RESEARCH ARTICLE

Climate Change and Efforts to Reduce its Threat in Bangladesh: University Faculty Members' Perceptions

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ABSTRACT

Applying qualitative data, this article attempts to investigate university teachers' perspectives on climate change and their effort to mitigate the damage caused by it. With a view to achieving this goal, both primary and secondary data sources have been used. This article is qualitative in nature. Hence it employs a variety of qualitative tools, such as Key Informant Interviews (KII) and Focus Group Discussions (FGD), and is framed for analysis by the Value-Belief-Norm (VBN) theory. The research focuses on two parts of climate change, namely, climate concerns and climate actions. It finds that university teachers, in general, are not as concerned about climate change as they should be in Bangladesh, as their behavior and actions indicate regarding climate change issues. However, both academically and professionally, they attempt to raise the awareness issue among their students with next to no significant effect on them. The article suggests that the government should take positive steps to develop efficacious policies to reduce climate change hazards in the country. The research also recommends that raising more awareness about climate change among university teachers is vital so that students, future policymakers, and political leaders might be oriented towards a green and sustainable world.

1. Introduction

Today, the world is facing what some consider the greatest environmental threat to date, a phenomenon called 'climate change'

(Stern, 2006; The Intergovernmental Panel on Climate Change [IPCC], 2007 and 2013). The extreme conditions associated with it not only pose serious threats to human and animal hygiene (Huq & Ahmed, 2020); they also render many places in the world uninhabitable (Weian et al., 2014). Over the past 50 years the rate of global warming has almost doubled. Most likely, this increase is attributable to human activity (Biswas et al., 2021 and IPCC, 2007). The cry against climate change being one of the major environmental challenges at the present day (Wei and Hansen, 2014) has heightened people's awareness of the issue (Upham et al., 2009). However, despite strong scientific evidence and consensus regarding the fact of human-induced climate change (IPCC, 2007, 2013) scientists and researchers have failed to articulate the message clearly among masses (Weber & Stern, 2011).

People from various socio-economic and educational backgrounds have different ideas and perceptions about climate change (Dunlap and Jacques 2013, Rahman et al., 2014). Scholars argue that climate change perceptions are locally constructed (Bunce et al., 2010) and shaped by personal attitudes and beliefs (Haq and Ahmed, 2020). Recent studies point out that university faculty members are considered better observers about the natural environment (Salick et al., 2009). Environmental behaviour is shaped by the level of education, people's living place, and the professions they are involved in (Ayanlade and Jegede, 2016 and Rahman, et al. 2022). A few researchers say that respondents note a general increase in temperature and a decrease in rainfall in many countries across the world (Hau and Ahmed, 2020), which is supported by recent meteorological data (Hasan and Kumar, 2020). People believe that human activities are mostly responsible for recent climate change (Ahmed and Haq, 2019). Scholars identify a significant relationship among education, knowledge, and perception of climate change (Abegunde, 2017) besides climatic variations (Santos et al. 2016). Educated people are found to take effective measures to reduce climate change; such as consuming less meat and water to put less pressure on nature (Kim and Moon 2012).

Admittedly, over the last two decades, the mean temperature in Dhaka city has risen alarmingly (Lilja, 2017; Rahman, M., 2012). Recent studies predict that temperature in South Asian countries, particularly in Bangladesh, will exceed the global mean by 2030 (Haq, 2020). To date,

researchers have investigated the degree to which anthropogenic and demographic variables have impacted climate change influencing the viewpoints of the people residing in Bangladesh (Knez et al., 2013; Rahman et al., 2018).

A few studies on people's perceptions about climate change have been carried out among the students of school, college (Rahman et al. 2014), and at the household level (Haq and Ahmed, 2017). A range of research pertaining to university students' perception on climate issues in Bangladesh has been conducted (Kabir et al. 2020 and Rahman et al., 2018). However, there is a paucity of research focusing on university faculty members' concerns about climate change and efforts to take action to reduce climate threats. Therefore, this current study aims at filling the research gaps and shedding light on exploring university teachers' perception of climate change based on the in-depth interviews from some selected universities in Bangladesh. This paper proposes to improve the gap of knowledge vis-à-vis the university faculty members' perception about climate change, and their activities with a view to mitigating climate threat in Bangladesh.

