, as well as the knowledge gap on their environmental and other human rights, thus, the need for awareness raising and education (Melithafa, 2023; Luckett 2022; Nkrumah, 2021). Educating and raising awareness was done in various ways. Luckett (2022) described how their youth climate organization, the Waterberg Environmental Justice Forum (WEJF), organized “community radio talk shows, programs at schools, door-to-door campaigning and community meetings” (p.11). In addition to climate change, the educational sessions included information on, for instance, environmental and children's rights drawing the links to the social dynamics of the climate crisis. This had positive effects, such as the Seleka Royal Council in Lephahale, which was thankful for the education program by the WEJF (Luckett, 2022). At the time of the interview, Melithafa (2023), was involved in a climate awareness program for schools in South Africa. Zhanda (2021) stated that an increase in knowledge and awareness about climate change has had a positive impact on youth climate activism. Although Vogel et al. (2021) do not focus on this form of participation, they touch on it very briefly mentioning the positive effects of this form of engagement. However, at the same time, they state that this might not be enough, as “poverty, racism, gender-based violence and unemployment also needs to be interrogated” (Vogel et al., 2021). This links to the social dynamics which is further elaborated on in the section “Social dynamics of youth activism”.

Protests. Protests refers to any form of public demonstration, including digital demonstrations via Social Media, to show disapproval about a subject. Three articles mentioned protesting as a form of youth engagement (Melithafa, 2023; Zhanda et al, 2021; Luckett 2022). Melithafa (2023) protested, as part of the African Climate Alliance, in Cape Town against the climate catastrophe. Youth climate organizations, such as Extinction Rebellion South Africa, partake in protests as well (Zhanda et al.,2021). This was not mentioned in the article specifically but can be found in the programs of the organizations the paper mentioned. Although not further elaborated on, the WEJF claims to use protests as a way of fighting against climate injustice, as well (Luckett, 2022).

Advocacy and political involvement. This theme was the main subject of two articles (Vogel et al., 2021; Nkrumah, 2021) and was also discussed in two other papers (Melithafa, 2023; Luckett, 2021). Each article touched on a different aspect of political engagement. Vogel et al.

(2021) presented a case study in which young people from Johannesburg were given a "real" seat at the Climate Action Plan (CAP) negotiating table. According to Hart's highest rung on the participation ladder (Vogel et al., 2021), the intention was to allow young activists to create their own action plan rather than merely offering feedback (Vogel et al., 2021). Due to the pilot's success, there was a commitment to continue involving young people and to expand it to other nations. Nkrumah (2021), on the other hand, focused on climate litigation. He explains how obstacles like lack of knowledge, and financial constraints prevent youth activists from bringing legal action against the government for not addressing the climate catastrophe sufficiently. Despite the constraints, Melithafa (2023) takes action nevertheless: in her interview, she speaks about her involvement in the Rights of the Child Petition, where they filed a lawsuit against global leaders for failing to protect children's rights. Additionally, she is a member of the commission of South African President Cyril Ramaphosa (Melithafa, 2023). The Waterberg Environmental Justice Forum is also engaged with "local governments, companies, and other key stakeholders"(p.10) through consultations, such as consultation meetings for mining applications or the Local Economic Forums Environmental Group (Lockett, 2021).

Social dynamics of youth activism. The following section elaborates on the social dynamic of youth climate activism. The groups were identified during the inductive analysis of this paper. Three groups were found, which were colonial history and modern youth activists, power inequality and accessibility, and social inequality for youth activists. The first one focuses on the still-existing coloniality and its consequences for youth climate activists in Southern African countries. The second subcategory focuses on the power inequalities between youth and global leaders and the government. The latter subcategory describes the struggles youth face every day, for instance, the impact of unemployment on their activism.

Colonial history and modern youth activists. The impact of the colonial history on modern youth climate activism was frequently mentioned, either directly or indirectly. For instance, when global leaders took advice from the young activists, they tended to inquire about youth from the Global North rather than from the Global South (Zhanda et al., 2021). The reason for this was because it was assumed that they had more scientific knowledge to back up their statements

(Zhanda et al., 2021). Because of this, Greta Thunberg initiated a conference in Sweden bringing the work of youth climate activists in the Global South in the light (Zanda et al., 2021).

