

The IIE Bachelor of Arts Honours in Communication

Summative Research Report

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*Message-Design Logic and GreenpeaceAfrica's Facebook Posts: A
Qualitative Descriptive Online Questionnaire of South African Millennials'
Sustainability Perceptions and Practices in 2020*

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DECLARATION

*I hereby declare that the Research Report submitted for the Bachelor of
Arts Honours in Communication degree to The Independent Institute of
Education is my own work and has not previously been submitted to
another University or Higher Education Institution for degree purpose.*

Kamishka Sukhdeo

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ABSTRACT

This study investigated *Facebook* and its perceived role in South African Millennials' sustainability perceptions and practices. The problem was based on the insufficient literature on the perceived influence of social media sustainability messages on peoples' pro-environmental perceptions and actions, from a South African context. This was addressed by interpreting participants' responses to determine whether environmental awareness aligned with sustainable action or not. Message-design Logic theoretically guided the study, and central concepts of Expressive, Conventional and Rhetorical Logic were used to thematically analyse participants' responses. The snowball method was used to acquire five participants and data was collected via an online questionnaire which qualitatively presented participants' perceptions. The findings suggested that sustainable posts on *GreenpeaceAfrica's Facebook* did influence South African Millennials' sustainable perceptions and practices by first creating environmental awareness which then led to environmental action. This study contributed insight to the Communications field and organisations regarding improving their communication practices targeting people of a similar age group, based on participants' responses and the findings in this study.

Key words: Environmental sustainability, pro-environmental behaviour, Millennials, Facebook, Expressive, Conventional and Rhetorical Message-design logic.

TITLE

Message-Design Logic and *GreenpeaceAfrica's Facebook* Posts: A Qualitative Descriptive Online Questionnaire of South African Millennials' Sustainability Perceptions and Practices in 2020.

1. INTRODUCTION

This study investigated *Facebook* and its perceived role in South African Millennials' sustainability perceptions and practices. Message-design Logic Theory and its central concepts of Expressive, Conventional and Rhetorical logic were used to analyse participants' responses to posts on *GreenpeaceAfrica's Facebook*. Firstly, the study analysed the background, rationale and relevance, problem statement, purpose statement, research questions and objectives. Secondly, the literature and theoretical framework section provided insight into Message-design Logic Theory, reviewed previous literature and the conceptualisation. Thirdly, the methodology section discussed the research paradigm, design, population, sampling, data collection, analysis and trustworthiness. Thereafter, the findings were presented and interpreted. Lastly, the conclusion was discussed, which comprised of research questions and objectives, the implication of the findings, ethical considerations, limitations and delimitations, heuristic value and finally, the closing statement.

1.1. Background

Individuals are increasingly using social media as an environmental awareness medium (Biswas, 2016). Social media sites, such as *Facebook*, have provided people with environmental-related communication (Vigrass, 2015). The proposed study focused on *Facebooks'* use in creating sustainability perceptions and practices in South Africa. Previous literature surrounding this topic, found that social media had a perceived role in peoples' environmental awareness and behaviour (see Huang, 2016; Wheeler & Quinn, 2017; Zhang & Skoric, 2018; Xu & Han, 2019). However, these studies were conducted outside a South African context. The limited research within South Africa provided the rationale for this study, which sought to determine South African Millennials' sustainability perceptions and practices regarding the messages and posts on *GreenpeaceAfrica's Facebook*. This study was based on Message-design Logic and applied Expressive, Conventional and Rhetorical logic, to participants' responses. The proposed research sought to determine whether

sustainability perceptions translated into practice or not. The findings of this study would be useful to both South African organisations and the communication field. This was because it contributed to the existing body of knowledge regarding how people perceived particular messages according to different message-production logics, to achieve a specific goal.

1.2. Rationale and Relevance

In relation to the rationale, Vibah Kushwaha (2015) wrote an article which suggested that social media's role in creating environmental awareness had led to an overflow of environmental information being created online, without knowledge of the message's effectiveness in influencing changed behaviour. As a result, this study sought to determine whether the posts on *GreenpeaceAfrica's Facebook*, had a perceived role in peoples' adoption of pro-environmental practices. The relevance of the proposed research was that it served as a useful indication for improved and informed communication practices by Communications or Public Relations practitioners, in achieving desired objectives (Kushwaha, 2015). It was also relevant to South African organisations as it aided in strategically producing messages on their social media platforms to Millennials or people of a similar age group. The relevance to both the field and organisation was based on participants' perceptions in the current study. The relevance for the field was also that there was limited research on this topic from a South African perspective so this is how the study contributed to the field, using Message-design Logic Theory.

1.3. Problem Statement

According to Amandeep Kaur and Harvind Chahal (2018) the environment continues to deteriorate despite social media's use in creating environmental awareness. Additionally, there was limited literature that investigated this from a South African context. The issue of limited literature suggested that little was known about whether sustainability messages, created online, had a perceived influence on peoples' pro-environmental behaviour, within a South African context (Kushwaha, 2015). The proposed research sought to address this problem, and interpreted if this online environmental awareness was perceived to align with sustainable action from a South African context in 2020. Message-design Logic theory was used to describe the perceptions of South African Millennials regarding the effectiveness of messages on

GreenpeaceAfrica's Facebook page and whether it was perceived to have a role in their sustainable perceptions and practices.

1.4. Purpose Statement

The purpose of this study was to describe South African Millennials' interpretations of the posts on *GreenpeaceAfrica's Facebook* in 2020, by means of a qualitative approach. This study aimed to describe the perceived influence that sustainability messages had on the pro-environmental perceptions and practices of people between the ages of 21- 38 years old. The researcher used an online qualitative questionnaire and analysed participants' perceptions using Message-design Logic Theory's central concepts of Expressive, Conventional and Rhetorical Logic (O'Keefe, 1988). The findings were thematically presented and analysed by applying the themes Expressive, Conventional and Rhetorical logic, to participants' responses in order to understand their sustainability perceptions and actions.

1.5. Research Questions

How do South African Millennials' interpret sustainable communication messages, on *GreenpeaceAfrica's Facebook*, using Message-design Logic?

How are these South African Millennials' interpretations of sustainable communication messages on *GreenpeaceAfrica's Facebook* perceived to have influenced their own sustainable perceptions and practices?

1.6. Research Objectives

To describe South African Millennials' understanding of communication messages on *GreenpeaceAfrica's Facebook*, using Message Design Logic.

To interpret whether South African Millennials' interpretations of communication messages on *GreenpeaceAfrica's Facebook* has a perceived influence in their own sustainable perceptions and practices.

2. LITERATURE REVIEW

The following section firstly analysed Message-design Logic theory in relation to the current study, followed by a review of past literature and the conceptualisation of key concepts.

2.1. Theoretical Foundation

Message-design logic theory theoretically guided this study. It related to the metatheoretical position of Interpretivism because it assisted the researcher in providing descriptive interpretations of participant' subjective experiences (Cheema, 2018). In 1988, Barbara O'Keefe proposed this theory based on the three differing ways to create goal-oriented messages (O'Keefe, 1988). The three central concepts of Expressive, Conventional and Rhetorical Logic (which was defined in the conceptualisation sub-section p.15), aided in examining Millennials' interpretations of *GreenpeaceAfrica's Facebook* sustainability messages. The theory was relevant due to its seminal nature and heuristic potential. This is because it clearly explained what was being studied and was applied to vast communication contexts (Caughlin, 2015; Ng, 2017).

This theory derived from message-production theories and was applicable within communication research, as it explained the effectiveness of goal-oriented messages (O'Keefe and McCornack, 1987). This theory was also suitable as the three design logics were applied to participants' perceptions to determine their use of message-design logic. The theory was applied in previous studies which illustrated the different logics applied by superiors and subordinates in organisations, and was used to determine individual's cross-cultural communication competency (Caughlin, 2015; Ng, 2017). This theory's relevance was based on its relation to the field of Communication and Media Studies, which the current study related to regarding investigating a social media platform (Margolin & Markowitz, 2017).

Message-design Logic was based on an individuals' cognitive capacity or interpretation, which justified the theory's' sociological nature (O'Keefe, 1988). This related to the aim of the study as it involved identifying how individuals subjectively interpreted messages on *GreenpeaceAfrica's Facebook*, in terms of Message-design Logic. This theory addressed the research problem above because it descriptively illustrated message production using different logics (O'Keefe, 1988). However, in this study the researcher applied these logics to determine the role environmental messages in the audiences' perceived sustainability perceptions and practices.

Additionally, the researcher focused on the theory's most prominent strength regarding its broad applicability to communication contexts (see Caughlin, 2015; O'Neill, 2016).

This was exemplified in the current study as the theory was applied to understand participants' perceptions about *Facebook* sustainability posts. Conversely, a limitation is that O'Keefe (1988) claimed that rhetorical logic was the most influential and persuasive, but cognitive abilities differ. Thus, some individuals were influenced by expressive messages. This was determined from a South African perspective using a qualitative online questionnaire to examine messages that contain various types of logics.

2.2. Research Problem Linked To Literature

The South African social media landscape was said to be crucial in shaping media users' understanding of environmental issues (Suliman, 2018). Similarly, Wheeler and Quinn (2017) suggested that online environmental activism efforts increased environmental consciousness, by influencing attitudes and perceptions. However, these studies focused on the possibilities of online environmental awareness without sufficiently acknowledging its effectiveness in inducing pro-environmental behaviour, which was under-researched (Briggs *et al.*, 2017; Wheeler & Quinn, 2017). Thus, the researcher sought to contribute new insights by determining *GreenpeaceAfrica's Facebook* use in creating sustainability awareness and action amongst South African Millennials. This literature review was organised into three themes 'social media, environmental perceptions and pro-environmental behaviour'; '*Facebook* and the dissemination of environmental awareness information' and lastly, 'Millennials and social media environmental activism'.

2.3. Introduction to the Review of Literature

The purpose of this thematic review was to critically analyse past scholarly research that aided in determining Facebooks' perceived role in South African Millennials' sustainability perceptions and practices. The research problem was based on the limited research within a South African context, which the literature addressed by providing insight from similar, past studies (Kushwaha, 2015). The literature was divided into three themes, namely, 'social media, environmental perceptions and pro-environmental behaviour'; '*Facebook* and the dissemination of environmental awareness information' and lastly, 'Millennials and social media environmental activism'.

2.3.1. Social Media, Environmental Perceptions and Pro-Environmental Behaviour

This theme analyses social media's use as an information tool and explores literature similar to this study regarding social media's perceived role in individuals' environmental perceptions and actions (Huang, 2016).

Huang Huiping proposed a study in 2016, in Taiwan, called '*Media Use, Environmental Beliefs, Self-Efficacy, and Pro-Environmental Behaviour*'. The study uses a survey to qualitatively explore the effects of media in exposing people to climate change information (Huang, 2016). The results found that online environmental information psychologically impacts participants' environmental perceptions (Huang, 2016). The strength of this study is its illustration of how continued exposure to environmental media messages, increases an individuals' intention to become more environmentally aware (Huang, 2016). This is insightful to the current study because it supports the argument about the perceived influential nature of social media on pro-environmental perceptions and behaviour (Huang, 2016). However, its Taiwanese context is limited within the context of the current study, which is overcome by conducting this study within a South African context.