2. The Theoretical Framework

The study employs the value-belief-norm (VBN) theory (Stern et al., 1999) of environmentalism to explore the research questions. The theory makes a causal chain based on the following five variables leading to climate behaviour: (1) personal values (especially altruistic values); (2) new environmental worldviews; (3) awareness of adverse consequences; (4) ascription of responsibilities of self, beliefs about general conditions: and (5) personal norms for pro-environmental action. The altruistic values (Heberlein, 1972) presume that the environment serves public good. Therefore, individuals' moral norms play a crucial role in their understanding of climate concerns. New environmental worldviews focus on environmental concerns and behaviour which involve empathy with others (Allen & Ferrand, 1999), an "emotional affinity" with nature (Kals, 1999), and empathy with wild animals. Individual norms influence people to assume the responsibility for pro-environmental action to reduce climate threat. In effect, behaviour-specific personal norms influence how people respond to particular situations (Stern et al., 1999).

Figure1: TheValue-belief-norm_theory
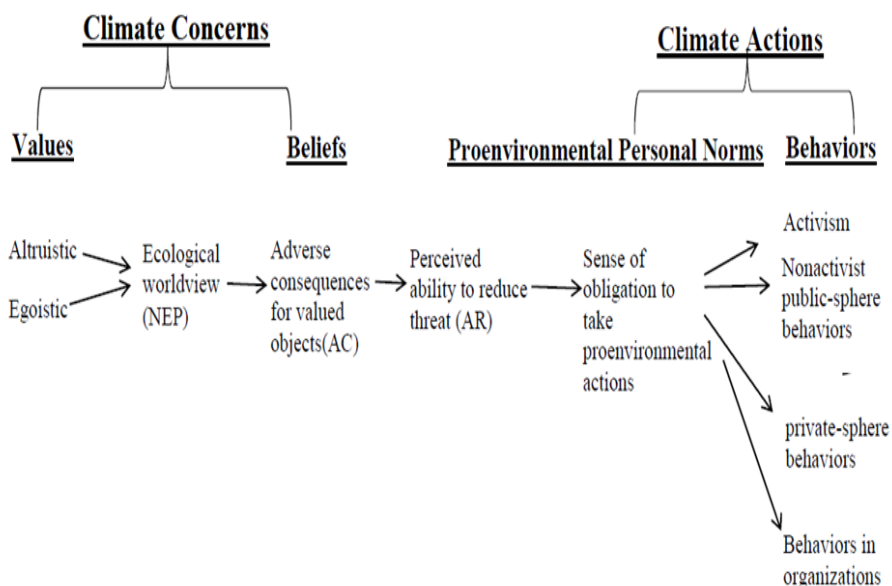
(Source: The VBN theory of environmentalism from Stern et al. 1999)

People's climate concerns, which stem from their personal pro-environmental values and beliefs, urge them to take action to reduce climate threat. These variables are causally linked. This study attempts to determine the degree to which university faculty members' environmental values and beliefs a) influence their climate concerns, and b) urge them to take action to reduce climate threat.

3. Methodology of the Study
3.1 Study Design
Population and Sampling Procedure

The study employs purposive sampling procedures to select the informants. At the outset, we selected three universities: International Standard University (ISU), Bangladesh Army University of Science and Technology (BAUST) and Jagannath University (JnU), Dhaka, two of them were private universities and one public university based on purposive sampling. We considered a few criteria while selecting those universities. Firstly, these universities were adjacent to either the

