

Climate Change Risk Perception Among University Students in Cameroon

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Abstract

This manuscript assesses the climate change risk perception (CCR) of the University of Yaoundé1 (UY1)'s students, via the CCRPM of van der Linden (2015) and Xie et al. (2019), as a novelty. So, 559 students have been administered a questionnaire, via a convenient sampling. The JASP Software, multiple regressions, t- test and ANOVA, procured analysed data. As findings, cognitive factors (cause and response-knowledge, mitigation response inefficacy); experiential processing (affects and personal experience); sociocultural factors (descriptive and prescriptive norms, biospheric, altruistic and egoistic values; and some demographics (age, education level, and faculty) have shown their prediction in CCRP. Eventually, the CCRM in a Cameroonian context explains a total variance of 64%, approximating the 68% from its original UK's version. Among all factors, Affects explain the highest (25.65%) and Extreme Weather Events Experience, the lowest variance (2%) in CCRP. Interestingly, this survey fills the gap of the rarity of CCRP data in Africa, Cameroon in particular and in social psychology in general. It also opens an avenue of futuristic researches, implications and pertinents recommendations, as a *si ne qua non* for Cameroon to efficiently achieve its main goal, of 'emergent country' in 2035, all along with the UN, in its 2030 Agenda of 17 SDGs.

Keywords: Climate Change, Risk, Perception, Pro-Environmental Behaviours, University, Yaoundé.

I. INTRODUCTION

Out of the Corona-19 crisis that has remarkably upturned the world since December 2019 ; the world suffers from another plague which is climate change (CC). CC is a process of continuous changes in the climate system over time and over a wide region due to human activities, mainly with a minor contribution from natural processes (Ghanem, 2023). For the World Bank Group (2021), Global CC has already resulted in a wide range of impacts across every region of the earth as well as many economic sectors. Accordingly, Penlap et al. (2004) note that the climate of Cameroon has been changing, with Cameroon's economy rapidly growing in recent years ; facing growing environmental impacts to its land, air and water quality (Achu, 2022). Accordingly, Tiafack et al. (2022) reveals that average daytime temperature is rising, with a rapid rate of urbanization in Yaoundé. Many studies have been positing that CC is anthropogenically induced. De Gaaf et al. (2005) could be right to state that many people suffer from "affluenza", an unsustainable addiction to consumption and materialism. To this, the UN Environment Program (2019) posits that "We are producing and consuming

more than ever before, and we are generating more GHGs as a result, as well as air pollutants [...]". Analogously, numerous surveys have already evidenced the growth of environmentally harmful behaviours in Cameroon, in several angles namely : -wood consumption (e.g., Egalame & Nforngwa, 2017; Gbetnkom ; 2005 ; Eba'a Atyi et al., 2016) - meat consumption (e.g., Tilman and Clack, 2014); Wears (e.g., The Good Trade, 2022 ; Nielsen et al., 2022) - littering (e.g., Kuitcha et al., 2008 ; Ngamaleu Njengoué and Mezo, 2021) - vehicles usage (e.g., Matcheubou et al., 2009; Tambe et al., 2012) - farming (e.g., Marcoty, 2019; Epule et al., 2014; Chimi et al., 2022) - air-conditioning and fan use usage (e.g., Bolakhe (2022).

Over the years, several disciplinary orientations have been surveying on CC such as Geography, Physics, geology, but few have taken a psychological orientation, in a Cameroonian context. Maeilla et al. (2020) state : "currently, CC represents an existential, physical, and psychological threat". Moreover, most research has been impact- oriented or adaptation-oriented, with nearly no CC perception-oriented study; to the best of our knowledge. Opitz-Stapleton et al. (2021) note that