Additionally, a study by Jian Xu and Ruixia Han (2019), titled '*The Influence of Place Attachment on Pro-Environmental Behaviours*', quantitatively surveyed people in China. The results suggest that social media affects individuals' pro-environmental awareness by influencing their emotional desire to conserve their surrounding environment and their idea of what issues are significant (Xu & Han, 2019). A strength of this study is how it demonstrates how emotional appeals within social media messages may lead to pro-environmental behaviour, which relates to the influence of Expressive Message-design Logic (O'Keefe, 1988). However, a limitation of this study, in the context of the current study, is that the sample includes people aged 20-45 years old, which the current study overcomes as the research includes people between 21-38 years old.

In contrast, a study by Adekunle Ogunjinmi, Olayinka Sunday, Kehinde Ogunjinmi, and Oluwatosin Adekoya (2016) provides a Pan-African perspective. The study is titled '*Influence of Social Media on Climate Change Knowledge and Concerns*' which aims to expound the role of social media, in Nigeria (Ogunjinmi *et al.*, 2016). The study uses

questionnaires to determine how providing people with climate change information increases their environmental concern (Ogunjinmi *et al.*, 2016). The results demonstrates that 98.3% of the participants were environmentally-conscious as a result of social media climate change messages (Ogunjinmi *et al.*, 2016). This reinforces the current study's argument about social media's perceived role in creating environmental perceptions and action. The limitation of this study is that the transferability is limited to Nigerian citizens which the current study overcomes by conducting research within a South African context.

A year later, Suraya Hamid, Mohamad Ijab, Hidayah Sulaiman, Rina Anwar and Azah Norman, proposed a study titled '*Social Media for Environmental Sustainability Awareness in Higher Education*', in Malaysia. This study demonstrates the potential growth of social media in disseminating environmental messages (Hamid *et al.*, 2017). It relates to the results of Xu and Han (2019), that social media can encourage pro-environmental behaviour. The strength lies in the findings that illustrates that online environmental awareness is the first step towards changed behaviour (Hamid *et al.*, 2017). This supports the choice to research social media and its perceived role in creating pro-environmental perceptions and behaviours. However, the study is limited to the context of higher institutes, which the current study overcomes as it is not confined to college students but includes a similar age group of 18-38 years.

Additionally, a study conducted in Johannesburg by Lutfiyah Suliman (2018), titled "*A Review of Environmental News Reporting in South Africa*", provides insight regarding media use from the context of specific environmental issues experienced in South Africa, as opposed to the broad climate change concerns proposed earlier by Ogunjinmi *et al.* (2016). A strength of this study is its focus on the increased growth of social media use amongst South African Millennials to create environmental-related messages (Suliman, 2018). This is beneficial as it illustrates how environmental media messages have the potential to directly reach media users. A limitation of this study is that participants had to be employed (Suliman, 2018). The current study overcomes this by conducting research on Millennials, regardless of employment status.

In contrast, Izzy Sofio (2020) conducted a study in the United States (US) titled '*How Does Climate Change Content on Social Media Influence Individual Pro-environmental Behaviours?*'. Similar to the results of Hamid *et al.* (2017), Sofia (2020)

provides recent results via a survey regarding how social media creates environmental norms which has a supposed role in creating pro-environmental behaviour. The study illustrates that social media is a promotional tool used to prompt environmental consciousness (Sofio, 2020). A strength of this study is its sample being inclusive of people between the ages of 18-30 years old, which is similar to the focused age group of the current study. This strength demonstrates the potential perceptions of people between these ages. However, this study is limited in the context of the current study, by its US context, which is overcome by conducting research within a South African context.

2.3.2. Facebook and the Dissemination of Environmental Awareness Information

This theme informs the current study by illustrating how *Facebook* can be used to create and spread environmental-related information (Zhang & Skoric, 2018).

Sarah Briggs, Alix Cage and Christopher Briggs proposed a study in the United Kingdom (U.K), in 2017, titled '*How Do UK Environmental Publishers Use Facebook to Engage Users with Sustainability?*'. It explores how environmental groups, such as *Greenpeace* and *World Wildlife Fund*, disseminated sustainability-related posts on their *Facebook* pages. It is relevant as the findings demonstrate that sustainability messages on *Facebook*, influences peoples' pro-environmental perceptions and actions, as a result of environmental engagement (Briggs *et al.*, 2017). This is applicable to the current study in determining how *GreenpeaceAfrica's Facebook* environmental engagement supposedly leads to pro-environmental behaviour. This study is limited within the context of the current study due to its U.K context. The current study will overcome this by conducting research from a South African perspective.

Additionally, a study by Hannah Wheeler and Courtney Quinn (2017) conducted in the US, titled '*Can Facebook Aid Sustainability?*' provided similar results as it qualitatively explores the relationship between *Facebook*, environmental sustainability and having empathy to become environmentally-conscious. A strength of this study looks at how empathy encourages people to take pro-environmental action (Wheeler & Quinn, 2017). This is beneficial as it elucidates how sustainability pages may produce messages that emotionally induces a specific behaviour or attitude in individuals

(Wheeler & Quinn, 2017). The results therefore relates to the theoretical foundation of the current study, regarding Expressive or the emotion-filled Message-design Logic's role in creating environmental awareness. This study's U.K context is limited within the current study, which is overcome by conducting research in a South African context.

Furthermore, Nan Zhang and Marko Skoric (2018) proposed a study in China, called '*Media Use and Environmental Engagement*', which uses an online survey to describe how people who were persistently exposed to sustainability content on *Facebook* were environmentally engaged. A strength of this study lies in the findings that demonstrates how *Facebook* provides suggestions on how to develop pro-environmental behaviour (Zhang & Skoric, 2018). This reinforces the argument of how the *GreenpeaceAfrica Facebook* has a perceived role in creating sustainability perceptions and practices through their posts. However, the study was conducted in China, which is limiting within the context of this study. The current study overcomes this by conducting research within a South African context.

Additionally, Elissa Pearson, Hayley Tindle, Monika Ferguson, Jillian Ryan and Carla Litchfield (2016) proposed a study titled '*Can We Tweet, Post, and Share Our Way to a More Sustainable Society?*'. The study proposed that in addition to online environmental information, people bring their own beliefs to the communication situation, which determines whether the message has the desired effect (Tindle *et al.*, 2016). The current study determines this from a South African context. A strength of this study is its acknowledgement of barriers that prevents awareness from translating into environmental action, which informs the current study regarding the reasons for why individuals may not adopt pro-environmental behaviour (Tindle *et al.*, 2016). This study is also limited within the current study regarding its Australian context, which the current study overcomes by looking at a South African context.

Lastly, Merav Katz-Kimchi and Idit Manosevitch (2015) proposed a study in Israel, titled '*Mobilizing Facebook Users against Facebook's Energy Policy*'. This study examines how environmental advocacy campaigns on the *Greenpeace Facebook* is used to create environmental awareness and gain support (Katz-Kimchi and Manosevitch, 2015). Despite the study being limited to an Israeli context, its findings are relevant to the current study as *GreenpeaceAfrica's Facebook* will also be analysed. Another limitation is that the study focuses on the cognitive effects of

environmental content, to create awareness, without ensuring if the content lead to behavioural changes, which the current study addresses through a qualitative questionnaire by asking for example, 'Has *GreenpeaceAfrica* played a role in your pro-environmental actions or not? If so, please elaborate on what those actions are'.

2.3.3. Millennials and Social Media Environmental Activism

This theme analyses previous literature and informs the current study regarding Millennials' online environmental awareness (Dookhoo, 2015).

A study conducted in the U.S by Sasha Dookhoo (2015) titled '*How Millennials Engage in Social Media Activism*' qualitatively explores how this generation is creating environmental change through social media. This relates to the current study and supports the previous themes by illustrating that social media creates behavioural changes through exposure to environmental messages. A strength of this study is its focus on *Facebook* being the dominant social media platform of this generation, which will be examined in the current study (Dookhoo, 2015). However, this study is limited within the current study to a sample of American college students (Dookhoo, 2015). The current study overcomes this by conducting research within a South African context that is not confined to college students.

Similarly, Nancy Hanson-Rasmussen and Kristy Lauver (2018) proposed a study in the U.S, titled '*Environmental Responsibility: Millennial Values and Cultural Dimensions*' which qualitatively studies the environmental consciousness of Millennials in U.S, India and China. Millennials are said to be the most environmentally aware according to survey results, using participants from culturally-diverse backgrounds (Hanson-Rasmussen & Lauver, 2018). The limitations of this study is that it illustrates the differing views based on cultural backgrounds which may differ to South Africa's culture. The current study will overcome this by conducting research within a South African context and ensuring that the population is inclusive of participants of different racial backgrounds to represent the racial diversity in South Africa.

Conversely, Kelly Scott (2020) offers a South African perspective in a study titled '*Exploring the Role of Storytelling in Environmental Communication*'. This study takes place in Stellenbosch and looks at the exploratory relationship between Millennials and environmental issues. The strength lies in the findings that insightfully illustrates

how Millennials largely account for the South African population who are more environmentally concerned (Scott, 2020). However, the study is limited by its Cape Town context, whereas perspectives may differ in other areas of the country. The current study will overcome this as participants are not confined by one specific geographical location in South Africa.

Additionally, McAnelly (2015) proposed a study in New York, titled “*From the Web into the World*” which focuses on how Millennials partake in environmental activism as a result of online environmental awareness. The study emphasises how sharing, liking and commenting on environmental-related content on *Facebook* is an act of environmental activism (McAnelly, 2015). This is a limitation of the study as what is done online may not always translate into practice. The current study overcomes this to a certain extent as it seeks to determine the effectiveness of *GreenpeaceAfrica’s Facebook* posts in influencing awareness that translates into environmental action. A strength of this study is that it illustrates that engaging in environmental awareness information on social media, may have a perceived role in Millennials’ pro-environmental perceptions and behaviours, which subsequently may encourage others to do so (McAnelly, 2015).

In closing, the review of literature provided an in-depth understanding of the perceived role social media plays in Millennials’ environmental perceptions and actions (Dookhoo, 2015; Ogunjinmi *et al.*, 2016; Zhang & Skoric, 2018). Furthermore, majority of these studies were conducted outside of South Africa. Thus, this research study is relevant due to the limited South African literature on this topic.

2.4. Conceptualisation

The key concepts of this study were environmental sustainability, pro-environmental behaviour, *Facebook*, Millennials, Expressive logic, Conventional logic and Rhetorical logic.

Firstly, ***Environmental sustainability*** refers to the concern for and conservation of the environment, through responsible acts that aids in the maintenance of resources and the environment for future generations to sustain themselves (Powe, 2020; Iqbal, 2020). Contextually, environmental sustainability referred to Millennials’ concern for reducing activities that detrimentally impact the environment. This concept was relevant to the study as it encapsulated the focus regarding whether social media

messages had a perceived role in Millennials' environmental awareness and actions, which was qualitatively interpreted in their responses. Environmental sustainability was measured by asking the following question, 'What do you understand by the term 'environmental sustainability?'.

Secondly, **Pro-environmental behaviour** can be defined as the conscious efforts of people seeking to limit the degradation of the environment and contribute towards the sustainability of it, through sustainable behaviours (Huang, 2016; Xu & Han, 2019). This was relevant as it reflected Millennials' sustainability practices and perceptions possibly due to the perceived role of online environmental awareness. The current research determined and described how *GreenpeaceAfrica's Facebook* posts had a perceived role in Millennials' adoption of pro-environmental behaviour. The following question measured pro-environmental behaviour, 'How environmentally-conscious are you in your daily life? Please elaborate, for example do you use paper straws, do you save water or recycle?'.

