***Review Article***

**Understanding Climate Change Perception and Knowledge in Bangladesh: A Review from a Non-Global North Perspective**

**ABSTRACT**

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| --- |
| This paper reviews the existing studies on scientific consensus on climate change within the framework of the gateway belief model which showed that majority of the existing studies on consensus messaging have focused and experimented in the global north. That led this study to explore public climate change perception and knowledge in Bangladesh from the existing research and examine whether the initiatives and interventions are required to be approached within the framework of the gateway belief model and thus, figure out the scope to test the gateway belief model to enhance public perception of climate change in Bangladesh. In order to identify the articles that align with the objective of this study and could answer the research question, the keywords “climate change perception” AND “climate change knowledge” AND Bangladesh were applied in Google Scholar database, and the prompt “climate change perception and knowledge of people in Bangladesh” was used in the Consensus (AI) tool, and the time frame was limited to the years between 2010 and 2025. The overall findings of the reviewed articles showed students’ perceptions of climate change vary between educational institutions in Bangladesh. Also, people that are experiencing the impact of climate change and living in high climate risk communities in Bangladesh have differences in climate change perception and knowledge due to several factors, for instance, cultural beliefs, education, economic situation, information gap, and so forth. This research concludes that in the developing country setting, explicitly Bangladesh, the gateway belief model could be tested by adapting to the localized settings applying social consensus and in-group consensus messaging to increase public perception of climate change and examine the effectiveness, which will provide a notion of whether or not the gateway belief model is relevant in the developing country context, namely Bangladesh. |

*Keywords: Climate Change, Climate Change Perception, Climate Change knowledge,* *Gateway Belief Model.*

1. **INTRODUCTION**

Climate scientists agree that climate change is happening (Aslany & Brincat, 2021; Cook et al., 2013; Doran & Zimmerman, 2009; Freudenburg & Muselli, 2010), and there is a strong scientific consensus that climate change is caused by humans which poses a serious threat to human civilization (Cook et al., 2016). However, public opinion on whether climate change is happening or not remains divided (Čábelková et al., 2021). Misconceptions about the anthropogenic cause of climate change still exist, and support for climate-friendly behavior and policies remains low (Gellrich, 2021; Infratest, 2021). To fulfil Sustainable Development Goal (SDG) 13, “Climate Actions” (United Nations, n.d.), needs ambitious collective action and requires to understand how people from different societies perceive, act, and respond to climate change. To understand different societies perceptions of climate change perception, this study will explore public climate change perception from the existing literature within the framework of the gateway belief model.

* 1. **Gateway Belief Model**

The gateway belief model developed by van der Linden, Leiserowitz, Feinberg, & Maibach (2015) demonstrates the scientific consensus indicates that human activities are the principal factor of global climate change and sees public (mis)perception of the scientific consensus can influence “gateway” cognition (van der Linden et al., 2019). The gateway belief model provides a dual-processing description (Chaiken & Trope, 1999; Evans, 2008; Marx et al., 2007) of how perception is formed by the integration of both affective (worry) and cognitive (belief-based) factors that influence public perception on social issues (van der Linden et al., 2019). It is purely a descriptive model that present a process of assessment and attitude change (van der Linden et al., 2015). The gateway belief model gains scientific consensus in climate science can act as a “gateway” to other crucial cognitive and affective judgments; for instance, recognizing that global warming is happening and that is caused by human beings and reflecting the level of concern people have about it (van der Linden et al., 2015). The gateway belief model describes “de-biasing” by highlighting scientific consensus on an issue such as climate change to influence public perception of that consensus (van der Linden et al., 2019). Scientific consensus functions as a “gateway” for slight changes in personal beliefs and attitudes on climate change (van der Linden et al., 2015), and changes in the perceived scientific consensus has an indirect impact on public support for action as shifts in personal beliefs primarily influence the casual effect (van der Linden et al., 2019). The theoretical framework of the gateway belief model relied on previous correlational research that distinctly discovered a substantial correlation between science acceptance and support for climate policy and perception of scientific consensus (van der Linden et al., 2019). According to this model, general people perceive or form their beliefs based on scientific information that is delivered by outside sources for instance information about the actual scientific consensus, and adjust their scientific beliefs based on the perceived level (Kobayashi, 2018). However, general people at least sometimes believe people in their social network as trustworthy source of scientific knowledge, particularly when they are provided with unclear or contradictory information from many sources (Haynes et al., 2008; Hilton, Petticrew, & Hunt, 2007). A widely acceptance of a particular concept within one’s group and social network could typically indicates that the concept maybe valid (Cialdini & Goldstein, 2004; Visser & Mirabile,2004). There is some evidence support the concept that people’s views of social consensus may influence how people in their social network perceive scientific consensus (Kobayashi, 2018). Furthermore, since expert consensus is a scientific “fact”, it is also having the particular advantage of being social in nature, as group consensus is often conveyed as a descriptive norm (van der Linden et al., 2019) and people are very influenced to the indications of group consensus (van der Linden et al., 2019). But people usually misperceive social norms (van der Linden et al., 2019) and the implication of it is changing attitudes (Gardikiotis et al., 2005).

