RESEARCH ARTICLE

Factor Analysis of Psychological Factors Affecting Environmentally Responsible Behaviour: Evidence from Buea Municipality, Cameroon

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ABSTRACT
This research aims to investigate people’s perceptions of what is deemed appropriate behaviours toward the environment and investigate the psychological factors and pro-environmental behaviour in daily life in the Buea municipality, Cameroon. The questionnaire was designed taking into consideration of the yes bias tendency that characterized previous research questionnaires on environmental consciousness. Twenty-five (25) statements were made, and respondents were asked to make a choice using a five-point Likert scale. The questionnaire results with both negative and positive prompts showed that the rate of people’s consciousness toward the environment was lower compared to other surveys. Five psychological factors were identified and stratified by demographic features: low personal responsibility, high interest in attitude, low awareness in daily life, care about the judgment of others, and insufficient environmental information. Factor A analyses the psychological factors that show low responsibility awareness of oneself. 40% of the sampled population indicated that psychological factors that affect low personal responsibility awareness of oneself are on the increase. With 30.50% of the population scoring a high mark in the factor B shows that approximately one-third of the population have a negative attitude towards the environment. The proportion of people with high C scores is deemed not to care about the environment when purchasing. 36.20% scoring high mark indicates that environmental awareness may still be high, but more than a third’s behaviour does not correspond with their level of awareness. A higher D score means that people exhibit PEBs depending on the fact that they may feel good or are being observed by others. Approximately one-third (30.83%) react positively to the environment when they observe that they are being watched by others. Approximately half (48%) of the sampled population scored a higher mark due to a lack of reliable environmental sources of information.

KEYWORDS
Psychological factors, environmentally responsible behaviour, personal responsibility, environmental awareness, environmental information, environmental attitude

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1. Introduction
Environmental awareness across the globe has increased considerably (I. K. Adu, Tetteh, Puthenkalam, & Antwi, 2020). Environmental education has been the major channel through which environmental awareness has been created and achieved (I. K. Adu, Puthenkalam, & Antwi, 2021; Puthenkalam, 2013). Environmental education has been used by various stakeholders, including the government, private sector, NGOs, etc. (K. Adu, Puthenkalam, & Kwabena, 2022; Perron, Côté, & Duffy, 2006; Stabler & Goodall, 1997).

In spite of the increase in environmental awareness across the globe, it is understudied in developing countries, especially the psychological factors affecting environmentally responsible behaviour. The major problem in recent research on environmental...
concern indicates that there exists a gap between peoples actions and attitudes through registration of a higher awareness has been recorded worldwide, but this does not reflect in peoples actions in their daily life related to environmental consciousness or awareness (Kollmuss & Agyeman, 2002). This study conduct factor analysis into the psychological factors affecting pro-environmental behaviour (PEBs).

Environmental awareness in developing countries, including Cameroon, is mainly rooted in human behaviour. The motivation to destroy the natural environment or show pro-environmental behaviours has been understudied. Research has focused on investigating peoples psychological factors such as the influence of values, behaviour, norms, attitudes, sense of control, intention and personality (Gifford & Nilsson, 2014; Kopec, 2018; Mehdizadeh, Nordfjaern, & Mamdoohi, 2018).

Environmental, psychological models continue to be developed to address the issues of psychological factors that affect issues like values, intention, behavioural control, altruism. Among theories that have expanded the behavioural pattern affecting PEBs are the theories of planned behaviour and value belief norm. The theories of planned behaviour and value belief norms have served as the reference point for explaining factors affecting people's attitudes and actions (Ajzen, 2011; Stern, 1999).

These theories used elements such as normative beliefs, perceived behavioural control, intentions, etc. Various psychological models have been developed and expanded with the addition of other elements, but the relationship between psychological factors and pro-environmental behaviour in developing countries have been under-studied. This research seeks to fill this gap by evaluating the relationship between psychological factors and pro-environmental behaviour.

The rest of the paper is organized as follows; section 2 reviews the relevant literature, while the methodology, results, and discussion are found in sections 3 and 4. Section 5 contains the important conclusions of the research highlighting their significance and relevance.