In addition, **Facebook** can be defined as a popular social networking service and communication tool that allows users to build relationships, engage with media content, join groups and follow pages regarding topics of interest (Briggs, Cage & Briggs, 2017). It was relevant as it was the primary social media platform that was examined and assisted in determining the population characteristics of the participants. *Facebook* is largely used by the South African Millennial population (Duffett, 2017; Scott, 2020). Sustainability messages on *GreenpeaceAfrica's Facebook* was interpreted and analysed to identify the perceived influences of these messages in the pro-environmental perceptions and practise of Millennials.

Moreover, **Millennials** refer to the technologically advanced generation of people between the ages of 21-38 years old (Dookhoo, 2015). Millennials were said to make up more than a quarter of the South African population (Duffett, 2017). Millennials were another criteria of the population characteristics, which was why this term needed to be conceptualised. This ensured that the most appropriate participants were selected for analysis in this study regarding the interpretation of their perceptions of sustainability messages on *GreenpeaceAfrica's Facebook*.

Furthermore, **Expressive logic** is a key concept of Message-design Logic Theory which referred to explicitly stating opinions, thoughts and emotions (O'Keefe &

McCornack, 1987). It was relevant as it was used to identify the initial logic that was applied to the sustainability messages on *GreenpeaceAfrica*, which participants interpreted. From the participants' expressive responses the researcher determined how they feel about the posts on *GreenpeaceAfrica's Facebook*. Responses that were self-expressive, honest, emotive and explicit were characterised as expressive (O'Keefe, 1988).

Contrarily, **Conventional logic** differed as it referred to co-operative and conventional engagement, in which the communication was more accommodative compared to the straightforwardness of expressive logic, taking into consideration social contexts (O'Keefe & McCornack, 1987). This was relevant as it played a role in determining the reasoned logic behind Millennials' interpretations of messages on *GreenpeaceAfrica's Facebook*. The interpretation of conventional logic aided in determining whether sustainability posts had a perceived role in their sustainability perceptions and actions (O'Keefe, 1988). Responses that were structurally implicit, acknowledged the context and offered support or advice, were characterised as conventional (O'Keefe, 1988).

Lastly, **Rhetorical logic** focused on creating a specific context and shared meaning or agreed upon outcomes between the participants in the communication process (O'Keefe & McCornack, 1987). This was relevant as it was the most sophisticated logic an individual employed when creating messages and illustrating action. An agreement was established regarding whether Millennials exposed to the content will agree to become more environmentally aware and adopt pro-environmental behaviours or not. Responses that indicated collaboratively achieving a specific goal and agreement regarding carrying out an action, were characterised as rhetorical (O'Keefe, 1988).

3. METHODOLOGY

This section analysed the research paradigm, design, population, sampling, data collection and analysis and lastly, the trustworthiness of the study.

3.1. Research Paradigm

Subjectivity is central to Interpretivism, which involves gaining an in-depth understanding of human behaviour and social experiences (Cheema, 2018). The proposed research was Interpretivist due to its focus on the interpretation of

Millennials' subjective perceptions and the perceived role of sustainability messages on their pro-environmental perceptions and behaviour.

Interpretivism was studied in terms of its epistemological, ontological, axiological metatheoretical and methodological positions (Cheema, 2018). The epistemological position of Interpretivism referred to what was common knowledge (Cheema, 2018). Therefore, the epistemic position was based on common knowledge and people's experiences of environmental awareness when interpreting sustainability messages. Considering the focus on subjectivity, ontology, or the study of existence, views reality as a dynamic, social construction (Cheema, 2018). The research conducted was dependant on how participants ascribed meaning to their interpretations of *GreenpeaceAfrica's Facebook* sustainability messages. These messages were socially constructed and participants interpreted these in different ways and utilised different Message-design Logics.

Additionally, the axiology of Interpretivism, or study of values, suggested that values shape people's unique interpretations of reality (Cheema, 2018). Thus, the researcher aimed to understand the participants' values and interpretations of environmental-related messages. The metatheoretical position of Interpretivism suggested that the theory must enable the researcher to interpret and describe the participants' responses (Cheema, 2018). Message-design Logic Theory assisted the researcher in describing the use of various logics used in creating messages (O'Keefe, 1988). Message-design Logic Theory's central concepts were qualitatively applied to participants' responses in relation to posts on *GreenpeaceAfrica's Facebook*. Lastly, the methodology referred to the qualitative data collection and analysis methods that were used in this research process (Cheema, 2018). Therefore, the methodological position of the proposed research made use of an online qualitative questionnaire and a qualitative thematic analysis to interpret Millennials' responses.

3.2. Research Design

A qualitative approach was adopted within the Interpretivist paradigm to gain an in-depth understanding of subjective experiences (Bengtsson, 2016). Therefore, a qualitative approach aided in describing Millennials' perceptions regarding the effectiveness of messages on *GreenpeaceAfrica's Facebook* and whether it was perceived to have a role in their sustainable perceptions and practices. The study was

cross-sectional in order to describe and understand participants' perceptions from one specific point in time (Bengtsson, 2016). The cross-sectional nature was also due to the study being conducted in less than a year. The current study utilised deductive reasoning, and so an existing theory was selected before commencing with the study, and its central concepts were applied to participants' responses (Bengtsson, 2016). Message-design Logic Theory and its key concepts of Expressive, Conventional and Rhetorical Logic were used to interpret Millennials' responses within a South African context, in relation to the research questions. Despite the questionnaires being conducted online, the research design was interactive because the researcher was required to interact with the population to participate in this study (Bengtsson, 2016).

3.3. Population

The nature of the population researched was people as the researcher aimed to determine their perceptions regarding the posts on *GreenpeaceAfrica's Facebook*. The target population were all *Facebook* members and followers of *GreenpeaceAfrica* in South Africa. The accessible population were South African Millennials between the ages of 21-38 years old, who were *Facebook* members and followers of *GreenpeaceAfrica Facebook*. The population was heterogeneous in terms of consisting of people from different races to cater to the racial diversity in South Africa and the South African perspective from which the study was conducted within.

There were four unique characteristics and the first one was that participants were of different racial backgrounds. The study's population consisted of one Black, one White, one Coloured and two Indian participants to represent South Africa's extensive racial diversity as much as possible¹. Second, the participants were South African as there was limited research about Millennials' sustainability perceptions and practices from a South African context, as majority of the previous studies were conducted outside this context (see McAnelly, 2015; Hanson-Rasmussen & Lauver, 2018). For example, the researcher wanted to contribute research regarding how South African Millennials interpret sustainability messages and whether it had a perceived influence on their own sustainability perceptions and practices. Thirdly, participants were between the ages of 21-38 years old, as previous literature had studied peoples'

¹ The researcher acknowledged that race does not equate with culture but racial categories were used as a classification system, as a similar reporting system is used in forms in South Africa.

sustainable perceptions and practices of a similar age group, but outside of a South African context, which this study had done (McAnelly, 2015; Zhang & Skoric, 2018). Lastly, the participants were followers of *GreenpeaceAfrica Facebook* and familiar with its posts. This is because the researcher sought to determine whether these posts influenced participants' sustainability perceptions and actions.

3.4. Sampling

The unit of analysis were participants' perceptions, which was gathered via the questionnaire responses based on the posts created by *GreenpeaceAfrica's Facebook*. The current study sought to gain an in-depth understanding of Millennials' perceptions, which made non-probability sampling appropriate, especially due to the online nature of the study. Snowball sampling was used which referred to using referrals of participants to increase the sample size (du Plooy-Cilliers, Davis & Bezuidenhout, 2014). This was done as the researcher contacted one follower of the *GreenpeaceAfrica Facebook* page, who then suggested another person. This referral process continued until a sample size of five participants was acquired. This is because the responses were qualitatively analysed and interpreted in-depth, therefore, five participants' responses to nine questions were suitable for this study. Additionally, 4-6 participants was also a requirement for a qualitative study (The Independent Institute of Education, 2020).

The researcher included participants in the sample that met the population parameters of being between the ages of 21-38 years old, followers of *GreenpeaceAfrica* and South African citizens of different races. This was ensured by reviewing responses to the introductory questions on the questionnaire. The *GreenpeaceAfrica Facebook* 'Top Fan Badge' feature on the page enabled the researcher to identify the most active members and followers within South Africa which aided in determining an appropriate participant to initiate the snowball method. This method was also chosen due to its timeliness, given the limited timeframe of the study.

3.5. Data Collection Method and Application

A qualitative, online questionnaire was used to obtain in-depth information about participants' perceptions (du Plooy-Cilliers *et al.*, 2014). Open ended questions were used because it allowed the participant's to provide in-depth responses, which close-ended questions would have limited (Kilinc & Firat, 2017). The most applicable

strength of using online questionnaires was that the researcher was able to access geographically dispersed people across South Africa, using *Facebook*. Additionally, the research was based on communication and the environment, so it was also an eco-friendly method.

However this method was limited by the issue of misinterpretation as a result of the absence of face-to-face contact (Daniel, 2016). The researcher reduced this limitation as much as possible through a pre-test that determined that the questions were well-understood (du Plooy-Cilliers *et al.*, 2014). The pre-test was conducted using a participant that resembled the unique characteristics, but who was not a part of the sample. The participant was a Black South African Millennial between the ages of 31-35 years old and a *GreenpeaceAfrica Facebook* follower, who was selected through the *Facebook* feature '*Top-Fan Badge*'.

The questionnaire was created on *Google Docs Forms* due to ease of access and sent to participants on *Facebook Messenger* using a link. This aided in the rapid collection of data. Following *The Independent Institute of Education's* approval of the study, the researcher then contacted one participant who resembled the population parameters. The data collection process took place from 28 August till 11 September 2020. To accommodate this limited two week period, a message was directly sent to the participant via *Facebook Messenger* regarding whether the participant was willing to fill out a questionnaire (see appendix G, p. 63). Nine participants were offered through snowball sampling, but the researcher had selected five participants to be included in the sample based on the unique characteristics and differing racial backgrounds to ensure a varied racial sample. The researcher then shared *The IIE* consent form and the explanatory information sheet. The signing and viewing of these forms were necessary as it informed the participants of the purpose of the study, their voluntary participation, the benefits and risks of it (du Plooy-Cilliers *et al.*, 2014). Once consent was given, the researcher sent the link to the questionnaire to the participant, who was then asked to recommend other potential participants.

The researcher split the questionnaire into two sections (see appendix D, p.52). The first section of the questionnaire contained parameter-related questions which ensured that participants were within the population parameters to be included in the study. The second section was designed in relation to the purpose of the study, the

research question and objectives, which was to describe South African Millennials' interpretations of posts on *GreenpeaceAfrica's Facebook*, and its perceived influence on their own sustainability perceptions and practices. For example, "Describe if *Greenpeace Africa's Facebook* posts have had a role in your pro-environmental actions or not? Discuss a specific example or examples", this open-ended question enabled the researcher to measure and determine the effectiveness of the sustainability messages and whether the *GreenpeaceAfrica Facebook* posts had a perceived role in participants' pro-environmental actions, which directly related to the research question about describing how the interpretations influenced their own sustainability practices.

The study was deductive and so the researcher selected Message-design logic theory before the research was conducted. This was advantageous as the coding process was less-time consuming (du Plooy-Cilliers *et al.*, 2014). A coding schedule was created to aid the analysis, using the theory's key concepts of Expressive, Conventional and Rhetorical logic. These three logics were used as themes and what characterised these logics were used as the codes to develop the coding schedule (see Appendix E, p.54).