perceptions are central to whether we act and how we act. It is thus vital to assess the CC perception of people first in a society, before envisaging any action for. Regarding this, Lazo et al. (2000) state that although CC is undoubtedly a serious risk to all life on earth, including the human species, not all people equally perceive CC as a risk. This is why Conserve Energy Future (2023) notes that CC is really, something serious that people downplay a whole lot ; and is changing each and every day. Over the years, the aspect of climate change risk perception (CCRP) has been attracting several scholars. Alongside, Sjöberg (2002b) stresses the need for a CCRP model which is more explanatory. Such a thirst seems to have been quenched by the CCRPM of Van der Linden (2015), which has been drawing much attention, and is viewed by Nyberg (2021) as a multidimensional and complicated phenomenon. It supplies a new conceptual framework that merges different fragmented theoretical perspectives into a cohesive whole, that inhabits considerable explanatory power for human risk perception on a broad range of phenomena (van Eck et al., 2020). This CCRPM has been tested in numerous countries, but with just a few studies in Africa. Suitably, van Eck (2020) notes that the CCRPM characterizes public perceptions, and that little is known about the model explanatory power in other contexts.

II. MEASURES OF THE CCRPM

The CCRPM of van Der Linden (2015) consists of four set of factors: cognitive, experiential, socio-cultural and socio-demographic factors.

A. Cognitive Factors of Climate Change Risk Perception : Knowledge and Mitigation Efficacy

Cognitive factors here are related to triadic knowledge, as influencers of CCRP. Wang and Zhan (2021) pose that environmental knowledge is considered to be one of the most important factors affecting university students' pro-environmental behaviour (PEB). The CCRPM thus encompasses cause, impact, and response knowledge. Some studies assessed the knowledge people hold about CC and found it as a significant positive predictors of CCRPs (e.g., Sundblad et al., 2007 ; Hidalgo & Pidalno, 2010 ; Milfont, 2012). Closely, some studies found that cause -knowledge (Van Der Linden, 2015 ; Soucy et al., 2021), impact knowledge (van der Linden, 2015 ; van Eck et al., 2020), and response knowledge (Lacroix et al., 2020 ; van Eck et al., 2020 ; Soucy et al., 2021 ; Xie et al., 2019) are the significant positive predictor of CCRP. Tobbler et al. (2012) in Switzerland found that both cause-knowledge and impact-knowledge are positively correlated to CC concern, including Siegrist (2012) in Sweden.

While extending the CCRPM, Xie et al. (2019) added Mitigation Response Inefficacy, as considered by this present survey. They term it as the extent to which individuals know about the causes, impacts and effective responses to CC. The concept of 'response inefficacy' stems from Gifford (2011) in his seven "Dragon of

inaction" with "limited cognition", manifesting itself as low perceived behavioural control or inefficacy. He views inefficacy beliefs as arising from the perception that CC is an entrenched, global problem, and therefore individual behaviours, or even the mitigation efforts of a single group or nation, will have little effect. Parallely, Xie et al. (2019) exemplified that a commonly-cited reason for not adopting better climate change-related behaviours is the belief that changing one's own behaviour will not make a difference, as also stressed by Fielding and Head (2012). Van der Linden (2015) apprehends CC as a collective event that threatens and elicits efficacy at the societal or collective level because it affects a large number of people and requires collective efforts to mitigate it. Likely, Bostrom et al. (2019) stated: "a growing body of research demonstrates that believing action to reduce the risks of CC is both possible (self-efficacy) and effective (response efficacy); is essential to motivate and sustain risk mitigation efforts". In the same vein, Xie et al. (2019) rather considered the reverse side of efficacy known as mitigation response inefficacy. After such an addition, they increased the variance in cognitive factors by 42% compared to the 14% of the original CCRPM. They posit that those who perceive greater response inefficacy about CC mitigation actions also perceive less risk. Their extended CCRPM explained 72% of risk perception variance, 3% more than the original CCRPM. So, it has been judicious to consider the factors of the early CCRPM, with the mitigation response inefficacy Xie et al, to assess CCRP in this survey.

B. Experiential Processings of Climate Change Risk Perception : Affects and Personal Experience with Extreme Weather Events.