Consensus Messaging

Belief in
Climate Change

Worry about Climate Change

Support for Public Action

*Debiasing Process*

Perceived Scientific
Consensus

Belief in Human Causation

**Fig. 1. Gateway Belief Model (van der Linden et al., 2019)**

**Source: van der Linden, S., Leiserowitz, A., Maibach, E., The gateway belief model:**

**A large-scale replication, Journal of Environmental Psychology (2019).**

* 1. **The Current State of Knowledge**

An increasing number of empirical research have used indicators either directly or indirectly examining the core theoretical foundation of the gateway belief model in different fields and cultural contexts (van der Linden et al., 2019). Some experiments indicate that learning about the scientific consensus on climate change can increase belief in anthropogenic climate change, which is mediated by perception of scientific consensus (Brewer & McKnight, 2017; Kerr & Wilson, 2018; Lewandowsky et al., 2013; van der Linden et al., 2016). Consensus messaging has been demonstrated to improve attitudes towards climate change and public scientific consensus, despite debate in the literature (Brewer & McKnight, 2017; Cook & Lewandowsky, 2016; Deryugina & Shurchkov, 2016; Goldberg et al., 2019; Lewandowsky et al., 2013; van der Linden et al., 2015). Existing studies on consensus messaging mostly focus on the global north; many European nations already have high consensus among the public on climate change (Fagan & Huang, 2019). Several research studies suggest that interventions that increase perception of scientific consensus on climate change have no overall effect on personal belief (Dixon et al., 2017; van der Linden et al., 2014). Whereas, some studies found a strong link between public views of scientific consensus on climate change and policy support based on the core belief about the issue (Ding et al., 2010; McCright et al., 2013; Schuldt & Pearson, 2016). A meta-analysis explored 30 research studies on scientific agreement and found that perceived scientific consensus was the third most significant psychological predictor of belief in climate change (Hornsey et al., 2016). Also, few studies have explored low consensus messages, but other studies have found that disagreement, partisanship, and misinformation can reduce scientific consensus to support climate policies (van der Linden, 2021).

