

LIFESTYLES OF CITY BARANGAY RESIDENTS ASSOCIATED TO CLIMATE CHANGE

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Abstract

This study determines the lifestyles associated to climate change among the residents in the city barangays of Dipolog and Dapitan. Results divulged that the study is dominated with young professionals and students with ages 11 to 29 years old whose behaviors and practices at home, in the workplace, at home and workplace combined and in social and economic interactions appeared to have alleviated and aggravated the impact on climate change. Lifestyles of respondents in the workplace ranked highest. It was also discerned that there was a significant difference on the lifestyles at home, in the workplace, at home and workplace combined and in social and economic interactions among professionals and non-professionals in Dipolog and Dapitan cities. It concludes that office workers and homemakers practices attest to have aggravated or increased the effect of climate change however they have compelling reasons to be value-focused in various ways like being organized, comfortable and health conscious, hence lifestyles of residents in vastly urbanized regions primarily those office employees have to be subjected to some behavior adaptation to address climate change mitigation.

Keywords: *climate change, mitigating, aggravating lifestyles*

Introduction

Climate change has indeed remained a dynamic and alarming issue in almost all conventions of men, since it demands an increasing sense of urgency. Many have now felt and experienced the impact of climate change to the environment, public health, the global economy, global security, and the civil society.

Persuasively, the Intergovernmental Panel on Climate Change (IPCC, 2001) itemized various occurrences that show climate change and these comprises plant and animal range shifts and population changes, coral reef bleaching, spreading of disease, heavy snowfalls and flooding, downpours, droughts and fires.

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According to them, these are only some of the increasing body of observations that present a collective picture of a warming world and further changes in the climate structure.

Climate change is one of the greatest challenges of our time as explicitly articulated in the excerpts of McCosker (2009) from a summary of the 2009 Copenhagen Accord on Global Climate Change and an examination of Australia's position on the environment. Our strong political will must be emphasized to urgently combat climate change in accordance with the principle of common but differentiated responsibilities and respective capabilities.

Furthermore, John Holdren (2007), President of the American Association for the Advancement of Science affixed that we basically have three choices - mitigation, adaptation, and suffering. We are going to do some of each. The query is what the mix is going to be. The more mitigation we do, the less adaptation will be required, and the less suffering there will be.

This phenomenon could be ascribed to the behaviors, lifestyles and practices of the people who have dwelt and continuously oppressed the natural resources and have frequently done commotions that pose threats to the environment. Only men could find ways to mitigate or perhaps totally solve these threatening environmental conditions. Thus, this paper anchored on some theories that would somehow help elucidate some concepts on people's behaviors and practices and the consequences that they may bring to their personal lives, to the lives of others and to the environment as a whole. One of which is the Social Cognitive Theory of Bandura and Mischel (1999) cited by Pervin & John (2001) that emphasizes the social origins of behavior and the importance of cognitive thought processes in all aspects of human functioning-motivation, emotion, and action. The theory suggests that behavior can be explained in terms of an interaction between the person and the environment. People are influenced by environmental forces, but they also choose how to behave. The person is both responsive to situations and actively constructs and influences situations. People select situations as well as being shaped by them; they influence the behavior of others as well as being shaped by the behavior of others. According to social cognitive theory, behavior is situation-specific and people have distinctive patterns of behaving in situations.

The theory proposes further that change of behavior is affected by ecological influences, personal factors, and attributes of the behavior itself. Each may affect or be affected by either of the other two. A central tenet of social cognitive theory is the concept of self-efficacy. A person must believe in his or her capability to perform the behavior (i.e., the person must possess self-efficacy) and must perceive an incentive to do so (i.e., the person's positive expectations from performing the behavior must outweigh the negative expectations). In addition, a person must value the consequences or outcomes that he or she assumes will crop up as a product of executing a specific action or behavior.

This is also supported with the theory of reasoned action which affirms that individual performance of a certain behavior is largely determined by a person's intent to execute that behavior. This intention is determined by two major factors: the person's attitude toward the behavior (i.e., beliefs about the outcomes of the behavior and the value of these outcomes) and the influence of the person's social environment or subjective norm (i.e., beliefs about what other people think the person should do, as well as the person's motivation to comply with the opinions of others). The theory of planned behavior adds to the theory of reasoned action the concept of perceived control over the opportunities, resources, and skills necessary to perform a behavior. The notion of professed behavioral control is comparable to the concept of self-efficacy -- person's sensitivity of his or her capability to perform the behavior. Perceived behavioral control over opportunities, skills and resources crucial to act upon a behavior is supposed to be a serious facet of behavior change processes.