2. Literature Review

This section is dedicated to the significant literature resources that contributed to the research. The author should survey scholarly articles, books and other sources relevant to the area of research, providing a description, summary, and critical evaluation of each work.

2.1 Environmental psychology in historical perspectives

Environmental psychology gained recognition as a field in the study of psychology in the late 1960s, and it is still a new area of study in psychology (Bonnes & Bonaiuto, 2002; Proshansky, 1974; Wohlwill, 1970). According to the writings of Kruse and Graumann (1984) and Pol (2006), Hellpach (1911) was the first to have used the term environmental psychology when he studied the impact of different environmental stimuli such as the sun and the moon, and the extreme environment impacting on human activities. Though it was too early to identify that environmental psychology was a new field, his studies mentioned words like urban phenomena, crowding, overstimulation, and different environments.

Gifford (2007), in his book "Environmental psychology: principles and practice" argued that Brunswik (1903-1955) and Lewin (1890-1947) are regarded as the founding fathers of the field of Environmental Psychology though none of their empirical work could be classified as a work in environmental psychology.

However, their work uses words like the interaction between psychological process and physical environment. Brunswik (1903-1955) is regarded as one of the first psychologists to have argued that much attention is given to the properties of the organism’s environments. He also argued for the inclusion of all aspects of the human-environment rather than the artificial and fragmented environment that are studied by the psychologist. In support of the relationship between behaviour and environment, Lewin (1951) argued that human behaviour is a function of the environment.

2.2 Environmental psychology in todays’ literature

With more concern about the growth of population and environmental degradation increases, two psychologists began their separate research, which later became "Division 34 on population and environmental psychology (Richards, 2000). Proshansky, Ittelson, and Rivlin (1970) later came out with the first recognized text in environmental psychology. Topics such as perceptions of environmental risks, uses of environmental resources, attributes of a built environment dominated the early stage of research related to environmental psychology (Clayton, 2012). Therefore, environmental psychology deals with social issues from the natural environment and natural resources perspective.

1 Such as natural, social and historical-cultural environments (Pol, 2006)
Clayton (2012) claims that the study of environmental psychology addresses three main themes that are often ignored by the other areas of study in psychology. First, this field understands people behaviour in a specific context. It believes that the randomized control trials (controlled experimental research) are valuable and useful, but it does not provide a full understanding of human behaviour or motivation.

Secondly, environmental psychology recognizes the reciprocity of the relationship between people and their environment. She distinguishes between harsh human behaviour towards the environment and that of the other species, whose impact on the environment is gradual and less deliberate; an indication of the practicability of environmental psychology, thus understanding how people’s lives are affected by the environment and also how people choose to modify the environment. Thirdly, environmental psychology emphasizes the need for interdisciplinary research into environmental issues.

2.3 Planned behaviour theory
The planned behaviour theory is one of the referenced theories or documents most often used in the publication to tour pro-environmental behaviour, including re-use, reduced, travel mode choice, energy consumption, water and soil conservation, food choice and ethical investment. (Stern, 2000; Staats, 2003).

The theory of planned behaviour argues that the best way of forecasting behaviour is given by asking people if they intend to behave in a certain way. Presuming intention can explain behaviour. How can intention be explained? According to Azjen, three determinants described behavioural intention: attitude, subjective norms and perceived behavioural control. As per the model, subjective norms, attitudes and perceived behavioural control forecast the intention, which in turn predicts the behaviour (figure 1).

Furthermore, this current research uses this theory to determine people’s behavioural intentions, which are influenced by a combination of three factors: attitude, subjective norms, and perceived behavioural control. In applying this theory in this research, reasons behind people pro-environmental behaviour as to why they exhibit a certain behaviour could be very useful and also help to suggest ways of changing the negative behaviour to positive towards the environment. The combination of the three factors earlier mentioned influences people’s intentions and behaviour.
2.4 Belief value norm theory

The value-belief-norm (VBN) theory proposed by Stern stress morality. VBN theory includes the value and norm components from the norm activation model and the new environmental paradigm (NEP), which surround general beliefs and deal with the environment and the need for steps to talk about environmental problems.