The WEJF made a link to colonial history, mentioning that there were no “apartheid days” anymore (Luckett, 2022, p.10). They call for more democratic processes in the climate change debate (Luckett, 2022). Also Nkrumah (2021) established a connection to colonial history, stating that a novel form of apartheid takes place. According to Nkrumah (2021) “Climate change, in the form of extreme heat and water scarcity, seems to undermine the fundamental freedoms to life, health, and wellbeing of this subpopulation.”(p.8).

The need to keep the “historical and current power inequities”(p.819) in mind is also highlighted by Vogel et al (2022). In the fourth principle of the provisions of the JYCAP, which was “[a]ccessibility and sustainability”(p.823), forms of racism are elaborated. According to Vogel et al. (2022)“It encompasses young people’s recognition of spatial inequality in society which disproportionately limits the ability of underprivileged youth to effectively engage in environmental discourses.”(p.823).

Girl African youth activists were faced with the consequences of sexism, racism and colonialism in particular, which are oftentimes overshadowed in the “can do girl narratives” (Harris, 2004 as cited in Zhanda et al.,2021, p. 92) of today's youth climate activism (Zhanda et al., 2021).

Power inequality and accessibility. The success stories and/ or struggles the youth faced depended greatly on the reactions of the government. Frequently, the youth merely had the right to make comments about the policies that governing bodies adopted, rather than having a true voice and the ability to actually affect change (Melithafa, 2023; Vogel et al., 2021). This is often referred to as tokenism. Melithafa (2023) describes how she experienced tokenism herself, and promotes giving young people more voice. The young people also face a lot of constraints, as, for instance, meetings were often held during school time (Vogel et al, 2021, Nkrumah, 2021).

Additionally, as mentioned in the previous section, financial constraints play a role as it is making it more difficult for the youth to hold the government accountable in court for not doing enough against climate change (Nkrumah, 2021).

Social inequality for youth activists. This section broadly covers the experiences the young activists had, for instance, with their family, on their activism. Family members might not comprehend why young people are activists if it leads to their unemployment (Lockett, 2022). So the narratives of young climate activists are influenced by more than just the government. Lockett (2022) elaborates on the paradox of youth having to fight against unemployment and climate change at the same time. Unemployment is a closer threat to their existence than climate change. At the same time, those industries that offer work, such as mining coals, are often the ones harmful for the environment (Lockett, 2022). These industries are often targeted in climate change protests (Lockett, 2022). Melithafa (2023) underlines these reports by stressing out the need to conduct research in the most affected regions of Africa. In that way the different living situations of the people and their different needs when it comes to climate change and climate activism can become more clear

Table 3*Overview findings*

Information on the article		Information relevant to answering the research question	
Author and Title	Method	Location	Information on the author(s)
Luckett, T. (2022) Youth Activist Paradoxes in the Urban Periphery of Lephalale: The Struggle for Employment and Climate Justice in a Coal-Rich Region of South Africa	Qualitative: Ethnographic Fieldwork	Lephalale, South Africa	Activist-researcher with connections to Lephalale, working at Newcastle University, UK
Nkrumah, B.(2021) Courtng emissions: climate adjudication and South Africa's youth.	Qualitative: Literature Review, Desktop Research	South Africa	Academic Researcher at the University of the Free State, Bloemfontein, South Africa
Zhanda, K et al. (2021) Children Climate Change Activism and Protests in Africa: Reflections and Lessons from Greta Thunberg	Qualitative: Literature review, Thematic Approaches	The whole continent, including “Southern Africa”	Academic Researchers from Universities in South Africa and Zimbabwe (graduate student, PhD student, from South Africa, postdoctoral researcher from Zimbabwe)
Melithafa, A (2023) THE INTERVIEW: Ayakha Melithafa	Qualitative Interview, Action research	South Africa	Journalist from Zimbabwe