3.6. Data Analysis Method and Application

A qualitative thematic analysis aided in the interpretation and identification of themes or patterns within participants' responses (Peel, 2020). The most prominent advantage of a thematic analysis was the methods' wide application to various research methodologies and the ability to efficiently organise data (Peel, 2020). These advantages were upheld in the study as it was used to organise and collate the data which aided in obtaining an in-depth understanding of South African Millennials' interpretations of posts on *GreenpeaceAfrica's Facebook*. Despite the method's flexible nature, it was also limited by this as it often led to the creation of incoherent themes (Maguire & Delahunt, 2017). However, this was avoided in the study as the researcher created the themes in relation to previous literature regarding the key concepts of Expressive, Conventional and Rhetorical Logic (O'Keefe, 1988; Caughlin, 2015).

The Braun and Clarke (2006) six step thematic analysis approach was adopted due to its seminal nature. Step one consisted of data familiarisation and organisation

(Braun & Clarke, 2006). The researcher first thoroughly read the data collected and then transcribed and organised it onto a *Microsoft Word* document. This was done to identify useful information in the responses, in relation to the research questions. For example the participant responded to the question “*GreenpeaceAfrica's Facebook* page posts environmental-related petitions such as the *#ProtectTheOceans* petition. How would you react to posts like this?” With “I aim to sign as many of *Greenpeace's* petitions as they are one of the few NGO's whose petitions are taken heed of. I share these posts to encourage others to help us out”. From this response the researcher was able to identify how the participant interpreted the message and as a result took environmental action.

Step two consisted of the coding process (Braun & Clarke, 2006). The primary codes were created according to what characterised the key concepts of Message-design logic theory- Expressive, Conventional and Rhetorical Logic. For instance, Expressive logic referred to people expressing feelings, emotions and attitudes, and the code ‘self-expressive’ conveyed this (O’Keefe & Mccornack, 1987). For example, phrases and words were highlighted in the following response of a participant and coded as ‘criticising’ and ‘blameful’, “I agree, there is only so much the public can do to recycle plastic, but really **manufacturers are the culprits** because they produce it and **the government does little** to put an end to this”.

Step three involved the creation of themes (Braun & Clarke, 2006). The researcher collated the codes under specific themes based on key concepts of Message-design Logic, Expressive, Conventional and Rhetorical Logic (see appendix E, p.54). The above example illustrated the use of the codes ‘blameful’ and ‘criticising’ which was categorised under the theme Expressive. This is because it referred to specific emotions and attitudes (O’Keefe & Mccornack, 1987). Thus, the participants’ response explicitly expressed their feelings and attitudes towards the manufacturer and the government.

In step four the researcher reviewed the themes to determine if they accurately represented the data or whether modification needed to occur (Braun & Clarke, 2006). For example, the researcher found that the Expressive themes’ codes needed to be modified to make it more applicable. In the response “*Greenpeace Africa* **has helped me** become more environmentally friendly and sustainable **by providing me with**

environmental news, information, advice and tips", the response is expressive because the participant explains what *GreenpeaceAfrica* does personally for them or how they feel it benefits them, but the code 'self-expressive' was too vague. Thus, the researcher modified the codes to include 'Self-benefiting'- which were responses about how participants felt something served their own interests. The researcher consulted previous studies on Message-design logic theory to ensure that this code accurately reflected the data and the Expressive theme (O'Keefe & Mccornack, 1987; O'Keefe, 1988).

In step five the researcher then provided clear definitions of each of the themes (Braun & Clarke, 2006). This was done by reviewing past literature regarding how Expressive, Conventional and Rhetorical Logic were defined and adapted within specific communication contexts (O'Keefe & Mccornack, 1987; Caughlin, 2015). For example, in the current study the Rhetorical theme was defined as "Communication messages that elaborate on the goal and demonstrates action or consensus (O'Keefe & Mccornack, 1987)"- this definition aided the researcher in better understanding the data in relation to existing literature and the current study.

Lastly, step six was about writing up the data interpretation (Braun & Clarke, 2006). This was done to present how the data was similar, differed or related to past literature, as well as to address the research questions and objectives (Braun & Clarke, 2006). The presentation, analysis and implications of the data and findings were examined in detail in the 'presentation and interpretation of findings section of the research report.

3.7. Trustworthiness

Trustworthiness entailed credibility, transferability, dependability and confirmability (du Plooy-Cilliers et al., 2014). Credibility referred to the plausibility of the data collected and interpreted (Leung, 2015). This was ensured by using a well-established research data collection and analysis method (qualitative online questionnaire and thematic analysis), as well as a seminal theory (Message-design Logic). Credibility was also ensured by creating a coding schedule in which the accuracy and themes of Expressive, Conventional and Rhetorical Logic were informed by previous literature (O'Keefe, 1988).

Additionally, transferability referred to the relation of the results to other prospective contexts (Korstjens & Moser, 2018). Transferability was ensured by providing an in-

depth description of the methodology regarding the South African context of the research, the Millennial sample and the qualitative research design so that readers were able to determine the transferability to other contexts. Considering that the sample size was small and transferability was limited, this study's theoretical framework (Message-design Logic theory) or population characteristics could be used in other studies.

Dependability referred to the consistency of the findings regarding its collection and interpretation (Leung, 2015). Dependability was ensured by providing a detailed documentation of the theoretical foundation, data analysis and findings. A thematic analysis was used to analyse data, in which the six step analysis process was provided in detail. Message design logic formed the theoretical foundation which was relevant as the researcher aimed to analyse participants' perceptions regarding sustainability messages on *GreenpeaceAfrica's Facebook*. This was done using Message-design Logics' central themes discussed above. The in-depth documentation of the analysis and interpretation aided in other researchers determining the consistency of the findings.

Lastly, Confirmability referred to the extent to which the findings were accurately confirmed, with the absence of bias (Korstjens & Moser, 2018). Confirmability was ensured by describing the research process in great detail, for example, all the steps in the data collection were provided for scrutiny (Leung, 2015). An online, qualitative questionnaire was used to collect data, which avoided the use of leading questions to reduce bias. These questions enabled participants to express their perceptions without being persuaded by the question or researcher. The data was quoted verbatim to avoid distorting the information to suit the researchers' needs (see appendix F, p.56).

4. PRESENTATION AND INTERPRETATION OF FINDINGS

This section analysed the data collected from participants A, B, C, D and E in relation to past literature and Message-design Logic. These responses were analysed thematically using key concepts and themes of Expressive, Conventional and Rhetorical logic (see appendix E, p. 54). Three themes were identified throughout the questionnaire which were 'parameter criteria responses', 'sustainability perceptions and actions', and 'environmental awareness'. Due to the qualitative nature of the data, the researcher only included the direct quotations from participants that were relevant to

address the research questions and objectives. The full responses are in appendix F, p. 55.

4.1. Parameter Criteria Responses

This theme highlighted the first four demographic-related questions of the questionnaire which related to the unique characteristics of the population and participants' inclusion in the study (see appendix D, p.52). All five participants met the study's criteria. The first question asked "are you between the ages of 21-25, 26-30, 31-35 or 36-38?" to determine whether the population was between the researchers desired age-group of 18-38 years old. All five participants were between the ages of 21-25 years old. The second question was "do you follow GreenpeaceAfrica?" which was used to acquire whether participants were familiar with the platform under investigation, to which all participants were. The researcher then asked "Are you a South African citizen?" to determine whether the participants could be included in the South African study. It was found that they were all South African citizens. Lastly, the researcher asked "What race are you?" which was asked to determine whether the population was multiracial due to the racial diversity in South Africa. There were one White, one Black, one Coloured and two Indian participants which was reflective of the racial diversity in South Africa, which the researcher sought to attain as much as possible due to its South African context.

4.2. Sustainability Perceptions and Actions

This theme analysed questions 3, 4, 6, 7, 8 and 9 (see appendix D, p.52). These responses related to participants' current and ensuing pro-environmental perceptions and actions as a result of *GreenpeaceAfrica*. Question three asked "How environmentally friendly are you in your daily life? Please elaborate" This question was asked to determine participants' environmental consciousness and their actions to improve the environment. All responses in the table below were categorised as Rhetorical as each participant demonstrated that they take various pro-environmental action. This relates to past literature which stated that changed behaviour occurred at a rhetorical level, where collaborative action is taken (see O'Neill, 2016; Ng, 2017). This was similar to the findings of Caughlin (2015) who discovered that rhetorical messages often illustrated action towards achieving an objective. Therefore, it was

conclusive that participants took pro-environmental action and accountability for their impact on the environment.

Table 1: Question three responses

	Responses	Theme
A	"I do the most I can for the environment. From saving water with finding new ways to collect rainwater and water plants to recycling bins. I'm big on no plastic. And prefer paper bags instead of shopping bags. I also only use metal straws."	Rhetorical/takes action
B	"I try to do my bit to be as environmentally friendly as I can. I save and reuse water wherever I can."	Rhetorical/ takes action
C	"I am extremely environmentally friendly, I always recycle plastic waste, for example turning cool drink bottles into flower pots"	Rhetorical/ takes action
D	"Apart from the various things I do at home to recycle and reduce wastage, I also volunteer to do beach-clean ups and do whatever I can to save the environment"	Rhetorical/ takes action
E	"We've installed energy saving bulbs Make use of recycling bins"	Rhetorical/ takes action

Question four asked "How do you feel about the reported increased use of plastic during the Corona Virus Pandemic?" this question asked participants to express their opinions and views regarding the increased plastic-use and pollution today. Four out of five responses were expressive due to the emotive language used to convey participant's true feelings or cognitive state (O'Keefe, 1988). This reiterated past studies that claimed that expressive messages were reflections of beliefs (Caughlin, 2015; Margolin & Markowitz, 2017). These expressive responses were similar to O'Keefe's (1988) findings regarding Expressive messages being subjectively conveyed using criticisms or complaints. In contrast, the one rhetorical response showed that participants subjectively and contextually interpreted the messages and

employed different logics based on it. This findings differs from Ng (2017) who discovered that different races will use different logics.

Table 2: Question four responses

	Responses	Theme
A	"Disheartened. We have many businesses who can seek alternative ways of protecting themselves and benefiting our environment but people often overlook this due to plastic being cheaper. People only care when it directly affects them and that is the harsh truth"	Expressive/Criticising
B	"As if we don't already have one pandemic to deal with, I think the increased use of plastic has become a whole pandemic in itself. One problem has made us forget the rest of the issues that we are faced with. As a result, we are not aware of the prolonged effects yet to come, which is sad as nobody is willing to prepare for it yet"	Expressive/Criticising
C	"People are to blame for the improper disposal of their masks or gloves during the pandemic, especially since it is very easy to purchase an affordable re-usable mask, or even make one for that matter!"	Expressive/Blameful
D	"It is so saddening to see that the issue of plastic pollution just keeps getting worse and worse." "I have started putting my used gloves into a bag and straight into a bin and I always suggest that people start doing this too"	Rhetorical/takes action
E	"It breaks my heart, but I knew that this would be the issue of the pandemic"	Expressive/self-expressive

Question six asked "GreenpeaceAfrica's #BreakFreeFromPlastic campaign and post states that in addition to recycling, the onus is on plastic manufacturers and governments to provide plastic-free alternatives. Please elaborate why you agree or

disagree”. All participants agreed and four out of five responses were categorised as Expressive due to the criticising and self-expressive nature (O’Keefe, 1988). This corroborated with past literature that stated that Expressive communicators often valued self-expression and subjectively created reactive messages (see O’Keefe, 1988, Ng, 2017). Contrarily, the conventional response was categorised as such because the participant offered solutions without criticism, therefore it was expressive content that was more goal-oriented (O’Keefe, 1988). The researcher inferred that participants’ design-logics differed for each question, despite similarities in their agreement or disagreement.