Values are quite continual and difficult to change, so this theory is not very instructive for environmental policy. Consequently, we propose that by exchanging values with environmental knowledge, VBN theory could be acceptable for examining the effect of environmental education on pro-environmental behaviour.

The norms theory holds the idea that pro-environmental actions happen in response to personal moral norms and that these are operated in individuals who trust that environmental states constitute threats to other people or other species and that actions they start off could prevent those consequences.

The personal value theory narrates the link to pro-environmental behaviour to particular basic types of values: self-interest, altruism toward other humans and altruism towards other species and the biosphere. Though values and beliefs have hampered, nurtured and investigated, environmental degradation has become a social menace hampering sustainable development in our society.

2.5 Psychological factors affecting environmentally responsible behaviour

Despite the increase in environmental awareness in developing countries, environmental degradation is on the rise, but factors responsible for such behaviours are understudied, especially the psychological factors affecting environmentally responsible behaviour. Though a gap has been identified between people's attitude and action as regards environmental problems and issues in the midst of an increase in people's environmental awareness, people's actions do not reflect the increased level of environmental consciousness (Kollmuss & Agyeman, 2002).
Analysis from various models and area studies have to identify how environmentally responsible behaviour could be promoted but mostly neglect the psychological factors. Some researches that investigated the determinants of environmentally responsible behaviour and examined predictors of environmental consumer behaviour and political behaviour, environmentally appropriate behaviour and intrinsic motivation, intrinsic satisfaction on reduced consumption behaviour, values and self-reported pro-environmental behaviour (Iwata, 2002a, 2002b; Mobley, Vagias, & DeWard, 2010).

Based on previous research, this current study has identified the following five psychological factors that affect environmentally responsible behaviour. People show pro-environmental behaviour based on a number of factors. While some do so because it could save them money or energy, others are encouraged to do so because they have a sense of strong personal responsibility towards the environment.

By reading books, articles, and TV/radio shows, people have also developed an interest in environmental issues, which has changed their environmental attitude. The demonstration of environmental awareness in our daily lives might also influence people’s behaviour. Others cultivate pro-environmental behaviours because they think they are being observed by others, whiles sources of environmental might also affect PEBs.

Based on the above exposition, questionnaires were based on the five psychological factors.

1. Personal responsibility: The sense of being responsible for individual behaviour towards the environment.
2. Attitude towards the environment: Shows interest in environmental issues and problems.
3. Daily life related to environmental awareness: Demonstration of environmental awareness
4. Caring about the prospects of others: Showing PEBs if being observed by others and society
5. Environmental information: Sufficient and insufficient source of information.

3. Research Design, Methodology and Questionnaire design

3.1 Research design
The research uses a quantitative method to understand people’s perception of what is appropriate behaviour or pro-environmentally responsible behaviour towards the environment. Below is how the research was designed.

| Methodology | Design type | Data collection method | Type of analysis |
|-------------|-------------|------------------------|------------------|
| Quantitative| Survey      | Questionnaire          | Correlation and relationship analysis |
|             |             |                        | Factor analysis  |

Figure 2: Methodology and tool for analysis

3.2 Questionnaire design
The questionnaire was designed taking into consideration of the yes bias tendency that has characterized previous research questionnaires on environmental consciousness. The questionnaire was based on environmental awareness in the daily lives and activities on the fact that people readily reveal PEBs without regard to the environment. Twenty-five (25) statements were made, and respondents were asked to make a choice between and among a five-point Likert scale where strongly agree = 5; agree = 4; Neutral = 3; disagree = 2; strongly disagree = 1.

The question asked how respondents emphasized environmental issues, who they think is responsible for the environmental problems, the extent to which they think their actions and inactions affect PEBs, and their source of environmental information. The questionnaire was administered in the Buea municipality of Cameroon in February 2020, where 100 respondents willingly responded to its statements. Some of the respondents preferred to answer the questionnaire themselves; whiles others needed it to be administered to them.