working or living place of the researchers. Secondly, the faculty members of the universities were well known to the researchers, which helped approach them quite positively frankly. At the second stage, ten (10) faculty members were selected from each university following the method of simple random sampling. The informants were contacted over the phone and in person to get their consent to participate. They were asked to choose a time and place for their interviews. Considering the complex and multidimensional nature of the research questions, we applied the qualitative method to address the research objectives. The qualitative research method makes it possible to investigate and accumulate data setting forth a detailed understanding of social processes, faculty members' perceptions and experiences. We collected primary data by applying the formats of Key Informant Interview (KIIs) and Focus Group Discussions (FGDs), and secondary data from existing literature. We prepared two an interview guide and a checklist: one is for in-depth interview and the other for FGD, keeping in mind the objectives for the interviews and latter for FGDs. While preparing the interview guide and checklists, we considered a few factors, such as pre-testing the interview guide, examining the VBN model, and a systematic review of literature on climate concern and climate threat. The interview guide allowed the respondents to provide their opinion based on their knowledge, experience, and feeling, instead of limiting their answers to a predetermined set of answer options. The informants were not probed during the interview. Instead, we guided them through the checklists which helped the informants to keep track of the questions that had or had not been either asked or answered. This enabled them to phrase the questions properly and motivated the interviewees to provide detailed and elaborate answers. All the interviews were recorded and transcribed for the preservation of data. The data were collected between October 12, 2021 and November 22, 2021.

3.2 Qualitative Method and Data Management

We have employed a qualitative method to collect and analyse the data. The method requires three essential criteria, i.e., data, data collection and data analysis. All three should be conducted using a qualitative method (Small, 2011). Recognising that qualitative data are descriptive in nature, we conducted twenty face-to-face interviews using an interview guide.

Afterwards, we analysed the collected data using thematic analysis. We attempted to structure the interviews; that is, to allow our interviewees to express their opinions and sentiments in open and candid manner. We conducted all the interviews in a private setting, that is, at their residence. This allowed our interviewees) to speak their mind openly and b) to take time to consider their answers. Before conducting the interviews, we built friendly relationships with them by meeting them, making phone calls, and familiarizing them with the purpose of our research. Establishment of good rapport with them allowed us to access more readily deep interpretative information pertinent to our research questions.

The study formulated the following research queries: how and in what ways university faculty members are concerned about climate change, and are acting to reduce the climate threat among the faculty members of University in Bangladesh. For the purpose of in-depth exploration of the main research question, we included the following two subsidiary questions: (i) Are university faculty members concerned about climate change? (ii) What action are they taking to combat the climate menaces?

3.3 Data Coding

Coding is a process of reducing data without losing its meaning (Saldana, 2013). After collecting the raw data from our informants, we carefully labelled their statements. Then, we categorized the labels based on their similarities and differences. We put the key information together to show the relationships. We used NVivo computer software to code the raw data. For these purposes, we selected two main themes from the research questions, i.e., 'climate concern' and 'climate action' which were further subcategorized into relevant concepts. Then, we inserted the raw data into the subcategories based on their similarities and dissimilarities.

3.4 Data Analysis Techniques and Management

Analysing data in a qualitative approach was quite challenging, as the volume of the collected data was huge and comprehensive in nature. Therefore, we carefully filtered the data as all data were not relevant to the study. We filtered the data based on the checklists which we prepared by explaining the VBN theory for the study. At first, we took the key concepts relevant to the study objectives and prepared a list of them.

Afterwards, we identified the incomplete, inaccurate or irrelevant data which have been replaced/ modified or deleted. Finally, we checked all the information to see if any information matched with the key concepts or not. If any information did not align with the key concepts, we tried to rewrite the information keeping in mind the particular keyword or concept. The collected data were thematically analysed by sorting out the salient themes and patterns from the narratives that transpired in the interviews. Tracing the thematic analysis, we showed the patterns of similarities and differences of the data. In the next step, we segmented, coded and presented the data. We coded the data followed by the ideas of interpretive and narrative analysis. We allowed our informants to explore their expertise in their own experience, allowing them to express themselves, which is central to the area of interest. To ensure the credibility and reliability of the data, the 'member checking' technique was performed by sharing the summary of the major findings with the study informants.