Leisorowitz (2005) views affect as a person's good or bad, positive or negative feelings about a specific object, image or idea. In the CCRPM of Linden (2015), effect is the extent to which participants view CC as unpleasant, unfavourable, and negative. Empirically, some studies showed that affects are important predictors of CCRP (e.g., Lacroix et al., 2020 ; van Eck et al., 2020 ; Soucy et al. 2021 ; Xie et al., 2019 ; Linden, 2015). Contrarily, Sjöberg (2006) explained a very little variance in risk perception, predicted by effects. Climate change has been felt by all individuals now (Kundariati et al., 2024), even in the Cameroonian context as already reported by several CC researchers. Personal experience (PE) is a dichotomous measure of whether or not a participant had experienced any extreme weather events (EWE) in their local area within the last five years (Xie et al., 2019). PE is thought to influence risk perception through its ability to elicit vivid emotions that strongly influence judgments of risk perception (Van Der Linden, 2015). Lai et al. (2021) suggest that the perceptions and adaptation practices of climate change-induced extreme events are critical to community sustainability and resilience; and that the gap between perceived and actual risks that communities experience creates challenges for policy makers in achieving sustainability goals. Van Der Linden found that those who had experienced an EWE tended to have higher CCRP than those who had not.

Farrokhi et al. (2020) indicate that participant's perception of CC is more related to people's perception of EWE throughout their lives. Castellini et al. (2024), Eck et al. (2020), and Elshirbiny (2018) suggest that experiential processes are the most powerful predictors of the total variance in CCRP. However, Lacroix et al. (2020); Soucy et al. (2021); Nyberg (2021); and Withmarch (2008) accord on the limited power of experiential factors on CCRP.

C. Socio-Cultural Factors : Norms and Values

In the CCRPM, socio-cultural factors, are based on the argument that understanding CCRP must include broader forces that shape values and social norms. Revis & Sheeran (2003) define injunctive norms as representing the individual's perception of what important others (i.e., parents, peers, and teachers) expect them to do or not to do, whereas descriptive norms are based on their perception of those important others' own behaviour. Castellini et al. (2024), van der Linden (2015), Soucy et al. (2021) and Gilbert & Lachlan (2023) have identified these two norms as significant predictors of CCRP; while van Eck et al. (2020) and Xie et al. (2019), have identified only descriptive norms as predictors, and Lacroix et al. (2020) with prescriptive norms as positive predictor.

In the CCRPM, values as psychosocial factors are susceptible to influence people's attitude and behaviour towards social objects. They are internalized cognitive structures that guide choices by evoking a sense of basic principle of right and wrong, a sense of priorities, and a willingness to make meaning and see patterns (Oysterman, 2015). For Gilbert & Lachlan (2023), what is considered a risk is informed by the relevant cultural context that clarifies what is important or of value. Fundamentally, Schwartz (1996) posits that “ human basic values are endowed with content and universal structures found in all cultures”; “desirable and trans-situational goals, varying in terms of importance, and serving as principles guiding people lives“. Several studies show that individuals with higher biospheric values (BV) have higher CCRP (e.g. De Groot & Steg, 2007 ; van der Linden, 2015 ; Xie et al., 2019 ; van Eck et al., 2020).

Martin (2023) posits that (BV) have been shown by extant research to be an important antecedent of individual's perception of the risk and consequences related to CC. He furthers that there seems to be variation in the strength of the BV-CCRP association between societies. He also reveals that the link BV-CCRP was stronger in wealthier and more individualistic societies compared to less wealthy or more collectivistic. Consequently, in a low-income country like Cameroon, poverty might be a negative moderator of the values-CCRP link. Van Eck et al. (2020) and Linden (2015) found that egoistic, altruistic, and biospheric values are significant predictors of CCRP. Overall, socio-cultural influences showed 19.3% in the van der Linden (2015) CCRPM, 34%, with Eck et al. (2020), 5% both in

England, and Xie et al. (2019) with 21% in Australia. Despite these predictions, Elshirbiny (2018) in Egypt, Prati et al. (2018), Nyberg (2021), and Eck et al. (2020) have reported a contrary effect.