Vogel et al.(2021) 'Empowering youth as change agents for climate change in South Africa': challenges, caveats and course corrections.	Qualitative: Case Study	Johannesburg, South Africa	Written by a “group of youth activists, civil society organization leaders, educators, and climate scientists” from universities and organizations in South Africa
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Table 4

Overview findings

Information on the article		Information relevant to answering the research question					
Author and Title	Method	Framework of youth participation			Social dynamics of youth activism		
		Education and awareness raising	Protests	Advocacy and political involvement	Colonial history and modern youth activists	Power inequality and accessibility	Social inequality for youth activists

<p>Lockett, T. (2022) Youth Activist Paradoxes in the Urban Periphery of Lephalale: The Struggle for Employment and Climate Justice in a Coal-Rich Region of South Africa</p>	<p>Qualitative: Ethnographic Fieldwork</p>	<p>World Economic Justice Forum: research, community education(talk shows, programs at schools, door-to-door campaigning,, community meetings), awareness raising,(local, government, companies) campaigning for transparency and accountability</p>	<p>Also partake in protesting (not further explained)</p>	<p>Talking with political leaders and companies</p>	<p>References to the Apartheid made</p>	<p>Activists are often unemployed, and families do not always understand their motivation to be an activist while unemployed</p>
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<p>Nkrumah, B.(2021) Courting emissions: climate adjudication and South Africa's youth.</p>	<p>Qualitative: Literature Review, Desktop Research</p>	<p>South African youth NOT actively involved in climate change litigation (CCL)</p>	<p>Novel form of apartheid They have a “locus standi” to file a lawsuit, but many constraints (finance, technical know-how, litigations prolonged and time-consuming , lack of awareness on the impact of rising emissions)</p>
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<p>Zhanda, K et al. (2021) Children Climate Change Activism and Protests in Africa: Reflections and Lessons from Greta Thunberg</p>	<p>Qualitative: Literature review, Thematic Approache</p>	<p>Various organizations (F4FSA,Earth Child Project Eco Warriors, Extinction Rebellion South Africa), awareness raising campaigns</p>	<p>Various organization s (F4FSA,Ear th Child Project Eco Warriors, Extinction Rebellion South Africa), street protests, demonstrati ons</p>	<p>Advocate for more female climate activists at the forefront,</p>	<p>Girls are particularly vulnerable as activists, gendered racism, Scholars and researchers consult children from the Global North on their environment al knowledge, Greta needed to hold a press conference ad a web series</p>
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					TalksForFuture, featuring the work of activist from the Global South		
Melithafa,A (2023) THE INTERVIEW: Ayakha Melithafa	Qualitative Interview, Action research	Climate awareness program for South African schools, Western Cape Education Council, School90 by 2023, school-radio, interviews by newspapers, as part of the Climate Alliance	As part of the African Climate Alliance	Part of Presidential Climate Commission, part of African Climate Alliance		stresses on the need to get the voices of youth heard, experience d tokenism herself, pleads to make meetings more accessible for the youth	recommends to visit most affected communities for research purposes,

(online
meeting,
via
Facebook),

<p>Vogel et al.(2021) 'Empowering youth as change agents for climate change in South Africa': challenges, caveats and course corrections.</p>	<p>Qualitative: Case Study</p>	<p>Securing a seat at the policy table, the youth got a platform through which they could voice their opinions, "young people initiated shared decisions with adults"(ladder of participation by Hart), highlighting different kinds of</p>	<p>In the fourth principle of the provisions of the JYCAP, '[a]ccessibility and sustainability',</p>	<p>the youth actively being involved, instead of "a box ticked". Further interactions with the city are planned, expanding this method to more Youth Climate Activation Plans (YCAP)</p>
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logic/knowledge
(Transdisciplinarity),
presented five
principles
for the
policies of
the CAP

Discussion

Science is part of our daily lives as it, for instance, might have an influence on policy making and political decisions (Bingle & Gaskell, 1994). Scholars frequently construct knowledge by building upon prior research. Consequently, it is of utmost importance to be aware of the sources of information and to possess a comprehensive understanding of a subject matter. This study focused on two parts of youth climate activism; the *where* and *how*, covering information on the research framework and on the authors, and the *what* displaying information on the form of participation of youth climate activism and their success stories and struggles.