3.5 Ethical Considerations
We ensured interviewees' voluntary participation and informed them about the study objectives prior to the interview or discussion, preserving the informants' anonymity and confidentiality. We got their consent before the interviews, and they had the right to terminate their participation at any stage of the study.

3.6 Positionality Approach
We were considered environmental experts or NGO workers when we started to communicate with the prospective interviewee. We were well-positioned to pursue our research as we made it clear to the informants about the purpose of our research. Some interviewees, particularly the teachers of public universities regarded us as academicians who helped us enormously in gaining trust from their side and eased them into sharing their ideas, views, and understanding about the requisite questions. However, some informants asked us what use of the information would be. In their opinion, people were always visiting them to get such information but nothing was working. We explained to them the objectives of our present study to do away with their frustration and misunderstanding; we convinced them that these data would be utilized

in order to explore their concerns and actions towards reducing climate threats in the country. Perceiving our honest intention, they eventually put their faith in us.

3.7 Limitations

Our qualitative analysis was limited to interviewing only thirty (30) university faculty members from three different universities. This limitation accounts for the similar kinds of concern expressed regarding climate change and action to alleviate climate threat. Had we found more time to interview people from other professions, such as farmers, businessmen and members of other professional groups, the results would have been different, and it would have been possible to unfold a nationwide scenario.

3.8 Data Findings and Analysis

We found two themes by sorting out the collected data using the NVIVO software. These are (i) climate concern and (ii) climate action. We have divided these two themes into many subcategories explained as follows:

Theme 1: Climate concern

    (i)   Altruistic environmental values

    (ii)   Awareness of adverse climate change

    (iii)   New environmental worldviews

    (iv)   Ascription of responsibility to self

Theme 2: Climate action

    (i)   Sense of personal obligation to take action

    (ii)   Sense of obligation to take institutional action

    (iii)   Sense of obligation to take governmental action

    (iv)   Active public sphere action

    (v)   Non-activist public sphere activities

    (vi)   Private sphere action

4. Climate Concern

The climate concern relates to how individuals come to learn about climate change issues, especially the variations in temperature, water logging, excessive and erratic rainfalls, cyclones, tornadoes, and turbulence in the sea. The central idea is to find out how much the

university faculty members are concerned about climate change. The following are some sub-themes we have found and illustrated below:

(i) Altruistic environmental values

Altruistic values refer to 'a personal value structure or an overall guiding principle that motivates individuals to contribute to the wellbeing of others or of society as a whole' (Schwartz, 1972, Stern et al., 1995).The conscious dwellers of Planet Earth are willing to sacrifice their luxurious lifestyles or use of unnecessary goods and amenities that cause much harm to environment. In the opinion of most of the interviewees post materialist values and over-consumption by humans are posing serious threats to the planet. One of the informants stressed, "*of course climate change is exerting a considerably bad impact on people. Maybe for some people it's a source of income or business, such as big corporate houses, but for us, the common people the impact is injurious, sometimes even far worse. For our living, lifestyle, everything in the climate is getting affected for the worse*".

Studies argue that people are buying more and more cars, personal accessories such as clothes, home furnishings like almirahs, tables, and other luxurious products for personal comforts which in turn are putting more pressure on nature causing climate change. In this connection, one interviewee emphatically says, "*capitalist societies today are built on abstract values producing unlimited demands. But we are living in a finite planet with limited resources*". One FGD participant echoes the idea and says "*As faculty of business administration, I am aware of energy imports. It's not good for any country, especially our country. We should not import energy to put ourselves in debt. We should be trying to produce our own energy*".

(ii) New Environmental Worldview

 Environment worldview refers to the educational and moral approaches of human beings which involve the establishment of shared values and expectations- vital for protecting climate across the world (Gardner & Stern, 1996). Recently, some researchers pointed to adverse influences on environmental concern and behaviour and stressed sympathy towards nature and empathy with wild animals (Kals et al., 1999). Humans should avoid any hazardous activity that might be harmful to the living

species. The study reveals that all the interviewees expressed their environmental concern that is; they expressed sympathy for human health, nature and animals. They showed concern that as the monsoon rains become heavier and the temperatures rise, humans and animals' health are affected by the impact. Many places have become uninhabitable and many areas have been deforested.