This finding aligned with previous literature regarding Expressive logic being used by participants to express their feelings, except a difference in the current study was that it was used in regards to the state of the environment, as opposed to the different contexts previous studies researched (see Caughlin, 2015; Margolin & Markowitz, 2017). The findings were therefore similar to previous literature and the implication was that individuals who employed the expressive and conventional logic were ardent, environmentally-conscious and had intent, despite being critical.

Table 3: Question six responses

	Responses	Theme
A	“I agree. Switching from plastics to alternatives are slightly higher in cost. Such as the metal straws. And paper straws disintegrate fast in your drinks and aren’t a pleasant experience. Whereas metal straws are amazing however they cost nearing R50”	Conventional/Offers solutions.
B	“I agree, due to the fact that manufacturers have the power to stop to consumption of plastic products by the route of not making it.”	Expressive/Blameful
C	“I agree, there is only so much the public can do to recycle plastic, but really manufacturers are the culprits because they produce it and the government does little to put an end to this”	Expressive/Criticising
D	“It is their fault and the governments!”	Expressive/Blameful

E	"I agree because we cannot eradicate convenience. Plastic is an issue of convenience, and humans will gravitate towards the more convenient option"	Expressive/Criticising
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Question 7 asked "Greenpeace Africa's Facebook page posts environmental-related petitions such as the #ProtectTheOceans petition. How would you react to posts like this? (For example, share it and why? Sign the petition and why? Like the post and why? Comment on the post and why? Ignore the post and why?)" This question determined participants' actions in response to environmental messages. Four out of five responses were rhetorical. These findings were similar to previous studies that were conducted outside a South African context (McAnelly, 2015; Hanson-Rasmussen & Lauver, 2018). The findings confirmed that Millennials were environmentally concerned and engaged with social media environmental activism (Scott, 2020). Thus, the researcher deduced that these South African Millennials were influenced by social media to conduct pro-environmental action. The one conventional response illustrated that conventional communicators respond in a standard and comforting way, with no desire towards taking action (Caughlin, 2015; Ng, 2017).

Table 4: Question seven responses

	Responses	Theme
A	"I heart react it. Sign it and share it"	Rhetorical/Takes action
B	"I would like and share these posts. This would be my bit to help create and promote awareness of these petitions"	Conventional/no direct contribution
C	"I would firstly click on it to sign the petition, then like, comment and share it to the rest of my Facebook contacts so that they too can sign it"	Rhetorical/Takes action
D	"I would sign the petition to contribute to helping the cause, then like this post and start sharing it"	Rhetorical/Takes action
E	"I aim to sign as many of Greenpeace's petitions as they are one of the few NGO's whose petitions are"	Rhetorical/Takes action

	taken heed of. I share these posts to encourage others to help us out"	
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Question 8 asked "In a post on February 16, 2019 Greenpeace Africa stated that: "We need to reflect on our actions and do better. We need earth more than it needs us" (GreenpeaceAfrica, 2019) Explain if you think that collaborative action is needed to make a change or not". This question determined participants' pro-environmental action through questioning their thoughts in relation to a *GreenpeaceAfrica* post. There were five out of four Rhetorical responses which once again reiterated past literature that collaborative action was often taken using rhetorical logic as discussed above (O'Keefe & McCornack, 1987). The one conventional response also determined that not all participants were influenced by rhetorical logic, some illustrated environmental awareness through conventional Message-design Logic (Caughlin, 2015).

Table 5: Question eight response

	Responses	Theme
A	It takes every one of us. We should be the change we want to see. We can't allow one man to fight the world or fight for the world"	Rhetorical/Collaborative action
B	"One person or organization cannot bring about the change needed. With the help of other organizations and the general public, change would be inevitable"	Conventional/Offers Solutions
C	"This is everyone's problem to deal with and we can indeed make a greater difference if everyone gets involved"	Rhetorical/Collaborative action
D	"Environmental conservation and change can only happen if we start working and unite together by doing everything from recycling, to saving water, electricity, paper etc."	Rhetorical/Collaborative action
E	"Collaborative action is important in our fight for environmentalism as it's not only the responsibility of companies and corporations"	Rhetorical/Collaborative action

Question 9 asked “Describe if *GreenpeaceAfrica*’s Facebook posts have had a role in your pro-environmental actions or not? Discuss a specific example or examples”. This determined the direct correlation between the posts and participants pro-environmental actions. All participants suggested that *GreenpeaceAfricas*’ posts did have a role in their pro-environmental actions, and three out of five reponses were Rhetorical. This finding aligned with the findings of Caughlin (2015) that individuals’ logic use differed depending on subjective contexts and interpretations. Thus, the researcher concluded that some participants were influenced by either Conventional, Expressive or Rhetorical Logic. The implication was that, once again, this illustrated that despite the differing use of logics, each participant agreed and elaborated on the role *GreenpeaceAfrica* plays in their pro-environmental actions. This addressed the research question above.

Table 6: Question nine Responses

	Responses	Theme
A	“They do have a role in my pro-environmental actions as they make me aware and educate me on matters which sometimes I may not know about”	Expressive/self-benefiting
B	“I’ve always wanted to reduce my carbon footprint and this was one way that I can do that. It has made me more conscious of my surroundings and my impact on the planet”	Expressive/self-expressive
C	“Whether it’s turning a toilet roll holder into a stationery holder or making planting pots out of 2L bottles, these posts have made me take more action to be environmentally conscious and do my part for the environment”	Rhetorical/takes-action
D	“Yes, indeed. The posts on Greenpeace Africa are the reason for why I started recycling rain water, and why I try to pick up dirt when I am walking along the beach or around my home”	Rhetorical/Takes action

E	“A tiny example is that I got my entire office to recycle their scrap paper. Every row would send their scraps to my tiny recycling bin under my desk, and then that escalated to a bigger box directly next to the printers”	Rhetorical/Takes action
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4.3. Environmental Awareness

This theme analysed questions 1, 2 and 5 which related to participants' sustainability knowledge and awareness as a result of *GreenpeaceAfrica*, which is the platform being studied and related to the research questions and objectives of describing Millennials' sustainability awareness (see appendix D, p.52). Question 1 asked “Why do you follow *GreenpeaceAfrica* on Facebook?” which determined participants' reasons for following *GreenpeaceAfrica*. Four out of five responses were Expressive as each participant described their personal use of the page by expressively communicating for oneself, whereas one Conventional response suggested that the participant acknowledged the context of the question, but showed no action towards accomplishing a goal. This finding aligned with O'Keefe (1988) who discovered that Conventional communicators responded in a way that achieved the inquirers' objectives, rather than expressing their own thoughts.

Table 7: Question one Responses

	Responses	Theme
A	“Because it keeps me up to date with new projects inculcated and educates me”	Expressive/Self-benefitting
B	“It also allows me to better my knowledge on environmental development and sustainability.”	Expressive/Self-benefitting
C	“The organisation shares important information about environmental issues around the world that encourages for more action to be taken to help make the environment better.”	Conventional/acknowledges context
D	“Greenpeace Africa has helped me become more environmentally friendly and sustainable by providing me with environmental news”	Expressive/Self-benefitting

E	"I'm incredibly passionate about environmentalism"	Expressive/Self-expressive
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Question two asked "How would you describe environmental sustainability?". This question determined participant's knowledge of environmental conservation. All participants had a response similar in nature, although their use of design-logics differed. Four out of five responses were Conventional, while one was Rhetorical. Previous studies have inferred that Conventional communicators often acknowledged the contexts of the message and subsequently responded in a standard way, that is not necessarily subjective or action-oriented (Ng, 2017, Margolin & Markowitz, 2017). Reiteratively, the common pattern in the findings, as discussed in previous questions' findings, were that every participant employed different logics according to the context of the question.

Table 8: Question two Responses

	Responses	Theme
A	"It's the ability to benefit from the environment without posing a threat by finding ways to conserve and protect it for future generations"	Conventional/ acknowledges context
B	"It would be the usage of environmental resources effectively and efficiently in order for it to last for many more generations to come"	Conventional/ acknowledges context
C	"Environmental sustainability refers to protecting or conserving the environment so that it is sustained for other, future generations of people"	Conventional/ acknowledges context
D	"we have to be more environmentally aware of our actions. For example I started reusing rain water to water my plants"	Rhetorical/Collaborative action
E	"Incorporating environmentalism into one's everyday life in order to mitigate the effects of climate change"	Conventional/ acknowledges context

Question five stated “Discuss if the posts and messages on *GreenpeaceAfrica*’s *Facebook* page encourages you to become more environmentally aware or not? Please elaborate”. This question sought to determine the perceived impact of the sustainability messages on *GreenpeaceAfrica*. There were four out of five Conventional responses. These were categorised as Conventional because it acknowledged the context of the situation regarding environmental awareness. The implication was that participants were environmentally-conscious and wanted to take environmental action.

Another similarity found regarding the theory was that Conventional Logic illustrated a conventionally defined means to accomplish something (Margolin & Markowitz, 2017). Contextually, this means that participants who employed Conventional Logic often responded in a socially accepted way to show environmental awareness. There was one Expressive response that was categorised as such due to the participant expressing their emotions regarding how the content made them feel, which resulted in their environmental awareness. Reiteratively, the difference in responses contributed to the argument of previous literature that peoples’ Message-design Logic differed based on the context (see Caughlin, 2015).

Table 9: Question five Responses

	Responses	Theme
A	“Yes. But it should be more interactive. Ask about people's view and concerns. Etc.”	Conventional/offers advice but no direct contribution
B	“It does encourage me to become more environmentally aware. There are real time issues that this continent is faced with that we might not hear of, but to know that there are people willing to fight for this planet encourages me to do the same”	Conventional/ acknowledges context and is comforting
C	“It does encourage me to become more environmentally conscious and aware because these posts illustrates the environmental issues faced in Africa or around the world which	Conventional/ goal-oriented but no direct contribution to the solution

	makes me want to be and do better for the environment I live in.”	
D	“Yes it has definitely made me more aware of all the environmental crises taking place, as well as making me more aware of how I can start helping”	Conventional/ goal-oriented but no direct contribution to the solution
E	“They do, they offer not just heartbreaking, almost guilt-inducing stories and campaigns, their campaigns are effective visually as well.”	Expressive/ self-expressive

To conclude, participants’ responses were qualitatively illustrated and analysed in this section. The data was thematically interpreted in relation to previous studies and Message-design Logic theory. This aided the researcher in identifying similarities, as well as new and unique insights.

5. CONCLUSION

The research study was concluded in this section by addressing the research questions, objectives, implications of the findings, ethical considerations and the limitations and delimitations.