The study found limited literature on youth climate activism in South African countries, which is in line with previous papers (Jones et al., 2023). All studies focused on South Africa, with no data or information on youth climate activism in Botswana, Namibia, and Lesotho. The discrepancy may be due to South Africa's being one of the most economic stable African countries (Boshoff & Fourie, 2020). Consequently, they may have greater access to financial resources for conducting research and publishing their findings. Four authors were from universities or organizations in South Africa or collaborating with South African universities. One researcher conducted research from the Newcastle University in the United Kingdom. She was promoted in Africa (Luckett & Mzobe, 2016.) before continuing doing research from the United Kingdom. Previous research has reported about academics from the Global North, studying a subject in the Global South, while having personal (familiar, activism,..) strings to the region. They claim that the demands from the universities in the Global North “can inscribe into the methodology particular value-systems and normative notions of culturally-contingent concepts such as respect and consent” (Halse and Honey (2005), as cited in Millora et al. 2020, p.11). To conclude, the demands from academic institutions in the Global North might be impractical to implement in research in the Global South. Luckett (2022) commits a chapter in her paper to this explanation and how her year long collaboration with the people living in Lephalale helped her to combat these struggles. More research discuss the same topic, such by Otto & Terhost (2011) who report that “Firstly, we discuss the (im)possibility of translating experiences into Western academic codes. Secondly, we highlight the difficulty of escaping one’s role as a mobile academic; a position that often entails privileges of access to decision making, financial resources and status. Lastly, we discuss the risk that this

research relationship is complicit with unequal power relationships because of the difficulty in constructing new social relations and positionalities” (p.202) This findings may explain the limited results on the subject by academics from the Global North.

Catell (2021) describes how activities in the Global North express a strong sense of responsibility towards the countries that bear the brunt of climate change. At the same time, factors that help to make your voice heard on a global level, such as academic knowledge, accessibility, and financing, are oftentimes denied or limited to youth from the Global South, as this paper revealed. The unintentional neglect could potentially lead to a form of paternalism, where the Global North assumes the role to “save” (Abu-Lughold, 2014 as cited in Barnett, 2017, p.66) the Global South from the climate catastrophe while relying solely on the views and knowledge production of the Global North. Paternalism frequently influences global dynamics (Barnett, 2017).

This paper explores the framework of participation of youth climate activists in the Global South, revealing that they engage in protesting, education, awareness raising, and advocacy. This is in line with existing literature about youth climate activism, that acknowledges all mentioned forms of participation (O'brien et al., 2018). The study showed the positive impact of involving youth from the Global South in climate debates. However, it is important to highlight that democracy and human rights played a significant role in the movements mentioned in this study. Previous research discuss the instability of African democracy and the exploitation of African people in contemporary times (Kalu & Falola, 2019). This, and the notion that coloniality still influences peoples everyday lives, might support the findings of this paper.

While youth climate organizations, such as Fridays For Future, were mentioned in this study, they originate from countries in the Global North (Olstedt, 2019).

This could be one of the reasons why some of their activism projects, such as suggestions for a more sustainable living, are impractical to implement in Global South nations (Kowas et al.,2021)

Although this study has revealed that youth climate activists in the Global South are involved in organizations such as Fridays For Future, Kowash et al. (2021) revealed that “(...)FFF [Fridays For Future] activists are mostly in privileged situations(...)”(p.3) and that is why they are sometimes even “(...) accused of being a white, middle-class youth movement.” (p.3)

This study discusses the lack of recognition and visibility of youth activists in Southern African countries. Previous research has demonstrated the impact that recognition and acknowledgement of one's participation can have on one's level of engagement. For example, Kowasch et al. (2021) found that "beliefs about one's own ability to become actively involved and confidence in the effectiveness of participation are key components of civic engagement and mobilization" (p. 2). Additionally, Eide & Kunelius (2021) interviewed several youth climate activists from different countries. In their study, they mentioned the role of “trust in other societal actors, the role of parents and the way they help youngsters to cultivate constructive reactions to negative emotions related to social problems”(Ojala, 2019 as cited in Eide & Kunelius, 2021, p.5).

