

Understanding the Complex Interplay between Religion, Belief Systems and Climate Change Attitudes: A Systematic Review

Sarbah Benjamin Kobina ¹ & Duodu Deborah Afua ²

¹St. Paul's University

²Development Practitioner, Compassion International Ghana, West Africa

Abstract

The relationship between religion and individuals' attitudes and actions towards the environment in the face of global climate change is a complex and captivating subject of academic inquiry, with both positive and alarming findings highlighting the intricate interplay between these key variables. This systematic review highlights the lack of precision and clarity in understanding the connection between religion, belief systems, and climate change, leading to inconsistent findings and hindering a comprehensive understanding of this relationship. The research examines how religious beliefs and moral convictions influence attitudes and responses to climate change, offering insights through reviewing and integrating past research. It also analyses the impact of religion and belief systems on attitudes, identifies shaping factors, highlights research gaps, and suggests future exploration. With a sample size of 10 (n = 10), this review provides a structured approach to the research field by analysing and synthesising themes in the literature on religion, belief systems and climate change. Quantitative and qualitative methods were rigorously employed to examine variables, ensuring validity and transparency. Researchers conducted a comprehensive search across multiple scholarly databases, following PRISMA guidelines to include high-quality sources. Despite challenges, scholars maximized selected databases' strengths, maintained strict source criteria, and employed diverse objective research approaches to examine publications, variables, data, interpretations, and research trajectories in the field of religion's impact on climate change attitudes and actions. The findings revealed multiple factors influencing climate change perceptions and highlighted, creating the need for further investigation to address gaps and limitations in the field. The review recommended future research on the link between afterlife beliefs, moral emotions, virtues, and sustainable consumption. It also highlighted the potential research on comparative climate change perspectives across religious groups, the role of religious language in climate communication, and longitudinal studies tracking climate attitude shifts with changing religious beliefs.

Keywords: Religion, Climate Change, Belief Systems, Attitudes, Environment

¹Benjamin Kobina Sarbah is a Doctoral Student, Development Studies at St. Paul's University, Limuru, Kenya.

²Deborah Afua Duodu is a Development Practitioner, Compassion International Ghana, West Africa

1.0 Introduction and background

Climate change has become one of the most pressing global issues of our time, necessitating immediate and coordinated action from all stakeholders. In spite of the abundance of scientific evidence that supports the concept of human climate change, scepticism continues to thrive (Ross et al., 2016). In light of the above-mentioned, political science provides useful insights into the factors that influence cooperation among states and international organisations, allowing for the formulation of successful policies to address shared challenges in a world without a distinct global leader. (Keohane, 2014). Climate change, a widely recognised scientific phenomenon, has numerous global consequences, and this has highlighted the importance of outlining the specific consequences to understand its seriousness. For instance, the adverse effects of climate change on agricultural yields and food security are substantial, giving rise to worries over this global issue. Advance studies indicate that a rise of 2°C in temperature has the potential to cause a significant decline of up to 50% in agricultural earnings throughout the eastern area of the United States (Lemoine, 2018). Furthermore, High emissions scenarios could increase mortality risk by 3.2% of the world GDP by 2100, especially in impoverished and hot areas. Additional carbon dioxide emissions could lead to average costs of \$36.6 in high scenarios and \$17.1 in moderate scenarios, emphasizing the need for informed policy choices (Keohane, 2014; Lemoine, 2018; Dale et al., 2020; Carleton et al., 2019; Ross, et al., 2016; Ghosh & Misra, 2010). Owing to this, the policy document "Integrating mitigation and adaptation in climate and land use policies in Indonesia" puts mitigation ahead of adaptation in Indonesian land-use policies. It stresses the need for climate impacts assessments that are specific to each region, sector-specific assessments of the pros and cons of mitigation and adaptation, and a full, unified approach to shaping climate change policies in the region (Gregorio et al., 2015). Climate change therefore requires active scientific study, collective efforts from governments, communities, businesses, and individuals to reduce emissions, invest in renewable energy, and adapt lifestyles, requiring further research and resource sharing.

