



Greta Thunberg and The Generation of Moral Authority

A Systematic Literature Review of the Discourses of the Characteristics of Thunberg's Leadership

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Abstract:

Now more than ever, climate change poses one of the greatest threats to our existence. Regardless of religion, economical wealth, culture or politics, no-one can escape the imminent consequences of climate change. There have been numerous efforts made by political leaders world-wide to prevent climate change and develop sustainable solutions. However, due to conflicting political wills and the complex solutions that nature requires, the attempts to limit climate change have proven vastly ineffective. For these reasons, a new kind of leader for environmental change is needed to bring significant societal transformation, and unite people across all cultural and political platforms. In recent years, Greta Thunberg has become a major spokesperson for the natural environment, and has managed to mobilize people all over the world to act against climate change. Utilizing a theoretical framework based on transformational leadership and moral authority, this study aimed to discuss the characteristics of Thunberg's leadership through a systematic literature review. Using PRISMA protocol, data was collected from different national and international media sources. A qualitative deductive content analysis was conducted to analyze the data with the assistance of ATLAS-ti.v.9 software. The findings section discusses how Thunberg embodies five typical characteristics recognized in a moral authority, being sacrifice, trust, courage, hope and belonging, to become a transformational leader that influences the possibility for climate change prevention, and enforce more sustainable solutions. This study concludes that it is through the characteristics of a moral authority that Greta Thunberg has become a global transformational leader for the natural environment.

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1. Introduction

Climate change poses without a doubt the ultimate challenge of our time. There have already been many noticeable and adverse effects on the natural environment, such as sea-ice shrinkages, higher sea levels and more extreme fluctuations in normal weather conditions (NASA, 2021). Political leaders all around the world have come together to implement measures intended to decrease and/or prevent climate change. One example is the Paris Agreement, aimed at decreasing global warming to below 1.5 degrees Celsius (Zulianello and Ceccobelli, 2020). It is a legally-binding international treaty on climate change, whereby countries collaborate for sustainable solutions (ibid). However, even if they can lessen the ecological footprint, doing so will take time and require cautious decision-making (Raiser et al., 2020). According to NASA (2021), the measures taken so far are simply not enough, and the results will not be delivered in time. Wilk and Cliggett (2007) believes that the problem is due to the multi-faceted nature of the global climate regime and the relatively early stage of developing effective and sufficient policies addressing the wide diversity of reasons for climate change. Peet et al. (2011) suggests that global climate change has become a new arena for economic growth, arguing that green governance is created with the purpose of increasing the wealth and power among the already rich, rather than actually placing climate change and environmental justice as the driving factors. Green governance is a concept in environmental policy and political ecology, which stresses that sustainable development should be the foremost concern when dealing with human activities, such as social, political and economical (Peet et al., 2011). Additionally, Raiser et al. (2020) states that the participants of the Paris Accords all have their own individual agendas for limiting their respective countries' emissions. Wilk and Cliggett (2007) also draw attention to the complexity during the negotiation process on the political arena, as well as the absence of overall leadership as two major hindrances to the effectiveness of the Paris Accord. Presently, the general approach towards climate change is state-centric, where political leaders, through different agreements and institutions, attempt to tackle the problem (Raiser et al., 2020).

Climate change is frequently debated in different contexts, and at times even the existence of global warming is denied (Schultz, 2002; Soper, 2004; Roberts and Parks, 2007; Plumwood, 2002). The differing beliefs and multidimensional problems relating to climate change pose the question of which kind of leader is required to tackle the problem most effectively. Peets et al. (2011) stresses the importance of leaders understanding the interaction between humans and

the natural environment, with an emphasis on how people's cultural beliefs concerning the natural environment affects their choices to act against climate change. According to Wilk and Cliggett (2007), a leader for environmental issues needs to look beyond the idea of sustainability alone, but rather seek transformation. Many thinkers have suggested that transformational leadership is best suited for this purpose (Fielding and Hornsey, 2016; Evans et al., 2015; Bryant, 2015). This transformational style of leadership has been recognized as a potentially effective solution against climate change in various contexts (Daston and Vidal, 2004; Clark, 2016; Bryant, 2015; Evens et al., 2015). For instance, during the 20th World Congress on Environment Management and Climate Change the topic on hand was "Transformational Leadership for Promoting Climate Resilient Growth" (Bryant, 2015).

All around the world, this young Swedish girl has become a spokesperson for the nature and climate change (Beeler, 2019; Björkman, 2020; Gibson, 2020). She is on everyone's lips and even powerful leaders are now listening to her. With Thunberg as their inspiration, children all over the world are being truant from school and marching on the streets, demanding that adults – particularly political leaders - act against climate change (Marchere, 2020). This new generation of young activists now has the world's attention, with Thunberg undeniably as their poster child (Dixon, 2020; Rincon, 2019; Hesse, 2019; Mishan, 2020). The influence and the attention she gains did not emerge through financial benefits, a celebrity background nor political achievements (Thunberg et al., 2018). Rather, Thunberg captured the world's attention through moral authority and charisma (Marris, 2019). This young climate activist may be the transformational leader we need, to demand and evoke change. There have been countless articles published and growing acknowledgement of the achievements of Thunberg (Payne, 2021). People seem fascinated by her, acknowledging Thunberg as a hero and huge contributor for the natural environment and sustainability (Landy, 2019; McCarthy, 2019; Lord, 2020; Phillips, 2019). Others accuse her of demoting democracy, blaming her for false news, as well as instigating rebellious behaviour from the younger generation, such as questioning authority and not following rules, whilst enhancing anxiety among the youth (Ewald, 2021; Curnow and Helferty, 2019). This study did not attempt to provide a summary of the accomplishments of Thunberg. Nor was the aim to present positive versus negative opinions of her presence. Rather, the purpose of this study was to offer a contribution to the existing data, with an alternative approach towards Thunberg. The focus of this study was predominantly to examine how - and why - Thunberg gained moral authority utilizing the theoretical framework of transformational leadership. This study presents a content analysis of the underlying elements in Thunberg's

success. Simply put: in which ways Thunberg has affected people and how she has managed to do so.

1.1. Aim and Research Questions

Utilizing a conceptual and theoretical framework based on transformational leadership and moral authority, this study aimed to discuss the conceptions of the characteristics of Thunberg's leadership through a systematic literature review of academic articles and popular journalistic media reports.

The study had the following research questions:

RQ1: What kind of discourses in the media characterize Thunberg's moral authority?

RQ2: What personal qualities of Thunberg, as discussed in media discourses, portray her as a transformational leader?

1.2. Disposition

At first, there is a presentation of the methodologies used in this study. This section includes the philosophy of science applied, and reasoning as to why pragmatism is relevant to the study. Additionally, the methodology section describes the process of collecting data for the systematic literature review, with the use of PRISMA protocol, and continues thereafter to present the development of the qualitative systematic content analysis. The methodology section concludes with addressing the ethical considerations required with the chosen research methods and the limitations of them. Thereafter, in the theoretical framework section the researcher draws attention to the reasoning behind the utilization of Transformational Leadership Theory and Moral Authority as the conceptual and theoretical framework. Continuously, a section referred to as Systematic Literature Review touches upon the definition of moral authority, how moral authority is created, and the sources of Thunberg's moral authority. The next section provides the reader with the presentation and analysis of the findings, divided into five sub-headings; Sacrifice, Trust, Courage, Hope and Belonging. Within the final section, a summary of the findings is described in accordance to the two research questions of this study. Thereafter, the notion of transformational leadership and moral authority are critically discussed. Before the conclusion, a discussion on the contribution of this study to the Human Ecology discipline was conducted. The bibliography is thereafter available.

2. Methodology

2.1. Philosophy of Science: Pragmatic reasoning

This was a qualitative study, which attempted to gain an understanding of what has generated Thunberg's moral authority, utilizing the Transformational Leadership Theory (TL) as a theoretical framework. A qualitative design enabled the researcher to consider the subjective experiences of the characteristics Thunberg possesses that generated her moral authority (Bengtsson, 2016). According to D'Cruz and Jones (2007), this kind of design aims to comprehend and interpret the underlying intentions and meaning of human behavior, rather than finding a universal truth, offering the opportunity to uncover unexpected findings and hence explore innovative avenues. Therefore, the researcher utilized a pragmatic position, permitting the option to apply the method that seemed most appropriate to the issues studied (Kvale and Brinkman, 2009). This study formed a deductive reasoning, enabling the utilization of pre-existing themes, connected to the analytical framework, when collecting and analyzing the empirical data (Bengtsson, 2016). Deductivism was used to support coding and thematizing the contents from the literature review with the help of the selected theoretical framework.

2.2. Collecting the data

This is a qualitative study engaged in synthesis. The data collected for the research undertook two phases (1) systematic identification of empirical data, and (2) screening data for eligibility.

2.2.1. Systematic identification of empirical data

Table 1

Data Collection

NO	DESCRIPTION	ITEMS FOUND (APPROX).	
1	Moral Authority	TITLE-ABS-KEY: ((Thunberg Moral authority) OR (Thunberg Moral) OR (Thunberg Authority) OR (Thunberg Hope) OR (Thunberg Trust) OR (Thunberg Sacrifice) OR (Thunberg Courage) OR (Thunberg Belonging) OR (Thunberg Hope follow) OR (Thunberg Trust follow) OR (Thunberg Sacrifice follow) OR (Thunberg Courage follow) OR (Thunberg Belonging follow) OR (Thunberg Identity) OR (Thunberg Identity morality) OR (Thunberg Identity authority))	6 550
2	Transformational Leadership	TITLE-ABS- KEY: ((Thunberg influence leaders) (Thunberg influence) OR (Thunberg influence power) OR (Thunberg influence authority) OR (Idealized leader) OR (Thunberg idealized) OR(Intelligence leader) (Thunberg follow) OR (Thunberg Leader) OR (Thunberg inspiring) OR (Thunberg Inspiring leader) OR (Thunberg Inspiring authority) or (Thunberg Transformational leader))	84
3		1 AND 2	632
4		3 AND Filters activated: Language (English and Swedish); Time: 18 th January 2021 until 1 st May 202; Publication type: Academic Article and Journalistic Article	370 (Duplicates not removed)

Data was gathered from public online sources in an electronic arrangement, between the periods 18th January 2021 through to 1st May 2021. The primary focus of the existing material was from the summer of 2018, when Thunberg began her climate strike, by sitting outside the Swedish parliament every Friday, until present time. The purpose was to systematically discuss the characteristics of Thunberg's moral authority. The data predominantly came from articles from Europe and the United States. Using the Systematic Literature Review (SLT) method, primary data was popular journalistic media reports from magazines and newspapers, and secondary data academic articles from recognized journals.