While youth climate activists around the globe face challenges with their activism (Skovdal & Benwell, 2021), this study highlighted the greater obstacles that young people in Southern African countries must overcome in order to be acknowledged and to make a difference.

To conclude, according to this research, youth climate activism is more than merely a global movement of young people against environmental injustice. It is different depending on where you live. Specifically for youth climate activists from the Southern African countries, the history of the continent and persistence of colonial structures continues to significantly impact people's everyday lives (Groose & Mark, 2020), and, thus, (the success of) youth climate activism as well. Even so, academics need to be aware of their positionality and possible barriers while conducting research on the subject.

Limitations

One limitation of the study was the language barrier. The search terms were all in English, which might rule out papers in other languages, such as French or Afrikaans. In Africa, there are eleven official languages (South African Embassy in the Kingdom of the Netherlands, nd). However, the total number of languages is higher. Keeping the potentially endangered languages

in mind, it is estimated to be between 1000 to 2000 languages (Maho, 2004). According to Lüpke (2015), Africa possesses a “third of the worlds languages”(p.1). Authorities speak English, but one could argue that this does not need to be the case for the general population. To conclude, the language barrier limits this study in several ways.

Firstly, only articles in the language that is selected can be found. There may be additional results in other languages that were not reported in this study, such as French or Afrikaans.

Second, the language barrier might have had an influence on the inductive content analysis of this study. Previous literature has shown that meanings can get lost or misinterpreted when translated into another language (Hartley et al. 2007). This could also be the case given that interviews with African activists and residents made up a portion of the findings. The outcomes of the content analysis's coding procedure may have been impacted by the translation.

Aside from that, one constraining issue was the search terms themselves. More or different studies that weren't included in this search could be found using different search terms. Consistent with the above remarks by Otto & Terhorst (2011), this might also involve local phrases or words that explain the climate change catastrophe and youth activism in their own language better than in English.

Another limitation of this study is the choice of the database. Another database, such as Scopus, could show more or other results on the subject.

Recommendations for further research

Holmes (2008) motivates novel forms of research production and this statement can also be of use for this research. African ethics has already found a place in modern society, such as Ubuntu (Mangena, 2016), and thus, it is recommended to also credit other forms of intellect from the Global South. According to Sabzalieva et al, 2020) “In practice, they are often based on the understanding that(...) the Global South either are trying to catch up or are merely recipients [of research quality]”(Sabzalieva et al., p.1) Simultaneously, this paper uncovered the challenges associated with utilizing solely knowledge production from the Global North in research conducted in the Global South. .A collaboration between academics from the Global North and South might be a solution. It might lead to more results and novel ways of producing knowledge, that can also be used in research in the Global South. By collaborating, academics from the Global South can act as experts in their country, and academics from the Global North can learn and build

upon the research process and findings. This could enhance the understanding of the unique circumstances the people in the Global South are in (Carbonnier & Kontinen, 2014). Additionally, it could reduce the perception of research from the Global South being of lesser quality (Sabzalieva et al., 2020), and in that way also help lessen the “white gaze” (Carbonnier & Kontinen, 2014). Consequently, young activists hailing from the Global South could potentially have a say in research and policy matters, and may be subjected to more frequent inquiries in the times to come. Collaboration might also help to tackle the language barrier, as African researchers might be able to better interpret the meaning of words.

Recommendations for policy and practice

This study revealed that youth should be more included in the decision-making processes. This inclusion can foster increased dialogue between younger and older generations, ultimately leading to a deeper comprehension of the challenges faced by the younger generation. Simultaneously, the younger generation can acquire invaluable skills from their elders, such as the art of debate and negotiation. The paper showed that this counts for youth from the Global South in particular. Just like researchers who possess expertise in their respective countries, youth climate activists originating from the Global South can serve as experts in their region. Particular customs, for instance, that might have an impact on the climate change debates and impede certain program proposals can be addressed. Ultimately, a comprehensive and inclusive understanding of the climate crisis can be explored, and appropriate measures can be implemented based on the local context and specific circumstances.