D. Socio-Demographic Determinants of Climate Change risk Perception

The CCRPM considers demographics such as gender, party affiliation, income, and level of education, with 6% of explanatory variance ; with only education and religion as non-influencer of CCRP. Elshirbiny (2018) in Egypt showed that age, sex, city of residence, level of education could be the predictors of CCRP. In Xie et al. (2019) gender, higher education, and political party was the CCRP predictors. Van Eck et al. (2020), in England also experienced some of these factors, including country of residence as predictors. Higher risk perception also showed a relatedness with higher levels of education in some studies (e.g., Ayal & Filho, 2017 ; Liu et al., 2018), but other studies indicated the reverse with lower education (e.g., Barrett & Bosack, 2018). In term of gender, Liu et al. (2018) and Lujala et al. (2015), are unanimous on the correlation between male and female in risk perception, compared to Castellini et al. (2024) and Sujakhu et al. (2016). Slovic et al. (1994) rather found risk perception differences among white women and men, with men showing considerable less concern and more acceptance of risk. Concerning religion, many studies indicate that religiosity/religion lower CCRP, decreases confidence in scientists (e.g. Gouchat, 2012), increases climate change skepticism (e.g., Zouh, 2015 ; Ecklund et al., 2016), and risk perception (e.g., Schneidernauer et al., 2021). Though many surveys have not yet tested the religion –CCRP link, the rise of religion in Cameroon, as a developing nation, might be depicting that many believers are focused on a God they expect to satisfy their basic needs. Consequently, they might even perceive CC as a chastisement to mankind. This can possibly lead to a fall in CCRP, as noticed here. Demographics in general have no significant impact on CCRP as shown by several CCRP studies, and reiterated by Gilbert and Lachlan (2023).

➤ Aims of the Study

This study assesses the largely unquestionable issue of Climate Change Risk Perception in a Cameroonian context, where most studies have just been impacted and adaptive-oriented. In fact, developing policies of climate risk adaptation, awareness of public attitudes, beliefs, and perception is essential (Farrokhi et al., 2020); and developing CC response and measures depend on understanding how people make sense of local climate and how they interpret related risks and opportunities (Becken et al., 2013). Due to the scarcity of data in Africa, as posited by many scholars, this study wanes such a gap in Africa, central Africa and Cameroon in particular. It is also a route for promoting ‘psychology’ in general and ‘environmental psychology in Cameroon, as vital for solving the waxing societal issues. In fact, this was reiterated during Cameroonian Psychological Society

(SOCAPSY), in July 2023, during the first National Congress of Psychology; cementing and legalising the profession of ‘psychologist’. This study thus aims to answer the question what are the predictors of climate change risk perception among Cameroonian students? Cameroon being a developing country where the impacts of CC are projected to be serious as the case with Elshirbiny (2018) in Egypt.

III. METHODOLOGY

A. Study Area

Referring to the World Bank Group (2021), Cameroon is a lower-middle income country situated on the western central coast of Africa along the Gulf of Guinea, extending North to Lake Chad. From its rich natural heritage, Cameroon ranks fourth in floral diversity and fifth in faunal diversity within the African continent. The University of Yaoundé I (UY1) is an academic institution (i.e., with Bachelor, Master, Doctorate and professional training) of higher education situated at the political capital of Cameroon called Yaoundé. The UY1 is situated within the area of Yaoundé III sub-division and precisely at the neighborhood called Ngoa - Ekellé. It encompasses several faculties and professional schools in both arts and science.

B. Sample Population

Via a convenient sampling, 589 students from the UY1 have been administered a closed-ended questionnaire stemming from Van Der Linden (2015) and Xie et al. (2018) for the assessment of their CCRP. It is noteworthy that the CCRP scale was translated from English to French by professional translators, which proved an acceptable inter-rater reliability, given that most of the respondents are the Francophones. Respondents here are within the age gap 16 to 40 and above (Mean = 1.5, SD= .78). Both males and females are involved, at a rate of 47.58% and 50.98% respectively (Mean = 1.55, SD= .59). The sample also involves students of all levels with the majority stemming from level 1, 2 and 3 at approximately 23% (Mean =3.1, SD=1.55). All faculties and professional schools have equally constituted the sample, with the majority stemming from the faculty of Arts Social Sciences and Sciences (Mean =2.6, SD=1.73). About 50% of students come out to be Christians following with 41.86% of Muslim (Mean= 1.71, SD=1.0).