It is essential to mention that, religion, specifically Christianity, Islam, and Hinduism, has a substantial impact on environmental stewardship and sustainable consumerism. This is because 84% of the world's population identifies as Christians, Muslims, or Hindus. (Khurshid, 2013; Collet, 2014). Conversely, the existing study on the correlation between religion and climate change is inadequate owing to inconsistencies arising from insufficient cultural context, methodological limitations, and absence of robust theoretical frameworks. Due to this rationale, this study seeks to address the existing knowledge gap by examining the correlation between religious practices and climate change. The study explores the link between religion, belief systems, and climate change attitudes through literature analysis and

systematic review, highlighting the influence of knowledge levels on climate change attitudes, providing valuable insights for researchers and policymakers. Given this rationale, the primary objectives of this study are to examine and assess studies on the impact of religion and belief systems on individuals' perspectives about climate change. Furthermore, the study will explore the influence of religious beliefs, morality, and political affiliation on climate change attitudes, identify research gaps, and propose further research on this correlation.

2.0 Literature review

The pivotal role of religion in sustainable Environmental Behaviour

This literature review explores the intricate connection between religion, beliefs, and attitudes in influencing sustainable environmental behavior. Furlong and Vignoles' (2021) study revealed that ethical beliefs, moral outrage, climate activist affiliation, and global identity significantly influence individuals' willingness to participate in collaborative climate change mitigation initiatives. However, the study further revealed that emotions like fear, guilt, shame, and hope did not significantly affect intentions and collective actions. The study further highlighted the need for more research on the complex interplay between personal beliefs and activism. In view of these findings, Orellano et al. (2020) suggest that religion indirectly influences sustainable consumption by shaping individuals' attitudes, beliefs, and societal norms, which in turn shape their sustainable practices. This highlights the role of religion in driving sustainable behavior and warrants further exploration of related elements. Transitioning to another facet, Hornsey et al. (2016) emphasize the importance of political affiliation on climate change attitudes. They underline that elements such as measuring methodologies, geographical location, and a nation's eco-friendly efficiency play a role in shaping these beliefs. Additionally, Arbuckle's (2017) study reveals that religious affiliation moderates the influence of political ideology on climate change concern, with liberals being more influenced by religion than conservatives are. Furthermore, Morrison et al. (2015) emphasize the significance of considering values, ideologies, worldviews, and political orientation in understanding climate change beliefs, which often outweigh education, gender, knowledge, and personal experiences. However, their impact on environmentally friendly behaviour is modest while Murphy et al. (2015) explore the link between religion and climate change adaptation, highlighting how changes in religious beliefs and practices affect a community's ability to adapt to climate change. Nevertheless, Kilburn (2014) emphasizes the importance of protecting traditional ecological knowledge and promoting resilience amidst potential tensions, while Arbuckle (2017) suggests aligning initiatives with religious beliefs. Fusco et al. (2012) on the contrary found that environmental science majors showed more engagement and stronger climate change beliefs, while Christian students were less inclined towards environmentally responsible behavior.

Negative Effects of Religion on Climate Change

In stark contrast, Kilburn's (2014) study suggests that American religious engagement and biblical literalism have influenced their perception of climate change, leading to a reduced concern for its consequences. Kilburn's study reveals that evangelical Protestants, who frequently attend religious services, express varying apprehension about climate change's consequences, while non-denominational attendees show more positive climate change stances, often influenced by party identification. To emphasize this point, Atanasova and Koteyko (2017) and Fusco et al. (2012) found that a student's major and religious affiliations significantly influence their environmentally responsible behavior and beliefs about global climate change. This in turn underscores the urgency of climate change action and the complex interplay between these factors. Conversely, the study found that students with Christian affiliations were less likely to engage in environmentally responsible behavior, but there was no significant interaction between major and religious affiliation. In light of these diverse findings, White argues that a Judeo-Christian perspective, rooted in human dominance over nature, contributes to environmental degradation in modern society, particularly among US Bible-adherents, reducing environmental concern and influencing climate change denial and policy. Concisely, the examination of current literature suggests that religion's impact on climate change opinions are multifaceted, influenced by biblical literalism and religious service frequency. In the US, some view climate change as natural, while others believe in environmentally responsible conduct.