One of the short-comings in the existing research that this study has discovered is the literature on consensus messaging concentrated in the global north mostly focused on the USA and Australian samples, with few studies focusing on New Zealand (Kerr & Wilson, 2018), Japan (Kobayashi, 2018), the UK (Hornsey et al., 2019), and Germany (Tschötschel, 2021). Climate change perceptions vary to a great extent between countries, so the results from one country cannot be applicable around the globe (Fagan & Huang, 2019). Academic literature commonly accepts that insufficient public responses cannot be entirely explained by uneven distribution of scientific literacy or a lack of knowledge (Denniss & Davison, 2015). Most of the research has focused on individual-level factors influencing people's attitudes and concerns about climate change (Poortinga et al., 2019). Even though the existing studies have expanded our knowledge on climate change and risk perception, that is country- and culture-specific, which makes it difficult to generalize with the other developing countries around the world (Lee et al., 2015). Some scholars indicate that confidence in climate scientists might moderate the consensus effect (Dixon, 2016; Hahn et al., 2015), and previous research suggests that faith in science may diminish the consensus effect, although there is no definitive evidence (Ding et al., 2011). Also, different mental models of science, for instance, “search for truth vs. science as debate,” might influence people’s way of thinking (Bertoldo et al., 2019).

Although the impact of climate change affects the whole world, it is commonly accepted that the poorest people in developing countries need the most support for adaptation (Adger et al., 2009; Ayers & Dodman, 2010; Burton, 2004; Huq & Ayers, IPCC, 2007; Schipper, 2007). Most of the previous studies on consensus messaging has focused and experimented mostly in the global north, which leads this study to assess existing literature to get insights of public climate change perception and knowledge in the developing country context specifically Bangladesh. Bangladesh is a country with a population of over 170 million people that are facing great challenges due to the high vulnerability to climate change (Woroniecki et al., 2022). This study will explore public climate change perception and knowledge in Bangladesh from the existing research which will allow us to comprehend public perception of climate change and whether the initiatives and interventions are required to be approached within the framework of the gateway belief model and thus, figure out the scope to test the gateway belief model to enhance public perception of climate change in Bangladesh. This review paper is intended for early-career researchers working in the arena of environmental sociology, and climate change, and the outcome of this study will provide a future area for the academics, especially early-career researchers, to test the gateway belief model in developing countries context.

* 1. **Research Question**

This study aims to explore:

What is the public perception and knowledge of climate change in Bangladesh, and does the application of the gateway belief model framework require in a developing country setting namely Bangladesh?

1. **METHODOLOGY**
	1. **Literature Search, Screening and Selection**

This study has adopted narrative literature review approach specifically narrative overviews which is also known as unsystematic narrative reviews (Oxman et al., 1994). The reason for adopting narrative review approach in this study is because it is effective to examine under researched topics as well as generating new ideas or ways of thinking about well-developed, extensively researched subject areas (Sukhera, 2022). Moreover, narrative review approach is frequently useful for the topics that require an effective synthesis of research findings that might be intricate or broad and require comprehensive, nuanced description and interpretation (Sukhera, 2022). Additionally, narrative review approach is important for setting the stage for future research hence it provides an interpretation of the literature, highlight gaps and assess previous research (Sukhera, 2022).

Before extracting the data findings from articles, a couple of keywords were used to sort the articles based on the objective of the study and the research question. In order to point out the articles that align with the objective of this study, and could answer the research question, the keywords and a prompt (see Fig. 2) were applied in Google Scholar database and the Consensus (AI) tool. Afterwards, a draft table was prepared in a spreadsheet with categories such as author(s), title of the paper, method, objectives of the study, findings (focused on climate change knowledge, perception, and awareness), and relevance level. After assessing the full text of the articles (n=17), based on the inclusion criteria (see Fig. 2), the articles were marked with high, medium, and low. The articles that closely aligned with the objective, the theme, and the concept of this study were marked with high relevance and finalized to analyse in this study. On the other hand, the articles that aligned with the theme but not with the concept were marked with medium relevance, and the articles that did not align with the theme and the concept of this study were marked with low relevance and not selected for analysis.