Primary sources were non-academic articles. This kind of article is available to the public and written by both academics and non-academics alike. There is no structured peer-review nor any reference list (Bengtsson, 2016). The sampling method for the primary sources were convenience sampling, focusing on newspaper and magazine articles concerned with Thunberg. The definition of newspapers and magazines are printed publications consistently issued over time (Robson, 2008). The researcher conducted an online search using Google search, with the filter "News", and written in either Swedish or English. Keywords and phrases, connected to the five characteristics of moral authority, were used to look for analytical material in these media sources. They were chosen conveniently in accordance with how comprehensive and recognized the newspaper or magazine was. The reasoning was to narrow the search result down to a manageable amount of sources. D`Cruz and Jones (2007) highlights the importance of limiting the data collection to a reasonable format appropriate, in accordance with the intentions of the methods outline. With Thunberg being such a prevalent public figure, an abundance of articles about her can be found. With the applied restrictions, data searches identified 354 relevant articles. There were 310 articles from international sources and 44 articles from Swedish sources.

For the secondary data, DIVA Portal was applied as a search tool for research publications. Secondary sources from research publications were used to gain additional knowledge and understanding of the perception of Thunberg and her leadership characteristics. Secondary sources refers to the process of gathering data that someone else has already comprehended for his or her own reasons (Robson, 2008). The study design for secondary material was limited to English-language articles that specifically addressed Thunberg. Utilizing secondary resources enhances the ability for the researcher to gain a grander scope and understanding of the problem compared to limiting the data to only primary sources (D`cruz and Jones, 2007). These

academic articles enabled the possibility to compare their findings/discussions to the material gathered from traditional newspaper and magazine articles. Furthermore, secondary sources enhanced the ability for generalization as it strengthened the assumptions formed by the material from the primary sources. Robson (2008) defines generalization as to the probability that the findings in this research can be applied to other situations. Altogether records identified 16 academic articles with those search criteria at Diva Portal.

2.2.2. Screening data for eligibility

Search results were downloaded and managed within PRISMA protocol for organizational and analytical purposes. PRISMA protocol assists with the systematical review of all content, allowing the researcher to upload citations, as well as full-text articles within the same review. The first step here was to screen the data for duplicates. After duplicates of articles were removed, 286 articles remained from non-academic sources and 8 academic articles. Thereafter, with the application of PRISMA protocol, the researcher screened and extracted publication citations with the purpose of removing articles that did not relate to the pre-existing themes connected to the theoretical framework. Data extraction was carried out independently by the researcher. This was possible due to PRISMA's various features, such as creating a review, uploading citations, gathering all the reviews in a dashboard, free-text labelling of citations, free-text search, and face-based filtering (Ouzanni et al., 2016).

Thereafter, the researcher was engaged in extracting articles that did not include any indication of addressing Thunberg as a leader nor mentioning her followers. Some scholars argue that the process of extraction of articles has no meaningful impact on the synthesis findings, because a qualitative study as such is not trying to present a generalized truth (Clark et al. 2015). However, due to the number of articles identified, this process was deemed necessary to narrow down the empirical data. The results from the extraction was compared and double-checked to see if there were any differences in interpretation. After the extraction, 163 full-text non-academic articles and 7 full-text academic articles were identified for eligibility.

Thereafter, 115 non-academic articles were excluded on the basis of no appropriate outcomes; irrelevant to the purpose of the study; similarities with other articles; and/or library was unable to find the article. Of the 7 remaining academic articles, one was excluded with the reason of not being publicly accessible. Ultimately, there were 48 full-text non-academic articles and 6

academic articles included in qualitative synthesis. Of the non-academic articles, 15 were articles from Swedish magazines, including 3 from Aftonbladet, 4 from Svenska Dagbladet, 3 from The Local, and 5 from Dagens Nyheter. There were 33 articles from international newspapers and magazines; 7 from New York Times, 4 from The Guardian, 5 from Fox News, 3 from Boston Review, 4 from Washington Post, 2 from Vancouver Sun, 5 from QUARTZ, and 3 from BBC News. Of the remaining 6 academic articles included for qualitative synthesis, 1 came from Nature Research Journals, 2 came from SAGE Journals, 1 came from Lancet Planetary Health, and 2 from The Political Quarterly Journal.

Table 2

PRISMA Flow Diagram

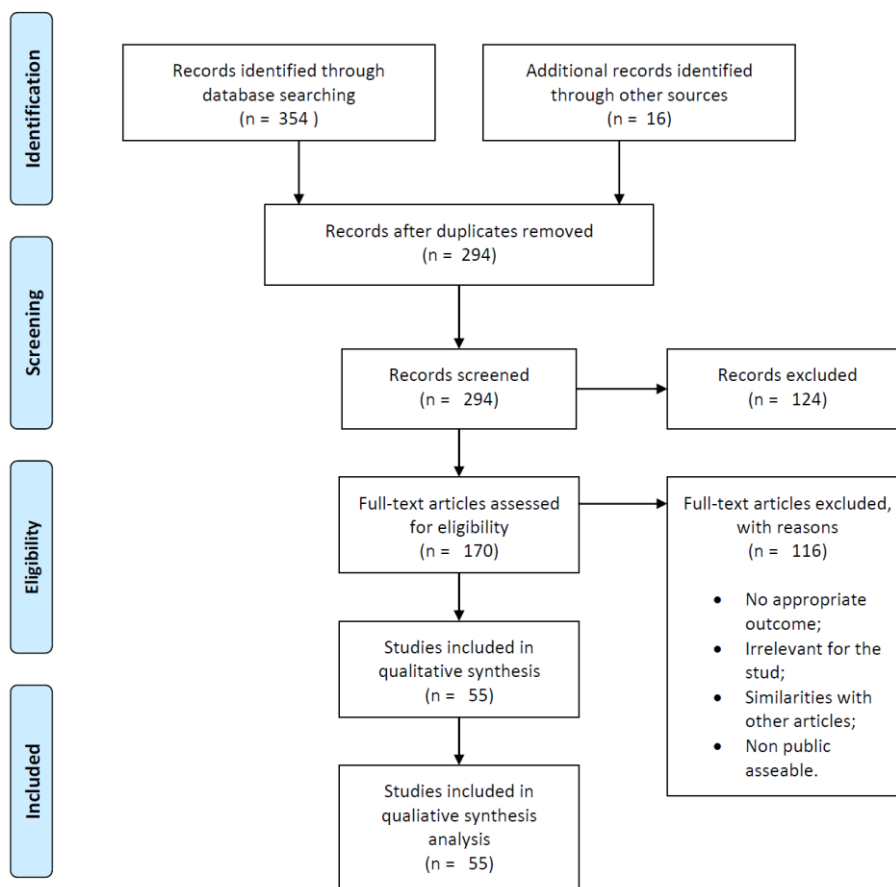


Table 3

Numbering the articles utilized in this study

Articles	Number
Beeler (2019)	1
Björkman (2020)	2
Blitzer (2019)	3
Boucher (2019)	4
Caldwell (2019)	5
Chomsky and Pollin (2020)	6
Curnow and Helferty (2019)	7
Dalal (2017)	8
Daston and Vidal (2004)	9
Dixon (2020)	10
Ewald (2021)	11
Fielding and Hornsey (2016)	12
Forsberg (2021)	13
Fox News (2019)	14
Gibson (2020)	15
Grossman (2020)	16
Grönberg (2020)	17
Hallett (2020)	18
Harvey (2020)	19
Helmersson (2020)	20
Hesse (2019)	21
Karlsson (2021)	22
Landy (2019)	23
Lord (2020)	24
Marchese (2020)	25
Marris (2019)	26
Mastrangelo (2020)	27
McCarthy (2019)	28
Milman (2019)	29
Mishan (2020)	30
Monnappa (2021)	31
Näslund (2021)	32
Oscarson (2021)	33
Payne (2021)	34
Phillips (2019)	35
Rincon (2019)	36
Rowlatt (2020)	37
Ruiz (2020)	38
Röstlund (2021)	39
Sabherwal (2021)	40
Show (2019)	41
Sridham (2019)	42
The Local (2019)	43
The Local (2020)	44
The Local (2021)	45
Thomas and Cretney (2019)	46
Timsit (2020)	47
Vertigan and Nelson (2019)	48
Vlessing (2020)	49
Wallace (2019)	50
Williams (2021)	51
Winman (2021)	52
Wu et al. (2020)	53
Zraick (2019)	54
Zulianello (2020)	55

2.3. Data analysis

This study aimed to conduct a qualitative systematic content analysis and adopted a flexible research design. The data gathered from online electronic sources was analyzed within the framework of a Deductive Thematic Network Analysis. This is a method within the qualitative analysis software ATLAS-ti.9 (Bengtsson, 2016). By applying a deductive approach, the data was assigned to ATLAS-ti.9 for a qualitative content analysis, which is a method used to systematically analyze written material. The coding frame was based on some pre-arranged codes and saved to the “List Coding” feature in ATLAS-ti.9. These pre-existing codes were created in accordance with the analytic framework, which are the five characteristics used to outline moral authority and the four sub-categories of Transformational Leadership Theory (TL). This was conducted prior to the analysis of the gathered data, which is referred to as driven coding. “List Coding” created the possibility for the researcher to recognize sections of the gathered data that could be grouped together and linked to a pre-arranged code (Bengtsson, 2016). This process of grouping together parts of the data is referred to as “quotations” in the ATLAS-ti.9 software and Bengtsson (2016) refers to this process as open coding.

During the data analysis, the researcher began with a manifest deductive qualitative content analysis to discuss the different qualities of leadership Thunberg possessed and the impact she had on people. When conducting a manifest qualitative content analysis, with a deductive approach, the researcher tends to seek for content aligned with the pre-existing analytic framework and research questions (Bengtsson, 2016). Thereafter, the researcher was engaged in axial coding, where the purpose was to explore the inter-relationships that existed between the various data sources. Here the relationships between themes were examined, formed and classified (Bengtsson, 2016). Thereafter, latent deductive quality content analysis was conducted to explore the different underlying behaviors among Thunberg and her followers that generated moral authority. Latent deductive quality content analysis enables the researcher to find hidden interpretations of the gathered data by applying conceptual lenses, and theory-based codes (Robson, 2008). Networks were used in ATLAS-ti.9 for analytic purposes to develop graphical understandings of the different fragments of the project. A network can include quotations, families, and memos, assisting the analytical process to be more structured and thusly more effective.

2.4. Ethical Consideration

It is becoming more popular to conduct qualitative research by studying existing online content (Bengtsson, 2016; Burles and Bally, 2018). While there are countless guidelines to conduct research on humans, over recent years ethical guidelines for content analysis are surfacing (Clark et al., 2016; Bengtsson, 2016). However, it is still an area that should be developed further (Burles and Bally, 2018). According to Bengtsson (2016), creating ethical principles for online data is problematic due to the wide range of online search features and the differing data that exists on the internet. Still, Burles and Bally (2018) aimed to present some generalized ethical principles when engaged in studying online content.