2.1 Strategy for environmental risk reduction and climate adaptation

The study by Nunn et al. (2016) discovered that spiritual values significantly influence people's connection to nature, leading to pessimism about the environment, despite climate change concerns in the Pacific region. These findings by Nunn et al. The Pacific Islands' environmental risk reduction and climate adaptation initiatives are bolstered by the integration of spirituality and nature-connectedness, with religiously framed conservation messages being particularly promising. However, Orellano et al. (2020) suggest that religion indirectly influences behavior precursors, emphasizing the need for methodologies that consider the moderating role of religion. The research highlights the importance of considering religious affiliation in formulating climate change policies and creating corresponding messages for a more accurate understanding of psychological foundations. This study examines the teachings of nine major religions, focusing on topics like promoting others' well-being and environmental responsibility. Posas (as cited by Morrison et al., 2015) argues that religions can influence their followers to advocate for an ethical approach in line with climate change policy. In summary, this literature review highlights the connection between spirituality, nature-connectedness, and environmental attitudes, emphasizing the importance of incorporating these factors into environmental interventions. However, it also calls for nuanced methodologies to understand religion's role in shaping climate change behavior and attitudes.

3.0 Methods

A systematic review was conducted to examine the relationship between religion and climate change activism. The study aimed to address gaps in current research and contribute to new theoretical frameworks. Both quantitative and qualitative methods were used to ensure methodological transparency, rigor, and validity. The researchers followed the PRISMA 2009 diagram checklist to minimize bias and reported all procedures meticulously. Various scholarly databases were searched, including Semantic Scholar, Springer, Wiley, and PubMed, among others. Advanced search strategies, such as Boolean operators and truncation, were used to construct a comprehensive inventory of keywords. Despite challenges like subscription costs, limited open access, and potential biases within databases, the researchers demonstrated their commitment to rigorous research. Overall, the systematic review provided valuable insights into the relationship between religion and climate change activism, filling gaps in the existing literature and offering new theoretical perspectives. A study aimed to select 10 high-quality research papers that directly addressed the relationship between religion and climate change or environmental care. Out of the 43 papers gathered, 33 did not meet the inclusion and exclusion criteria. The inclusion criteria were diverse, including various methodologies such as systematic reviews, meta-analyses, quantitative and longitudinal studies, and ethnographic approaches. Language accessibility, particularly English-written papers, was also prioritized. The systematic review further refined the selection process by eliminating duplicates, non-peer-reviewed papers, and those lacking core variables. Low-quality research papers, non-academic sources, and papers without full text were also excluded to ensure academic rigor. The exclusion criteria were designed to improve the quality of the selected papers for the review. The review focused on 10 papers, including different types such as quantitative, qualitative, systematic reviews, and meta-analyses. Each paper was evaluated based on specific criteria. The review process assessed the methodological scope and adequacy of the selected papers, contributing to a thorough systematic review process.