5.1. Research Questions and Objectives Addressed

The first research question was ‘how do South African Millennials’ interpret sustainable communication messages, on *GreenpeaceAfrica’s Facebook*, using Message-design Logic?’ and the research objective was ‘to describe South African Millennials’ understanding of communication messages, on *GreenpeaceAfrica’s Facebook*, using Message-design Logic’. This was solved as the analysis illustrated that social media plays a role in Millennials’ pro-environmental perceptions and actions (Huang, 2016). The findings above inferred that Millennials’ expressively and conventionally interpreted messages on *GreenpeaceAfrica’s Facebook*, which had a role in their own sustainable perceptions and actions. This related to previous literature, except this study was conducted within a South African context (see Dookhoo, 2015; Zhang & Skoric, 2018). Additionally, the questions measured participants’ environmental awareness in relation to their interpretation of the posts on *GreenpeaceAfrica’s*

Facebook. All participants agreed that these sustainability messages had influenced their awareness and consequently encouraged them to carry out environmental action.

The second research question was *'How are these South African Millennials' interpretations of sustainable communication messages on GreenpeaceAfrica's Facebook perceived to have influenced their own sustainable perceptions and practices?'* and the objective was *'To interpret whether South African Millennials' interpretations of communication messages on GreenpeaceAfrica's Facebook has a perceived influence in their own sustainable perceptions and practices'*. From the findings above, it was deduced that participants had similar interpretations of the *GreenpeaceAfrica* posts regarding their agreement or disagreement, however they used different design logics to express this. The findings supported previous illustrate about the developmental progression of design logics used (O'Keefe & McCornack, 1987; O'Keefe, 1988). For example, participants initially used Expressive Logic to convey their feelings towards harmful environmental actions, they then proceeded to use Conventional Logic to offer pro-environmental solutions or show awareness and agree that action needs to be taken, and lastly they used Rhetorical Logic to elaborate on their own pro-environmental perceptions and actions. Thus, it was inferable that participants' interpretations of the sustainability messages does influence their own sustainable perceptions and practices.

5.2. Research Problem Addressed

The research problem was that there was limited literature about whether online sustainability messages had a perceived influence on South African Millennials pro-environmental perceptions and behaviour (Kushwaha, 2015; Kaur & Chahal, 2018). There was adequate literature only outside a South African context, which is why this study had sought to solve this problem. This was done by describing the perceptions of South African Millennials regarding the effectiveness of messages on *GreenpeaceAfrica's Facebook*. The implications of the findings which were discussed in detail below, concluded that social media sustainability messages did have a role in South African Millennials' sustainability perceptions and thereafter, actions. This study aided in the increase of research from a South African perspective and the use of Message-design logic in a different context than previous literature (see Caughlin, 2015; Margolin & Markowitz, 2017).

5.3. Implications of Findings

The responses analysed above indicated that South African Millennials' environmental awareness and actions were a result of social media sustainability messages. It was found that sustainability messages on *GreenpeaceAfrica* subsequently induced participants need to sustainably take action. The results corresponded with previous studies and the implications were that similar trends exist today and within South Africa (see McAnelly, 2015; Dookhoo, 2015; Katz-Kimchi and Manosevitch, 2015). Previous studies on Message-design Logic theory had demonstrated that there were individual differences in the Message-design Logic, depending on the particular situation or context (Caughlin, 2015; Ng, 2017; Margolin & Markowitz, 2017).

Additionally, Ng (2017) discovered that Message-design Logics differ between people of various races. The current study found that whilst South Africa is multicultural and different races responded differently, the sophistication of their responses were more dependent on the context of the message. For example, Indian participants did not use one specific design logic, but different ones according to the context of the question. Thus, the South African context of the study and its results proved that although there were significant similarities in the results with previous literature, it however determined that these South Africans were contextual communicators. This did not align with O'Keefe and McCornack (1987) who found that Rhetorical logic was the most sophisticated and influential logic employed by communicators, instead the responses indicated that the context or situation influenced the type of logic used and messages produced. These findings offered unique insights into the ways in which South African Millennials contextually communicate using Message-design Logic. These implications were valuable as it aided in increasing literature from a South African context as stated in the research problem and answered both the research questions and objectives above.

5.4. Ethical Considerations

The ethical considerations defined the code of conduct that enabled the researcher to maintain integrity while conducting research (du Plooy-Cilliers *et al.*, 2014).

5.4.1. Researcher

The researcher did not misuse Information and this was avoided by describing the purpose of the research in detail in the research explanatory information sheet (refer to Appendix B, p. 49). The data collected from the online qualitative questionnaire were analysed and interpreted only for the purpose of this study, and the contribution of the research was also explicitly stated, as suggested in *The Independent Institute of Education's (IIE) Research Policy* (2020). Additionally, bias was avoided by not creating leading questions that prompted desired responses that corresponded with the researchers' perspective (du Plooy-Cilliers *et al.*, 2014). Similarly, participants' responses were directly quoted to avoid bias and increase confirmability (Leung, 2015). Furthermore, the distortion of information was avoided by ensuring that the data was unedited and interpreted in a bias-free manner by consulting previous literature to ensure accuracy. Moreover, considering the technological nature of this study, the data was secured by transcribing it onto a document in order to back the data up, which was done by exporting the results to a *Microsoft Word* document. The data was then saved onto the researchers' hard drive (Nieuwenhuis, 2020:146).

5.4.2. Participants

Firstly, informed consent was acquired via *The IIE* informed consent form (refer to Appendix C, p.51). In the current study, the researcher acquired informed consent of the participant who signed agreement forms before beginning with the online qualitative questionnaire. Confidentiality was maintained by assigning pseudonyms to participants' within the research, such as 'participant A'. Additionally, participants' information was also technologically secured by creating a strong password on *Google Docs Forms* and regularly backing-up the data to the researchers' hard drive. Deception was avoided by providing an in-depth description of the specific purpose of the study, which ensured that participants were aware of why the research was conducted (Arifin, 2018). This information was also included in the research explanatory information sheet.

5.5. Limitations and Delimitations

The limitations and delimitations aided in increasing the reliability of the study by identifying potential weaknesses and boundaries (Theofanidis & Fountouki, 2019). The data collection method was a limitation which was a qualitative online

questionnaire, as it limited the data analysis methods available to the researcher. A delimitation of this was that the researcher was unable to statistically analyse certain responses from participants. The qualitative online questionnaire was also a delimitation because the researcher was only allowed to collect qualitative types of responses, which the current study overcame due to its interpretive nature. Another limitation was the study's transferability and comprehensiveness due to focusing on Millennials. A delimitation of this is that the researcher's population consisted of people between the ages of 21-38 years old, and got findings from this age group. The current study overcame this as it focused specifically on Millennials. The sample size was a delimitation of the limited transferability of the qualitative study, as the researcher was unable to study more than 4-6 participants, and the study is conducted or completed using only that amount of participants. However, five participants were sufficient to collect in-depth information to conduct a thematic analysis of their responses.

5.6. Heuristic Value

This study incites recommendations for further study regarding how other researchers may utilise a larger sample to increase the transferability of the results to other research contexts. Another recommendation will be to research different social media platforms, other than *Facebook*, for its potential to influence sustainability perceptions and practices. Furthermore, researchers could use differing age-groups instead of focusing on Millennials, such as 40-60 year olds to determine the transferability, similarity or differences in the results to these age groups. This will contribute insight and literature regarding whether older generations are persuaded by social media to become more pro-environmental. It will also determine the Message-design Logic of other age groups and whether people in different countries are contextual communicators, such as what the results suggested for South African Millennials.

Recommendations for practice includes how the research will contribute insight to South African organisations, such as *GreenpeaceAfrica*, running online sustainable communication messages on *Facebook*, whose audience is multi-racial or Millennials. This will demonstrate the potential perceptions of people between 21-38 years old. It will also illustrate the effectiveness of these messages in achieving specific goals such as creating awareness. Organisations in the Communications field and Public Relations practitioners could also utilise the findings to better inform their

communication. This is because the research will provide unique insights about how people may perceive particular messages according to different message-production logics, to achieve a specific goal.

6. CLOSING STATEMENT

To conclude, this study investigated social media's perceived role in South African Millennials' sustainability perceptions and practices, using *GreenpeaceAfrica's Facebook* and Message-design Logic theory. It was found that participants experienced a developmental progression of design logics (Caughlin, 2015). In other words, the *GreenpeaceAfrica* posts created environmental awareness, which soon developed into environmental action. This illustrated how the findings of this studied both supported previous literature and provided new insights from a South African perspective.

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APPENDICES

Appendix A: Ethical Clearance Letter



11 August 2020

Student name: Kamishka Sukhdeo

Student number: 17002188

Campus: The IIE's Varsity College, Westville Campus

Re: Approval of The IIE Bachelor of Arts Honours in Communication Proposal and Ethical Clearance



HONOURS ETHICAL CLEARANCE LETTER

Your research proposal and the ethical implications of your proposed research topic were reviewed by your supervisor and the campus research panel, a subcommittee of The Independent Institute of Education's Research and Postgraduate Studies Committee.

There are some aspects that you still need to address in your proposal. You will need to **address these aspects in consultation with your supervisor before you may proceed.** **Please note** your data collection may only proceed once you address the following issues:

1. Online qualitative questionnaire requires revisions. *Your supervisor needs to sign off your final data collection tool.* Please resubmit.

In the event of you deciding to change your research methodology in any way, kindly consult your supervisor to ensure all ethical considerations are adhered to and pose no risk to any participant or party involved. A revised ethical clearance letter will be issued.

We wish you all the best with your research!

ADvTECH HOUSE
Inanda Greens
54 Wierda Rd West
Wierda Valley 2196
P.O. Box 2369
Randburg 2125



Directors: RJ Douglas (UK), JDR Oesch*, MD Aitken*, FJ Coughlan* (*Non-executive)



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GENERAL CONDITIONS TO BE FULFILLED IN RELATION TO RESEARCH

Permission is granted to proceed with the above study subject to the conditions listed below being met and may be withdrawn should any of these conditions be flouted.

Please note: The panel has not considered the merits, accuracy or ethical soundness of the research. The only merits examined are the use of The IIE as a sample.

Permission is granted subject to the following conditions:

1. The researcher(s) will need to obtain informed consent in writing from all of the participants in his/ her sample if the study is not anonymous.
2. The researcher(s) may only use the data collected for research purposes and in no other way.
3. Photographs of human subjects may only be taken if relevant to the research, informed consent was obtained, and even with informed consent, the photographs may not be published on any online platforms.
4. The researcher is responsible for supplying and utilising his/her own research resources, such as stationery, photocopies, transport, faxes and telephones and should not depend on the goodwill of the institutions and/or the offices visited for supplying such resources.
5. No names or identifying information of participants may be used within the research and the research must be voluntary.
6. Please make it clear that the information will not be used punitively in any way and participants may in no way be counselled/advised based on this.

Dr Natalie Le Roux

Supervisor

Dr Natalie Le Roux

**The IIE Honours in Communication
Campus Post-Graduate Coordinator (CPC)**

Appendix B: Explanatory Information Sheet

To whom it may concern,

My name is Kamishka Sukhdeo and I am a student at The IIE Varsity College Westville. I am currently conducting research under the supervision of Dr. Natalie Le Roux and this study focuses on social media and its perceived role in South African Millennials' sustainability perceptions and practices. The study uses a qualitative online questionnaire to analyse participants' perceptions regarding the messages on *GreenpeaceAfrica's Facebook*. I hope that this research will enhance our understanding of how strategic message-production can help achieve objectives and provide knowledge about how Millennials may view particular messages according to different message design logics or reasons.