In addition, research results can be published in languages other than English. This could enhance the accessibility to scientific knowledge on the subject and could be particularly useful for young non-English speaking people who want to learn more about the newest findings on the climate debate. This can be particularly helpful if the article is then easy accessible to the general public, such as in schools. This could also help to tackle one of the constraints the youth faces, namely accessibility and education constraints.

Conclusion

This paper aimed to answer the research question: “*Jeugklimaataktiwisme in Suid-Afrikaanse lande*: What literature is available on youth climate activism in South Africa,

Botswana, Lesotho, and Namibia from 2018-2023". The five papers showed different kinds of youth activism, from education programs to protests to engagement in institutions, such as partaking in political discussions. All studies focused on South Africa or specific regions within the country. No articles covering youth activism in Botswana, Namibia, and Lesotho were found. Three articles were written by African research activists, with one of them in collaboration with youth activists, society organizations, and educators. One article was written by African Ph.D. students and scholars and the last one was written by a journalist from Africa. Both had no further information on any strings to climate activism. Only one article was written by a researcher from the Global North, who was actively involved as climate activist in the region she studied. The complex social dynamic affecting youth activism was a recurrent subject in the five papers. The youth are frequently not heard and they might even face repercussions due to their activism, such as unemployment or legal consequences. Oftentimes, they have to fight climate change and unemployment simultaneously. At the same time, some papers showed the success of initiatives where young people have had a seat at the negotiation table. The paper showed that the colonial history of Southern African countries still affects the people today, and thus, also affects youth climate activism in these regions. The study shows the need for young people to actively be involved in climate change debates. Additionally, it underlines the need for further research in this area, especially in countries where no information was found. This study only searched for available literature on youth climate activism in Southern African countries. Further research on the countries, that did not reveal any information on youth climate activism, namely are Botswana, Namibia and Lesotho, are recommended. Additional research from other African countries could provide a more complete picture of youth climate activism in Africa. As South Africa is the most stable African country economically, research on other countries than South Africa might give more insights into, for instance, the impact of the economy on the success or motivation of youth climate activism. Further research could also dive deeper into the differences in youth climate activism in the Global South compared to the Global North. In this way, different organizations and/or the motivation for youth to engage in climate activism can be compared. Case studies about girl activists might, for instance bring forward struggles girls in particular are confronted with. Moreso, a collaboration with academics from the Global North and the Global South is recommended to allow for diverse views and ways of data gathering and result presentation. This study has shown the struggles academics from the Global North face when conducting research in

the Global South. These obstacles encountered by Global North academics can be seen as a chance to explore collaborative solutions, rather than perceiving them as restrictive factors. . Overall, more collaborative research might give a better understanding of the unique circumstances of youth climate activist in Southern African countries. Research on this topic can be used for policy-making and spreading knowledge, within the country and globally. The climate crisis is different everywhere for everyone, and so is youth climate activism. The findings do not only lead to conclusions and recommendations for the selected countries in this paper but can be utilized for research on youth activism in the Global South in general.

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Appendix

Appendix A: JBI Critical Appraisal Tool for qualitative studies

Reviewer _____ -Date _____

Title: _____

Author _____ Record Number _____

Yes No Unclear Not applicable

1. Is there congruity between the stated philosophical perspective and the research methodology?

2. Is there congruity between the research methodology and the research question or objectives?

3. Is there congruity between the research methodology and the methods used to collect data?

4. Is there congruity between the research methodology and the representation and analysis of data?

5. Is there congruity between the research methodology and the interpretation of results?

6. Is there a statement locating the researcher culturally or theoretically?

7. Is the influence of the researcher on the research, and vice-versa, addressed?

8. Are participants, and their voices, adequately represented?

9. Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?

10. Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?