Firstly, it is crucial to use original online sources, to strengthen the validity of the empirical data (Burles and Bally, 2018). For instance, the researcher in this study avoided using data that was cited in any articles. Some material however, such as Facebook posts were not from its original source but gathered from articles citing different social media platforms. It is however essential to have an ethical principle of using the original sources as often as possible. Another ethical issue is the concept of anonymity and confidentiality. From one perspective, using online sources strengthens the codes of confidentiality, as it is already approved and published material (Clark et al., 2015). On the other hand, the authors of the articles are not aware that their material will be interpreted and analyzed in this manner. It is hence vital to reference the data accordingly, and differentiate between interpretation and actual statements that exist in the material. Additionally, a correct referencing system is vital, including dates and time of the retrieved data. This study did not require ethical approval because the data collected was already published materials which are available in the public domain. Finally, objectivity is always an ethical dilemma in qualitative research (Burles and Bally, 2018). According to Bengtsson (2016) collecting online sources enhances the objectivity, as it is already published material. He also states that the online sources are free from potential communication bias, which can occur when participants are aware they are being studied (Bengtsson, 2016). Consequently, qualitative research from online material has the prospect for revealing new knowledge about subjective understandings, which may not surface in face-to-face studies.

2.5. Limitations

The limitations with a pragmatic approach are that it is quite time-consuming. However, by using ATLAS-ti.9 software, Mendley reference software and PRISMA protocol, the efficacy and organizational structure becomes significantly increased. The advantages of utilizing qualitative data analysis software include being freed from most of the manual and clerical tasks, saving time, being able to use comprehensive amounts of qualitative data, enhanced flexibility, and enriched validity and auditability of qualitative research. Another vital consideration is that when using popular journalistic articles and academic publications, it does not always provide the up-to-date statistics and knowledge. Even though the data gathered was within the timeframe suitable for the analysis, it might not always be relevant today. Another element to take into consideration is that secondary research provides its arguments from already collected data. Therefore, the success of this study relied on the quality of previous research. Still, a pragmatic approach addresses the different limitations of a method and believes therefore that drawing on many methods increases the understanding of the research problem (Robson, 2008).

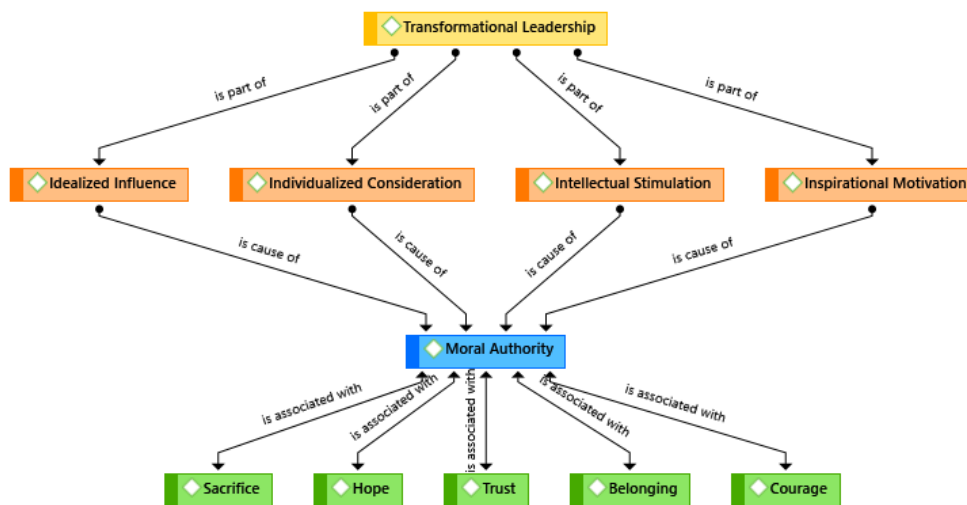
A challenge with a rather fixed theory as TL is that one may be blinded when analyzing the findings to fit the framework. A researcher always needs to be cautious about relying too much on a theory, which could prevent data from coming through (D`Cruz and Jones, 2007). Utilizing an abstract theory, as TL, in such context required therefore in-depth understanding of the theory. In this study, there was a pre-conception that Thunberg was considered a moral authority. If we accept that Thunberg was an authority of morality, then it was vital to acknowledge that the lens in which the findings were analyzed, are colored by that pre-conception. Robson (2008) highlights the importance of being aware of these pre-conceptions to understand the researcher's position and attitudes in relation to the content gathered. However, ATLAS.ti software enhanced the ability to some degree extract the researcher's view from the empirical data. Bengtsson (2016), refers to this as *bracketing*, stating that it is a vital process to address in qualitative research. Finally, it is important to consider the cultural and other forms of biases. Whether we are aware of it or not, we all have biases (D`Cruz and Jones, 2007). Thunberg is Swedish and a female, as is the researcher. This resemblance has the possibility to influence the researcher and render the researcher more subjective to Thunberg's accomplishments. However, the theoretical and framework and the use of a content analysis design increased the ability to objectively gather and analyze the chosen data.

3. Theoretical Framework

By utilizing the Transformational Leadership Theory, this study includes references from the five typical characteristics of moral authority, discussed by various scholars (Stanley, 2011; Mayberry, 1970; Ferrari, 1998; Daston and Vidal, 2004; Blackford, 2016, Covey, 2002; Clark, 2016).

Table 4

Theoretical Framework



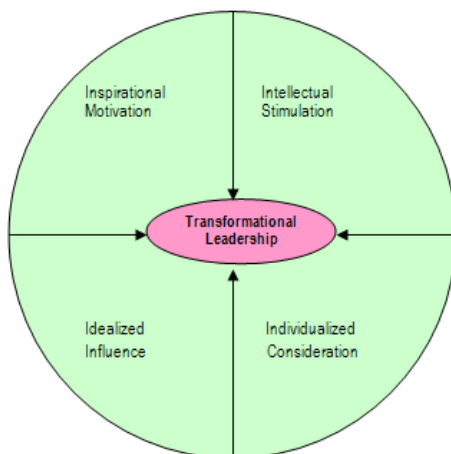
3.1. Transformational Leadership Theory

TL was first described by Downton in 1973, but later academically defined by Burns (1978, cited in Ahmed et al., 2016). To gain understanding of Thunberg’s ability to influence so many people, the TL offered the framework to examine her capacity to get people to willingly follow her and change set behaviors (Northouse, 2001). The success of leadership is hence related to the behavior of the leader and the needs of the followers (Clark, 2016). Thunberg has by moral authority become an influential and successful leader (Marris, 2019). According to Daston and Vidal (2004), TL requires the ability to engage in a process that transforms and changes followers, emphasizing individual and groups values, emotions and ethics. TL suggests that leaders who possess certain personal traits and the relationship they have to their followers are those who can achieve the most change (Clark, 2016). Further, it is argued that TL can impact on individual, group and societal levels, as well as influencing an entire culture (Ahmed et al. 2016).

There are four subcategories within TL (Goethals and Sorenson, 2007). The first is *Individualized Consideration*, referring to a leader’s ability to build personal relationships with an individual or group (Hanbing and Maolin, 2016). This sub-category was used to analyze Thunberg’s skills to promote self-development and the followers’ ability to identify themselves with her. Secondly, is the *Intellectual Stimulation*, emphasizing a leader’s ability to impact people to follow intellectual and rational arguments (Northouse, 2001). Within this context, Thunberg’s reliance on science and finding sustainable solutions were addressed. She encouraged followers to think like her and challenge old ways of doing things (Landy, 2019; McCarthy, 2019; Lord, 2020; Phillips, 2019). The next component of TL is *Inspirational Motivation*, with an emphasis on emotional stimulation. Here, the focus was on Thunberg’s strong and evocative language and its impact on people, as well as her ability to share her visions. According to Stanley (2011), leaders engaged in inspirational motivation are often recognized as charismatic. Finally, we have *Idealized Influence*, stressing the importance for leaders to lead-by-example, sacrificing oneself for the sake of values and mission (Northouse, 2001). This section was applied when analyzing Thunberg as a role model for moral behaviors, thereby gaining respect and trust. According to the TL, if a leader is successful within these four subcategories, their performance is beyond expectations (Northouse, 2001).

Table 5

Transformational Leadership Theory



Source: Retrieved from Northouse (2001, p. 73)

3.2. Moral Authority

This study examined Thunberg’s influence on people within the context of moral authority. Moral authority applied from an anthropological perspective, understands that charisma is

culturally situated and emerges from the desire among people (Evans et al., 2015). By addressing moral authority as a process means that it is a two-way and interactive dynamic (Mayberry, 1970). Thunberg is a moral authority because she does not have the physical power to enforce her will on people. Rather, she can convince people to willingly follow her and acknowledge her moral principles as the truth (Sabheral et al., 2021). The concept moral authority is frequently applied in various contexts (Raven and French, 2021). However, it is possible to identify some specific characteristics recurrently addressed by different scholars (Stanley, 2011; Mayberry, 1970; Ferrari, 1998; Daston and Vidal, 2004; Blackford, 2016). These are *sacrifice* meaning giving up something of value for the joint vision that the result is worth the effort, *trust* in the leader that their vision encourages the willingness to be a follower, *courage* in being able to stand firm in one's own beliefs, *hope* so the followers are empowered, and *belonging* which creates a sense of being part of something great. These characteristics were used as sub-headings in the process of analyzing the findings.

4. Systematic Literature Review

This chapter provides useful information for understanding the definition and origins of moral authority, and how moral authority is generated. Furthermore, the sources for Thunberg's authority will be discussed by looking at her background and how she became influential.

4.1. Definition of Moral Authority

According to Mayberry (1970), God is the source of all authority for morality. He continues by arguing that as God lessens its essentiality among people, a universal idea of morality decreases. Mayberry (1970) goes so far to state that God's absences results in a disappearance of morals. This indicates that the origins of moral authority came from the Christian church. On the contrary, one may suggest that people, instead of relying on God for morality, continue seeking other moral figures to guide them, such as leaders (Wilk and Cliggett, 2007). Today the concept of moral authority is often used to describe a specific kind of leadership. However, there is no universal definition of the term (Daston and Vidal, 2004). Kevin Sharer, Professor at Harvard Business School, suggests "*Moral authority is not easy to define precisely, but like many things, you know it when you see it, or especially when you do not. Lack of moral authority in leaders breeds distrust, creates cynicism, and kills initiative. Over time, the lack of strong moral authority in the leadership is fatal*" (Sharer, 2010, cited in Clark, 2016, pp. 74-75). Blackford (2016, p. 126) recognizes the complexity of defining moral authority but refers to it as "*the*

capacity to convince others of how the world should be". Ferrari (1998, p. 84) defines moral authority as "*the ability to speak authoritatively on matters of right and wrong behavior*". These definitions certainly make moral authority sound impressive. Of course, it can be, but one might wonder if it always has to be (Covey, 2004). However, the leaders with moral authority that we learn about have managed to get a god-like position in the world (Clark, 2016). An interesting discussion would be if their grandiose position in the world is because of their characteristics to generate moral authority, or if they gained these lavish roles due to other reasons which thereafter generated their moral authority. Regardless, the definition that was applied in this study addressed both leaders with super-hero acknowledgements, through to the neighbor whom inspired you're local community to create food packages for newly arrived immigrants.