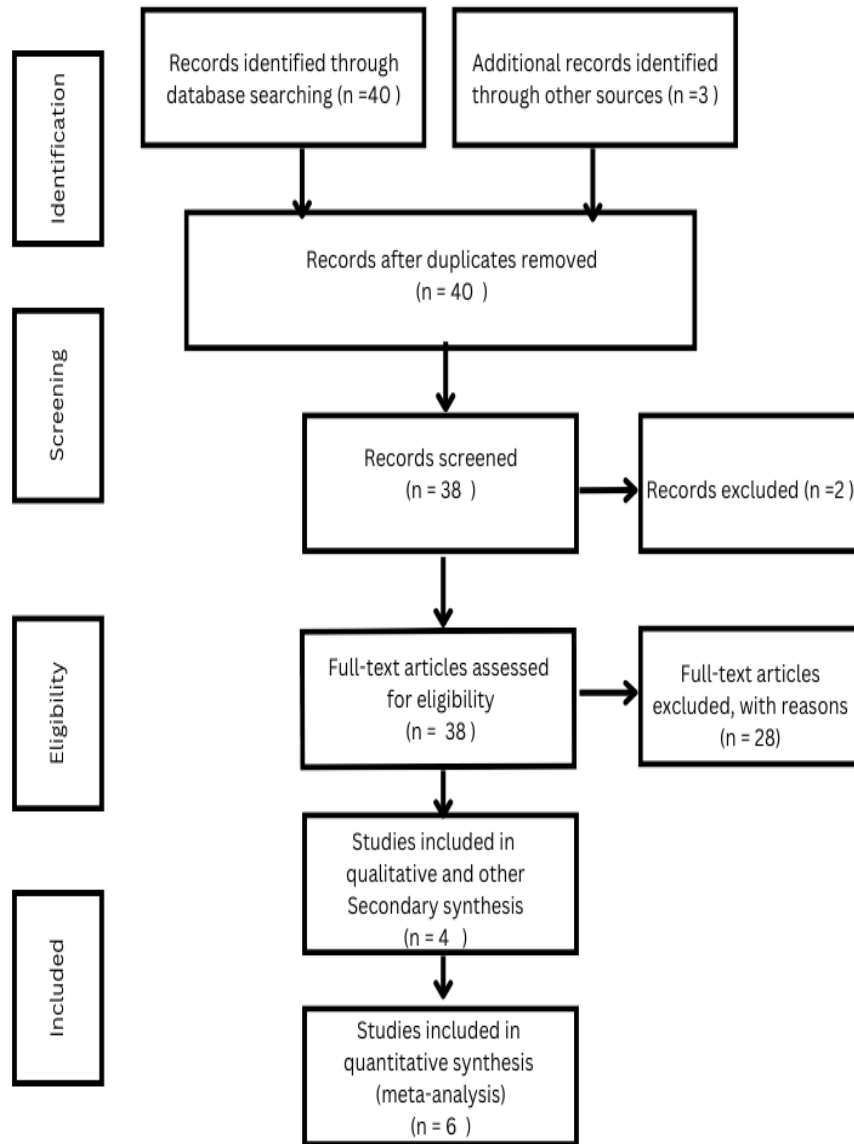


Figure 1. PRISMA flow diagram. Adapted from Moher et al. (2009).

4.0 Results and discussions

Quantitative Sample

Out of the 10 journal studies examined, six of them utilised quantitative methods to explore the correlation between religion and climate change. These studies, conducted by Furlong and Vignoles (2021), Morrison et al. (2015), Nunn et al. (2016), Kilburn (2014), Arbuckle (2017) and Fusco et al. (2012), employed varied approaches and investigated distinct facets of climate change. Furlong and Vignoles (2021) specifically examined the relationship between collective action behaviour and future intentions. They employed a correlational approach and utilised structural equation modelling. In their study, Morrison et al. (2015) investigated climate change attitudes and behaviours using ordinal regression analysis. In parallel, Nunn et al. (2016) did a meticulous investigation on Pacific Islanders, employing diverse factors. Kilburn (2014) and Arbuckle (2017) examined the attitudes, behaviours, and influencing variables related to climate change. In contrast, Fusco et al. (2012) investigated the relationship between ecologically responsible behaviour and other characteristics. Although there were variations in the level of rigour in the methods used, these research made a substantial contribution to our knowledge of the intricate connection between personal beliefs, societal influences, and worries about climate change.

The research conducted by Furlong and Vignoles (2021) and Morrison et al. (2015) aimed to evaluate collective action behaviour, attitudes towards climate change, and associated variables. Nunn et al. (2016) examined the perspectives of participants about nature, worries, and spiritual convictions. In addition, they collected data on gender, age, home island, geography, and year of study to see how these factors can influence views towards environment and worries about climate change. However, the sources did not clearly provide particular indications for these factors. The study sought to comprehend the influence of many variables on attitudes towards environment and climate change. Kilburn (2014) and Arbuckle (2017) performed study on the attitudes, behaviours, and variables associated with climate change. Kilburn employed Probit regression technique to investigate attitudes towards climate change, specifically examining religious views, affiliations, and party identification. Arbuckle (2017) employed a 5-point scale to gauge the extent of apprehension over climate change and endorsement of environmental preservation. Fusco et al. (2012) gathered data on environmentally responsible behaviour (ERB) by administering a thorough questionnaire. Additionally, they investigated how global climate change beliefs operate as a mediator between ERB and characteristics such as major and religious affiliation. These studies utilise various research methods and investigate many facets of climate change, with a specific emphasis on comprehending how ideas, attitudes, and behaviours are shaped by factors such as religious views, connections, and human traits. Consequently, they employ various methods to gather and analyse data, which helps to develop a thorough

comprehension of the intricate connection between personal views, societal influences, and worries about climate change.