C. Results

As quantitative and ordinal data, hierarchical regression analysis has been employed for data analysis, via the JASP software. This has enabled us to evaluate the extent to which cognitive, experiential, socio-cultural and demographic factors are the predictors of climate change risk perception

Table 1 Regression Data on the Predictors of Climate Change Risk Perception

Personal Risk Perception				Social Risk Perception				
Independent variables	R ² adjusted	β	t	p	R ² adjusted	β	t	p
Impact-knowledge	.005	.079	1.87	.061	.001	.055	1.28	.19
Cause- knowledge	.039	-.203	-4.88	.001	.037	-.19	-4.76	.001
Response- knowledge	.062	-.25	-6.15	.001	.064	-.25	-6.27	.001
Self-inefficacy mitigation	.03	-.17	30.07	.001	.029	-.17	38.38	.001
Generalised affects	.21	.46	12.51	.001	.26	.51	14.21	.001
Personal experience	.020	.14	3.52	.001	.010	.109	2.58	.001
Descriptive values	.047	.22	5.33	.001	.005	.083	1.96	.05
prescriptive valued	.028	.17	4.15	.001	.008	.097	2.31	.021
Biospheric values	.077	.28	6.88	.001	.053	.23	5.69	.001
Altruistic values	.053	.23	5.77	.001	.052	.23	5.67	.001
Egoistic values	.007	.092	2.18	.03	.007	.096	2.27	.024

Note. P= p-value (probability); β = regression coefficient; t= student-t test; α =.05

Table 2 Inferential Data on Demographics: Age, Sex, Education, Faculty, Religion

Demographics	Age	Sex	Education	Faculty	Religion
	PCCRP	SCCRP	PCCRP	SCCRP	PCCRP
F	8.42 (3)	5.55 (3)	.58 (3)	.8(3)	2.39(5)
P	.01	.01	.62	.49	.036

Note: p= p-value; PCCRP= Personal Climate risk Perception; SCCR= Social Climate risk Perception; Bracketed Numbers () are Degrees of Liberties. Alpha=.05.

D. Discussion and Conclusion

As noted, the main aim of this paper is to assess the psychosocial determinants of climate change risk perception (CCRP) of the UY1 students. Measures include -cognitive influencers : impact, cause and response knowledge, and response inefficacy - experiential processing : affect and experience - socio-

cultural influencers consisting of norms : descriptive and subjective norms ; including values : biospheric, altruistic and egoistic values and demographics influencers. It is thus these factors that are discussed, as significant influencers of the CCRP among the UY1 students in majority.

Regression data indicate that the impact knowledge of the UY1 students has no effect on their CCRP. This might be the reason why Lee et al. (2015) and Leisorowitz (2007) state that knowledge about CC is relatively limited in developing countries in comparison to developed ones. Likewise, Menny et al. (2011) in Germany found that a better understanding of the effects of CC, might lead to a fall in perceived hazard. Inequivalently, most surveys in the domain of CC have confirmed the prediction of CCRP by general knowledge. Such results are incongruous with Castilini et al. (2024) among an Italy sample, van Der Linden (2015) in the UK. Uniformly, Bertoldo & Bousfield (2011) suggest that people are more focused on the expression of consequences of phenomena than causes.

In this present study, cause-knowledge (CK) has a negative effect on the CCRP of the UY1 students. It implies that the more the students grow in knowing the causes of CC, the less their perception of CC as a risk. Correspondingly, van Der Linden (2015) also found knowledge of the causes of CC, as a consistent predictor of only CCRP (societal risk) ; including Tobbler et al. (2012) in Sweden and Siegrist (2012) in Switzerland. The findings of Castilini et al. (2024) Elshirbiny (2018) in Egypt show no impact of CK on CCRP at all. The CC literature reveals that the causes of CC are anthropogenic, natural, or the product of a 'plot theory' from some states in the pursuit of economic power. It is in such a sphere that Lee et al. (2015) suggest that understanding the cause of CC (i.e., anthropogenic) is the strongest predictor of CCRP, chiefly in Latin America and Europe, whereas the perception of local temperature change is the strongest predictor in many African and Asian countries. Out of Linden, some recent studies have also experienced the impact of cause-knowledge on CCRP [(e.g., Xie et al. (2019) ; Soucy et al. (2021); van Eck et al. (2020); Lacroix et al. (2020); Tobbler et al. (2012); Siegrist (2012)]. Unlikely, Brody et al. (2008) found no significant relation, while Kellstedt et al. (2008) found a negative one between general knowledge and CCRP.

