



URBAN DEWELLERS'S ROLE IN OFFSETTING CLIMATE CHANGE

Dr. Neha Garg ¹ & Sonal Bhushan ² 

RESEARCH ARTICLE



Author Details: ¹ Assistant Professor, Department of Sociology, Chaudhary Charan Singh University, Meerut, Uttar Pradesh, India; ² Research Scholar, Department of Sociology, Chaudhary Charan Singh University, Meerut, Uttar Pradesh, India

Corresponding Author:
Sonal Bhushan

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Abstract

In order to guide adaptation and mitigation policies, it is critical to comprehend public knowledge of climate change. This study looks at the psychological component of urban dwellers' self-reliant behaviour and mitigation strategies, as well as their awareness and concern about climate change. According to the study, the majority of city dwellers are aware that climate change is occurring and attribute it mostly to deforestation, fuel consumption, and nature, with less emphasis on domestic activities and inadequate waste management.

In order to help urban dwellers deal with and lessen the effects of climate change, understanding environmental psychology is essential. This necessitates research aimed at addressing the issue of climate change from an urban standpoint, particularly with regard to public knowledge and concern. It is thought that a crucial first step in developing mitigation and adaptation plans for climate change is raising public awareness and concern about their detrimental contributions to the phenomenon. One of the most crucial issues to comprehend to accurately estimate future climate change is public awareness and concern.

Keywords: *Climate Change, Environmental Psychology, Urban Dwellers, Public Awareness*

Introduction

One major limitation of a vast amount of psychological research is that it often views the environment merely as a neutral backdrop to human actions and a stage where we perform our lives. Essentially, the environment is treated as extraneous noise. In psychological studies and experiments, it is common to eliminate or minimize any irrelevant noise that could influence the 'purity' of our findings. While this approach is rational and beneficial in many contexts, it becomes crucial to consider the environment when aiming to understand human perceptions, attitudes, and behaviours in real-life situations. It is a characteristic feature of environmental psychology that in any environmental transaction, attention should focus on the user of the environment as much as the environment itself. For example, as it is not possible to understand the architecture and spatial layout of a church, mosque or synagogue without reference to the sacramental precepts which influenced their design, so it is no less possible to understand any landscape without reference to the different social, economic and political systems and ideologies which inform them.

The surroundings we inhabit are not merely neutral and devoid of values; they are influenced by culture. These environments continually express meanings and messages, playing a crucial role in human behaviour and activity.

The prominent issues shaping the political and environmental landscape at the start of the 21st century – such as human rights, well-being, quality of life, globalization, and sustainability – must be examined and addressed by environmental psychologists, with attention to both cross-cultural influences and historical contexts. The influence of environmental psychology could be strengthened if researchers engaged with the broader cultural and temporal contexts that shape individuals' perceptions and actions in specific environments. This final section examines some of the efforts made by environmental psychologists that aim to tackle this issue and respond to what some have identified as an 'application gap' in environmental psychology (i.e., the disparity between the formulation of general principles and practical advice that is immediately useful for practitioners).

Literature review

Many previous studies have examined behavioural responses to climate change and its influencing factors. For instance, it practically necessitates the usage of high-rise residential structures, which affect inhabitants in different ways (Gifford 2007). A wide range of factors that influence urban residents' role in understanding the climate change have been identified through

numerous research studies.

Place attachment

Place attachment refers to the connections that residents feel toward their neighbourhoods (or other places) that hold particular significance for them (Altman and Low 1992, Stedman 2002). It has been described as comprising three to five components. Scannell and Gifford (2010) identify three dimensions: individuals, locations, and the psychological mechanisms involved. In contrast, Raymond and his colleagues (2010) outline five elements: place identity, place dependence, bonding with nature, bonding with friends, and bonding with family.

Attachment to a place influence how people view their neighbourhood. This may account for why residents in impoverished areas often evaluate their environment more positively than outsiders (Cunningham 1984, Helson 1964) and why older individuals might remain attached to declining towns (Kaplan 1985). Additionally, it may clarify why homeowners, and long-standing residents perceive fewer instances of disorder (such as graffiti or litter), experience a diminished fear of crime, and exhibit a stronger sense of community belonging (Brown et al. 2003). It is not surprising that individuals who have a strong attachment to their living environment find it challenging to relocate (McAndrew 1998).