The review analysed many research that investigated different independent variables (IVs) in order to comprehend the elements that impacted involvement in the Extinction Rebellion movement. The research employed several approaches, including the Social Identity Model of Collective Action (SIMCA) and the Encapsulated Model of Social Identity in Collective Action (EMSICA). In addition, additional research examined factors such as religious membership, spiritual views, gender, age, church attendance, Home Island, location, and year of study. These researches also examined attitudes towards the causes and effects of climate change, the relationship between religious beliefs and political ideologies, and the views of global climate change among students with different majors and religious affiliations.

The review-analysed research that investigated the independent factors (IVs) that affect involvement in the Extinction Rebellion movement. These studies employed techniques such as SIMCA and EMSICA. The study also examined factors such as religious affiliation, spiritual beliefs, gender, age, church attendance, Home Island, location, year of study, and attitudes on climate change. Additionally, it investigated the relationship between religious affiliation and political ideology, as well as the impact of student majors. Six quantitative studies found that moral convictions, anger, XR identification, global identification, and participative efficacy had a significant impact on attitudes and behaviours related to environmental issues and climate change. These factors were found to be predictors of collective action within the Extinction Rebellion movement. Furthermore, climate change perspectives were influenced by religious beliefs, political orientation, and individual traits, emphasising the complex and diverse nature of this connection. The study encompassed six quantitative publications and concluded that nominal religious affiliations did not have a significant influence on American views regarding climate change. Simultaneously, party affiliation had different impacts on the participation of those who were not formally affiliated with any religious denomination.

However, characteristics such as fear, guilt, or hope did not have a significant influence on forecasting collective action behaviour. Moreover, there was no substantial association between Christian self-identification and environmentally conscientious behaviour or perspectives on global climate change. This research emphasised the intricate nature of the connection between religion, political ideology, and views towards climate change in the United States. Multiple research has examined the correlation between religion and views on the environment. As an instance, Furlong & Vignoles (2021) investigated how moral views, anger, XR identity, global identification, and participative efficacy influence individuals' engagement in the Extinction Rebellion movement. Morrison et al. (2015) emphasised that religious affiliation has a crucial influence in shaping views towards climate change. In a similar vein, Nunn et al. (2016) examined the influence of

spiritual beliefs on environmental views among the Pacific Islander community. Kilburn (2014) investigated the impact of religious beliefs on public sentiment in the United States, whereas Arbuckle (2017) explored environmental sentiments among different religious traditions and political ideologies. In a similar vein, Fusco et al. (2012) investigated the relationship between environmental education, students' academic disciplines, religious affiliation, and environmentally responsible behaviour.

All investigations encountered methodological limitations. Furlong & Vignoles (2021) highlighted the need of doing longitudinal and experimental investigations. Nevertheless, the outcomes of these investigations have produced contradictory outcomes regarding the adequacy measures. Morrison et al. (2015) raised concerns over the adequacy of representation and coverage. Conversely, Nunn et al. (2016) had challenges in obtaining accurate survey responses and had a restricted sample size. However, Kilburn (2014) recognised the constraints associated with using self-reported data. Arbuckle (2017) acknowledged the existence of divergent perspectives across various religious affiliations. Fusco et al. (2012) has restrictions pertaining to a particular university and sample. Notwithstanding these difficulties, the investigations offered useful insights and proposed directions for future investigation. The findings of Furlong and Vignoles (2021) were derived from survey data collected from XR advocates, without providing precise statistical outcomes. However, Morrison et al. (2015) acknowledged constraints in the extent and inclusiveness of their study. Positively, Nunn et al. (2016) provided a robust synopsis of key findings and implications. Kilburn (2014) offered valuable insights into the intricate relationship between religion and American public opinion. Likewise, the conclusion of Fusco et al. (2012) concisely summarised the research findings and their consequences for U.S. climate change policy. Research findings offered recommendations for future investigation. For example, Furlong and Vignoles (2021) advocated for the use of longitudinal and experimental studies. Morrison et al. (2015) suggested more exploration of the relationship between religion and attitudes towards climate change.