3.3 Tools for analysis
To scrutinize the attitude-behaviour gap further, this research seeks to employ a survey questionnaire using both negative and positive prompts. The survey contains questions that probe the intentions and actions of respondents to determine whether people perceive or see certain behaviour as good or bad to save the environmental mess created due to our actions and inactions. The study used statistical tools such as Statistical Program for Social Sciences (SPSS) and Microsoft Excel for data analysis.
4. Results and Discussions

4.1 Factor Analysis

4.1.1 Psychological factors affecting environmentally responsible behaviour based on factor analysis

This study shows that psychological factors were grouped into five items for factor analysis. Table 7.2 groups the environmental statements under each factor that were identified. All questions related to the factor “attitude towards the environment” were reversed to be in conformity with the other statements. In all the factors, a higher score would mean that from the psychological point of view, the proportion of the sampled population has a negative attitude towards the environment, and for that, their actions, intentions and behaviour do not favour the environment.

**Factor A** corresponds to statements to assess one’s sense of personal responsibility or environmental issues. Statements such as B8: Companies and industries should take more efforts than individuals to improve the environment; B9: Individual action will not improve the environment; B10: I do not think my behaviour is responsible for global warming, etc. This factor analyses the psychological factors that show low responsibility awareness of oneself. From table 7.3, 40% of the sampled population indicated that psychological factors that affect low personal responsibility awareness of oneself are on the increase.

**Factor B** deals with people attitudes towards the environment in general. The following statements were used to make the assessment: B2: My Pro-Environment Behaviours (PEBs) are based on environmental consciousness; B5: Environmental issues are important problems to be solved; B13: PEBs should be adopted even if they are bothersome; B17: Individual action is important to solve environmental problems, etc. The statements here regard the psychological factors of a person having a high interest in environmental consciousness. With 30.50% of the population scoring a high mark in this factor shows that approximately one-third of the population have a negative attitude towards the environment.

Statements related to **factor C** assess our daily activities that either exhibit either pro-environmental behaviour or otherwise. The following statements were used, B12: When purchasing (e.g., energy, resources, waste), I do not particularly care about the environment; B15: Even if they are good for the environment, I avoid PEBs because I do not want to be inconvenienced; B20: The solution to global warming will come about without my efforts, etc. The proportion of people with a high C score is deemed not to care about the environment when purchasing. 36.20% scoring high mark indicates that environmental awareness may still be high, but more than a third’s behaviour does not correspond with their level of awareness.

**Factor D** deals statements that relate to the prospects of others in relation to environmental issues were assessed using statements like B7: I cannot understand a person who is enthusiastic about environmental activities; B13: I will not display PEBs when I do not have the attention of others or society; B23: I display PEBs depending on whether others are paying attention to my behaviours, etc. A higher D score means that people exhibit PEBs depending on the fact that they may feel good or are being observed by others. Approximately one-third (30.83%) react positively to the environment when they observe that they are being watched by others.

And finally, **factor E** assess the sources of environmental information available to people to make an informed decision. Statements such as the following were used, B4: I do not know how much media information on the environment is reliable; B18: There is not enough useful information on adopting PEBs; B19: Honestly, I do not know what behaviours are good or bad for the environment, etc. Approximately half (48%) of the sampled population scored a higher mark due to a lack of reliable environmental sources of information.

### Psychological factors affecting pro-environmental behaviours

| Factors                             | High score (%) | Low score (%) |
|-------------------------------------|----------------|---------------|
| A Personal responsibility           | 40.00          | 60.00         |
| B Attitude towards environment     | 30.50          | 69.50         |
| C Daily life related to environmental awareness | 36.20          | 63.80         |
| D Caring about the prospects of others | 30.83          | 69.17         |
| E Environmental information        | 48.00          | 52.00         |