One informant observes, "*With the changing environment our behaviour towards others is rapidly changing, too.*" According to one FGD informant *"The weather was fine once upon a time. Now, as the climate is changing and the heat increasing, our tolerance level seems to be falling low. When you have to live and work under the scorching sun, it causes trouble in the mind. The climate is changing and it's really getting hot these days. I can't put up with it at all.*" On this issue, another interviewee spoke similarly: "*Yes, I'm worried. It's for everybody. It's not that rich people won't be affected. But, everywhere you find it is the mass people who are affected most. As the sea level rises and river erosion continues without check, land is getting submerged; hence, people have to migrate from lower to higher land areas".* Regarding the question as to how much of the country is likely to be affected by climate change, one participant predicted, *"I'm sure it's climate change, the reason behind all these. We have done this. All the factories and all the gas fumes have increased the carbon level and thus, we are now having these changes in the weather. It's raining when it should not be; it's not raining when it should be. Many other evidence can be seen in the nature."*

(iii) Awareness of adverse climate concerns

Scholars such as (Widegren, 1998) point out that adverse climate concerns explain individuals' moral norms that are activated once they find particular conditions pose threats to others. People's awareness regarding adverse climate change is crucial to safeguarding the surrounding environment. The educational background of the respondents facilitates them in perceiving the climate issues effectively and enabled them to act accordingly. Many informants stated that energy production using fossil fuels is making a significant contribution to the

rising weather temperature. The increase of temperature is leading to a climatic imbalance in Dhaka city.

One informant commented "*climate change is bad news for people, mostly for those people, who live in the capital*". Another informant says, *"I am worried about this. This heat and every other change in the environment are threatening. I think it should be taken care of."* Recent studies argue that people are unaware of the damage caused to our planet by senseless human activity. They keep cutting down trees and more and more machines rolling in.

One FGD participant stated, "*If the situation goes on at this rate, there would be bigger problems in future. If we use ACs in our homes and offices, it will have a bad impact on us".* Another FGD informant added "*May be for some people it's a source of income or business, like big corporate houses, but for us common people the impact is much worse, sometimes worst. For our living, lifestyle, everything is getting affected by climate change."*

(iv) Ascription of responsibility (AR) to self

AR refers to the actions that people could initiate to avert those consequences for climate change. Above everything else, there comes our personal responsibility to save our environment. One participant says, "*a teacher can make various contributions to the reduction of climate change by inspiring the students, motivating and guiding them in the classroom to take actions against climate disaster. Also, sometimes students along with their teachers can act quite actively and positively*." Another participant said, "*Faculty members have some responsibilities to the world. If they can play a significant role to reduce climate change to some extent it would be great.*"*As I have said, people from all groups and parts have to do their part. As university teachers we can tell our students about these problems, campaign, and raise awareness among our students".*

Studies argue that not only as university teachers, but also as common human beings we have a very significant role to play. We should use as much clean energy as possible. That would cause less harm to our

environment. One informant says assuredly, *"if we all can do these things, climate change can be reduced. But, a united effort is required to achieve this goal"*.

Table: 1 Key factors in Climate Concern

Theme 1:
Key concepts Found in Climate Concerns
-Altruistic environmental values
● Avoiding luxurious products
● Avoiding materialistic propensities harming the environment
-New environmental worldviews
● Environmental changes causing psychological changes
● Lifestyle is changing owing to it
-Awareness of adverse climate change
● University teachers are concerned about climate change
● They are worried about the poor people's lives
-Ascription of responsibility to self
● Teachers are doing their part in a limited way
● Personally, they are trying to reduce climate change as much as possible

(Source: KIIs and FGDs, 2021)

5. Climate Action

(i) Pro-environmental personal norms

The study focuses on the fact that each individual is obligated to take action with a view to alleviating climate threat. The latter is dependent on the degree to which organizations and the state exercise responsibilities. Many interviewees felt fully responsible for combating climate change. One informant said, "*We try to act prudently and think of the environment when we buy and use household stuff. We think of ourselves as conscious citizens*". He added that the focus is on "*sharing the same knowledge with others*".