Qualitative Sample

Two out of ten scholarly journal publications examined research that predominantly employed qualitative methodologies, utilising ethnographic and critical metaphor analysis approaches. Murphy et al. (2015) performed ethnographic research to investigate traditional belief systems and the difficulties encountered when integrating technologies into communities. The study included focus group discussions and semi-structured interviews. Conversely, Atanasova and Koteyko (2017) utilised critical metaphor analysis to investigate metaphors used in climate change talks sourced from online media. The primary conclusions derived from the analysed quantitative publications underscored the significant impact of metaphors, namely those related to war and religion, in climate change discourse. Crucially, these studies emphasised the significance of meticulous methodology in light of the

constraints and particular circumstances of the newspapers and environments examined. Murphy et al.'s (2015) study acknowledged the influence of shifting religious beliefs on the ability to adapt and engage in livelihood practices. Atanasova and Kotevko (2017) contended that qualitative methodologies provide a thorough comprehension of intricate phenomena, while also recognising the context-specific aspect of qualitative research.

Regarding the limitations, Murphy et al. (2015) found difficulties in accessing data on disputes caused by different belief systems. This highlights the need for more research on changes in religious affiliation and the involvement of faith-based organisations. Atanasova and Kotevko (2017) discovered drawbacks in the sample sizes, possible bias, and contextual variables that might affect the findings. Murphy et al.'s ethnographic data offered profound insights and acknowledged the necessity for more study. On the other hand, the viewpoints captured by Atanasova and Kotevko in their study acknowledged the limits in making broad conclusions, and identified areas that need more research. Murphy et al. on the other hand focused on investigating the involvement of faith-based organisations (FBOs) and the development of traditional ecological knowledge (TEK). Although both research acknowledged deficiencies in the existing literature, they classified these deficiencies into conceptual, contextual, methodological, and empirical elements. However, neither study specifically identified any substantial deficiencies in their qualitative methodologies. Ultimately, two academic journal articles utilised qualitative methodologies, highlighting the importance of metaphors in the discussion around climate change. Significantly, these studies offered excellent insights through their qualitative methodologies, without any major deficiencies, while they acknowledged limits and emphasised the need for more study.

Meta-analysis Sample

Hornsey et al. (2016) did a meta-analysis on a selection of 10 peer-reviewed publications to examine the factors that influence confidence in climate change. Using a methodical approach, 171 publications from a variety of sources, such as academic institutions, research businesses, and governmental agencies were analysed. Although the procedures used were thorough, the presence of differences in impact magnitudes between researches suggested that there may be some limits. The meta-analysis examined the relationship between belief in climate change and several independent factors such as political affiliation, ideology, knowledge levels, and policy support indicators. The results unveiled the influence of political variables and expertise on the acceptance of climate change. Nevertheless, the study did not provide specific information about the uniformity of indicators and the dependability of measurements. Hornsey et al. (2016) could not uncover any particular results that were considered inconsequential. However, they did recognise that the limitation of the generalizability of their findings due to variances in the intensity of the effects. The results underscored the intricate nature of the elements that influence confidence in climate change. It is therefore important to interpret the results carefully due to the

reported diversity among studies and the lack of particular regions identified for future investigation.

To conclude, Hornsey et al.'s meta-analysis provided insight into the complex elements that influence confidence in climate change, with particular focus on variables such as political affiliation, ideology, and expertise. The systematic method highlighted the intricate nature of the issue, but important to exercise caution owing to the heterogeneity in the intensity of the effects and the lack of reported consistency metrics.

Systematic Review Sample

Out of the 10 peer-reviewed publications analysed, one of them included papers that employed a meta-analysis. Orellano et al. did a comprehensive analysis from 1998 to 2019 to examine the relationship between religion and sustainable consumption behaviour among individuals. The systematic review utilised many methodologies and databases, following the PRISMA criteria, to examine the correlation between religion and sustainable consumption. The researchers emphasised the need for further investigation on other mediating factors and methodological issues, arguing for a comprehensive study to gain a clear understanding of this intricate connection. The review reveals religion's influence on attitudes, values, self-efficacy, social norms, and identity, highlighting the need for further research on undiscovered aspects and contextual elements. The study recognised religion as a possible catalyst for sustainable consumption, but noted the inconsistent results in prior studies, which can be attributed to differences in research methods and theories. The proposal posits that religion has an indirect influence on sustainable consumption through several psychological dimensions, indicating the necessity for further understanding of its effects. Furthermore, limitations in terms of data sources, possible exclusions, and the lack of quality assessments for research were discovered. Additionally, future studies to tackle these constraints and suggested potential paths for more investigation were emphasised, such as examining the impact of gratitude and forgiveness on environmental conduct among various religious affiliations. Overall, Orellano et al. proposed for further research to examine the impact of gratitude, forgiveness, and prayer on environmental behaviour. Conceptual, methodological, and empirical deficiency that need to be addressed were identified. Nevertheless, the review lacks clear and transparent information on the study selection process, raising concerns about potential bias and hindering the clarity of the approach.