Lewin's Field Theory (1947) cited by Smith (2001) also believed that for change to arise, the overall situation has to be taken into account. If only part of the situation is considered, a misrepresented picture is likely to develop. His theory further asserted that behavior was determined by totality of an individual's situation. In his field theory, a field is characterized as the totality of simultaneous facts that are regarded of as communally interdependent. Individuals were observed to act differently according to the manner in which tensions between perceptions of the self and of the environment were exerted through. In order to understand behavior, the entire psychological field, or life space, within which people acted, had to be viewed. Within this individuals and groups could be seen in topological terms (using map-like representations). Individuals partake in a sequence of life spaces (such as the family, school, church and work), and these were created under the various force vectors influences.

However, behavior modifications are possible through a therapy program as stressed by Newton (1996). He delineated behavior modification therapy as something that seeks to extinguish or inhibit abnormal or maladaptive behavior through reinforcing behavior which is desirable and extinguishing behavior which is disagreeable. The target of behavior modification program is to alter and adjust behavior that is undesirable or inappropriate in some way. With this program, the individual would be aware of his undesirable behavior and with this awareness comes the greater goal of understanding the cause and effect of the behaviors, thus helping to affect change.

It is for this rationale that the researchers believed that the lifestyle varying behaviors and practices of the city barangay residents could be significantly correlated to climate change and theorized that there is no significant difference on the lifestyles at home, in the workplace, in the home and workplace, in social and economic interactions pooled between professionals and non-professionals, hence, this study.

Objectives of the Study

The study aimed to determine the lifestyle changing behaviors and practices of city barangay residents that mitigate or amplify the impact of climate change in their



workplaces, social and economic interactions, and in their homes. It also profiled the respondents' age and profession to draw the demarcation line in those behaviors and practices they commonly adapted in the specifically given scenarios. And most significantly, this study was intentionally done to frame out sound recommendations relating to behavior adjustments adaptive probably to climate change mitigation.

Research Method

This study employed the descriptive method of research. The questionnaire, in checklist form was made by the researchers to rank common behaviors and practices in mitigating or increasing climate change. Respondents comprised students and professionals in diverse ages predominantly residing in the urbanized areas of Dipolog and Dapitan cities. In treating the survey data, frequency and percentage ranking were utilized, while in determining the difference in lifestyles in the home, workplace, social and economic interactions and home and workplace combined between professional and non-professional city residents, Friedman's two-way Analysis of Variance (ANOVA) was used.

Results and Discussion

Table 1 shows the respondents' age. It revealed that 310 or 62% aged 11 to 29 years old; 113 or 22.5%, 30 to 49 years old; and 46 or 9.2%, 50 to 69 years old. This implies that those with behaviors and practices which mitigate or increase the impact on climate change were people belonging to the young generation. It means that the young individuals are directly responsible in effecting lifestyle change to adapt with the change in climate.

Table 1 Respondents' Age

Age Bracket	Frequency	Percentage	Rank
70 years old and above	12	2.4%	5
50 to 69 years old	46	9.2%	3
30 to 49 years old	113	22.6%	2
11 to 29 years old	310	62%	1
10 years old and below	19	3.8%	4
Total	500	100%	

Table 2 presents the respondents' profession. It showed that 257 or 51.4% students ranked highest; followed by 206 or 41.2% professionals. Only 37 or 7.4 percent consisted of the retirees. It implies that lifestyles to mitigate climate change are concentrated among students and young professionals. This means that most of those who are formally educated are adept on lifestyles associated to climate change.

Table 2 Respondents’ Profession

Profession	Frequency	Percentage	Rank
Students	257	51.4%	1
Professionals	206	41.2%	2
Retirees	37	7.4%	3
Total	500	100%	

Table 3 Behaviors and Practices Associating to the Impact on Climate Change at Home

Lifestyles Associated To Climate Change				
A. Home	F	Ave. Rank	Rank of Ranks	
1. Wears cotton clothing	272	1.79	2.5	
2. Cleans bathroom and CR	289	2.06	9	
3. Teaches children to live simply	220	2.02	8	
4. Provides children valuable memories, quality time together	204	2.23	10	
5. Makes home a place any members of the family want to come back	220	1.97	5	
6. Sleeps late at night	331	1.94	4	
7. Prefers to drink cold water	285	1.76	1	
8. Washes dishes in running water from faucet	176	2.00	6	
9. Hands on with children	100	2.01	7	
10. Brushes teeth with faucet open	178	1.79	2.5	

Table 3 presents the behaviors and practices associating to the impact on climate change at home. Results revealed that respondents’ preference to drink cold water ranked first; wearing cotton clothing and brushing teeth with faucet open, followed and equaled in rank; sleeping late at night, was next. This indicates that respondents manifested further aggravating lifestyles at home which implies that they contributed much to the escalating impact of climate change.