One FGD informant emphasised institutional responsibility and advocated acting collectively to reduce climate threat. In this

connection, a participant said: "*Big industries, factories, and companies should be careful about producing sustainable product*s." Regarding state responsibility, one participant suggested, "Our government should improve the railway system, especially in the northern region, for ensuring an environmentally friendly transportation system. The government should collect more taxes from the factories whose products are not sustainable." Another interviewee advocated making some regulations concerning the *modus operandi* of handling industries and restaurants where fossil fuels are used to run their business."

A participant suggests, "*People should reduce the use of private transportation. Fewer cars would emit less carbon into the environment. So, in order to make this happen, the government should take initiatives to introduce faster, cheaper and efficient public transportation*".

(ii) Active public sphere activities
Scholars argue that active involvement for reducing climate threat in public spaces encourages the masses to follow the activities and motivates them to work accordingly. With appropriate knowledge and experience on climate change, the university teachers are able to disseminate climate-related information to their students. One informant said: "I work with an NGO known as the BAPA (Bangladesh *Poribesh Andolon*). I think organizing ourselves into one voice is the most powerful thing we can do." One FGD participant said: "*We attended a few demonstrations against the Rampal coal power plant which flagrantly disregards environmental issues.* 'One of the informants stated, "*Extreme weather conditions are already being experienced in many countries: it's too hot not only in summer but also in other seasons.*" Another participant said, "*This tax should be imposed. I would support. In Bangladesh there is no such policy. But, if there is any policy it should be stepped up further.*"

(iii) Non-activist public activities
Non-activist public activities focus on supporting public policies which involve acceptance of environmental regulations, willingness to pay higher taxes for environmental protection (Stren, 2000). The government policies encourage others to take necessary actions for a cleaner, cooler

and happier world. Recent studies argue that Bangladesh is a country where many people are vulnerable to the impact of climate change. Several informants agreed with the prospect of paying higher taxes for environmental protection. Appreciating the government move to stop plastic shopping bags one informant said: "*A couple of years back, the government of Bangladesh decided not to ban plastic bags for shopping purpose, which was implemented, too. It was great and highly praiseworthy!*" *People would like to see imposed higher taxation for environmental degradation issues*". All agreed that by doing so people could be motivated. All combined actions said and done might protect the world from the current stage of deteriorating climate condition. One interviewee stated, *"higher taxes should be imposed. I'll wholeheartedly support any government policy that would help to improve the environment by compelling people not to harm nature. In Bangladesh there is no such policy yet. But, if there is one that should be implemented strictly"*. On the question, whether or not these policies would actually help, one FGD informant argued, "*it all depends on people's intention to do well for the environment. But if there is corruption it won't work. Sometimes the government isn't interested in spending money on this issue, either.*"

(iv) Private sphere activities

Private sphere activities highlight human behaviour regarding climate actions in a private atmosphere. The purchase of major household goods and services that are environmentally sound indicates green consumerism and promotes the use of recycled products (Stern and Gardner, 2020). Individuals' private sphere activities play a significant role in reducing climate threat. Most of the informants stated that nowadays they are aware about using plastic bags; they try not to use them. They are giving up other plastic goods which directly end up in the environment. Many interviewees use bikes and public transport, that is, buses and trains while commuting. Though not enough, it is yet a good start. One participant said *"I participated in a tree plantation program in my previous institution too, in an awareness-raising-programme about using less energy. I have a car but I celebrate a 'No car day' once a month."*

All these actions together play an important role in reducing climate threat. All the interviewees said that they turn off lights while leaving the room and try to use less hot water while cooking and/or taking a shower. One FGD informant added: *"we try to avoid printing any papers from our class teachers or friends. Instead, we make an e-copy which is sustainable. Whenever we go out to eat, we opt for restaurants that display the label 'environmentally friendly' and provide food that is also environmentally friendly. we only try to purchase wine in bottles labelled 'environmentally friendly'.*