5.0 Conclusions

This comprehensive systematic review explores the complex relationship between religion, belief systems, and attitudes towards climate change, drawing upon a diverse range of scientific literature. By conducting a comprehensive study that incorporates quantitative, qualitative, systematic review, and meta-analysis investigations, we have gained significant knowledge regarding the intricate connections and impacts that contribute to individuals' attitudes towards climate

change and their corresponding actions towards the environment. Quantitative research has provided valuable insights into the significant influence of religion and religious beliefs on the formation of attitudes towards climate change. These studies emphasise the considerable impact that connections and convictions can have on individuals' perspectives on environmental matters. In addition, qualitative research has revealed in-depth narratives and nuanced viewpoints, providing a more profound comprehension of the complicated connections between belief systems, such as conventional ecological knowledge and metaphors, and the discourse surrounding climate change. Concurrently, the utilisation of meta-analytical and systematic review methodologies has rigorously amalgamated existing evidence, emphasising the importance of factors such as political affiliation and ideology in influencing views and attitudes towards climate change. Although these studies provide significant contributions to our understanding of the complex processes involved, they also underscore the importance of exercising caution and doing additional study. Many things make it hard to study the link between religion, beliefs, and attitudes towards climate change. For example, the strength of the effects seen in different studies varies, qualitative findings depend on the specific situation, and there are problems with data consistency and generalizability. However, this systematic review offers a strong basis for future research efforts, urging scholars to explore new areas, tackle methodological and theoretical obstacles, and further investigate the mediating factors that support these intricate connections. In the face of the urgent global issue of climate change, it is crucial to recognise the significance of religion and belief systems in order to promote a society that is more sustainable and environmentally aware.

6.0 Recommendations

In light of the results, our systematic review of the intricate relationship between religion, belief systems, and climate change attitudes suggests several promising avenues for further research. Future studies could investigate intermediary constructs that bridge religious beliefs and environmentally responsible behaviour, such as beliefs in the afterlife, moral emotions, rituals, and virtues. Comparative examinations of climate change perspectives across various religious affiliations and denominations could reveal intriguing variations and commonalities in interpretation and environmental stewardship. Exploring the role of religion in environmental activism, including participation in climate action movements like Extinction Rebellion, is another fruitful area. Additionally, researchers should analyse the use of religious language and metaphors in climate-change communication strategies, track longitudinal shifts in attitudes concerning changes in religious beliefs or affiliations, and consider the influence of cultural and regional contexts on this relationship. These recommendations provide a roadmap for future exploration and understanding in this complex field.

6.1 Funding

No funding affiliations are involved in this study.

6.2 Disclosure Statement

The authors reported no potential conflict of interest.