Overall appraisal: Include Exclude Seek further info

DISCUSSION OF CRITICAL APPRAISAL CRITERIA

1. Congruity between the stated philosophical perspective and the research methodology

Does the report clearly state the philosophical or theoretical premises on which the study is based? Does the report clearly state the methodological approach adopted on which the study is based? Is there congruence between the two? For example: A report may state that the study adopted a critical perspective and participatory action research methodology was followed. Here there is congruence between a critical view (focusing on knowledge arising out of critique, action and reflection) and action research (an approach that focuses on firstly working with groups to reflect on issues or practices, then considering how they could be different; then acting to create a change; and finally identifying new knowledge arising out of the action taken). However, a report may state that the study adopted an interpretive perspective and used survey methodology. Here there is incongruence between an interpretive view (focusing on knowledge arising out of studying what phenomena mean to individuals or groups) and surveys (an approach that focuses on asking standard questions to a defined study population); a report may state that the study was qualitative or used qualitative methodology (such statements do not demonstrate rigour in design) or make no statement on philosophical orientation or methodology.

2. Congruity between the research methodology and the research question or objectives

Is the study methodology appropriate for addressing the research question? For example:

A report may state that the research question was to seek understandings of the meaning of pain in a group of people with rheumatoid arthritis and that a phenomenological approach was taken. Here, there is congruity between this question and the methodology. A report may state that the research question was to establish the effects of counselling on the severity of pain experience and that an ethnographic approach was pursued. A question that tries to establish cause-and-effect cannot be addressed by using an ethnographic approach (as ethnography sets out to develop understandings of cultural practices) and thus, this would be incongruent.

3. Congruity between the research methodology and the methods used to collect data

Are the data collection methods appropriate to the methodology? For example:

A report may state that the study pursued a phenomenological approach and data was collected through phenomenological interviews. There is congruence between the methodology and data collection; a report may state that the study pursued a phenomenological approach and data was collected through a postal questionnaire. There is incongruence between the methodology and data collection here as phenomenology seeks to elicit rich descriptions of the experience of a phenomena that cannot be achieved through seeking written responses to standardized questions.

4. Congruity between the research methodology and the representation and analysis of data

Are the data analyzed and represented in ways that are congruent with the stated methodological position? For example:

A report may state that the study pursued a phenomenological approach to explore people's experience of grief by asking participants to describe their experiences of grief. If the text generated from asking these questions is searched to establish the

meaning of grief to participants, and the meanings of all participants are included in the report findings, then this represents congruity; the same report may, however, focus only on those meanings that were common to all participants and discard single reported meanings. This would not be appropriate in phenomenological work.

5. There is congruence between the research methodology and the interpretation of results

Are the results interpreted in ways that are appropriate to the methodology? For example:

A report may state that the study pursued a phenomenological approach to explore people's experience of facial disfigurement and the results are used to inform practitioners about accommodating individual differences in care. There is congruence between the methodology and this approach to interpretation; a report may state that the study pursued a phenomenological approach to explore people's experience of facial disfigurement and the results are used to generate practice checklists for assessment. There is incongruence between the methodology and this approach to interpretation as phenomenology seeks to understand the meaning of a phenomenon for the study participants and cannot be interpreted to suggest that this can be generalized to total populations to a degree where standardized assessments will have relevance across a population.

6. Locating the researcher culturally or theoretically

Are the beliefs and values, and their potential influence on the study declared? For example:

The researcher plays a substantial role in the qualitative research process and it is important, in appraising evidence that is generated in this way, to know the

researcher's cultural and theoretical orientation. A high quality report will include a statement that clarifies this.

7. Influence of the researcher on the research, and vice-versa, is addressed

Is the potential for the researcher to influence the study and for the potential of the research process itself to influence the researcher and her/his interpretations acknowledged and addressed? For example:

Is the relationship between the researcher and the study participants addressed?

Does the researcher critically examine her/his own role and potential influence during data collection? Is it reported how the researcher responded to events that arose during the study?

8. Representation of participants and their voices

Generally, reports should provide illustrations from the data to show the basis of their conclusions and to ensure that participants are represented in the report.