I would like to invite you to participate in my study. In order to explain to you what your participation in my study will involve, I have formulated questions that I will try to fully answer so that you can make an informed decision about whether or not to participate. If you have any additional questions that you feel are not addressed or explained in this information sheet, please do not hesitate to ask me for more information. Once you have read and understood all the information contained in this sheet and are willing to participate, please complete and sign the consent form below.

What will I be doing if I participate in your study?

I would like to invite you to participate in this research because your perceptions and interpretations of messages on *GreenpeaceAfrica's Facebook*, in relation to a qualitative online questionnaire, are required to contribute to the study and answer the two research questions. If you decide to participate in this research, I would like to invite you to answer my qualitative questionnaire.

You can decide whether or not to participate in this research. If you decide to participate, you can choose to withdraw at any time or to decide not to answer particular interview questions.

Are there any risks/ or discomforts involved in participating in this study?

Whether or not you decide to participate in this research, there will be no negative impact on you. There are no direct risks or benefits to you if you participate in this study. You might, however, indirectly find that it is helpful to talk about your perceptions regarding messages on *GreenpeaceAfrica's Facebook*. If you find at any stage that you are not comfortable with the line of questioning, you may withdraw or refrain from participating.

Do I have to participate in the study?

- Your inclusion in this study is completely voluntary;
- If you do not wish to participate in this study, you have every right not to do so;
- Even if you agree to participate in this study, you may withdraw at any time without having to provide an explanation for your decision.

Will my identity be protected?

I promise to protect your identity. I will not use your name in any research summaries to come out of this research and I will also make sure that any other details are disguised so that nobody will be able to identify you. Nobody else, including anybody at IIE Varsity College will have access to your interview information. I would like to use quotes when I discuss the findings of the research, but I will not use any recognisable information in these quotes that can be linked to you.

What will happen to the information that participants provide?

Once I have received all questionnaire responses, I will write summaries to be included in my research report, which is a requirement to complete my BA Honours Degree in Communications. You may ask me to send you a summary of the research if you are interested in the final outcome of the study.

What happens if I have more questions about the study?

Please feel free to contact me or my supervisor should you have any questions or concerns about this research, or if there is anything you need to know before you decide whether or not to participate.

You should not agree to participate unless you are completely comfortable with the procedures followed.

My contact details are as follows:

Kamishka Sukhdeo

[REDACTED]

[REDACTED]

The contact details of my supervisor are as follows:

Dr. Natalie Le Roux

[REDACTED]

[REDACTED]

Appendix C: Consent Form for Participant



Consent form for participants	
I, _____, agree to participate in the research conducted by Kamishka Sukhdeo about social media's perceived role in South African Millennials' sustainability perceptions and practices, through a qualitative online questionnaire that will analyse participants' perceptions regarding the messages on <i>GreenpeaceAfrica's Facebook</i>. This research has been explained to me and I understand what participation in this research will involve. I understand that: • I agree to be interviewed for this research. • My confidentiality will be ensured. My name and personal details will be kept private. • My participation in this research is voluntary and I have the right to withdraw from the research at any time. There will be no repercussions should I choose to withdraw from the research. • I may choose not to answer any of the questions that are asked during the research interview. • I may be quoted directly when the research is published, but my identity will be protected.	
Signature	Date

Appendix D: Questionnaire

My name is Kamishka Sukhdeo and I am an Honours in Communications student at *The IIE's Varsity College* Westville Campus. By answering this questionnaire you will contribute to my research study which is about determining the perceived role social media has in the sustainability perceptions and practices of South African Millennials between the ages of 21-38 years old. This questionnaire contains nine (9) questions. These questions will take a maximum of 30 minutes to answer and I thank you for your time.

Please answer the following questions to ensure that you meet the research study's criteria:

- Are you between the ages of:

21-25 ☐

26-30 ☐

31-35 ☐

36-38 ☐

- Do you follow the *GreenpeaceAfrica* Facebook page?

Yes ☐

No ☐

- Are you a South African citizen?

Yes ☐

No ☐

- What race are you?

Black ☐

White ☐

Coloured ☐

Indian ☐

Other ☐

1. Why do you follow *Greenpeace Africa* on Facebook?
2. How would you describe environmental sustainability?
3. How environmentally friendly are you in your daily life? Please elaborate. (Do you have recycling bins, energy saving light bulbs, save water?)
4. How do you feel about the reported increased use of plastic during the Corona Virus Pandemic??
5. Discuss if the posts and messages on *Greenpeace Africa's Facebook* page encourages you to become more environmentally aware or not? Please elaborate.



6. *GreenpeaceAfrica's #BreakFreeFromPlastic* campaign and post states that in addition to recycling, the onus is on plastic manufacturers and governments to provide plastic-free alternatives. Please elaborate why you agree or disagree.
7. *GreenPeaceAfrica's Facebook* page posts environmental-related petitions such as the *#ProtectTheOceans* petition. How would you react to posts like this? (For example, share it and why? Sign the petition and why? Like the post and why? Comment on the post and why? Ignore the post and why?)
8. In a post on February 16, 2019 *GreenpeaceAfrica* stated that:

"We need to reflect on our actions and do better. We need earth more than it needs us" (GreenpeaceAfrica, 2019)

Explain if you think that collaborative action is needed to make a change or not?



9. Describe if *GreenpeaceAfrica's Facebook* posts have had a role in your pro-environmental actions or not? Discuss a specific example or examples.

Appendix E: Coding Schedule

Themes	Theme Description	Codes
Expressive	Communication messages that openly express feelings, emotions and attitudes (O'Keefe & Mccornack, 1987).	E1: Responses are self-expressive (For example, 'I feel heartbroken over the Mauritian oil-spill'). E2: No indication of taking action or self-action (For example, 'The litter is a big problem and something needs to be done!'). E3: Explicit and Ill-mannered comments (For example, 'People who litter are a virus' –in response to a plastic pollution post on <i>GreenpeaceAfrica's Facebook</i>). E4: Blameful and criticising (For example, 'People/The government are to blame for the mismanagement of waste'). E5: Self-benefiting, reponses about how participants' feel something serves their own interests. For example 'I find it very helpful/informative' or 'It helps me' 'makes me aware'
Conventional	Communication messages that illustrate cooperativeness, support and socially accepted ideas (O'Keefe & Mccornack, 1987).	C1: Responses are implicit and comforting by acknowledging the context or situation (For example, 'I heard the news about the pollution, I would try to help wherever I can' or 'hang in there! Hopefully more is done to save the forest'). C2: Offers advice, (For example, we should come up with ways to recycle plastic products'). C3: Reponses are standard and scripted (For example, 'I'm sorry to hear about the drought, we really do need to save water').

		C4: Provides solutions to the problem but no direct contribution to the solution (For example, 'Recycling will help with plastic pollution'). C5: Goal-oriented responses that offers assistance or support, (For example, 'I would/could/should sign a petition or volunteer').
Rhetorical	Communication messages that elaborate on the goal and demonstrates action or consensus (O'Keefe & Mccornack, 1987).	R1: clear indication and agreement to carry out an action or achieve a goal (For example, 'I did sign the petition' or 'I have started recycling'). R2: Communal or collaborative responses and solutions directed at achieving goals (For example, 'We must start using energy-saving lightbulbs' or 'This is our problem or solution'). R3: Explains or elaborates on how (sustainability) goals will be achieved (For example, In order to achieve this, we will have to become more environmentally-aware by...'). R4: Responses that acknowledges responsibility instead of blame (For example, We have to take accountability and realise the consequences of our actions' or 'it is our responsibility to protect the environment'). R5: Context is created in the response.

Appendix F: Participants Full Responses

1. Why do you follow Greenpeace Africa on Facebook?
A: "Because it keeps me up to date with new projects inculcated and educates me as well as others on issues which are touchy and go unnoticed until it's too late and becomes a cause for concern"
B: "I find it very informative and helpful. It allows me to keep up to date with environmental issues around Africa. It also allows me to better my knowledge on environmental development and sustainability"
C: "The organisation shares important information about environmental issues around the world that encourages for more action to be taken to help make the environment better. They also share ways to become environmentally-friendly"
D: "Greenpeace Africa has helped me become more environmentally friendly and sustainable by providing me with environmental news, information, advice and tips. For example I now recycle things"
E: "I'm incredibly passionate about environmentalism"

2. How would you describe environmental sustainability?
A: "It's the ability to benefit from the environment without posing a threat by finding ways to conserve and protect it for future generations"
B: "It would be the usage of environmental resources effectively and efficiently in order for it to last for many more generations to come"
C: "Environmental sustainability refers to protecting or conserving the environment so that it is sustained for other, future generations of people"
D: "To make various environmentally-friendly changes to the way we live or get resources so that we can conserve the environment and in order for us to do this, we have to be more environmentally aware of our actions. For example I started reusing rain water to water my plants and I am conscious of how long my showers are or how much water I put in the kettle so that it does not get wasted"
E: "Incorporating environmentalism into one's everyday life in order to mitigate the effects of climate change. I believe every little bit counts"

3. How environmentally friendly are you in your daily life? Please elaborate. (Do you have recycling bins, energy saving light bulbs, save water?)

A: "I do the most I can for the environment. From saving water with finding new ways to collect rainwater and water plants to recycling bins. I'm big on no plastic. And prefer paper bags instead of shopping bags. I also only use metal straws. Often collect dirt I see around beaches and parks to avoid it getting into streams and rivers posing other threats to marine life and animals. And I do work as a manager for Greenpeace (sales) so I assist in getting funds to support our organization itself"

B: "I try to do my bit to be as environmentally friendly as I can. I save and reuse water wherever I can. I also try to recycle and reuse as much paper and plastic as I can or reduce my buying of these items"

C: "I am extremely environmentally friendly, I always recycle plastic waste, for example turning cool drink bottles into flower pots. I also replaced all the light bulbs in my house with energy saving bulbs."

D: "I am very environmentally friendly. Apart from the various things I do at home to recycle and reduce wastage, I also volunteer to do beach-clean ups and do whatever I can to save the environment"

E: "We've installed energy saving bulbs
Make use of recycling bins
We use the bucket system (something my grandparents always encouraged us to do)
Cook by gas as often as possible
I discourage the rest of my family from buying new clothes (fast fashion)
We all use reusable water bottles"

4. How do you feel about the reported increased use of plastic during the Corona Virus Pandemic?

A: "Disheartened.
We have many businesses who can seek alternative ways of protecting themselves and benefiting our environment but people often overlook this due to

plastic being cheaper. People only care when it directly affects them and that is the harsh truth”

B: “As if we don't already have one pandemic to deal with, I think the increased use of plastic has become a whole pandemic in itself. One problem has made us forget the rest of the issues that we are faced with. As a result, we are not aware of the prolonged effects yet to come, which is sad as nobody is willing to prepare for it yet.”

C: “I am absolutely devastated because it was a big problem before the pandemic and is so much worse now. Plastic pollution has been around for so many years and to think that it is still a problem today despite the many efforts people have made to solve this issue. People are to blame for the improper disposal of their masks or gloves during the pandemic, especially since it is very easy to purchase an affordable re-usable mask, or even make one for that matter!”

D: “It is so saddening to see that the issue of plastic pollution just keeps getting worse and worse. We need to be more responsible of how and where we dispose of our latex gloves, masks and other harmful things. I have started putting my used gloves into a bag and straight into a bin and I always suggest that people start doing this too. Or alternatively they can contact a medical waste-disposal centre.”

E: “It breaks my heart, but I knew that this would be the issue of the pandemic.”