Source: Authors own
Psychological factor score meaning

| Factors                              | High score                                                                 | Low score                                                                 |
|--------------------------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------------|
| A Personal responsibility            | Lack of responsibility of individual behaviour for the environment          | High sense of responsibility of individual behaviour for the environment  |
| B Attitude towards environment       | Shows a low interest in environmental issues                                | Shows a high interest in environmental issues                               |
| C Daily life related to environmental awareness | Individual have a low awareness                                            | Individual have a high awareness                                           |
| D Caring about the prospects of others | People act only if being observed by others.                               | People act regardless of attention from others or society                  |
| E Environmental information          | Insufficient information                                                   | Sufficient Information                                                     |

Source: Authors own

4.2 Correlation analysis

Table 7.5 presents the correlation coefficient of the response of the 25 statements. In factor analysis, all questions/statements that relate to a factor are expected to correlate strongly, whiles a weak correlation is expected to be seen in variables that do not belong to the same factor. The determinant in factor analysis demonstrates whether a factor correlation exists or not. A determinant of more than 0.001 means that there exists a correlation. From table 7.5, the determinant gives 0.003, that is, more than 0.001, indicating a correlation. A Kaiser-Meyer-Olkin Measure of more than 0.5 is acceptable to measure the adequacy of sampling. Table 7.6 presents a Kaiser-Meyer-Olkin Measure of 0.597 to indicate the acceptability of the sampling.

Error! No text of specified style in document. Correlation matrix of 25 environmental issues
|   | - | - | 0 | 0 | 0 | 0.1 | 0 | 1 |
|---|---|---|---|---|---|----|---|---|
| 1 | 0 | 0 | 0 | . | . | . | 9 | . |
| 3 | . | . | 0 | 0 | 0 | 0 | 0 | 0 |
|   | 1 | 1 | 0 | 2 | 2 | 7 | 4 | 0 |
| 4 | 5 | 1 | 4 | 5 | 1 | 4 | 5 | 1 |
|   | B | - | - | - | - | 0 | 0.1 | - | 0 | 1 |
|   |   | B | - | - | - | . | 9 | 0 | . |
| 7 | . | . | . | . | . | . | 2 | 0 |
|   | 1 | 0 | 1 | 1 | 1 | 6 | 0 | 3 | 0 |
|   | 5 | 8 | 1 | 2 | 0 | 7 |
|   | B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 |
|   | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 |
| 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   | 4 | 2 | 6 | 0 | 9 | 4 | 1 | 0 | 0 |
|   | 2 | 9 | 6 | 9 |
|   | B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 |
|   | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 |
| 2 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 |
|   | 7 | 1 | 2 | 3 | 2 | 0 | 0 | 1 | 1 |
|   | 2 | 3 | 9 | 4 |
|   | B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 |
|   | 0 | 1 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 2 |
|   | 7 | 0 | 0 | 1 | 1 | 7 | 7 | 2 | 4 | 8 | 9 |
|   | 0 | 5 |
|   | B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 |
|   | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 |
| 1 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 9 | 0 |
| 6 | 2 | 8 | 4 | 4 | 0 | 2 | 0 | 2 | 2 | 6 |
|   | 5 | 2 | 5 | 7 |
|   | B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 |
|   | 2 | . | 0 | 0 | 0 | 0 | 0 | 5 | 1 | 0 |
| 2 | 3 | 1 | 1 | 1 | 2 | 0 | 0 | 0 | 0.1 |
|   | 1 | 0 | 2 | 4 | 3 | 1 | 1 | 1 | 3 | 2 |
|   | 5 | 1 | 2 | 2 |
|   | B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 |
|   | 1 | . | . | . | 0.0 | 0 | 0 | 1 | 9 | 6 |
| 0 | 1 | 0 | 1 | 2 | 1 | 8 | . | 1 | 3 |
|   | 7 | 2 | 3 | 1 | 5 | 3 | 0 | 0 | 1 | 9 | 1 |
|   | 6 | 5 | 6 |
|   | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.1 | 0.0 |
|   | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 8 |
| 4 | 1 | 0 | 1 | 2 | 0 | 0 | 1 | 0 | 2 | 0 |
|   | 6 | 0 | 4 | 3 | 7 | 0 | 1 | 0 | 2 | 1 |
|   | 1 | 3 | 3 | 4 |
|   | B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.1 |
|   | 1 | 0 | 1 | 1 | 1 | 9 | . | 1 | 0 |
| 7 | 9 | 7 | 5 | 2 | 6 | 4 | 0 | 0 | 1 | 0 | 1 |
|   | 7 | 0 |
|   | B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.1 |
|   | 3 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 0 | 1 | 0 | 5 | 5 | 1 | 6 | 5 | 0 | 2 | 0 | 0 |
|   | 3 | 7 | 0 |
|   |   | 1 | 0 | 1 |
|   | B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.2 |
|   | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 4 |
| 3 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 7 | 5 | 5 | 1 | 6 | 5 | 0 | 2 | 0 | 0 |
|   | 3 | 7 | 0 |
|   |   | 1 | 0 | 1 |
|   | B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.3 |
|   | 2 | . | . | . | 0.1 | 0 | 0 | 4 | 8 | 9 |
| 4 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 |
|   | 2 | 7 | 8 | 7 | 9 | 2 | 1 | 0 | 2 | 1 |
|   | 2 | 9 | 2 |
|   |   | 8 | 8 |
|   | B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.1 |
|   | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 | 7 | 0 | 6 | 4 | 2 | 0 | 0 | 3 | 4 | 0 |
|   | 7 | 0 | 2 | 0 | 0 |
|   | 8 | 8 | 8 | 6 | 0 | 8 | 2 | 6 | 0 | 8 |
|   | 9 | 9 | 9 | 9 | 9 | 9 |
|   | B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | -0.08 |
|   | 1 | . | . | . | . | . | . | 0 | 0 | . |
| 2 | 0 | 0 | 2 | 0 | 0 | 6 | 0 | 0 | 9 | 8 |
|   | 4 | 9 | 5 | 2 | 2 | 5 | 7 | 1 | 5 | 0 | 0 |
|   | 0 | 7 | 6 | 4 | 9 |
Factor Analysis of Psychological Factors Affecting Environmentally Responsible Behaviour: Evidence from Buea Municipality, Cameroon