Goethals and Sorenson (2011) offer a stimulating definition of moral authority as compared to mere authority. They present a comparison between President Bush's speech to the U.N in 2004 and Presidents Obama's speech in Cairo 2009, to illustrate their argument. Goethals and Sorenson (2011) draws attention to the resemblances within these speeches, even though they are known for conflicting political beliefs. Within both speeches there was an emphasis on the significance of human rights, independence, and equality in Muslim communities. Bush and Obama highlighted how USA shows respect towards the traditions and history of the Muslim world and that USA was not declaring war against Islam. However, the reaction from the Muslim community could not have been more diverse. Presidents Bush had to duck a shoe thrown in hatred, while President Obama was received with respect. Goethals and Sorenson (2011) argue that the contradictive reactions from the Muslim community was not connected to what the presidents said, but rather related to how they as individuals are perceived, which is a result of their biographies, actions, and the narrative they have shaped for themselves. Former President Obama and President Bush have completely diverse moral statuses in their association to the Muslim world. Accordingly, their words are interpreted tremendously different.

4.2. What creates Moral Authority?

The attempt to gain power is a common element among all of the heroes and villains in our history books and been accomplished in a number of different ways. Power is directly related to one's authority, which is in turn linked the followers' willingness to obey (Roberts and Parks, 2007). According to the traditional leadership theories, such as The Great Man and Traits theories, people tend to obey leaders to gain rewards, avoid undesirable consequences, and/or

a belief that an authority is legitimate (Ahmed et al., 2016; Goethals and Sorenson, 2007). Moral authority however is created through the followers (Stanley, 2011).

To gain understanding on what determines whether or not a leader will become a moral authority, it is useful to look at other moral authorities. Mahatma Gandhi is a very good example. With a non-violence approach, Gandhi managed to gain freedom for his country in 1947 (Mayberry, 1970). His key motivational leadership traits were people-skills, resilience, knowledge and leading by example (Stanley, 2011). Gandhi was not a born leader as the Great Man Theory states, yet Blackford (2016) argues that he had qualities to obtain moral authority. Covey (2004) believes that moral authority often emerges in times of crisis. At the time when Gandhi became known, India had been suffering from decades of atrocity from the British rule (Stanley, 2011). The people of India were desperate but did not have a solution for their distress. By his vision of an "Independent India", Gandhi inspired people and gave them *hope* that freedom could be achievable (Stanley, 2011). Gandhi showed *courage* to stand up against the British and *sacrificed* materialistic pleasures to live a simple life and was even physically abused and imprisoned (Mayberry, 1970). The vision to free India was not motivated by personal self-interest, inspiring *trust*. Gandhi was confident in his belief that India would become independent and thus uniting the populous by giving them a sense of *belonging* (Stanley, 2011). As we can see, the traits and behaviors that Gandhi possessed are in coherence to the five characteristics of moral authority, which are sacrifice, trust, courage, hope and belonging.

4.3. The sources of Thunberg's Moral Authority

Thunberg didn't just happen. Since her first appearance, the Thunberg that the world knows has been an evolutionary story. Thunberg was born 2003 in Stockholm, Sweden (Thunberg et al., 2018). Her mother, Malena Ernman, is a famous opera singer in Sweden, and her father, Svante Thunberg, a Swedish actor. Thunberg is a descendant of Svante Arrhenius, a scientist who was awarded the Nobel Prize for Chemistry in 1903 for inventing a new model of the greenhouse effect (Thunberg et al., 2018).

Thunberg became aware of climate change at the age of eight and was immediately concerned about why there was not more effort to act upon it (Thunberg et al., 2018). Her concerns of how little was done to address climate change made her depressed and she stopped eating and talking

during a period (ibid). Shortly after, Thunberg was diagnosed with obsessive–compulsive disorder, selective mutism and Asperger syndrome (Thunberg et al., 2018). Thunberg has described Asperger's syndrome as a gift and a "superpower" (Mishan, 2020). According to Meadan et al. (2010), people diagnosed with Asperger syndrome have a tendency to concentrate their focus and be passionate about a specific area. Clearly, Thunberg's passion is focused on climate change. Thunberg aimed to gain the attention of law-makers to address climate change (Thunberg et al., 2018). Three weeks prior to the Swedish election, September 2013, Thunberg did not attend school, but rather, sat in front of the Swedish parliament with a sign saying “Skolstrejk för Klimatet” (School Strike for Climate) (Thunberg et al., 2018). Her inspiration for her climate strikes came from some students in Parkland, Florida who organized a national school strike to fight for stricter gun laws (Grossman, 2020). For every Friday Thunberg was there, more people joined her (Hervey, 2020). Soon she was getting international attention and she inspired thousands of young people around the world to skip school on Fridays and create their own “Friday for Future” strikes (Milman, 2019; Monappa, 2021; Näslund, 2021; Phillips, 2019). Thunberg went from being unknown to an international celebrity within a year (Marris, 2019). She is clearly not the first young person that has advocated for the climate. However, she has managed to gain the attention of media and world leaders like no other.

5. Presentation and Analysis of the Findings

The findings of this study were analyzed with the use of five recurring characteristics of moral authority, utilizing the TL framework. Despite the fact that these characteristics intertwine, this study separated them for structural purposes. They are: *sacrifice, trust, courage, hope and belonging*.

5.1. Sacrifice

Throughout history, Christians have shown adoration for the sacrifices of Jesus Christ and the impact it had on them (Mayberry, 1970). This example is the archetype and shows the effectiveness when leaders sacrifice for the greater good. Martin Luther King Jr once stated, “*Human progress is neither automatic nor inevitable. Every step toward the goal of justice requires sacrifice, suffering, and struggle; the tireless exertions and passionate concern of dedicated individuals*” (Goethals and Sorenson, 2007). According to TL, sacrificing leaders display the element of *idealized influence*, which involves engaging with followers to develop

a joint purpose and thus gain their respect (Clark, 2016). This study identifies several different forms of sacrifice that Thunberg undergoes.

Firstly, there are the concepts of sacrificing time, energy and material comforts. The findings show that Thunberg is often portrayed in media as someone who sacrificed a lot of time and energy (Marchese, 2020; Zulianello and Ceccobelli, 2020; Dixon, 2020). This image is not only a creation by media as even Thunberg, in her speeches, stresses the sacrifices she has had to make. For example, at the UN Climate Action summit 2019, Thunberg said *“Yet you all come to me for hope? How dare you! You have stolen my dreams and my childhood with your empty words”* (Hesse, 2019). These are powerful claims of sacrifice, and her passionate rhetoric gains a lot of attention in media and amongst her followers (Milman, 2019). Idealized attributes in TL suggests that sacrificing one’s own comfort and time builds trust and acceptance among followers (Northouse, 2001). Phillips (2019) recognizes Thunberg’s sacrifices by addressing how utterly devoted she is to her mission, referring to a post in a Facebook group *“Greta has sacrificed her youth and time for us. Think of all the hours and energy she has spent to protect the future for all of us”* (Marchese, 2020). Thunberg not only sacrifices her time and energy, but puts aside material comforts as well, which strengthens her stance as a moral authority (Goethals and Sorenson, 2011).

Secondly, there is the element of self-sacrificing, where no personal gain is involved. According to Hanbing and Maolin (2016), self-sacrificing leadership is an essential attribute for a moral authority. Many argue that Thunberg realizes it is not about herself and appears not to be self-seeking nor compromising, whilst also careful to show that she is not making money from the attention (Oscarsson, 2021; Rincon, 2019; Williams, 2021; Mishan, 2020; Karlsson, 2021). Bluntly, Thunberg has declared several times that she is not interested in fame nor being a celebrity (Williams, 2021). For example, Thunberg is irritated that *“instead of focusing on the climate and listening to the scientific message, people are instead listening to and talking about me and talking about wanting to take pictures with me,”* (Show, 2019). Saleemul Huq, director of the International Centre for Climate Change and Development in Bangladesh states *“Speaking as a climate change scientist who has been working on this issue for 20 years and saying the same thing for 20 years, she is getting people to listen, which we have failed to do”* (Show, 2019). From a TL perspective, self-sacrificing leadership involves the willingness of a leader to give up personal comforts (Ahmed et al., 2016). McCarthy (2019) argues that Thunberg sacrificed her own education, referring to Thunberg’s speech delivered to the UN

Action summit in New York *"This is all wrong. I shouldn't be standing here. I should be back in school on the other side of the ocean"*.

Finally, there is the idea of "lead by example", which is an essential attribute among moral authorities, meaning that a leader must sacrifice far more than what they require the followers to do (Covey, 2004). In one of Thunberg's speeches she says *"I refuse to be part of the problem. I am not going to contribute to stealing the future of coming generations"* (Hesse, 2019). According to Wilk and Cliggett (2007), to act against climate change is directly related to sacrificing comforts and "needs" in your daily life. They argue that people are not willing to change their environmental behaviors only by being told to do so or gaining knowledge of the consequences if they don't (Wilk and Cliggett, 2007). Thomas (2019) describes how Thunberg, by denying herself new clothes, a variety of food and comfortable travelling arrangements evokes a will to change among people. Many therefore suggest that Thunberg's sacrifices and conscientious choices are powerful arguments and most effective. (Rowlatt, 2020; The Local, 2019; Vlessing 2019; Mastrangelo, 2021; Helmersson, 2020). Milman (2019) demonstrates this by referring to a Facebook post *"Thunberg shows us how to respect and protect our environment, by living by example. She is an inspiration"*. Caldwell (2019), Björkman (2020), Gibson (2020) and Lord (2020) agrees, claiming that her sacrifices are what impresses people. For instance, Thunberg spent 15 days on a zero-emission sailboat across the Atlantic Ocean with no access to showers or other comforts, to take part of the climate talks in New York (Chomsky, 2020). According to Covey (2004), material sacrifices are important, but sacrifices that directly increase the joint vision are most effective to obtain moral authority. Ahmed et al. (2016) argues that indicators for a leader that possesses *idealized influence* are personal sacrifices that are directly connected to the greater good. According to TL, leaders who become role models will motivate their followers to engage in change and sacrifice (Isserow and Klein, 2017). An interesting observation is that Thunberg does not particularly agree that she sacrifices in that sense. She states *"I don't need new clothes. I know people who have clothes, so I would ask them if I could borrow them or if they have something, they don't need any more. I don't need to fly to Thailand to be happy. I don't need to buy clothes I don't need, so I don't see it as a sacrifice."* (Mishan, 2020).