Place attachment is more centred on social connections and affective ties with a location, while satisfaction is typically based on routine activities like shopping or leisure (Aiello et al. 2010). Nonetheless, there is a close connection between the two ideas. For instance, higher levels of satisfaction with a location are linked to feeling at home there (Lord and Rent 1987). The psychological needs of urban dwellers as they relate to their attachment and neighbourhood satisfaction are covered in the rest of this chapter. The needs of the cities' residents should be considered when developing sustainable cities. As a result, we will briefly discuss how each resident has different needs before going over the necessity of safe spaces, social interaction, and pleasant surroundings. In order to support future sustainable urban planning initiatives, the aspects of city architecture that have psychological effects on urbanites should be studied.

Sustainability and Urban Psychology

It is important to take into account the elements that affect citizens' contentment and sense of commitment to their city. Cities that prioritize environmental sustainability also have higher levels of attachment and contentment. For instance, more walkable or bikeable neighbourhoods increase social interaction and physical fitness among inhabitants while lowering greenhouse gas emissions (Congress for the New Urbanism 2010). Furthermore, city parks and green areas enhance the quality of the air and help people regain their mental and physical abilities (van den Berg et al. 2007; Mitchell and Popham 2007).

Although inhabitants' happiness and environmental sustainability are often correlated, population density is one facet of sustainable city life that may conflict with the objective of residents' satisfaction. High-density living is linked to lower levels of attachment and satisfaction and can be unpleasant for residents when it results in noise, crime, congestion, or a lack of natural places (Hur et al. 2010). However, because it is effective and stops sprawl from destroying nearby natural areas, increasing city density is beneficial for sustainability. Enhancing sustainability and liveability requires smart city planning. When reshaping cities to improve their environmental sustainability, city planners should take into account the resident's concerns.

Individual Differences

The needs of city dwellers variate as each urban centre's population have unique demands, no one plan will work for everyone, making design difficult. In inner-city neighbourhoods, for instance, female teens are more likely than male teens or older teens to feel alienated from and dissatisfied with their local area (Fagg et al. 2008). They also differ more from male teens in how they perceive traffic flow and the value of crosswalks or pedestrian traffic signals (Yan et al. 2010). Another factor that may contribute to differences in city satisfaction and attachment is a person's long-term preferences for cities, suburbs, or rural areas. Some people abstain from living in city, while others are urbanophiles, preferring a more urban lifestyle.

The prevalence of adverse events linked to city living is often overestimated by urbanophobes and underestimated by urbanophiles (Félonneau 2004). Increasing the number of urban villages – viable, small-scale communities dotted across a city that provide a sense of scale – is one way to address this issue.

The need for areas that are calm, clean, natural, and aesthetically pleasing, unfortunately cities frequently have visually uninteresting places, noise, air pollution, and a lack of green space. Once more, urban quality of life and sustainability are interwoven because these frequently stem from unsustainable energy generation, transportation, and building methods. These features of the city are not only disagreeable, but they can also have detrimental psychological impacts. For instance, loud street-level noise has been demonstrated to decrease one's motivation to assist others and airplane noise can be extremely stressful (Bronzaft et al. 1998, Evans and Maxwell 1997). Similar to this, the air pollution and unpleasant smells that are frequently present in urban areas might have a detrimental impact on how people see other people (Rotton 1983), increase hostility (Rotton 1979), and possibly raise the frequency of psychological disorders and domestic conflicts (Rotton and Frey 1984, Rotton and Frey 1985). For instance, if there was cigarette smoke present, people were less inclined to assist a blind person who had dropped their glove (Bennett and Casey 1989).

The Need for Security

The need for security can have a significant impact on how happy city dwellers are with their neighbourhood; they are more content when they feel protected (Baba and Austin 1989). People are less inclined to value environmental sustainability or recognize the advantages of sustainable living if they feel frightened. Long-term residents' sense of attachment may also be diminished by a fear of crime or a significant influx of "different" people into the neighbourhood (Goodman and Hankin 1984). Ironically, though, those who feel more a part of their community also tend to believe that there is less chance of crime and other incivilities (such as litter or graffiti) (Brown et al. 2004). Therefore, one consequence of community attachment is that locals tend to downplay or dismiss the negative aspects of their neighbourhood.

The Need for Social Interaction

Because humans are social creatures, place attachment can be accurately predicted by neighbourhood social ties (Lewicka 2010). Residents become more committed to a community when it fosters pleasant social interaction and serves their needs (Kaplan 1984, Mesch and Manor 1998). According to Wilson-Doenges and Baldassare (1996) this attachment is also facilitated by a feeling of community, which grows as inhabitants enjoy greater privacy and community involvement but diminishes as a city grows larger, denser, and more ethnically diverse. For sustainability-related reasons, urban planners who are interested in increasing city density should be mindful that doing so may lead to a decline in social cohesiveness and, consequently, community attachment. However, social connectedness with neighbours and the probability that inhabitants will stay in the neighbourhood (as opposed to relocating) both rise with neighbourhood confidence (Varady 1986). All things considered, these factors might indicate a compromise between sustainability and the happiness of the residents.