4.3 Factor analysis stratified by demographic features

4.3.1 Low personal responsibility
From table 7.7, the older generation has the lowest personal responsibility as they seem to be getting closer to their graves and, for that matter, careless about the environment. In reality, they are supposed to care more than the younger generation since they have the financial muscle. Those aged under 40 years account for 31% of those with low personal responsibility, while those above 40 years’ account for the remaining 69%. Due to students’ exposure to the environment, only 8% were found among those with low personal responsibility. Those in full-time employment seems to care less about the environment; they constitute 23% of those with low personal responsibility.

4.3.2 High interest in attitude
The younger age group of less than 40 years, mostly students in the junior high, senior high and tertiary, demonstrate a high sense of interest in attitude towards the environment than any other age group, occupation group, and educational group. In this sense, being young, educated or still in school makes you highly interested in a favourable attitude towards the environment.

4.3.3 Low awareness in daily life
Demonstration of low awareness in daily life seems to be even across ages, gender, occupation and educational level, with the exception of being a student and being in a tertiary institution. The two exception group represent the students and those in the tertiary institution. This confirms the earlier link with regards to those with a high interest in attitude towards the environment.

4.3.4 Care about the judgement of others
Those who would only exhibit PEBs because they feel judged by others or care about the environment because someone may be looking at the person are lower among the 15-20-year group and higher among the 31-40-year group. The males are caught in this circle as 53% of them only show PEBs because they care about the judgment of others compared to 47% of females.