Peet et al. (2007) addresses the resistance to change through the framework of political ecology, stating that the majority of the political climate-mitigation efforts are information-based interventions with threats of what is going to happen if they don't change. This would suggest that there is a belief that people are unaware of the consequences that their life-style choices

have on the natural environment and by giving them the information they would change their behavior. Furthermore, it indicates that threats and fear motivate people to sacrifice willingly. According to Peet et al. (2007), this is a very ineffective approach. Instead, they promote behavioral interventions work (Peet et al., 2007). Yet, it seems that Thunberg uses information as her base and call for change (Rowlatt, 2020; The Local, 2019; Vlessing 2019; Mastrangelo, 2021; Helmersson; 2020). Many argue that Thunberg often refers to science and facts to scare people into understanding that they need to change their behavior (Monnappa, 2021; Röstlund, 2021; Sridham, 2019; Williams, 2021). However, Raiser et al. (2020), claims that it is not the facts from science which attract people's attention, rather, that they are willing to change their behavior and listen to Thunberg because she confronts them with compelling arguments (Raiser et al., 2020). Sabherwal et al. (2021) refers to such behavior as social comparison, suggesting it as the reason as to why Thunberg has had strong impact on people all around the world. Social comparison in this context refers people changing their behavior if they notice that they are doing less for the environment than their friends or neighbors (Sabherwal et al., 2021). For instance, findings reveal that the sacrifices in terms of donating almost all her money to environmental groups have generated social comparison and thus change (The Local, 2020; Timsit, 2020; Zraick, 2019; Lord, 2020; Grönberg, 2020). It is also possible to suggest that Thunberg endorsed the idea of social comparison by stating "*feel like the youth must sacrifice their own education in order to protest against the destruction of their future*", which evoked a lot of change according to the findings (Hesse, 2019; Curnow and Helferty, 2019; Blitzer, 2019; Grossman, 2020). Ferrari (1998), states that it is crucial for a transformational leader to understand the efficiency of social comparison to engage in the element of *Inspirational Motivation*.

To conclude, the findings show that the traditional way of sharing information about climate change - and the consequences if people don't change their habits - have not had much impact. Through sacrificing her time, energy, and material comforts, Thunberg has led by example, gained media attention, evoked leaders around the world, and influenced thousands of people to sacrifice their material comforts and spend time advocating for a more sustainable world.

5.2. Trust

According to Covey (2004), a moral authority needs to be trustworthy. Trust is defined by Blackford (2016, p. 72) as "*stable belief in the consistency, truth, or ability of someone*". Adams (1995) states that trusting a leader emerges when leaders are in cohesion with their pre-existing behaviors and experiences. Some suggest that Thunberg's followers see her as someone they

can trust (Ewald, 2021; Wallace, 2019; Harvey, 2020; Carlqvist, 2021). Others question Thunberg's ability to generate trust (Fox News, 2019; Landy, 2019, Thomas et al., 2019). For instance, according to Wu et al. (2020), it is absurd that Thunberg generates trust among people, because she is challenging their ways and even their existence. According to Landy (2019), people do not trust someone who is criticizing them and advocating change. Covey (2004) agrees that change often evokes fear and mistrust among people. It is obvious that Thunberg is demanding people to change their behavior and ways of thinking (Fox News, 2019; Winman, 2021; Hallett, 2020). The question hence arises how Thunberg gains trust, despite her foremost message that change is an absolute must? An answer may come from TL framework, which describes in the sub-category *intellectual stimulation*, the importance for a leader to look from different perspectives for solutions to a problem (Daston and Vidal, 2004). According to Hesse (2019), Beeler (2019) and Dixon (2020), Thunberg encourages non-traditional thinking and re-examines critical assumptions of what is required to reduce climate change. These characteristics seem to give Thunberg results (Forsberg, 2021; Helmerson, 2020; Payne, 2021; Curnow, 2019; Blitzer, 2019). For instance, Boucher (2019) refers to a Facebook post where a young person is acknowledging their trust to Thunberg by stating "*I love Thunberg... She is telling the truth and we have someone to trust*" and "*I follow Thunberg [be]cause she is telling the truth*". Additionally, Thunberg herself is asking people to trust her through statement such as "*2020 was the hottest year ever recorded according to NASA. The last 6 years have been the hottest 6 years on record. We are in climate emergency and the changes needed to avoid the worst consequences are still nowhere in sight. The only one who can change that is you and I. Spread awareness. Be the change*" (Hesse, 2019).

Many argue that trusting someone is a slippery slope for the new generation (Roberts and Parks, 2007; Wu et al., 2020; Raiser et al., 2020). Through social media and electronic news, nearly everyone has access to world events. However, media is not portraying one truth (Wu et al., 2020; Raiser et al., 2020). Rather, contradictive theories and news are available (ibid). This makes you wonder how to know what and who to trust, as the new generation is confronted with multiple claims of truth and reality. Media continues to blame other media sources for being bias and "fake news", arguing that they consider themselves of singularly providing "real" facts (Zulianello and Ceccobelli, 2020). Dalal (2017), draws attention to this topic, arguing that social media and online media sources have offered the possibility for more people to be heard. There is an ongoing debate whether the accessibility to news creates a more nuanced picture for news recipients. Or, that individuals become selective to what they read,

only taking notice to the news/fact that are simply reaffirming their existing pre-conceptions (Chomsky and Pollin, 2020; Dalal, 2017). Regardless, there is a strong belief that the current media situation has led to an increase in mistrust of science (Dalal, 2017; Bryant, 2015; Zulianello and Ceccobelli, 2020). Experiencing climate change and trusting the consequences of the impact humans have on the natural environment, require youth to trust scientific experts (Bryant, 2015). Despite their mistrust to science, Thunberg is urging people to listen to the experts (Thunberg, 2018; Winman, 2021; Show, 2019; Oscarsson, 2021). The foremost statement of the leading climate change youth movement, Fridays for Future, is that officials and other general actors ought to ‘listen to science,’ meaning that science is the essence of this youth engagement (Thomas et al., 2019). According to Milman (2020) and Marris (2019), it is unclear why Thunberg’s call to trust science is so well received, while many others have failed. Landy (2019) and Phillips (2019) argue that the emphasis on science has not contributed to Thunberg’s ability to receive trust and be a moral authority. Rather, due to Thunberg’s other characteristics, followers trust the science she presents on climate change. To conclude, in this era of never-ending access to news, different realities and contradictive truths, Thunberg has become someone people can rely on and trust.

Roberts and Parks (2007) discuss how mistrust around climate change, environmental justice, and the need for sustainable living is fueled though media, by its contradictive facts on the “truth”. They also suggest that guilt might also be an important aspect in fostering mistrust since acknowledging climate change involves accepting one’s own role in perpetuating the problem (Roberts and Parks, 2007). Within this context, many are puzzled as to why Thunberg instills trust among so many (Williams, 2021; Timsit, 2020; The Local, 2021; Rowlatt, 2020; Näslund, 2021). The confusion emerges because on countless occasions Thunberg has painted very bleak images of our future, or lack thereof, if people do not change (Monnappa, 2021; Lord, 2020; Karlsson, 2021). However, some argue that despite the guilt climate change generates among people, Thunberg receives trust due to the fact that she offers something that political leaders do not (Dalal, 2017; Bryant, 2015; Chomsky and Pollin, 2020). She designates the blame to political leaders (Zulianello and Ceccobelli, 2020). Lynch (2004) states that it is easier to act against something when someone else is accountable for it. Those who initially failed to accept climate change (out of guilt), can now become engaged in climate change. The findings indicate that Thunberg provides a context where people can avoid feeling guilty for their lifestyle, nor fear that the solutions and responsibility lies on them (Wallace, 2019; Vertigan and Nelson, 2019). Thunberg directs the impetus onto political leaders themselves, allying with the masses

as victims of the poor decisions made by those in power (Zraick, 2019; Vlessing, 2020). The findings hence suggest that Thunberg provides a solution in which political leaders and other global forces are to blame and mainly responsible to act differently (Ewald, 2021; Wallace, 2019; Harvey, 2020; Carlqvist, 2021).

5.3.Courage

A universal trait among moral authorities is courage (Blackford, 2016; Covey, 2004; Daston and Vidal, 2004; Ferrari, 1998). According to Dongwong et al. (2020), courage among leaders is displayed when they challenge set authorities and established powerful sources. Covey (2004) describes courage as a vital element to gain moral authority. Thunberg has a lot of courage to challenge powerful leaders, even when they verbally attack her (Mastrangelo, 2021; Raiser et al., 2020; Sabherwal et al., 2021; The Local, 2020; Phillips, 2019). For instance, when Russian President Putin described Thunberg as “*a kind and very sincere girl, who doesn’t understand the complexities of the modern world,*” (Vertigan and Nelson, 2019). Brazil's far-right president Bolsonaro labeled her a “*brat*” (Hesse, 2019). Michael Knowles on Fox News 23 September 2019 refers to Thunberg as a “*Mentally ill Swedish girl*”, when dismissing any reason to follow her (Blitzer, 2019). According to Hesse (2019), Caldwell, 2019 and Ewald (2021), Thunberg gains followers through her fearless approach to those who criticize and mock her. There have been several experienced leaders who found it challenging to handle personal attacks without going to the same level with counter-attacks (Evans et al., 2015; Ferrari, 1998). Thunberg, however, seems to be handling this by sticking to her convictions (Gibson, 2020; Harvey, 2020; McCarthy, 2019).

Several journalists and academics have struggled to understand how Thunberg - a young girl from Sweden - not only managed to find motivation to continue her quest, but also the courage to respond to those patronizing and belittling her (Rincon, 2020; Röstlund, 2021; Sridham, 2019; Vlessing, 2020; Grossman, 2007). Some believe that her steadfastness is what makes her a moral authority (Björkman, 2020; Zullianello and Ceccpbelli, 2020; Timsit, 2020; Rowlatt, 2020). Many suggest her Asperger diagnose is her source for staying focused, hindering her to become emotional towards all the criticism she receives (Mastrangelo, 2021; Raiser et al., 2020; Sabherwal et al., 2021). For instance, Thunberg’s speech at the 2019 UN Climate action summit in New York demonstrated her courage to address political leaders (The Local, 2019; Wallace, 2019; Zraick, 2019; Chomsky and Pollin, 2020). She stated, “*We are in the beginning of a mass extinction and all you can talk about is money and fairy tales of eternal economic growth - how*

dare you!” (Björkman, 2020). A common attribute of Thunberg is her fearless approach and courage as she moves forward in the face of criticism. Every leader needs courage to make hard decisions, implement changes, and cast vision (Evan et al. 2015). In this context, Thunberg is able to courageously stand up against the established system and question global politicians.