Discussion

Understanding environmental psychology's function is essential to helping city dwellers deal with and lessen the effects of climate change. It is thought that a crucial first step in developing mitigation and adaptation strategies is raising public awareness and concern about their detrimental impacts to climate change. One of the most crucial ideas that underpins accurate estimates of future climate change is public awareness and concern.

According to the literature review, earlier research has attempted to investigate locals' climate change behaviour and the elements that influence it. These studies have produced several enlightening findings. However, it is remarkable that there are so few empirical research examining how urban dwellers behave in reaction to climate change and its impacting elements. Given the significance of this issue, it is imperative to investigate inhabitants' behavioural responses and design adaptation policies in order to help the world's societies become climate adaptive. We think there is a research gap, and by examining this subject, the current study hopes to fill it.

In the present study, we draw on previous research to show that policymakers should actually take the psychological components of adaptation into account. Literature from the linked disciplines of sociology and psychology serves as the basis for the theoretical argument. We begin by reviewing adaptation and adaptable capacity research from several disciplinary perspectives, with a focus on how motivation and perceived adaptive capacity were overlooked in this study.

Previous research on adaptation and adaptable capacity in the context of climate change has modelled the adaptation process in very straightforward, linear terms and has concentrated on elements like resources that may influence people's ability to respond objectively. But climate change adaptation is only one instance of how people make decisions when faced with uncertainty. A vast body of research on human decision-making and behaviour outside of climate change indicates that people are influencing the dynamic and distinct environment around them, yet certain characteristics are the same for a group that somewhat binds them together.

That is why it is imperative that we develop into a climate-adaptive civilization capable of making informed decisions to handle the opportunities and threats associated with climate change. Because adaptation takes place in households, inhabitants are crucial to this process. Locals can either adapt on their own or deal with the effects of climate change, including increased water costs. Residents can, however, also put pressure on public officials to take action. Residents can also adapt to climate change to a large extent.

Conclusion

Urban living can be safe, aesthetically beautiful, and focused on the community, or it can be polluted, criminal, and alienating. In general, living in an environmentally friendly neighbourhood is also enjoyable. Declining neighbourhoods can be turned into aesthetically pleasing and useful urban areas with careful design choices that take into account the unique demands of each occupant. High-density living and increased urbanization may be more sustainable than suburban or rural living, but neighbourhoods will fail if their population relocate to the suburbs or rural areas. As a result, when planning a community, the demands of urban residents must be considered. For sustainable city planning, it might be difficult to increase city density while lowering the detrimental psychological effects that come with it.

Therefore, it is imperative that we develop into a climate-adaptive civilization capable of making informed decisions to handle the opportunities and threats associated with climate change. Because adaptation takes place in households, inhabitants are

crucial to this process. Locals can either adapt on their own or deal with the effects of climate change, including increased water costs. Residents can, however, also put pressure on public officials to take action. Residents can also adapt to climate change to a large extent. Individual actions, such travel and food expenditures, account for 40% emissions, according to Gardner and Stern (2008). U.S. households contribute about 35% of the nation's CO₂ emissions, which is more than the entire U.S. industrial sector and more than any other nation except China, despite the fact that businesses in the manufacturing and energy sectors are the main source of CO₂ emissions (Cadez and Czerny, 2016).

It's astonishing, though, how little residents know about the consequences of their choices. Deepening our understanding of citizens' behavioural responses and the ways that different elements may impact policy formation and restrict adaptive options is crucial. Policymakers will benefit greatly from this understanding, which will also encourage the growth of a climate-adaptive civilization.

Nonetheless, the results of the study suggest that cost has a significant impact on how urban dwellers behave. Therefore, in order to promote the behaviour of urban dwellers, government policy should remove economic and other obstacles. Giving urban dwellers information that makes them concerned about the dangers of climate change is likely to encourage them to take meaningful action. Informational messages regarding climate change need to be contextualized within the environmental values that are important to certain localities. Additionally, while adaptation at the human level may be a policy choice, it should be supported by adaptation initiatives from other actors, such as the business and industry sectors.

Lastly, it is important to note this study's shortcomings. Not all the variables affecting inhabitants' behaviour were examined in the study. However, this study offers valuable information, a foundation for future research, and will encourage more studies on urban policy and climate change.

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