Literature search, screening and selection

*Search Results*
Google Scholar (n=234)
Consensus AI (n= 45)

*Search tools used*
Google Scholar & Consensus AI

*Google Scholar (Keywords used)*

"climate change perception” AND “climate change knowledge" Bangladesh

*Consensus AI (Prompt used)*

climate change perception and knowledge of people in Bangladesh

*Screening*

Total paper screened (n = 30) -title based on- climate change perception in Bangladesh, and climate change knowledge in Bangladesh and sorted by year: 2010-2025

Abstract assessed articles (n=30)

Full text reviewed articles (n=17)

*Inclusion criteria*
The articles which concept and theme concentrated on climate change perception and knowledge of people in Bangladesh were selected to analyse in this study

Total articles finalized for analysis (n=10)

**Fig. 2. Literature search, screening and selection**

**Table 1: Overview of the selected literature**

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| --- | --- | --- | --- | --- |
| Author (Year) | Title of the Paper | Method | Objective of the study | Findings (Focussed on Climate change knowledge, perception and awareness) |
| Haq & Ahmed, 2020 | Perceptions about climate change among university students in Bangladesh | A self-administrated questionnaire was used to collect data. | The aim of the study is to explore climate change perception among university students at Shahjalal University of Science and Technology (SUST) Bangladesh.  | Majority of students believe that the primary reason of climate change is human caused which connects with: those that are mostly male respondents and have experienced the extreme weather, carry this perception of climate change.Perception of climate change among student in tertiary education differ by academic discipline. Students in the social sciences more likely than other discipline, perceive climate change caused by human activities.  |
| Rahman et al., 2020 | Climate change and dengue fever knowledge, attitudes and practicesin Bangladesh: a social media–based cross-sectional survey | A social media based (Facebook) cross-sectional survey on knowledge, attitudes and practices and secondary data of dengue fever cases in 2019 | The objective of the study was to examine the knowledge, attitudes and practices of university students in Bangladesh as well as the variables that influences their climate change prevention practices and dengue fever. | A significant number of respondents reported that they heard about climate change and climate is changing. Moreover, the respondents have good knowledge of climate change attitudes and practices which leads to adequate knowledge of climate change mitigation and adaptation. However, male participants had lower probability of having strong climate change adaptation practices compared to female respondents. |
| Hasan & Akhter, 2011 | Determinants of public awareness and attitudes on climate change in urban Bangladesh: Dhaka as a case | A mixed method approach both qualitative and quantitative method used in this study. Also, stratified random sampling was employed to collect 172 samples from 4 various parts of Dhaka city. | The study aims to identify the aspects influencing public knowledge and responsiveness to climate change. | People with formal education, media access and personal experiences with environmental issues are more likely concerned about climate change and develop appropriate environmental attitudes compare to people with less formal education and less informed about environmental problem. |
| Ahmed et al., 2022 | Teachers’ Perceptions about Climate Change: A Comparative Study of Public and Private Schools and Colleges in Bangladesh | This study used a primary survey with a self-completed questionnaire to collect data from 95 teachers in Sylhet, Bangladesh from 3 schools and colleges. | To explore the perception of teachers in school and colleges in Sylhet, Bangladesh.  | There is high level of awareness and perception about climate change among the teachers. Additionally, there is no statistically significant relationship the teacher’s education level and perception of climate change  |
| Hasan & Nursey-Bray, 2017 | Artisan fishers’ perception of climate change anddisasters in coastal Bangladesh | This paper adapted Johnson and Onwuegbuzie's (2004) eight -step framework to design and apply a mixed-method approach. A in-person survey was conducted applying a structured questionnaire and in-depth interviews and focus group discussions were deployed to collect primary data for this study.  | This study explores the contextual causes and dimension of artisanal marine fishing communities’ views and understand, and respond to climate change in Bangladesh. | Despite the fishers are experiencing the impact of climate change however they do not perceive as the greatest risk or threat to their well-being. Furthermore, majority of the respondent believed that climate change is an "Act of God" or a natural process. In addition, the fishers do observe and worried about climate change but they do not consider or link it as a distinct phenomenon. |