This coincides with the report of Rosenzweig (2008) linking humans to climate change and she revealed that observed global-scale impacts are very likely because of human-caused warming. According to her, humans are influencing climate through increasing greenhouse gas emissions. The warming is causing impacts on physical and biological systems that are now attributable at the global scale.



Table 4 Behaviors and Practices Associating to the Impact on Climate Change at Workplace

Lifestyles Associated To Climate Change			
B. Workplace	F	Ave. Rank	Rank of Ranks
1. Downloads files	117	1.97	8
2. Sends reports and files through e-mail	82	1.98	9
3. Keeps planner, book, wallet, kit, mosquito repellent, Eucalyptus roll-on, nail cutter, nail file, napkin, medicines such as paracetamol, antacid, etc. in the handbag	144	1.51	1
4. Leaves computer in a switch on mode	75	1.56	3
5. Listens to MP3 while working in the office	77	1.90	6
6. Multitasks oneself like texting, blogging, chumming, tweeting, engaging in long teletalks, internet gaming while at work	104	1.91	7
7. Sidetasks self on computer games such as spider solitaire, pinball, Zuma, backgammon, minesweep, etc.	68	2.30	10
8. Leaves air-conditioned unit on while taking noon break	47	1.53	2
9. Dines out every mealtime while at work	43	1.61	5
10. Leaves ringing office telephones unanswered	32	1.59	4

Table 4 shows behaviors and practices associating to the impact on climate change at workplace. Findings exposed that keeping planner, book, wallet, kit, mosquito repellent, Eucalyptus roll-on, nail cutter, nail file, napkin, medicines such as paracetamol, antacid, etc. in the handbag, leaving air conditioning unit on while taking noon breaks, and leaving the computer in a switch on mode were rated by the respondents on the first, second and third rank correspondingly. This denotes that respondents still have more lifestyles that intensify the outcome of climate change than those that mitigate, but they enclose other compelling grounds to be value-focused sometimes when they are at work such as that behavior of being well-organized.

Despite those compelling reasons, the United Nations Environment Programme-World Meteorological Organization (1997) confirmed in their report that human activities are contributing to climate change, and that there has been a discernible human influence on global climate and that these activities will have an increasing influence on future climate.

Table 5 Behaviors and Practices Associating to the Impact on Climate Change in Social and Economic Interactions

LIFESTYLES ASSOCIATED TO CLIMATE CHANGE			
C. Social and Economic Interactions	F	Ave. Rank	Rank of Ranks
1. Prefers to commute from home to work and vice versa	204	1.50	1
2. Emails to friends and family	194	2.13	8
3. Sends text messages through SMS	186	1.82	4
4. Uploads photos and other files on social networks	171	2.18	9
5. Engages in bodily and mental exercises such as yoga, painting, cooking, baking, swimming, other sports and martial arts	182	1.98	6
6. Listens to radio and watches TV broadcast and infomercials.	344	1.62	2
7. Leaves the other person enjoy the freedom to decide	204	1.92	5
8. Spends time at the beach breathing fresh air, dipping feet in the water, or bathing at the sea	159	2.28	10
9. Rides on PUVs even to short distance destinations	110	1.63	3
10. Prefers calling than texting	125	2.09	7

Table 5 presents behaviors and practices associating to the impact on climate change in social and economic interactions. Results revealed that commuting from home to work and vice-versa; listening to radio and watching TV broadcast and commercials; and ride on PUVs even to short distance destinations were rated by the respondents on the first, second and third rank respectively. This means that respondents were much behavior-focused as substantiated by their choices or inclinations in keeping with work effectiveness and their emergent concern for civic information. This implies that in order to cope with the intense effects of climate change nowadays, people learn to adjust their lifestyles by either sacrificing their own comfort on transfer and movement to places or managing their inclinations to fit in to work and social demands.

Table 6 shows behaviors and practices associating to the impact on climate change in the home and workplace. Findings showed that practices such as leaving the room or hall with its lights on, going vegetarian by eating only fish or no fish at all, avoiding junk foods and soft drinks, and charging cellular phones ahead of the required charging time were the first three uppermost ranking lifestyles at home and work combined. This means that respondents have exacerbated the effect on climate change as apparently they have exhausted on energy at the same time they are struggling to mitigate it through attitudes regarding much more on health and nutrition. This implies that staying fit and healthy would occasionally show to have preoccupied the respondents; on the other hand, they also evidently have alarming propensities on power mistreatment that in the long run would convey about a devastating impact to climate change.