**5. Discuss if the posts and messages on Greenpeace Africa's Facebook page encourages you to become more environmentally aware or not?
Please elaborate**

A: “Yes. But it should be more interactive. Ask about people's view and concerns. Etc.”

B: “It does encourage me to become more environmentally aware. There are real time issues that this continent is faced with that we might not hear of, but to know that there are people willing to fight for this planet encourages me to do the same. Thus making me conscious of what is going on”

C: “It does encourage me to become more environmentally conscious and aware because these posts illustrates the environmental issues faced in Africa or around the world which makes me want to be and do better for the environment I live in”

D: “Yes it has definitely made me more aware of all the environmental crises taking place, as well as making me more aware of how I can start helping.”

E: “They do, they offer not just heartbreaking, almost guilt-inducing stories and campaigns, their campaigns are effective visually as well. It’s a well balance of serious business and mesmerising art.”

6. Greenpeace Africa's #BreakFreeFromPlastic campaign and post states that in addition to recycling, the onus is on plastic manufacturers and governments to provide plastic-free alternatives. Please elaborate why you agree or disagree.

A: “I agree. Switching from plastics to alternatives are slightly higher in cost. Such as the metal straws. And paper straws disintegrate fast in your drinks and aren’t a pleasant experience. Whereas metal straws are amazing however they cost nearing R50. It’s the same with paper bags at stores. They cost more. Which shouldn’t be the case. We are in an economic crisis. People love the environment but sometimes can’t afford to do they’re part. Government should assist. It will benefit us in the long run.”

B: “I agree, due to the fact that manufacturers have the power to stop to consumption of plastic products by the route of not making it. Simply, no manufacturer, no product, no sale, no problem.”

C: “I agree, there is only so much the public can do to recycle plastic, but really manufacturers are the culprits because they produce it and the government does little to put an end to this.”

D: “I totally agree with this statement. We wouldn’t need to keep asking for plastic to be recycled or less purchased and used if manufacturers would just stop making it. It is their fault and the governments’!”

E: “I agree because we cannot eradicate convenience. Plastic is an issue of convenience, and humans will gravitate towards the more convenient option. Companies can help mitigate climate change issues by tackling the issue of plastic convenience, not just recycling.”

7. Greenpeace Africa's Facebook page posts environmental-related petitions such as the #ProtectTheOceans petition. How would you

react to posts like this? (For example, share it and why? Sign the petition and why? Like the post and why? Comment on the post and why? Ignore the post and why?).
A: "I heart react it. Sign it and share it. I love what Greenpeace does and the cause they stand for. Also because of the work I do. It's good exposure. If people become familiar with these posts they're more likely to support us as they know the work we do"
B: "I would like and share these posts. This would be my bit to help create and promote awareness of these petitions."
C: "I would firstly click on it to sign the petition, then like, comment and share it to the rest of my Facebook contacts so that they too can sign it."
D: "I would sign the petition to contribute to helping the cause, then like this post and start sharing it so that other people can also help."
E: "I aim to sign as many of Greenpeace's petitions as they are one of the few NGO's whose petitions are taken heed of. I share these posts to encourage others to help us out — I am a volunteer and I aim to encourage those around me to find a passion in environmentalism."

8. In a post on February 16, 2019 Greenpeace Africa stated that: "We need to reflect on our actions and do better. We need earth more than it needs us" (GreenpeaceAfrica, 2019) Explain if you think that collaborative action is needed to make a change or not.
A: "Collaborative action is needed as this isn't a one man job. It takes a team effort. It takes every one of us. We should be the change we want to see. We can't allow one man to fight the world or fight for the world"
B: "Two heads are always better than one. One person or organization cannot bring about the change needed. With the help of other organizations and the general public, change would be inevitable."
C: "Collaborative action is definitely the answer! Together we can work to protect the environment and make it safe for all. This is everyone's problem to deal with and we can indeed make a greater difference if everyone gets involved. For example if everyone starts refusing to purchase plastic products or packets at stores it would impact the production of it and reduce it significantly."

D: “I think the only way to combat these environmental threats is through collaborative action. We have a duty to protect the environment we live in, as well as help others protect environments around the world. Environmental conservation and change can only happen if we start working and unite together by doing everything from recycling, to saving water, electricity, paper etc.”

E: “One person or group is not enough to make a change, although every single person helps the cause. Collaborative action is important in our fight for environmentalism as it’s not only the responsibility of companies and corporations to take responsibility in their consumption, but us ordinary people, especially people living in communities such as the Cape Flats.”

9. Describe if Greenpeace Africa’s Facebook posts have had a role in your pro-environmental actions or not? Discuss a specific example or examples.

A: “They do have a role in my pro-environmental actions as they make me aware and educate me on matters which sometimes I may not know about. Like the oil spills cause by Shell (the company).”

B: “The #breakfreefromplastic campaign stood out to me. I’ve always wanted to reduce my carbon footprint and this was one way that I can do that. It has made me more conscious of my surroundings and my impact on the planet”

C: “It has definitely played a role in my actions, for example Greenpeace often attaches articles to their posts and one specific post that stood out for me was about how to achieve a zero-waste lifestyle. It showed me how to recycle different materials, which I have been doing ever since I started following this page years go. Whether it’s turning a toilet roll holder into a stationery holder or making planting pots out of 2L bottles, these posts have made me take more action to be environmentally conscious and do my part for the environment.”

D: “Yes, indeed. The posts on Greenpeace Africa are the reason for why I started recycling rain water, and why I try to pick up dirt when I am walking along the beach or around my home. These posts not only show us what is happening around the world, but it also provides tips on how to develop pro-environmental actions.”

E: “Greenpeace has encouraged me to be louder with my support, more explicit.

A tiny example is that I got my entire office to recycle their scrap paper. Every row would send their scraps to my tiny recycling bin under my desk, and then that escalated to a bigger box directly next to the printers.

Working in office administration produces a shameful amount of paper waste and any little bit definitely counts.”

Appendix G: Research Study Facebook Messenger Invitation

Hi there, I hope you're well. My name is Kamishka and I am conducting a research study for my Honours degree based on Greenpeace Africa and whether social media plays a role in Millennials' sustainability perceptions and practices? Would you be willing to fill in a questionnaire and recommend other people who meet the criteria of being a South African citizen between the ages of 21-38 years old. I really appreciate your time and contribution to my study.

If so, I would share my research study information sheet, consent form and link with you to go about filling the questionnaire and finding out more about my study.



Appendix H: Safe Assign Similarity Report



RESE8419_2020_HBA1_VCDW1 - RESE8419_VCDW1

Step 2: Submit Assignment 7 - Research Report

Kamishka Sukhdeo

on Wed, Oct 28 2020, 12:27 PM

74% highest match

Submission ID: bd07ffe3-2d32-4169-9954-9cba674bed93

Attachments (1)

17002188 Kamishka Sukhdeo RESE8419 Summative Report.pdf 74%

Word Count: 19,408

Attachment ID: 3619059349

17002188 Kamishka Sukhdeo RESE8419 Summative Report.pdf

1 MESSAGE-DESIGN LOGIC AND GREENPEACEAFRICA'S FACEBOOK POSTS: A

1 QUALITATIVE DESCRIPTIVE ONLINE QUESTIONNAIRE OF SOUTH AFRICAN MILLENNIALS'

SUSTAINABILITY PERCEPTIONS AND PRACTICES IN 2020

Kamishka Sukhdeo

Student number: 17002188

Appendix I: Research Report Summary Table

Title: Message-Design Logic and *GreenpeaceAfrica's Facebook* Posts: A Qualitative Descriptive Online Questionnaire of South African Millennials' Sustainability Perceptions and Practices In 2020.

Research purpose/objective	Primary Research Questions	Research Rationale	Seminal Authors/Sources	Literature Review	Paradigm	Approach	Data Collection Method(s)	Ethics	Key Findings	Recommendations
The research aimed to describe whether messages and posts on <i>Greenpeace Africa's Facebook</i> had a perceived role in South African Millennials' sustainability perceptions and practices, by means of a qualitative approach.	How do South African Millennials interpret sustainable communication messages, on <i>Greenpeace Africa's Facebook</i> page? How are these SA Millennials' interpretations of messages perceived to have influenced their own sustainable practices?	Kushwaha (2015) produced an article which suggested there is an overflow of environmental information on social media. This study seeks to determine whether the different logics used by <i>Facebook</i> sustainability pages, will influence changed behaviour.	Barbara J. O'Keefe. 1988. <i>The Logic of Message Design: Individual Differences in Reasoning about Communication</i> . Barbara J. O'Keefe and Steven A. McCormack. 1987. <i>Message Design Logic and Message Goal Structure</i> .	Theme 1: Social media, environmental perceptions and pro-environmental behaviour. Theme 2: Facebook and the dissemination of environmental awareness information. Theme 3: Millennials and social media environmental activism.	Paradigm: Interpretivism Epistemology: Peoples' experiences and common knowledge is used to interpret environmental awareness messages on <i>GreenpeaceAfrica's Facebook</i> . Ontology: Reality is subjectively and socially constructed (Cheema, 2018). The messages on <i>GreenpeaceAfrica's Facebook</i> are socially constructed and may be interpreted differently based on the various message-design logics. Axiology: Values shape people's interpretations (Cheema, 2015). Participants have different values and may have different interpretations of the messages on <i>GreenpeaceAfrica's Facebook</i> .	Qualitative	An online, qualitative questionnaire created via <i>Google Docs Forms</i> . It was dispersed via <i>Facebook Messenger</i> using a link. The questionnaire was pre-tested using one participant who represented the unique characteristics of the study.	No bias, misuse and falsifying of information and data. Data was secured by exporting results to hard drive. Informed consent was established. Confidentiality was maintained using pseudonyms. Data was secured through regular back-ups.	Different people use different message-design logics depending on the context. Participants experienced a developmental progression of design logics. The <i>GreenpeaceAfrica</i> posts created environmental awareness, which soon developed into environmental action.	Conducting a study with a larger sample of more than 4-6 participants. A future study could use another social media platform other than <i>Facebook</i> . Further recommendations include using different age-groups such as 40-60 year olds to increase the transferability of the results. Recommendations for practice will be changing and improving communication strategies based on Message-design logic. Unique insights will be provided regarding how Millennials or people of a similar age group perceive messages.
						Population Parameters				
There is limited South African literature on the effectiveness of the sustainability messages created online (Kushwaha, 2015). As well as if online environmental awareness is aligned with sustainable action.	To describe South African Millennials' understanding of communication messages, on <i>Greenpeace Africa's Facebook</i> . To interpret whether South African Millennials' interpretations of messages on <i>Greenpeace Africa's Facebook</i> influences their own adoption of sustainable practices.	1.Environmental sustainability 2.Pro-environmental behaviour 3. Millennials 4. Facebook 5.Expressive logic 6.Conventional logic 7.Rhetorical logic	Message-design logic theory (O'Keefe, 1988).			Sampling	Data Analysis Methods	Limitations	Key Contributions	
						Non-probability sampling. Method: snowball sampling. Size: Five participants	A qualitative thematic analysis, using Expressive, Conventional and Rhetorical Logic as themes. The unit of analysis: participant's perceptions.	The study is limited by its small sample size as it may not be transferable to the entire population. An online, qualitative questionnaire is limited by the issue of misinterpretation as the researcher is unable to clarify questions (Leung, 2015).	Provided Communication, Public Relations Practitioners and South African organisations with knowledge about how Millennials may perceive particular messages according to different message-design logics, to achieve specific goals.	