| Huda, 2012 | Understanding indigenous people’s perception on climate change and climatic hazards: a case study of Chakmaindigenous communities in Rangamati Sadar Upazila of Rangamati District, Bangladesh | A household survey was conducted to collect data from 384 households in Rangamati Sadar, Bangladesh. In order to collect data a semi-structed questionnaire was designed. | The primary objective of the project was to understand the relationship between the perception of climate change and climatic hazards and socio-demographic characteristics of Chakma indigenous community in Bangladesh. | A substantial number of respondents from Chakma community perceive that climate is changing and aware of the different climatic hazards. Moreover, male respondents are more likely to perceive climate change than female respondents. Also, younger respondents are likely perceiving climate changes than the older people in the Chakma community. Additionally, respondents that have formal education perceive climate change than people with less formal education which is a leading predictor. |
| Kumar et al., 2019 | Perception and Knowledge on Climate Change: A Case Study of University Students in Bangladesh | A well-structured questionnaire was used to collect primary data from the participants from four both public and private universities in Rajshahi city in Bangladesh and a stratified sampling method was used. | The purpose of this study is to investigate university students in Rajshahi on perception and knowledge of climate change specifically cause-effect, action and mitigation of climate change | A great number of the students participated in this study think deforestation as the primary cause of climate changes well as unsustainable development, unplanned settlement and burning of fossil fuel. In addition, most of the respondents strongly think that it is too difficult to tackle climate change as it is already too serious and late to act. Furthermore, the study found that majority of the students believe that government is mainly responsible to tackle climate change  |
| Kabir et al., 2016 | Knowledge and perception about climatechange and human health: findings from abaseline survey among vulnerablecommunities in Bangladesh | The main tool for this study was pre-tested, structured interviewer-administrated interview schedule. Also, as part of the questionnaire an observation checklist of household and community characteristics used by the interviewers. | The objective of the paper is to explore collect community data on people’s knowledge and perception about climate change | Around 54.2% of the participants has knowledge about climate change while 45.8% had not heard of it all. In addition, education was one of the most influential factors for understanding of climate change and its impact on health. The study has suggested school-based intervention should be explored to enhance people knowledge about climate change as well as public health sector needs to be engaged in primary health care. |
| Islam et al., 2024Uddin & Akter, 2023 | Perception, problems, and risks to climate change adaptation: A studyadjacent to Sundarbans mangrove forest, BangladeshThe Knowledge, Awareness and Perception About ClimateChange And Its Hazardous Effects Among Students OfBarishal University: An Environmental Survey | A reconnaissance survey was conducted to explore the existing condition of the study area. To collect the primary data and information on climate change adaptation were gathered through personal interview based on a questionnaire and household survey. Also, focus group discussions were also conducted as well as secondary data from different sources such as journals, books and so forth.An online survey was conducted among the students at Barishal University, Bangladesh. 570 students participated in this study from 24 departments. A semi-structured interview guide and a self-administrated questionnaire was used to collect the data from the participating respondents. | The study goal is to explore the perception, problems and associated risks regarding climate change adaptation in the south-western coastal region of Bangladesh close to the Sundarbans mangrove forest.The aim of the study was to evaluate the level of knowledge, awareness and perception about climate change and the impact on the students at Barishal University. | A substantial number of respondents around 77.15% were not concerned about climate change and 70% of the respondents were unaware of climate change adaptation. The potential reason for low perception level includes inadequate education, lack of training and insufficient financial support.The students that participated in this study, around 97% were worried about climate change. However, among them 28% students were not aware of the causes of climate change, and 36% student lack knowledge about impact on economy of climate change. But, 84% students have experienced extreme natural events such as cyclone, floods, droughts and so on. In addition, 66% students believe that public awareness is important to reduce climate change impacts.  |

1. **RESULTS AND DISCUSSION**

This study has synthesized the literature on two concepts to examine the public climate change perception and knowledge in Bangladesh. The first one is examining the perception of climate change of people that already have or are obtaining formal education. The second aspect is people that are living in the communities that are at high climate risk regions and experiencing the impact of climate change. The reason for synthesizing the literature in these two aspects is to find out, whether people with formal education have knowledge of climate change and what their perception of climate change is, as they have already received or obtaining formal education. On the other hand, to examine the perception of the people that are living in the high climate risk communities and experiencing the impact of climate change in Bangladesh and find out the factors that influence their climate change perception.