References

- Arbuckle, M. (2017). The interaction of religion, political ideology, and concern about climate change in the United States. *Society and Natural Resources*, 30, 177-194. <https://doi.org/10.1080/08941920.2016.1209267>
- Atanasova, D., & Koteyko, N. (2017). Metaphors in Guardian Online and Mail Online Opinion-page Content on Climate Change: War, Religion, and Politics. *Environmental Communication*, 11, 452-469.
- Carleton, T. A., Jina, A. S., Delgado, M., Greenstone, M., Houser, T., Hsiang, S. M., ... Zhang, A. T. (2019). Valuing the Global Mortality Consequences of Climate Change Accounting for Adaptation Costs and Benefits. *PSN: Global Warming and Climate Change*. <https://doi.org/10.2139/ssrn.3224365>
- Collet, B. A. (2014). Introduction to the Special Issue: Probing the Nexus of Migration, Religion, and Education. *Diaspora, Indigenous, and Minority Education*, 8, 55-58. DOI:10.1080/15595692.2013.857305
- Dale, A., Robinson, J., King, L. A., Burch, S., Newell, R., Shaw, A., & Jost, F. (2020). Meeting the climate change challenge: local government climate action in British Columbia, Canada. *Climate Policy*, 20, 866-880. <https://doi.org/10.1080/14693062.2019.1651244>
- Furlong, C., & Vignoles, V. L. (2021). Social Identification in Collective Climate Activism: Predicting Participation in the Environmental Movement, Extinction Rebellion. *Identity*, 21(1), 20-35. <https://doi.org/10.1080/15283488.2020.1856664>
- Fusco, E. J., Snider, A. G., & Luo, S. (2012). Perception of global climate change as a mediator of the effects of major and religious affiliation on college students' environmentally responsible behavior. *Environmental Education Research*, 18, 815-830. <https://doi.org/10.1080/13504622.2012.672965>
- Ghosh, S., & Misra, C. (2010). Assessing Hydrological Impacts of Climate Change: Modeling Techniques and Challenges. *The Open Hydrology Journal*, 4, 115-121. <https://doi.org/10.2174/1874378101004010115>
- Gregorio, M. D., Nurrochmat, D. R., Fatorelli, L., Pramova, E., Sari, I. M., Locatelli, B., & Brockhaus, M. (2015). *Integrating Mitigation and Adaptation in Climate and Land Use Policies in Indonesia: A Policy Document Analysis*. Retrieved September 12, 2023, from <https://www.cifor.org/knowledge/publication/5953/>

- Hornsey, M. J., Harris, E. A., Bain, P. G., & Fielding, K. S. (2016). Meta-analyses of the determinants and outcomes of belief in climate change. *Nature Climate Change*, 6, 622-626. <https://doi.org/10.1038/nclimate2943>
- Keohane, R. O. (2014). The Global Politics of Climate Change: Challenge for Political Science. *PS: Political Science & Politics*, 48, 19-26. <https://doi.org/10.1017/S1049096514001541>
- Khurshid, F. (2013). *Religion Wise Distribution of Population in Jammu, Kashmir and Ladhak Province* Province Population Persons Hindu Muslims Christians Sikhs Buddhists Jains. <https://shodhganga.inflibnet.ac.in/handle/10603/11399>
- Kilburn, H. W. (2014). Religion and foundations of American public opinion towards global climate change. *Environmental Politics*, 23, 473-489. <https://doi.org/10.1080/09644016.2013.859777>
- Lemoine, D. (2018). Estimating the Consequences of Climate Change from Variation in Weather. *Political Economy - Development: Environment eJournal*. <https://doi.org/10.3386/W25008>
- Morrison, M., Duncan, R., & Parton, K. A. (2015). Religion Does Matter for Climate Change Attitudes and Behavior. *PLOS ONE*, 10. <https://doi.org/10.1371/journal.pone.0134868>
- Murphy, C., Tembo, M., Phiri, A., Yerokun, O., & Grummell, B. (2015). Adapting to climate change in shifting landscapes of belief. *Climatic Change*, 134, 101-114. <https://doi.org/10.1007/s10584-015-1498-8>
- Nunn, P. D., Mulgrew, K. E., Scott-Parker, B., Hine, D. W., Marks, A. D., Mahar, D., & Maebuta, J. (2016). Spirituality and attitudes towards Nature in the Pacific Islands: insights for enabling climate-change adaptation. *Climatic Change*, 136, 477-493. <https://doi.org/10.1007/s10584-016-1646-9>
- Orellano, A., Valor, C., & Chuvieco, E. (2020). The Influence of Religion on Sustainable Consumption: A Systematic Review and Future Research Agenda. *Sustainability*. <https://doi.org/10.3390/SU12197901>
- Ross, L. A., Arrow, K. J., Cialdini, R. B., Diamond-Smith, N. G., Diamond, J. M., Dunne, J. A., Ehrlich, P. R. (2016). The Climate Change Challenge and Barriers to the Exercise of Foresight Intelligence. *BioScience*, 66, 363-370. <https://doi.org/10.1093/biosci/biw025>
- Smith, K., York, R., & Ehrlich, P. R. (2016). The Climate Change Challenge and Barriers to the Exercise of Foresight Intelligence. *BioScience*, 66, 363-370. DOI:10.1093/biosci/biw025