4.3.5 Insufficient environmental information
Insufficient environmental information was the highest psychological factor affecting environmentally responsible behaviour. It is highest among the housemakers and lowest among students in the occupation category. Educational level influences the sources of environmental information available to the people as it is very low among those in the tertiary and the senior high school.
Table: Psychological factors stratified by demographic characteristics in percentages

|                          | Low personal responsibility | High interest in attitude | Low awareness in daily life | Care about judgement of others | Insufficient environmental information |
|--------------------------|-----------------------------|----------------------------|-----------------------------|---------------------------------|-------------------------------------|
| **Age: 15-20**           | 9                           | 28                         | 22                          | 8                               | 10                                  |
| **21-30**                | 12                          | 20                         | 18                          | 10                              | 13                                  |
| **31-40**                | 10                          | 23                         | 10                          | 26                              | 15                                  |
| **41-50**                | 21                          | 10                         | 20                          | 16                              | 12                                  |
| **51-60**                | 20                          | 14                         | 15                          | 22                              | 20                                  |
| **60+**                  | 28                          | 5                          | 15                          | 18                              | 30                                  |

| **Gender: Male**         | 51                          | 43                         | 52                          | 53                              | 50                                  |
| **Female**              | 49                          | 57                         | 48                          | 47                              | 50                                  |
| **Occu: student**       | 8                           | 23                         | 5                           | 18                              | 8                                   |
| **Retired**             | 14                          | 13                         | 28                          | 10                              | 15                                  |
| **Housekeeper**         | 14                          | 13                         | 23                          | 10                              | 26                                  |
| **Self-employed**       | 14                          | 10                         | 13                          | 13                              | 20                                  |
| **Unemployed**          | 12                          | 8                          | 10                          | 9                               | 10                                  |
| **Employed full-time**  | 23                          | 21                         | 11                          | 20                              | 11                                  |
| **Employed part-time**  | 15                          | 12                         | 10                          | 20                              | 10                                  |
| **Education: None**     | 25                          | 8                          | 25                          | 9                               | 25                                  |
| **Primary**             | 24                          | 11                         | 20                          | 12                              | 25                                  |
| **Junior High Sch.**    | 15                          | 20                         | 21                          | 18                              | 23                                  |
| **Senior High Sch.**    | 16                          | 26                         | 13                          | 23                              | 8                                   |
| **Tertiary**            | 2                           | 23                         | 6                           | 24                              | 4                                   |
| **Others**              | 18                          | 12                         | 15                          | 14                              | 15                                  |

Source: Authors own

4.4 Major findings based on literature and fieldwork

1. Factor A analyses the psychological factors that show low responsibility awareness of oneself. 40% of the sampled population indicated that psychological factors that affect low personal responsibility awareness of oneself are on the increase.

2. With 30.50% of the population scoring a high mark in the factor B shows that approximately one-third of the population have a negative attitude towards the environment.

3. The proportion of people with a high C score is deemed not to care about the environment when purchasing. 36.20% scoring high mark indicates that environmental awareness may still be high, but more than a third’s behaviour does not correspond with their level of awareness.

4. A higher D score means that people exhibit PEBs depending on the fact that they may feel good or are being observed by others. Approximately one-third (30.83%) react positively to the environment when they observe that they are being watched by others.

5. Approximately half (48%) of the sampled population scored a higher mark due to a lack of reliable environmental sources of information.

Large temporal and geographical distances account for the unclear reason of the relationship between behaviour, climate change and its environmental impact. People have become non-adaptive to the challenges of climate change due to this. From the evolutionary point of view, evolutionary adaptations and cognitive heuristics (exploratory) has failed to understand the human-environment relationship (Griskevicius, Cantú, & Van Vugt, 2012; Van Vugt, Griskevicius, & Schultz, 2014). Based on this, it is believed that anti-environmental behaviour has had an evolutionary basis (Griskevicius et al., 2012; Van Vugt et al., 2014).

The reason for low personal responsibility as the explanation of the factors relates to the value people place on individual gratification than a collective one, but the environmental issues and problems are global and have to be dealt with through the
collaborative efforts of all. The major difficulty in achieving environmental sustainability is the unwillingness to forgo personal gains in favour of collective glory. Questions related to our inability to take personal charge of the environment hampers a more sustainable and desirable lifestyle since people see the temporal distance between their today's behaviour and that of the environmental gains in the future as stretched over generations.