Many believe that Thunberg’s courage is displayed in her anger (Björkman, 2020; Zullianello and Ceccpbelli, 2020; Timsit, 2020; Rowlatt, 2020). Adams (1995) states that several great leaders utilize anger to gain followers. In TL, anger is seen as a beneficial attribute, but emphasizes on “focused anger”, to display courage and evoke change and thus encourage followers (Clark, 2016). On the other hand, according to Covey (2004), a successful leader should hide their true emotions and especially avoid expressing anger. Martin Luther King Junior clarified once *“You could be angry that the system is oppressing you, but try not to direct that anger towards people who were caught up in that system, but channel it to the system itself. Use the anger to act without violence”* (Adams, 1995). Dongoon et al. (2020) seems to agree with Martin Luther King Jr. and argues that, anger should be directed to an action, rather than a person. Conversely, the findings show that Thunberg directs her anger mainly towards people and only occasionally towards actions (Marchese, 2020; Hesse, 2019; Grönberg, 2020; Ewald, 2021; Curnow and Helferty, 2019). This can be shown in a response to a question of a journalist *“If everyone is guilty, then no one is to blame, and someone is to blame... Some people, some companies, some decision makers in particular know exactly what priceless values they have been sacrificing to continue making unimaginable amounts of money, and I think many of you here today belong to that group of people.”* (Landy, 2019). Nevertheless, Thunberg’s focused anger has been discussed in both positive and negative forms in media (McCarthy, 2019; Chomsky and Pollin, 2020).

Some disparage Thunberg’s anger (Wallace, 2019; Zraizk, 2019; Vlessing, 2020). Sridham (2019) points out that Thunberg has not earned the right to be angry. He argues that Thunberg - and her generation - should be thankful for the privilege of being able to care of the environment (Sridham, 2019). He continues to state that Thunberg’s anger and allegations are counter-productive by dividing people into different camps, of which they are definitely not accountable for (ibid). However, some address accusations like Sridham’s towards Thunberg from a gender perspective (Show, 2019; Thomas et al., 2019). Mishan (2020), Phillips (2019), and Rincon (2019) discuss the criticism against Thunberg and suggest that a lot of the disparagement emerges from Thunberg being a woman, and that it is never well received when women express anger. Anger from female leaders has been suggested to lack efficacy compared

to anger from men. (Adams, 1995; Ferrari, 1998; Isserow and Klein, 2017; Vertigan and Nelson, 2019). Dongwon et al. (2020) conducted a study regarding leadership, courage and anger. Their study showed that when men in leadership positions displayed focused anger towards a joint cause, people responded by experiencing commitment and trust. When women, on the other hand, showed signs of focused anger, they were accused of being too emotional, not trustworthy and insecure (Dongwon et al., 2020). Overall however, Thunberg' anger has had a positive response among her followers, and can well be a source of her moral authority (Zraick, 2019; Vlessing, 2020; Payne, 2021; Mastrangelo, 2021; Hallett, 2020; Karlsson, 2021). UN Secretary General António Guterres stated “*My generation has failed to respond properly to the dramatic challenge of climate change. This is deeply felt by young people. No wonder they are angry.*” (Dixon, 2020).

5.4. Hope

According to Goethals and Sorenson (2007), there are limited studies conducted on the relationship between TL and hope. On the other hand, the concept of hope is often addressed in traditional leadership theories, such as Traits Theory (Clark, 2016). Interestingly enough, in the finding of this study, the term “hope” is used in regards to TL without specifying it as a necessary quality (Ahmed et al., 2016; Clark, 2016; Raven and French, 1959; Zulianello and Ceccobelli, 2020; Stanley, 2011; Sabherwal et al., 2021). For instance, a leader with attributes such as *Idealized influence* and *Inspirational Motivation*, evokes hope among the followers to achieve desirable goals through communication, being a role model, and establishing patterns for identification (ibid). The findings indicate that Thunberg generates hope from two perspectives, by her celebrity status and by decreasing eco-anxiety among the younger generation (Boucher, 2019; Grossman, 2020; The Local, 2019; Näslund, 2021; Carlqvist, 2021).

Thunberg has managed to gain global attention by offering hope (Milman, 2019; Rincon, 2019; Show, 2019; Chomsky and Pollin, 2020). Blackford (2016) argues that the accomplishments in terms of fame and recognition among a moral authority are reasons themselves to create hope among young people. In other words, fame alone generates hope. Show (2019), Blitzer (2019) and Forsberg (2021) state that because Thunberg has gained a celebrity status, younger people look up to her and feel hope that their voice can also be heard. Williams (2021) suggests that the media attention around Thunberg led to a feedback loop. Blitzer (2019) says that “*Young people are getting so much attention that it draws more young people into the movement.*”. Due

to the modern technology of this era, there are many young people striving to get fame and have a platform to spread their message (Adams, 1995; Bryant, 2015; Dalal, 2017). Lord (2020) agrees and refers to a Facebook post stating “*Finally we have a voice. We are the next generation that will inherit this world. We should be able to have a voice. I feel so much hope*” and “*Thanks Thunberg, you have forced the world to listen to us*”. However, there are those who question Thunberg’s fame and attention, stating she is not the first young climate activist with charismatic attributes, nor the first with a clear message (Sabherwal et al., 2021; Timsit, 2020; Wallace, 2019). According to Dana Fisher, a sociologist who studies activism at the University of Maryland, young people have discussed climate change for quite some time (Fisher, 2019 cited in Marris, 2019). Therefore, many are puzzled as to why Thunberg gained so much attention (Adams, 1995; Bryant, 2015; Dalal, 2017). Some believe that the moral authority that Thunberg has obtained emerged through her unconventional approach (Wu et al., 2020, The Local, 2020; Raiser et al., 2020; Monnappa, 2021). That is, rather than sending out a message that the polar bears and the rainforest need protection, Thunberg focuses on the human-environment connection, stressing the matter of global justice (McCarthy, 2019; Lord, 2020; Carlqvist, 2021; Björkman, 2020). This was acknowledged by Harriet Thendra, an environmental social scientist at the University Of Leeds, who stated “*Thunberg’s message isn’t about saving the rainforest or saving whales; it is about saving the most vulnerable people on Earth*” (Monnappa, 2021).

Secondly, subsequent studies have supported the existence of solastalgia among youth (Sabherwal et al. 2021). In other words, there is an increase of hopelessness and anxiety among young people all around the world, also referred to as eco-anxiety (Wu et al., 2020). Many argue that Thunberg has become a sense of hope that the human kind can overcome global warming and find a sustainable living situation (Beeler, 2019; Ewald, 2021; Marris, 2019; Oscarson, 2021). According to the Public Health Agency in Sweden (2021), every fifth Swedish 12-year-old states that they “*very often or often*” are worried about climate change. Thunberg, can therefore be seen as a source of hope among the next generation. For example, she has said “*As long as you are doing everything you can now, you can’t let yourself become depressed or anxious.*” and “*There are signs of change, of awakening*” (Zraick, 2019). However, some suggest that Thunberg being a source of hope is ironic (Fox News, 2019). In several public speeches, her rhetoric is scary and negative, such as “*Why should we study for a future that may not exist anymore?*” (Rincon, 2019). Thunberg illustrates a rather scary future for humankind, with melting ice-caps and glaciers, raising ocean levels and exacerbating extreme weather

events (Grönberg, 2020; Marchese, 2020; Mishan, 2020; Sridham, 2019; Phillips, 2019). For example, Lord (2020) illustrates this by referring to a Facebook post *“Thunberg is the reason children and teenagers fear their future and feel anxiety. She is to blame for the stealing the childhood from so many”*. Yet, Röstlund (2021) does not blame Thunberg, stating that children and youth were suffering from eco-anxiety way before Thunberg gained fame. Thunberg has repeatedly claimed that her message derives from hope, not from despair. She says, for example, *“The school-striking children, when I see them – that is very hopeful. And also, the fact that people are very unaware of the climate crisis. I mean, people aren’t continuing like this and not doing anything because they are evil, or because they don’t want to. We aren’t destroying the biosphere because we are selfish. We are doing it simply because we are unaware. I think that is very hopeful, because once we know, once we realise, then we change, then we act.”* (Monnappa, 2021).

5.5. Belonging

A leader within TL requires the interpersonal capacities as well as being a model for identification and imitation according to Northouse (2001). Furthermore, Mayberry (1970) states that a moral authority must create a sense of belonging and be accessible for people. This can be challenging for environmental leaders, as they need to influence people from different cultural settings (Peet et al., 2011). They continue to argue that an environmental leader needs to evoke willingness among the followers to change set behaviors and live more in harmony with the natural environment (Peet et al., 2011). Plumwood (2002) acknowledges the complexity by stating that environmental behaviors directly relate to the cultural setting. This would entail that for an individual to change their relationship to the natural environment their cultural morals and norms need to change. Wilk and Cliggett (2007), add to the complexity, arguing that an individual’s moral principles are fixed and taught in childhood and that moral values are very different, depending on the cultural setting. Some anthropologists clarify that every culture is convinced that their moral principles are in coherence with the natural order (Plumwood, 2002). Morality in this context is bound to a specific culture and can only stay within the boundaries that the culture has allowed. Plumwood (2002) even goes so far as to claim that acting against climate change, or even accepting its existence is thoroughly dependent on the cultural setting. However, the findings in this study suggest the contrary. Many believe that Thunberg has in some regards overcome cultural, as well as economic differences (Hesse, 2019; Rowlatt, 2020; The Local, 2021; Zulianello and Ceccobelli, 2020; Timsit, 2020). One possible answer to this accomplishment is that those who follow Thunberg

are somewhat disconnected from their cultural norms and morals. This would be in accordance to Wilk and Cliggett (2007) argument that some people are more influenced by their culture than others. Prior to Thunberg, many young people from different cultural backgrounds were already creating sub-cultures to fight against climate change (Carlqvist, 2021; Raiser et al., 2020; Röstlund, 2021; Zraick, 2019; Dixon, 2020). According to Thomas et al. (2019), young people around the world had already mobilized mass climate protests and demonstrations, before Thunberg became known. Curnow, at University of Manitoba, states that many activists from indigenous groups had acted and fought for environmental justice, with more charismatic traits and leadership personality and skills than Thunberg (Curnow and Helferty, 2019). The climate movement among youth had several young women and men at the wheel, such as the executive director of the US Climate Strike, Isra Hirsi (Caldwell, 2019). However, Caldwell (2019) argues that they did not get the same recognition because many of these young activists are of colour. Curnow (2019) claims that a vital source for Thunberg's moral authority has a lot to do with race. He continues to state that her whiteness and being a "privileged" girl is of great importance to why governments, media and UN acknowledge her to the extent that they do (Curnow and Helferty, 2019). The racial aspect of Thunberg's fame has been discussed in several contexts (Monnappa, 2021; Forsberg, 2021; Helmersson, 2020; Lord, 2020; Ruiz, 2020). For instance, Hesse (2019) discusses Thunberg and race, referring to a Facebook post from a young girl *"I hope equally much attention will be given to a number of kids of colour who have been at the frontline of activism to act against climate change for decades"*.