Table 6 Behaviors and Practices Associating to the Impact on Climate Change at Home and Workplace

LIFESTYLES ASSOCIATED TO CLIMATE CHANGE			
D. Home and Workplace	F	Ave. Rank	Rank of Ranks
1. Applies facial creams, body moisturizers, sunblock and other extra skin and hair care protect and energy boosting, skin revitalizing products	155	1.96	5
2. Goes vegetarian by eating only fish or no fish at all diet, avoiding junk foods and softdrinks	164	1.79	2
3. Takes dietary food supplements such as wheatgrass, vitaplus, fernslim, vitalC, fernC, bioslim and other weight reducing substances	121	2.09	7
4. Sticks to daily routines from the moment of waking up to bedtime such as fixing the bed, taking meals on time, etc. to freshening up at night	263	1.82	4
5. Maintains regular meeting with family members and workmates.	196	1.98	6
6. Leaves the room or hall with its lights on	133	1.65	1
7. Charges cellular phones beyond the required charging time	203	1.81	3

Disclosing the statements from (<http://edugreen.teri.res.in/explore/climate/causes.htm>), all of us in our daily lives contribute our bit to this change in the climate. Electricity is the main source of power in urban areas. All our gadgets run on electricity generated mainly from thermal power plants. These thermal power plants are run on fossil fuels (mostly coal) and are responsible for the emission of huge amounts of greenhouse gases and other pollutants.

Cars, buses, and trucks are the principal ways by which goods and people are transported in most of our cities. These are run mainly on petrol or diesel, both fossil fuels. We generate large quantities of waste in the form of plastics that remain in the environment for many years and cause damage. We use a huge quantity of paper in our work at schools and in offices which would mean that large areas of forest have to be cut down.

Table 7 Average Ranks Showing the Difference in Lifestyles between Professionals and Non-Professionals

Lifestyles Associated to Climate Change				
A. Home	Professionals		Non-Professionals	
	Ave. Rank	Rank of Ranks	Ave. Rank	Rank of Ranks
1. Wears cotton clothing	1.67	2.5	1.89	3.5
2. Cleans bathroom and CR	1.94	8	2.13	8
3. Teaches children to live simply	1.86	5	1.94	5
4. Provides children valuable memories, quality time together	2.31	10	2.16	9
5. Makes home a place any members of the family want to come back	1.85	4	1.84	2
6. Sleeps late at night	1.89	6.5	1.96	7
7. Prefers to drink cold water	1.89	6.5	1.67	1
8. Washes dishes in running water from faucet	2.16	9	1.89	6
9. Hands on with children	1.67	2.5	2.38	10
10. Brushes teeth with faucet open	1.62	1	1.89	3.5
B. Workplace				
	Professionals		Non-Professionals	
	Ave. Rank	Rank of Ranks	Ave. Rank	Rank of Ranks
11. Downloads files	2.22	9	1.91	7
12. Sends reports and files through e-mail	2.12	8	1.79	3
13. Keeps planner, book, wallet, kit, mosquito repellent, Eucalyptus roll-on, nail cutter, nail file, napkin, medicines such as paracetamol, antacid, etc. in the handbag	1.44	2	1.81	4
14. Leaves computer in a switch on mode	1.54	3	1.61	2
15. Listens to MP3 while working in the office	1.84	4	2.00	8
16. Multitasks oneself like texting, blogging, chumming, tweeting, engaging in long teletalks, internet gaming while at work	1.89	5	1.89	6
17. Sidetasks self on computer games such as spider solitaire, pinball, Zuma, backgammon, minesweep, etc.	2.26	10	2.24	9
18. Leaves air-conditioned unit on while taking noon break	1.38	1	2.60	10
19. Dines out every mealtime while at work	2.00	7	1.11	1
20. Leaves ringing office telephones unanswered	1.94	6	1.86	5