Group and social behaviour are influenced by cognitive exploratory (Engler, Abson, & von Wehrden, 2019). The statements that relate to customs to PEBs seems to impose PEBs on people to achieve environmental sustainability in collective terms, but people turn to favour their personal interest than that of the community.

Another important psychological factor that makes people feel reluctant to put the environment first is the fact that there is an imbalance between giving and receiving favours since most people expect reciprocity in giving out of forfeiting something. The imbalance makes people compromise their environment, health and well-being.

5. Recommendations
The above assessment from literature to fieldwork and its analysis aimed at investigating people's perceptions of what is deemed as appropriate behaviours towards the environment and investigating the psychological factors and pro-environmental behaviours in daily life have the following as recommendations. Furthermore, it seeks to discover the fundamental reasons for the unfriendly human behaviour towards the environment and suggest ways to shape people's emotional and cognitive thinking, which could be translated into practice to save the degrading environment.

- Policies geared towards making sustainable behaviour the social default in our society. The development of sustainable behaviour as a social norm becomes the implicit rules that govern environmentally responsible behaviour.
- Policies aim at communicating normative information as research shows people respond positively to behaviour, and imitating such behaviour becomes easy.
- The provision of direct social proof through normative information shows a large of people promoting “eco-friendly behaviour in public”.
- Policies to encourage positive social cues for sustainability must be enacted. This can take the form of nods of encouragement or compliments for exhibiting environmentally responsible behaviour. Other ways could be to tell citizens to notice an environmentally responsible behaviour and to reinforce them with positive cues such as words of support, smiles, compliments, etc. Giving negative cues to unfriendly environmental behaviour should be encouraged but with caution.
- Provide an opportunity for people to demonstrate environmentally responsible behaviour.
- Provide an opportunity to create and support networks that could spread environmentally responsible behaviour to ensure collective environmental responsibility
- Expanding the definition of sustainability to go beyond “eco-elite” to include not only those who have been tagged as friends of the earth.

6. Conclusion
A survey on environmental awareness and perceptions of environmentally responsible behaviour in daily life was conducted in the Buea municipality of Cameroon. Three kinds of behaviours were included to investigate the link between the level of consciousness and daily life behaviour. These are behaviours people consider as generally apt to sustain the environment, behaviours that respondents are not sure whether they were good or bad for environmental sustainability, and behaviours considered good but are likely to disagree. The survey was administered to 100 residents of the Buea municipality from all walks of life. Both people’s negative and positive behaviours towards the environment were analyzed as well as the effect of demographic characteristics on responses.

The questionnaire results with both negative and positive prompts showed that the rate of people's consciousness toward the environment was lower compared to other surveys. Five psychological factors were identified and stratified by demographic features: low personal responsibility, high interest in attitude, low awareness in daily life, care about the judgment of others, and insufficient environmental information. Factor A analyses the psychological factors that show low responsibility awareness of oneself. 40% of the sampled population indicated that psychological factors that affect low personal responsibility awareness of oneself are on the increase. With 30.50% of the population scoring a high mark in the factor B shows that approximately one-third of the population have a negative attitude towards the environment. The proportion of people with a high C score is deemed not to care about the environment when purchasing. 36.20% scoring high mark indicates that environmental awareness may still be high, but more than a third's behaviour does not correspond with their level of awareness. A higher D score means that people exhibit PEBs depending on the fact that they may feel good or are being observed by others. Approximately one-third (30.83%) react positively to the environment when they observe that they are being watched by others. Approximately half (48%) of the sampled population scored a higher mark due to a lack of reliable environmental sources of information.
The level of environmental consciousness was very low in the survey with negative prompts than in positive prompts questions. The results of the analysis suggest that gender, age, and occupation have a strong relationship with environmental consciousness. The area of residence of respondents had almost no influence. The survey was made up of negative prompts questions to remove the “yes-bias” propensity of positive asked stimuli. Hence dividing attitudes into positive or negative positions was a difficult task. This kind of study indicated a disparity between interest in the environmental issue in general and awareness in daily life and activity.

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