Whether Thunberg became an environmental leader due to her race or not, the world was in need of a global leader that could cross political, cultural and religious indifferences (Fielding and Hornsey, 2016). According to Blitzer (2019), especially the younger generation was craving someone to join them together in their fear over the threats of the nature changing around them. Blitzer (2019), supports his claim by referring to a Facebook post from a young girl from Nigeria *"Internally displaced peoples, farmer-herdsmen clashes, insecurity — all driven by climate change. Also the increase in food price, floods sweeping away farmers' land, droughts affecting the yield of crops, and excessive rainfall. We need someone to lead us against the greatest war ever known by humankind. The war to protect our climate"* (Blitzer, 2019). To be a TL requires the ability to provide a sense of collective identity (Northouse, 2001). According to Fielding and Hornsey (2016), collective identity emphasizes the need of people to belong to a group and for the individuals in that group to alter their identity towards a joint collective identity. Some believe that Thunberg has accomplished this through mobilization of

people and collectively acting against global warming (Mastrangelo, 2021; Grossman, 2020; Harvey, 2020; Sabherwal et al., 2021; Thomas et al., 2019; Payne, 2021). It is, by some, referred to as the “Greta Thunberg Effect” (Beeler, 2019; Curnow and Helferty, 2019; Oscarson, 2021; The Local, 2020). Fielding and Hornsey (2016), argues that cultural norms surrounding an individual is what ultimately determines how people position themselves towards climate change. However, they suggest that collective identity may overrule the cultural norms (Fielding and Hornsey, 2016). This entails that whilst cultural norms are of great impact, the idea of collective identity is a stronger influence in getting individuals to change their behavior. Stanley (2001) emphasizes the need for a leader to create a collective identity among the followers to engage in a transformational process. Fielding and Hornsey (2016) state that if people can embrace a social identity in regards to acting against climate change then they will be involved in pro-environmental behavior. Thunberg thus offers the new generation a truth that goes beyond political, class and religious indifferences, which is an essential characteristic within the subcategory *Individual consideration* in TL (Northouse, 2001).

Thunberg is both a child and a girl, two qualities that either evoke acceptance or rejection of her message. Some suggest that Thunberg paints the climate as a generational issue - the adults have stolen the children's future. Instead of addressing it as primarily a class issue (Harvey, 2020; Milman, 2019; Landy, 2019; Halett, 2020). Grossman (2020) discusses this issue by referring to a Facebook post “*The older generation messed things up and we are doing the cleanup*”. However, according to Roberts and Parks (2007), there is clear division between the right and the left of politics when discussing climate change. The findings clearly suggested that the “Greta Thunberg effect” is more appealing for some more than others (Gibson, 2020; Hesse, 2019; Mastrangelo, 2021; Payne, 2021). Thunberg’s followers, tend to have a more liberal, rather than conservative political ideology (Sabherwal et al., 2021; Grönberg, 2020; Fox News, 2019; Grossman, 2020). Sabherwal et al. (2021) mentions how those who feel familiarity and resemblance to Thunberg are more likely to follow her. In a study conducted by Payne (2021) it was argued that attributes such as the same age group, political ideology, socioeconomically similar living situation, or cultural setting, play an essential role in the willingness to recognize Thunberg as a leader. The majority of Thunberg’s followers seems to be roughly between the age of 15 and 25 years old (The Local, 2020; Vlessing, 2020; McCarthy, 2019; Karlsson, 2021; Halett, 2020; Dixon, 2020). An important factor is also that Thunberg has often referred to herself as a child (Harvey, 2020; Caldwell, 2019; Boucher, 2019; Wallace, 2019). One example is when Thunberg says, “*Adults keep saying, “We owe it to young people*

to give them hope.” But I don’t want your hope. I don’t want you to be hopeful. I want you to panic. I want you to feel the fear I feel every day, and then I want you to act. I want you to act as you would in a crisis. I want you to act as if our house is on fire. Because it is.” (Rincon, 2019). By doing so, she aligns with the youth, making them feel as if she is one of them (Wallace, 2019; Curnow and Helferty, 2019; Chomsky and Pollin, 2020) as Chomsky and Pollin (2020) comment *“She is providing an arena where the younger generation can find a social identity”*.

Thunberg’s young age has been highlighted by media, herself and among her followers. Even though Thunberg’s young age could be a source for her moral authority, it is possible to find disadvantages with her young age (Carlqvist, 2020; Chomsky and Pollin, 2020; Williams, 2021; Beeler, 2019). For instance, those critical of Thunberg often refer to her as a “child” to belittle her mission and appearance (Björkman, 2020; Winman, 2021; Blitzer, 2019; Fox News, 2019; Caldwell, 2019). Some argue that this infantilization is similar to stereotypical feminine accusations used to silence women, such labels as hysteria, emotionality, mental disturbance and no ability to think for themselves (Boucher, 2019; Dixon, 2020; Payne, 2021). The gender aspect should not be ignored as it is rooted in a far-reaching historical connection. According to Vertigan and Nelson (2019) and Plumwood (2002), climate denialism is connected to the masculine identity, where the idea of the conquest of nature is intertwined with industrial capitalism. They argue that industrial capitalism is made by and for men, and the core essence of being a “man” becomes questioned when one criticizes industrial capitalism (Vertigan and Nelson, 2019; Plumwood, 2002). Nonetheless, despite her age and gender having been used against her, Thunberg herself has repeatedly referred to her young age as a strategy to enforce her mission, which by many has been seen as successful (The Local, 2020; Vlessing, 2020; McCarthy, 2019; Karlsson, 2021; Halett, 2020; Dixon, 2020).

6. Discussion

6.1. Summary of the findings

6.1.1. What kind of discourses in the media characterize Thunberg’s moral authority?

Table 6

Characteristics of Thunberg’s moral authority

Sacrifice	Trust	Courage	Hope	Belonging
Sacrificing time, energy, and material comforts (13, 48, 25, 3, 34, 53, 47, 18, 28, 54, 26).	Enabling trust among her followers (48, 24, 5, 29, 44, 11, 36, 3, 47, 15, 6, 51, 7, 23).	Courage when standing up against and challenging powerful leaders (46, 1, 35, 12, 38, 8, 27, 48).	Celebrity status so younger people look up to her and feel hope that their voices also can be listen to (53, 16, 34, 45, 4).	Overcome cultural and political indifferences and established a new sense of belonging (5, 36, 22, 6, 47, 11).
Sacrifices that has an immediately positive affect to the natural environment (55, 16, 4, 27, 9, 42, 2, 13, 49, 17).	People tend to trust her because she is urging people to trust science and not her (5, 11, 3, 48, 24, 7, 51, 23).	Displaying “focused anger” towards the established system as well as to individuals (36, 6, 49, 12, 38).	Some believe she has provided hope for a generation engaged in eco-anxiety (22, 54, 15, 7, 33).	Younger generation in need of a leader joining them together in their eco-anxiety (5, 22, 6, 11, 34).
Self-sacrifice and no interest in own benefits (19, 6, 38, 7, 51, 39, 11).	Provides a context where people can avoid feeling guilty for how they live and the responsibility lies on political leaders (1, 18, 53, 27, 31, 52, 14).		Others believe she is the cause of eco-anxiety (37, 13, 42, 9)	Providing a collective identity (41, 10, 16)
“lead by example” “role model” sacrifice own needs and comforts to encourage others to sacrifice (24, 50, 3, 28, 43, 11, 30, 44,).	Flexible enough to change while showing consistency over time (50, 38, 10, 32, 17, 45, 21, 9, 43, 25, 39, 2 37)			Using her age to evoke a sense of belonging among followers (20, 53, 13, 29, 46, 3, 15, 33, 14, 25, 7, 20, 54, 8, 14).
Balancing information-based with behavioral interventions (25, 52, 15, 47, 7, 27, 2, 53).				
Sacrificing to evoke social comparison (21, 47, 52, 18,)				

This study argues that Thunberg enhances her position as a moral authority by sacrificing in numerous ways. Her sacrifices in terms of time and energy, with direct positive effects on the natural environment, have influenced people the most (13, 48, 25, 3, 34, 53, 47, 18, 28, 54, 26, 55, 16, 4, 27, 9, 42, 2, 13, 49, 17). Her self-sacrificing actions evoke social comparison (19, 6, 38, 7, 51, 39, 11). Thunberg frequently refers to scientific evidence to drive her message for green governance and sustainable living (25, 52, 15, 47, 7, 27, 2, 53). Whilst some hail her as a spokesperson in this regard, many claim that Thunberg’s information-based approach does

not contribute to her moral authority (25, 52, 15, 47, 7, 27, 2, 53). Rather, they suggest it is Thunberg herself - by consistently leading as an example - that has had the greatest affect (24, 50, 3, 28, 43, 11, 30, 44). Finally, the fact that she has not materially benefitted in any way by being in the spotlight, has inspired others to follow her self-sacrificing approach (19, 6, 38, 7, 51, 39, 11). This study draws attention to the downside of internet and globalization, arguing that the never-ending access to news and social media creates different realities and contradicting truths. The new generation is therefore growing up with a mistrust of science and a post-modernist approach to facts. Thunberg has not only become a mediator between science and youth, but more importantly a trusted one (48, 24, 5, 29, 44, 11, 36, 3, 47, 15, 6, 51, 7, 23, 5, 11, 3, 48, 24, 7, 51, 23). Thunberg provides a context where people can avoid feeling guilty for how they live, because she redirects the responsibility on political leaders (1, 18, 53, 27, 31, 52, 14). Subsequently, Thunberg is their hope and offered the possibility for people to overcome their guilt (50, 38, 10, 32, 17, 45, 21, 9, 43, 25, 39, 2, 37). In doing so, she has earned their trust (48, 24, 5, 29, 44, 11, 36, 3, 47, 15, 6, 51, 7, 23). It takes courage to be in the limelight. One can see how Thunberg has gained recognition and compliments for her courage in dealing with the criticism and verbal attacks from political leaders around the world (46, 1, 35, 12, 38, 8, 27, 48,). There is wide-spread admiration for individuals who reach a superstar position who fight for a good cause (53, 16, 34, 45, 4). She herself attributes her Asperger for her ability to confront and question authority (36, 6, 49, 12, 38). Finally, Thunberg has overcome cultural and political differences and established a new collective identity (5, 36, 22, 6, 47, 11). Those who are concerned about climate change often feel isolated and helpless. By giving youth the opportunity to be part of a collective, Thunberg has greatly reduced their feelings of individual powerlessness, and thereby inspired them (5, 22, 6, 11, 34). Some believe this was accomplished through stressing her young age in speeches, media and other social platforms (20, 53, 13, 29, 46, 3, 15, 33, 14, 25, 7, 20, 54, 8, 14). Conclusively, Thunberg has accomplished a lot by becoming a spokesperson for environmental issues. Through self-sacrificing, establishing trust, being courageous, offering hope and creating a sense of belonging, Thunberg has established herself as a moral authority, with people of all ages as well as political leaders taking notice. The world is in need of an environmental leader and Thunberg can be seen as the moral authority we are looking for.