The mitigation response inefficacy of the studied students has a significantly negative effect on their CCRP. It implies that the more the UY1 students exhibit inefficacy, the less their CCRP. In relation to the stock of environmental knowledge, students possess, as demonstrated by several scholars, such an inadequacy might reflect the 'I don't care attitude' of the UY1 students, of apprehending CC as a risk ; within which they feel capable of acting for a mitigation. They might also be more preoccupied by other societal problems, such as unemployment and lack of basic needs, and academic success. Consistently, Solopavo (2008, p. 41) mentions that economic factors have a strong influence on people's decisions and behaviour, as connected with social, infrastructural, and psychological factors. Furthermore, the students might have reached a stage of impotence, self-helplessness or despair, which make them

believe that there are no more doable solutions for mitigating CC. Though many studies have not yet investigated the mitigation response inefficacy- CCRP's link or effect, Xie et al. (2019) in Australia found that those who perceive greater response inefficacy about CC mitigation actions also perceive less risk. Mitigation self-inefficacy in this current study has thus procured an explanatory variance of 4%, less than the 18.12% obtained by Xie et al. (2019).

Numerous surveys have revealed that affects have significant positive effect CCRP (e.g., Castellini et al., 2024 ; Eck et al., 2020) ; Linden, 2015 ; Elshirbiny, 2018 ; Smith & Leisorowitz, 2012 ; Sundblad et al., 2007), as valid in this new one with the UY1 students. Affects are very important constructs, as an individual will likely experience any effect when interacting with social objects. In other words, the more the UY1 students feel the negative havocs of CC such as sadness, worry, stress, despair, hopelessness; via heat waves and floods and so on, the more they are likely to display a waxing CCRP. This sense of affects is the wishable ones as they might likely predict the adoption of eco-friendly behaviours too. In this current study, the 26 % of explanatory variance in general affects, is greater than the 20.83% obtained in Linden (2015) and 26.30 % by Xie et al. (2019). Sjöberg (2006b) rather found a very little variance in risk perception predicted with affects ; while some studies rather disagree on the impact of affects on CCRP. The personal experience with extreme weather events (EWEs) is also a factor that many experience quite often in CC, and that affect their CCRP, according to some empirical studies [e.g., Castellini et al., 2024 ; Leisorowitz et al. (2020) ; Tezar and Setiadi (2023) ; López-Feldman & González (2022) ; Ngo et al. (2020) ; Nyberg (2021) ; van Der Linden (2015)]. Correspondingly the same impact is found among the UY1 students, with experience with EWEs having a significant positive effect on their CCRP. In other words, the more the students experience EWE (e.g., floods, high temperature), the greater their positive CCRP. Interestingly, López-Feldman & González (2022) in Mexico notices that experiencing an EWE and its consequences might make the risks associated with CC more tangible, easier to evaluate, and more salient. Despite all these findings, Ngo et al. (2020) revealed that flood experience is not the most influential driver of flood-risk related perceptions, among Vietnamese. Closely, Nyberg (2021) in Sweden finds experiences as limited in the explanatory power of CCRP, as well as Withmarch (2008) in the UK. In this present study, the 2 % variance obtained experience is close to the 1.25% of Linden (2015) and 3.77 % in Xie et al. (2018).

Findings here present descriptive norms as a significant influencer of CCRP, implying that the more the students hold positive descriptive norms towards CC, the more positive is their CCRP. In other words, the more the students perceive or see others taking actions to attenuate CC, the more their CCRP. Such predictions are in consonance with Castellini et al. (2024); Xie et al.

(2019); and Linden (2015) in the UK. Pursuant to prescriptive norms, they have have a significant positive effect on the CCRP of UY1 students. For Revis and Sheeran (2003), injunctive norms are an individual's perception of what important others (i.e., parents, peers, and teachers) expect them to do or not to do ; the extent to which an individual feels socially pressured to, view CC as a risk that requires action (Van Der Linden, 2015). By inference, the more the UY1 students feel environmental norms pressures to attenuate CC, the more their positive CCRP. On the same path, Castellini et al. (2024), Linden (2015) and Xie et al. (2019), have revealed that injunctive norms are significant positive predictors of CCRP; but with a minimal effect by van Eck et al. (2020).