9. Ethical approval by an appropriate body

A statement on the ethical approval process followed should be in the report.

10. Relationship of conclusions to analysis, or interpretation of the data

This criterion concerns the relationship between the findings reported and the views or words of study participants. In appraising a paper, appraisers seek to satisfy themselves that the conclusions drawn by the research are based on the data collected; data being the text generated through observation, interviews or other processes.

Appendix B: JBI Critical Appraisal Tool for case reports

Reviewer _____ Date _____

Author _____ Record Number _____

Yes No Unclear Not applicable

1. Were patient's demographic characteristics clearly described?

2. Was the patient's history clearly described and presented as a timeline?

 3. Was the current clinical condition of the patient on presentation clearly described? (*Mod: personal situation of youth activists*) 4. Were diagnostic tests or assessment methods and the results clearly described? (*Mod. Intervention*) 5. Was the intervention(s) or treatment procedure(s) clearly described? (*Mod. Social intervention*)

6. Was the post-intervention (clinical) condition clearly described?

7. Were adverse events (harms) or unanticipated events identified and described?

8. Does the case report provide takeaway lessons?

Overall appraisal: Include Exclude Seek further info

Comments (Including reason for exclusion)

EXPLANATION OF CASE REPORTS CRITICAL APPRAISAL

Case Reports Critical Appraisal Tool

Answers: Yes, No, Unclear or Not/Applicable

1. Were patient's demographic characteristics clearly described?

Does the case report clearly describe patient's age, sex, race, medical history, diagnosis, prognosis, previous treatments, past and current diagnostic test results, and medications? The setting and context may also be described.

2. Was the patient's history clearly described and presented as a timeline?

A good case report will clearly describe the history of the patient, their medical, family and psychosocial history including relevant genetic information, as well as relevant past interventions and their outcomes. (CARE Checklist 2013)

3. Was the current clinical condition of the patient on presentation clearly described?

The current clinical condition of the patient should be described in detail including the uniqueness of the condition/disease, symptoms, frequency and severity. The case report should also be able to present whether differential diagnoses was considered.

4. Were diagnostic tests or methods and the results clearly described?

A reader of the case report should be provided sufficient information to understand how the patient was assessed. It is important that all appropriate tests are ordered to confirm a diagnosis and therefore the case report should provide a clear description of various diagnostic tests used (whether a gold standard or alternative diagnostic tests). Photographs or illustrations of diagnostic procedures, radiographs, or treatment procedures are usually presented when appropriate to convey a clear message to readers.

5. Was the intervention(s) or treatment procedure(s) clearly described?

It is important to clearly describe treatment or intervention procedures as other clinicians will be reading the paper and therefore may enable clear understanding of the treatment protocol. The report should describe the treatment/intervention protocol in detail; for e.g. in pharmacological management of dental anxiety - the type of drug, route of administration, drug dosage and frequency, and any side effects.

6. Was the post-intervention clinical condition clearly described?

A good case report should clearly describe the clinical condition post-intervention in terms of the presence or lack thereof symptoms. The outcomes of management/treatment when presented as images or figures would help in conveying the information to the reader/clinician.

7. Were adverse events (harms) or unanticipated events identified and described?

With any treatment/intervention/drug, there are bound to be some adverse events and in some cases, they may be severe. It is important that adverse events are clearly documented and described, particularly when a new or unique condition is being treated or when a new drug or treatment is used. In addition, unanticipated events, if any that may yield new or useful information should be identified and clearly described.

8. Does the case report provide takeaway lessons?

Case reports should summarize key lessons learned from a case in terms of the background of the condition/disease and clinical practice guidance for clinicians when presented with similar cases.

Appendix C: Excel template overview

Nr	Author	Title	Publisher	Methodology	Abstract	Main findings	Limitation
1	<i>Authors name</i>	<i>Full title</i>		<i>Framework, Participants</i>	<i>Full abstract by author</i>	<i>Youth climate activism, selected countries</i>	<i>Limitations of the study</i>