6.1.2. What personal qualities of Thunberg, as discussed in media discourses, portray her as a transformational leader?

Table 7

Qualities of Thunberg as a transformational leader

Inspirational Motivation	Idealized Influence	Individualized Consideration	Intellectual Stimulation
Sacrifices benefits and needs, evoking social comparison among people (21, 47, 52, 18, 3, 34, 53, 47, 18, 28, 54, 26).	Engages with her followers and sacrifices own needs to commit for the joint goal (55, 16, 4, 27, 9, 42, 2, 13, 49, 17).	Provides a collective identity. “Greta Thunberg Effect” (41, 10, 16, 7, 20, 54, 8).	Encourages non-traditional thinking challenges existing truths (11, 3, 24, 51, 23, 36).
Offers a solution to the climate change (5, 11, 3, 48, 24, 7, 51, 23, 27, 31, 52).	“Leads by example” by sacrificing benefits and comforts (24, 50, 3, 28, 43, 11, 30, 44).	Offers the new generation a truth that goes beyond political, class and religious indifferences (5, 36, 22, 6, 47, 11).	Relies on facts and science to strengthen her mission (5, 11, 3, 48, 24, 7, 51, 23).
“Focused anger”, displaying courage and evoke change and hence encounter followers (36, 6, 49, 12, 38, 46, 1, 35, 8, 27).	Becomes a role model through self-sacrificing (19, 6, 38, 7, 51, 39, 11).	Providing a sense of belonging, enabling a collective and social identity (41, 10, 16, 7, 20, 54, 8, 29, 46, 3, 15, 14, 25).	Encourages new ideas and engages in a problem-solving approach (25, 52, 15, 47, 7, 27, 2, 53).
Provides a sense of meaning and challenges global leaders (33, 14, 6, 11, 34, 22, 6, 12, 38, 18, 53, 27).	Embodies the qualities that she wants among the followers (50, 3, 28, 43, 11, 30, 41, 10, 16, 18, 28, 54).	Empowers her followers to act against climate change (22, 54, 15, 7, 33, 53, 16, 34, 45, 4).	Re-examines critical assumptions of what is required to reduce climate change (3, 16, 43, 51, 3, 51, 23, 36).
Promotion of consistent vision, mission, and a set of values (29, 44, 11, 36, 3, 47, 15, 6, 51, 7, 23)	High ethical standards (24, 50, 3, 28, 43, 11, 30, 44).	Establishes a clear concept of what is “right” and “wrong” (43, 28, 30, 11, 44, 3, 16, 43, 51).	Provides solutions (29, 44, 3, 47, 15, 6, 51).

There are four skills required for a transformational leader, referred to as sub-categories in TL, (Northouse, 2001). First, *Inspirational Motivation*, with emphasis on emotional stimulation. The findings of this study suggest that Thunberg engages in such attributes by sacrificing benefits and needs, hence evoking social comparison among people (21, 47, 52, 18, 3, 34, 53, 47, 18, 28, 54, 26). By utilizing “focused anger”, Thunberg displays courage and thus evokes change (36, 6, 49, 12, 38, 46, 1, 35, 8, 27). Furthermore, Thunberg provides a sense of meaning among her followers and challenges set authority, as well as promoting consistent vision, mission, and a value system (33, 14, 6, 11, 34, 22, 6, 12, 38, 18, 53, 27). She inspires while engaging her listener’s emotions (5, 11, 3, 48, 24, 7, 51, 23, 27, 31, 52). The next component of TL is *Idealized Influence*. Thunberg obtains this attribute by engaging with her followers and sacrificing her own needs to commit to the common goal (55, 16, 4, 27, 9, 42, 2, 13, 49, 17). *Idealized influence* stresses the importance for leaders to lead-by-example, which Thunberg does an exemplary job of (24, 50, 3, 28, 43, 11, 30, 44). She has high ethical standards and consistently practices what she preaches (50, 3, 28, 43, 11, 30, 41, 10, 16, 18, 28, 54). For

instance, by sacrificing her schooling and childhood, and by having no ulterior self-benefitting motives, Thunberg has become a role model, embodying the qualities that she asks of her followers (50, 3, 28, 43, 11, 30, 41, 10, 16, 18, 28, 54). Next, there is the element of *Individualized Consideration*, referring to a leader's ability to build personal relationships with an individual or group. Here the findings showed that Thunberg offered the new generation a truth that goes beyond politics, class and religion (41, 10, 16, 7, 20, 54, 8, 29, 46, 3, 15, 14, 25). Due to her competence to cross cultural differences, she seems to be able to create a collective identity (41, 10, 16, 7, 20, 54, 8). This is now coined the "Greta Thunberg Effect" (22, 54, 15, 7, 33, 53, 16, 34, 45, 4). Furthermore, Thunberg also reveals attributes of *Individualized Consideration*, establishing a clear definition of what is "right" and "wrong", and hence offering her followers a much clearer solution for climate change (43, 28, 30, 11, 44, 3, 16, 43, 51). Finally, there is the element within TL referred to as *Intellectual Stimulation*. The section can be seen in how Thunberg encourages her followers to engage in non-traditional thinking, as well as challenge existing truths (11, 3, 24, 51, 23, 36). She advocates for developing new ideas and engages in a problem-solving approach (25, 52, 15, 47, 7, 27, 2, 53). Thereby, Thunberg is often acknowledged as someone who provides innovative sustainable solutions (29, 44, 3, 47, 15, 6, 51). Additionally, she re-examines critical assumptions of what is required to decrease climate change and does this by consistently relying on facts and science to strengthen her arguments (41, 10, 16, 7, 20, 54). In conclusion, the findings of this study argue that Thunberg embodies all four sub-categories that define a transformational leader.

6.2. Challenges with transformational leaders and moral authorities

The TL theory is recognized to be the most prominent leadership style (Clark, 2016). TL argues that a leader should motivate and inspire followers to accomplish their common goals. Despite the advantages of TL, discussed in this paper, it is important to address the attributes of a transformational leader and moral authority from a critical perspective (ibid).

Leaders with transformational attributes are great visionaries and motivators (Ferrari, 1998). This kind of leader is able to convince individuals and groups to believe and trust them. It is therefore essential that the leader has high morality and isn't self-serving (Goethals and Sorenson, 2007). There is hence a risk that a leader with such skills could use them for less-than-honorable purposes, convincing followers to act in a questionable manner. However, this study provides data showing that Thunberg's intentions are consistent and nothing short of

honorable. Both of which being key attributes of a moral authority. Still, it is vital to acknowledge the power that Thunberg possesses and continually evaluate her morals and intentions. Secondly, according to Isserow and Klein (2017), a moral authority serves as a parallel actor to the traditional political authorities. They argue that both politicians and moral authorities create laws/rules which decide whether rules or laws have been broken and thereafter enable punishments. (Isserow and Klein, 2017). This would entail that being a moral authority may involve equal power as a political leader. Thunberg, in some regards, possesses therefore the same power over people as other traditional, established world leaders. If we also assume that Thunberg has become an authority with transformational leadership skills then she has obtained a variety of control and influence over her followers. It is however crucial to keep in mind that political leaders are those who will in the end have to make legislation and rules addressing climate change. Therefore, though Thunberg criticizes and accuses political leaders of inaction, the ultimate goal is to influence and/or pressure them to act against climate change. It is thus a slippery slope making political leaders the enemy. They are the ones who will have to make the decision to adopt green governance.

6.3. Contribution of this Study

Thunberg is a global phenomenon inspiring people all around the world to act against climate change. She stresses the importance to change behavior and the relationship that exists between humans and the natural environment. Different scholarly disciplines have acknowledged and researched the interdependency of humans and nature. For instance, Human ecology combines several disciplines to address the interaction between people and the natural and built environment (Peet et al., 2011). Scholars in human ecology study emphasize the need of an environmental leader that addresses the cultural perspective, exploring the impact culture has on how a person thinks and acts. (Wilk and Cliggett, 2007; Peet et al., 2011; Plumwood, 2002; Roberts and Parks, 2007). Roberts and Parks (2007) argues how people's cultural beliefs concerning the natural environment affect their choices to act against climate change (Roberts and Parks, 2007). Thunberg enters the stage by displaying the ability to overcome cultural and political differences (The Local, 2020; Vlessing, 2020; McCarthy, 2019; Karlsson, 2021; Halett, 2020; Dixon, 2020). Through characteristics identified in a moral authority, such as sacrificing, providing trust, sharing courage, generating hope and creating a sense of collective identity and belonging, Thunberg has united people from different cultural settings to fight the ultimate challenge of our time.

This study utilized the TL theory to explore the characteristics of Thunberg's moral authority. A central theme within political ecology is that ecological change cannot be addressed without taking into consideration the power dynamics of politics and economy (Peet et al., 2011). Thunberg has become a global leader to act against climate change. Her strength lies in her ability to connect with her listeners by using scientific facts, emotional rhetoric as well as leading by example. She intuitively seems to understand the central relationships between environmental processes and political processes, which is a central theme in political ecology. Foremost, Roberts and Parks (2007), argue that within the framework of political ecology, new environmental leaders are required. They believe that global political leadership has focused on economic development and hence failed to create sustainability policies (Roberts and Parks, 2007). Peet et al., (2011) discuss the need for a transformational leader to mobilize and act for a more sustainable world. This study adds to that discussion by exploring Thunberg's leadership characteristics within TL and through the lens of a moral authority.

6.4. Conclusion

Thunberg has embodied five dominant characteristics; *sacrifice, trust, courage, hope, belonging*, which have made her a moral authority. Through her moral authoritarian position, she has developed personality attributes and a relationship to her followers, which are in accordance to the four subcategories of a transformational leader (*Inspirational leadership, Idealized Influence, Individualized Consideration, Intellectual stimulation*). Thunberg is today a leading figure whose voice is heard globally by leaders and politicians. However, she offers a new kind of approach to environmental leadership. As a moral authority, Thunberg has established herself as a transformational leader who unites people together, regardless of culture, economical wealth, religion and political beliefs. Climate change is one of the greatest challenges of our time. Thunberg is perhaps the solution we need.

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