C. Social and Economic Interactions	Professionals		Non-Professionals	
	Ave. Rank	Rank of Ranks	Ave. Rank	Rank of Ranks
21. Prefers to commute from home to work and vice versa	1.50	1	1.49	2
22. Emails to friends and family	2.09	7	2.21	10
23. Sends text messages through SMS	1.95	6	2.03	6
24. Uploads photos and other files on social networks	2.21	9	1.19	1
25. Engages in bodily and mental exercises such as yoga, painting, cooking, baking, swimming, other sports and martial arts	1.86	4	2.20	9
26. Listens to radio and watches TV broadcast and infomercials.	1.81	3	1.57	3
27. Leaves the other person enjoy the freedom to decide	1.90	5	1.92	5
28. Spends time at the beach breathing fresh air, dipping feet in the water, or bathing at the sea	2.33	10	2.10	8
29. Rides on PUVs even to short distance destinations	1.61	2	1.76	4
30. Prefers calling than texting	2.11	8	2.08	7
D. Home and Workplace	Professionals		Non-Professionals	
	Ave. Rank	Rank of Ranks	Ave. Rank	Rank of Ranks
31. Applies facial creams, body moisturizers, sunblock and other extra skin and hair care protect and energy boosting, skin revitalizing products	1.75	2	2.31	7
32. Goes vegetarian by eating only fish or no fish at all diet, avoiding junk foods and softdrinks	1.84	4	1.89	4
33. Takes dietary food supplements such as wheatgrass, vitaplus, fernslim, vitalC, fernC, bioslim and other weight reducing substances	2.09	6.5	2.11	6
34. Sticks to daily routines from the moment of waking up to bedtime such as fixing the bed, taking meals on time, etc. to freshening up at night	1.76	3	1.00	1
35. Maintains regular meeting with family members and workmates.	2.09	6.5	1.78	2
36. Leaves the room or hall with its lights on	1.60	1	1.93	5
37. Charges cellular phones beyond the required charging time	1.86	5	1.79	3

Table 7 presents the average ranks showing the lifestyles of professionals and non-professionals. Findings revealed that amongst professionals, lifestyles such as brushing their teeth with faucet open; leaving office air-conditioning units on while taking noon breaks; leaving the room or hall with its lights on and commuting from home to work and vice versa; ranked first; while the non-professionals’ lifestyles showed that they prefer to dine out every mealtime while at work; upload photos and other files on social networks; drink cold water; and stick to daily routines from the moment they wake up to bedtime such as taking meals on time, fixing the bed, etc. to freshening up at night, topped in their rank of ranks. This implies that though both groups varied their lifestyles, the professionals did less mitigation, while the non-professional group had done more adaptations to climate change. This could be corroborated closely to Mendelsohn’s (2000) finding that individuals and firms likely engage in substantial private adaptation with respect to climate change.

Recreation and energy were among those sectors which build interest in possible adaptation measures. He recommended sound actions such as mutual adaptation, but on the other hand presented his reluctance due to its shared benefit nature. It will root individuals to underprovide joint adjustment in areas such as environmental management and water control which are basically evident in the study at hand.

Table 8 Test of Significant Difference on the Lifestyles Between Professionals and Non-Professionals

Lifestyles	Professionals	Non-Professionals	
	Computed Value X_r^2	Tabular Value Df .05(1)	Action Taken
a. Home	0.40	3.84	Reject HO
b. Workplace	0.10	3.84	Reject HO
c. Social and Economic Interactions	0.0	3.84	Reject HO
d. Home and Workplace	0.1428	3.84	Reject HO

Table 8 shows test of significant difference on the lifestyles between professionals and non-professionals. Result revealed that their lifestyles in the four areas significantly differ having their respective computed values as: 0.40, in the home; 0.10, workplace; 0.0, social and economic interactions; and 0.1428, home and workplace, with tabular value of 3.84 at .05(1) degrees of freedom, which lead to rejecting the null hypothesis. This implies that the professional and non-professional groups may have different lifestyles but unmistakably have adapted some forms of personal alterations to environmental changes.

Based on Holdren’s (2007) adaptation, mitigation and suffering choices, this recent study distinctively achieved a popular mix; that the more dissimilar lifestyles the individual live out, the more he adapts, mitigates, or aggravates the impact of climate change. Alterations of behavior at some point will mitigate potential harm brought about by climate change.



Conclusion and Recommendation

The practices of office workers and homemakers prove to have increased or aggravated the effect of climate change yet they have compelling reasons to be value-focused in some ways like being organized, health conscious and comfortable, thus lifestyles of residents in highly urbanized areas particularly those office employees have to be subjected to some behavior modifications to address climate change mitigation.

It proposes that individual or private and joint adjustments particularly in the key market quarters of the society should be imposed so that the magnitude of destruction from the impact of climate change will be condensed and the size of benefits will amplify not only in areas of energy and recreation, but most significantly in the direct impact areas of environmental management, farming and forestry. This ecological concern necessitates government initiatives, which the government needs to instigate thinking about mutual adaptation, to cautiously devise efficient responses which treat arising dilemmas related to climate change.

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