* 1. **Perception of People with Formal Education**

Based on the sample of respondents obtained through stratified cluster sampling, the discussion on understanding climate change perception and knowledge in Bangladesh from a non-global north perspective will be particularly interesting, especially as it will provide insights into public views based on their social background (in this case, their educational level). Looking into the public perception of climate change, the research conducted among the university students in Bangladesh to examine students’ perception and knowledge of climate change found mixed observations from students from the analysis of the selected literature for this study. The majority of university students at a public university in Sylhet in Bangladesh believe that the primary cause of climate change is human-caused such as deforestation, extracting sand from rivers, dredging rivers, carbon emissions from vehicles, and so forth (Haq & Ahmed, 2020). However, among all the students who participated in that study, around 25% perceive that climate change as the will of God or a punishment of humankind’s wicked action such as not praying regularly, women going out in public, committing immoral acts, and so on (Haq & Ahmed, 2020). In addition, a substantial number of students from social science discipline perceive climate change as human driven than students from other disciplines (Haq & Ahmed, 2020). Furthermore, the study by Kumar et al. (2019), focusing on public climate change knowledge and perception and private universities in Rajshahi city in Bangladesh, showed that most of the students think combating climate change is challenging since it is already too serious and too late to act, and the government have the primary responsibility to address this problem. Even though the students are aware of the causes and effects of climate change in Bangladesh (Kumar et al. 2019). Nonetheless, a significant number of students believe awareness about climate change could help to a great extent to reduce the effect of climate change (Kumar et al. 2019).

In addition, Uddin & Akter (2023) conducted a study at a public university in Barishal, and the results showed around 97% of students were worried about climate change, and about 66% of students believe that personal awareness is important to reduce climate change effects. However, except for the bioscience faculty students, no other student has academic knowledge on climate change in their graduate and undergraduate studies (Uddin & Akter, 2023). Moreover, the study by Hasan & Akhter (2011) conducted in 4 parts of Dhaka city examining public knowledge and responsiveness to climate change, the findings of the research illustrated that people that have formal education, access to media, as well as personal experiences with environmental issues are more concerned about climate change and willing to develop appropriate environmental attitudes compared to people having less formal education and less informed about environmental problems.

* 1. **Perception of People at High Risk of Climate Change**

Looking into the research that have been conducted in the communities that are at high risk of climate change and where people have been experiencing the impact of climate change provides a different overview about climate change perception than the studies conducted among the people that have or are obtaining formal education and live in the urban or peri-urban areas of Bangladesh.

Islam et al. (2024) conducted a study in the southern coastal region, specifically in the communities of the Sundarbans mangrove forest. The findings reveal that the majority of the respondents living in the communities in the Sundarbans are not concerned about climate change, which could be connected to the educational status of the people, as the study shows 51% of the respondents have no formal education, with only 25% of respondents having completed primary education and 12% of respondents having completed secondary or upper secondary education. The majority of the respondents in the Sundarbans communities experienced financial troubles, waterlogging, salinity, and waterborne disease, but only a small fraction of respondents were neutral, and none were very concerned about climate change impact in the Sundarbans (Islam et al., 2024). Moreover, on the southeast coast in the villages of Chittagong and Chakaria, which are in a climate risk disaster zone, fishers are aware of climate change and can identify the visibility of the changes, such as warmer winters, floods, cyclones, and so on (Hasan & Nursey-Bray, 2017). However, the understanding of climate change is opposite to the scientific explanation, as many of the fishers think climate change is an “Act of God” or divine punishment rather than human activity (Hasan & Nursey-Bray, 2017). Fishers have a long tradition of adapting to environmental risks; however, they do not directly associate this adaptation with climate change, which leads to a barrier for successful adaptation policy implementation in the villages (Hasan & Nursey-Bray, 2017). Their perception has relied mainly on direct experiences and observation of environmental changes and disasters which are embedded in local knowledge, tradition, faith, and values rather than just formal scientific knowledge (Hasan & Nursey-Bray, 2017).