Biospheric values have a significant positive effect on the CCRP of UY1 students, as supported by various surveys (e.g., Martin (2023 ; Zhou et al., 2020 ; Soucy et al. 2021 ; Zobeidi et al., 2020 ; Gilbert & Lachlan, 2023 ; Elshirbiny, 2018 ; Corner et al., 2011 ; De Groot & Steg, 2007). These findings also match with altruistic values too, meaning that some Cameroonians perceive altruistic values as vital for societal well-being. Egoistic values have a significant positive effect on the CCRP of the UY1 students. This implies that the more the UY1 students display Egoistic values, the more positive is their CCRP both at a personal and social angle. Relatedly, Smith and Leisorowitz (2012) found a lower link between self-enhancing values and CCRPs although many researchers proved Egoistic values to be rather a stronger predictor of CCRP (e.g. van der Linden, 2015). Adversely, Elshirbiny (2018) reveals that value orientations are the weakest predictors of CCRP, while Prati et al. (2018) did not see any meaningful association. In total, sociocultural factors explain 19.3% in this new study ; comparatively to the overall 16% by Linden (2015) and Eck et al. (2020) with 5% both in the UK, and Xie et al. (2019) with 21% in Australia. Withmarch (2008) survey in the UK also revealed that environmental values are a positively strong predictor CC as a salient risk and of PEB.

Within the scope of demographics, data indicate that age has a significant positive effect on the CCRP of UY1 students. This might imply that the more the student's age increases, the higher their CCRP. Similarly, Akompab et al. (2013) in Australia got the same result, with older people having the highest risk. Lacroix et al. (2020), Xie et al. (2019) and Menny et al. (2011) equally indicated that age is a significant predictor of CCRP, though with the younger people having a higher CCRP than the older ones. These results also agree with Xu et al. (2020), Elshirbiny (2018), Tezar and Setiadi (2023). Untowardly, Linden (2015), Kellstedt et al. (2008), Milfont (2012), and Sundblad et al. (2007) did not get such significance. For sex, it has no effect on the CCRP of the UY1 students ; Indistinguishably aligning with Castellini et al. (2024); Soucy et al. (2021); van Eck et al. (2020), Lacroix et al. (2020). Contrarily, sex has been identified as a significant predictor of CCRPs by van Eck

et al. (2020), van der Linden (2015), and Elshirbiny (2018). Importantly, Ogunbode et al. (2019) in their meta-analyses reveal that people who believe in the existence of CC tend to be younger, female; and partly agreeing with Flynn et al. (1994). Although studies such as Xie et al. (2019) ; Soucy et al. (2021) ; and van Eck et al. (2020) did not get any significance between education level and CCRP, this present one has indicated that it has a significant positive effect on the CCRP of UY1 students. This present finding corroborates with many other studies (e.g. Nyberg, 2020 ; Liu et al. 2018 ; Qasim et al. 2018). It goes the same with 'belonging to a faculty' which is significant both at a social and personal level of CCRP. In fact, students belonging to certain faculties (e.g. Medicine, geography) might be more close to environmental education than others. Having a clearer knowledge and mastery of environmental issues, positive CCRP, and consequent display of PEBs. Studies such as those of Taleb et al. (2021), Keresztes & Kotta (2021) confirm such a hypothesis. Much studies have not yet scrutinized the link CCRP-religion, but this current one has realised no impact of religion on CCRP ; concurring with Njengoué Ngamaleu and Mezo (2021) among this same students, in the link between religion and littering attitude. However, Lee et al. (2015) in 119 countries realised that religion relatively influences risk perceptions at national scales. It is also obvious that religious affiliation could be the highest predictor in an African country like Cameroon, where people are becoming very rooted. Unfortunately, the inconsistency of findings here might signifies that the religious affiliation of many Cameroonians are geared towards the struggle to improve their socio-economic and professional situation and not CC, for the majority.

A large majority of the findings has shown a distinction between personal and social CCRP, consistently with Linden (2015) and Elshirbiny (2018) ; though not really significant. This phenomenon might refers to a type of 'social contagion', or hypnosis, that people generally endure in social interaction, where their individuality is swallowed up by the society. Appropriately, Sjökvist and Medic (2020) note that risk perception is influenced by how risk is socially represented in people's lives, both by other people in society and by people in a close reference group (e.g., family and friends).