Regarding buying energy saving home appliances, one interviewee said: "*we recently bought energy efficient clothes dryer. We try not to buy cotton products because they need a lot of water for cleaning. We try to purchase second-hand clothes which ensure more use of a particular product".* Green economy starts with the aim to give people useful and necessary things that will not harm the environment. Energy efficient appliances are a must for getting better results in reducing climate change. People should use energy saving bulbs that consume less energy than other bulbs. In Sri-Lanka a man recently started making paper using elephant dung (Stern, 2010). This is a significant progress. In this connection, one informant said, "*of course, if you buy good quality appliances they will consume less energy. And by using less energy they can give greater output".*

Table: 2 Key factors on Climate Actions

Theme 2:
Key factors Found on Climate Actions
(i) Pro-environmental personal norms
- Big industries should come forward
- Eco-friendly products should be produced

(ii) Active public sphere activities
- Raising public awareness is important
- Stop activities that go against environment

(iii)Non-activist public activities
- People should come forwardin a body
- Environment pollution must be stopped immediately

(iv)Private sphere activities
- Consuming less and giving away more
- Recycling and reusing

(Source: KIIs and FGDs, 2021)

6. Discussion

The main objective of the study was to explore university faculty members' perception on climate change and efforts to reduce climate threat in Bangladesh. The study employs a range of qualitative methods to find out research objectives. The study pinpointed that university faculty members are highly concerned about climate change and thus they work accordingly on climate issues in Bangladesh. The study argues that human induced activities lead to warmer weather in the country which has been drastically affecting people living in the country. Scholars such as Lawrence (2011) argue that climate change concerns have become a major issue in many western societies like the USA. People are divided into different groups where some believe that it should not be worrisome while others are convinced that they would be seriously affected in their lifetime.

We examined two main themes and a number of relevant sub-themes that emerged while sorting out the collected data using NVIVO software. We placed relevant information under the themes and sub-themes that

directly addressed the research objectives. The present study argues that the community concern about reducing the hazardous condition is vital. The study argues that people's awareness about climate change and the associated activities play an important role in reducing the climate threat in Bangladesh. It is evident that the community's perception turns into action on climate change. Livingston et al., (2011) show that many communities in Australia are worried about climate change, which they notice to be happening. The climate is changing; however, fewer believe that it is due to human activities.

Scholars show that people in the western world have more knowledge about climate change that helps them in a large way in successfully tackling adverse natural phenomena. The present study reveals that faculty members are highly concerned about climate change and they work effectively to avoid potential damage from disastrous situations. In order to do so, informants are positive about changing their lifestyle and maintaining a better physical environment. The study is in no doubt that the state should step up measures to raise consciousness among the masses with a view to lowering potential threats as fallout of climate change. Research conducted in the Western Europe and Canada show that people are concerned about climate change, but they are unwilling to change their lifestyle for protecting environment. A research conducted by Richard (1988) supports the findings of the present study, arguing that people in Canada are aware of global warming and other climate related changes and problems. But they are against any actions and policies that would in any way alter their lifestyle.

This study argues that people have superficial knowledge about climate change. Many informants understand climate change in the light of personal experience, knowledge, the balance of costs and benefits, and finally in terms of other societal factors. A few studies reveal that technical improvements are more preferred by the people than behavioural change (Poortinga et al., 2003). Other studies hold that one of the reasons people are not pro-active in mitigating climate change is that they lack first-hand experience of the consequences of climate change (Spence et al., 2011).

Meredith and Mueller (2016) found that, people believe rainfall has increased over the years due to climate change in New Zealand. Their perception of climate change is a serious matter and they are urged to take actions to reduce climate change and make Earth more habitable. But people in the USA are still not aware of climate changes leading to an unpredictable future (Elke and Stern, 2011). They conclude that psychological conditions can improve people's perception about climate change and make them awareof the necessity to reduce it. The current study echoes the findings and states that faculty members' knowledge of and views on climate change help them take necessary steps to reduce climate threat.