Furthermore, the Chakma, an indigenous community in Rangamati, have inadequate approaches to tackle climate change impacts and climate-related hazards (Huda, 2012). People with wealth, formal education, and access to mass media, such as teachers, NGO workers, and male and young people, are far more likely to recognize climate change than people with lower-level education or no education, such as farmers and small-scale businessmen that are directly or indirectly involved in agricultural activities with an experience of the visible impact of climate change (Huda, 2012). Though Chakma communities in Rangamati are aware of climate change, their strategies to combat climate change-related problems are inadequate due to poverty, ignorance of different adaptation approaches, and knowledge and information gaps on the effect of climate change (Huda, 2012).

1. **LIMITATIONS OF THE STUDY**

The goal of this study was to get an overview of climate change perception and knowledge of people in Bangladesh and, based on that, to understand whether or not there is a need to enhance public climate change perception and, if so, to find out the scope to test the gateway belief model to enhance public perception of climate change in Bangladesh. However, the analysed articles that focused on universities students climate change perception and knowledge in Bangladesh, if the authors have applied stratified cluster sampling that could have provided the climate change perception and knowledge of students from different semesters at the universities could have provided a comprehensive discourse on universities students climate change perception and knowledge. In addition, a meta-analysis literature review could provide a comprehensive output on public climate change perception and knowledge in Bangladesh.

1. **CONCLUSION**

This study has explored the public climate change perception and knowledge in Bangladesh based on the indicators such as access to education, geographic location, and experience with climate vulnerability. The overall findings of the literature showed that students’ perceptions of climate change vary between educational institutions. Students from one university, despite having the knowledge of climate change, some lack scientific consensus on climate change. Whereas, in another university, the majority of the students are seriously concerned about climate change and believe that personal awareness is crucial to tackle climate change. However, looking into some other universities, the absence of morality has been noticed among students to take climate action, which indicates a lack of willingness to take action to mitigate climate change impact. In addition, among people that are experiencing the impact of climate change and living in high climate risk communities in Bangladesh, there are differences on climate change perception and knowledge due to several factors, for instance, cultural beliefs, education, economic situation, information gap, access to mass media, and so forth.

Although people may not usually identify with scientists as a social group (Bayes et al., 2020), as van der Linden (2021) brought up, the gateway belief model has yet to investigate the benefit of using in-group messengers to convey consensus messages regardless of partisanship or other factors. In the developing country setting explicitly in Bangladesh, application of the gateway belief model could be tested by adapting to the localized settings using social consensus and in-group consensus messaging to increase public perception of climate change. Future research could be focused on testing the gateway belief model, adapting to the local settings using social consensus and in-group consensus messaging to enhance public perception of climate change, and examining the effectiveness of using social consensus and in-group consensus messaging in Bangladesh, which will provide a notion of whether or not the gateway belief model is relevant in the developing country context, explicitly Bangladesh.

**Author’s contribution**

The sole author designed, analysed, interpreted and prepared the manuscript

**DISCLAIMER (ARTIFICIAL INTELLIGENCE)**

Author hereby declares that no generative AI tool such as Large Language Models (ChatGPT, COPILOT, etc) have been used. AI grammar and language checking tools have been used to check sentence error during the writing or editing process.

**DATA AVAILABILITY**

This is a review article, prepared from literature review therefore no new data have been generated.

**Competing interests**

Author has declared that no competing interests exist.

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