IV. CONCLUSION

The aim of this paper was to examine the psychosocial determinants (knowledge, affects, experience, norms, values, and demographics) of climate change risk perception (CCRP) among the UY1 students, via the CCRPM of van der Linden (2015) and Xie et al. (2018). In total, the model explained 64% in CCRP, with an additional response inefficacy factor of 4 % comparatively to the total 68 % obtained by van der Linden. Experiential processings have also topped cognitives, demographic and sociocultural factors at 25.65%. Besides, affects explained the highest variance

of 25.65% in CCRP, with the lowest in experience with extreme weather events at 2% ; regardless of demographics. In consonance with Linden and Elshirbiny (2018), this study also found a distinction between personal and social CCRP, though not really consistent in a broad view. Despite the fact that the CCRP model of Linden (2015) and Xie et al. (2019) have proved their stance in capturing the CCRP of the UY1 students, this study bears some restrictions. This study lack to investigate the interactions between the drivers of CCRP, as noted by Ruiz et al. (2020) that a deeper understanding of interactions among drivers should prove especially useful for the design of effective climate change mitigation and adaptation measures. This survey has used a sample of 559 over a population of more than 30000 students. Enlarging such a sample might be quite interesting for a more reliable generalization of findings, over university students in Cameroon. The CCRP from van Der Linden (2015) and Xie et al. (2019) here does not account for the impact of contextual factors such as income level, source of information, trust in the government and scientists, in the apprehension of CCRP. In fact psychologists emphasised on the key role of the context, as influencers of people's perception, attitude, awareness, efficacy, intention and behaviour. The four additional items added to the CCRPM model by Xie et al. (2019) for assessing mitigation response inefficacy, need additional items, in order to efficiently capture the propensity of people on their belief in behaving pro-environmentally. This study does not capture the influence of perception on people's pro-environmental behaviours, as the aim of science is to procure solutions to societal issues, not only in changing people's cognitions, but behaviours too. Notwithstanding these limits, this novel study is a kick-off for an explosion of psychological studies in a Cameroonian context, where such studies are competing rarity with gold. Moreover, this study makes room for a wide range of futuristic climate change research that are still abnormally dormant.

V. IMPLICATIONS AND FUTURE DIRECTION

Many studies posit the way CC messages are communicated can likely boost eco-unfriendly (PEBs) behaviours and poor CCRP, in a society (e.g., Hassan & Elshirbiny, 2022 ; Van der Linden, 2015). Policy-makers are thus called upon to set up strategic plans for communicating climate change contents in a way that can raise more lasting awareness, risk perception and PEBs; including some amendments in environmental education. This also implies an improvement of the socio-economic and professional situation of youths in particular by the Cameroonian State. Many would be highly focused on these aspects in a developing country like Cameroon, as they are still at the lowest of the Maslowan scale struggling with basic human needs, to the detriment of environmental issues. There is an urgent need for researchers to also scrutinize the intermediary factors that interfere the the link PEBs-CCRP ; including strategies susceptible to boost self-efficacy, norms and values, for CC mitigation 'behaviours to be triggered, as a pleasant

daily style of living. Uncovering how the public perceive climate change is a key step towards effective engagement in climate action, as noted by several studies (e.g., Hassan & Elshirbiny, 2022 ; Opitz-stapelton et al., 2021). As a novel research, this study thus needs some replications, to deeply capture the CCRP of the Cameroonians. Nascimento and Loureiro (2024), emphasise that practitioners are advised to raise public awareness of the environmental impacts of non-sustainable foods and provide tangible evidence about why sustainable foods are important for fighting climate change. Correspondingly, many studies are still lacking on the motivational factors that can urge Cameroonians to gladly privilege PEBs such as recycling, reducing meat, clothes, and electronics consumption. As already noted, this is vital, and a *si ne qua non* for Cameroon to really achieve its main goal, as 'emergent country' in 2035, all along with the UN, in the attainment of its 2030 Agenda of 17 SDGs, as well.

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