The study findings show that university faculty members are more concerned about climate change than their apparent actions. The findings of the study are supported by Lorenozi and Pidgeon (2006) who reveal that people perceive climate change from the media whereby most of them are made conscious and concerned about climate change but they do not take much action to reduce it. University students are more concerned about climate change as they get information by attending classes. The findings are supported by the study conducted by Haq and Ahmed, (2020) who argue that students have the perception that climate change is due to human action perpetrating current deforestation, river mining, emission of fumes from factories and other waste into rivers and the like. Similarly, farmers in Bangladesh are the true victims of the changes, as they work in the fields and they are the ones who live very close to nature (Kabira et. al. 2020).

The present study points out that university faculty member face diverse climatic hazards in their lives and therefore they develop their own strategies to help continue their lives. In this connection, Alam and Mallick (2022) address the level of perception of the fishermen in the sea and rivers. They can directly perceive the occurrences of climate change as it occurs. As they live very close to nature it is evident to them. Scholars (Bikram et. al. 2021 and Rahman, 2012) show that people must take necessary measures to prevent climate change and its impact on human health. The present study, moreover, argues that necessary policies by the relevant authorities of the government of Bangladesh

(GoB) can be developed to ensure that people do not suffer due to climate change.

We have tried to show that the informants' perceptions of climate change are associated with their worldviews and altruistic mental condition. The findings are echoed by the study carried out by Prasad and Mkumbachi (2021) who show that university students perceive those changes in the environment, living spaces, and other animals, deaths of corals and the like endanger the safer world environment. In another study Bakaç (2018) finds out engineering students' perceptions of climate change and reveal that they are well aware of climate change, and take initiatives to reduce it. Ahmed et al. (2021) show that college teachers' socio-demographic and disciplinary background plays a vital role in shaping their perception about climate change. This research argues that with a high level of educational background, the faculty members are well aware of climate change which facilitates them to take proper steps to reduce potential threats from climate change.

7. Conclusion

The study aims to investigate how and why people's concern about climate change induces them to take action to reduce climate threats. We have scrutinized the 'Value, Beliefs and Norms' theory to explore and validate the research questions. Employing qualitative methods, we argue that individual values facilitate people's perceptions that the climate is a public asset. Therefore, people should take collective action to reduce climate threat. The study finds that people are taking action to reduce climate threat based on their concern that the climate is changing. The study shows that the climate is changing on a daily basis, affecting not only people's health, but also the health of animals. Besides, it impacts agricultural lands, frequently in the form of severe droughts. Stern (2000) suggests that feelings of moral obligation are dependent upon personal [habitués based] perceptions. For example, there is a problem and some feeling of personal responsibility for a specific behaviour (Schwartz, 1977). The study finds that university faculty members feel personally responsible to reduce climate threat.

The study argues that the respondents think themselves as conscious citizens of the country. They feel guilty even if any of their smallest activity endangers the environment. According to the VBN theory, participation in environmental activism is determined by personal efficacy, collective efficacy, and institutional efficacy beliefs (Lubell, 2002). Regarding collective efficacy, the study finds that climate change is not like a thing which can be resolved by an individual activity. People need to act collectively; they need to be aware equally and act accordingly. The study recommends that government introduce mass rail transit very fast in Dhaka city for protecting environment and thus save money. The study, moreover, argues that government should collect more taxes from factories whose products are not sustainable. People's collective concern about being too dependent upon fossil fuels could have a significant impact on taking climate action. This observation is confirmed by many interviewees who say, "*We are very worried if energy is produced by fossil fuels as they are not good for the environment and heats up the climate.*" There is widespread evidence to suggest that a sense of personal obligation is essential for turning concern into action (Steg & De Groot 2010).

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Declaration of Interests

We, the authors of this research manuscript, declare that we have no financial interest. We have provided written consent to publish the paper in this journal.