ISSN (Print): 2788-8320 ISSN (Online): 2788-8339



IOURNAL OF SOCIAL RESEARCH DEVELOPMENT www.is

www.jsrd.org.pk editor@jsrd.org.pk

AN INVESTIGATION ON THE CLIMATE CHANGE AWARENESS AND CONCERNS

Muhammad Yaseen¹, Jamil Ahmed² & Adnan Riaz³

¹Assistant Professor, Department of Sociology, University of Turbat, Pakistan ²Lecturer, Department of Political Science, University of Turbat, Pakistan ³Assistant Professor, Department of English, University of Turbat, Pakistan

KEYWORDS	ABSTRACT
Climate Change Awareness, Perception, Attitudes, Activities, Mitigation & Adaptation	The concerns and awareness regarding climate change are becoming more common in various disciplines across the globe. Throughout the world, this has become a quite common topic but the country like Pakistan is still at the back to develop a body of literature particularly in the context of its people about concerns and awareness of climate change. The aim of this research was to investigate the awareness and concerns of the climate change among intermediate students at District Kech. Social survey method was applied and universe was degree colleges male and females of district Kech. A sample of 351 students had been selected from Raosoft calculator of the sample size. Proportional stratified sampling was utilized for the collection of information. The data represented the relation between climate change awareness and its concerns. In present research, the variables like attitude, activities, perception, mitigation and adaptation were significantly correlated with the awareness of climate change except gender respectively, and there exist a relation among them. 2022 Journal of Social Research Development
Corresponding Author	Muhammad Yaseen
Email:	muhammad.yaseen@uot.edu.pk
DOI	https://doi.org/10.53664/JSRD/03-02-2022-06-193-211

INTRODUCTION

Weather exchange is taken into consideration to be the riskiest venture for development and development of all around the international within twenty first century (UNDP, 2007). In present day, a long time, global warming and weather trade are taken globally situation problems. The fashion of conferences, reviews, researches and campaigns from Rio Earth Summit held in 1992 on stated aspects is itself evidence that weather trade is chance over the globe. Holdren (2006) defined climate alternate as any measurable inclination closer to extreme in international climate, which objectives in increasing the temperature global. it's

long-term, verifiable climatic trend that is going for extremes. in step with the experts, the motives of climate trade which might be taking location or being driven, are unsustainable practices of mankind and like burning of fossil fuels, business pollutants, deforestation and land use adjustments (IPCC, 2007; Canadel, Ciais, Dhakal, Dolman & Friedlingstein, 2010; Weart, 2010; Cook, Nuccitelli, Green, 2013). In a brief span of time the distinction is even clearer as 2017 that became warmer than 2016 in zero.68 degree and 2016 become zero.8 stages warmer (Wired, 2018).

Inside 2017, global weather alternate danger Index, Pakistan turned into ranked 7th a few of the nation's most prone to weather exchange. Floods, heat waves, and cyclonic activity have grown in frequency and depth in the current years, causing vast monetary, cloth, and human destruction. Given Pakistan's ranking of one hundred thirty-five amongst GHG-generating nations within the equal document, that is very annoying. This summer time, temperatures in Karachi have already topped forty-three levels, and the continuing heat wave has claimed lives of extra than 60 people. This ring a bell in my memory of Karachi's awful and remarkable heat wave in 2015, which killed over 1, two hundred human beings (Rifat, 2019). As a result, the general public of the writers describe climate alternate as the anthropogenic alteration of the worldwide weather gadget due to growing amounts of the greenhouse gases (GHGs) inside the surroundings, make a contribution to worldwide warming (UNFCCC, 1992; Curry, 2011). In keeping with known clinical information, planet warmed through around zero.6 stages Celsius on common during the 20th century (IPCC, 2001), and is anticipated to warm by using about 2-3 tiers Celsius through the give up of the 21st century (IPCC, 2001).

Weather Change is an urgent trouble that should be addressed. It has shifted ecological great and began to elevate worldwide temperature increases with the aid of about five degrees Celsius within preceding 27 years. As an end result, fee of melting of the ice cap, in addition to melting of mountains, has increased, resulting in an increase in sea ranges. The climate of an area is climate averaged over lengthy period of time (Wired, 2018). And, in case of weather alternate, these lengthy-term modifications take hundreds upon heaps of years to occur. some of elements that contribute to weather change are herbal. Earth's orbit and the amount of electricity emanating from sun purpose those natural fluctuations. maximum professionals, but, trust that fast increase in CO2 ppm (elements in keeping with million) started at some point of commercial Revolution and has not stopped considering (Rifat, 2019). We produce electricity we're so reliant on these days by means of burning coal, oil, and gasoline, which has been case since the commercial revolution. The manner of burning fossil fuels traps warmth in our environment, resulting in a sluggish growth in international temperature.

It gives a stunning manner out of world's ostensibly impending apocalypse (Khoushab, 2017). Government of Kenya identifies the weather alternate as difficulty of development

and is whole lot problem concerning it. National climate trade response method (NCCRS) 2010 and its implementation plan, the national climate trade action Plan (NCCAP) 2013-2017, lay out activities that ought to be taken to reduce and construct resilience to climate alternate's effects. The frequency and significance of climate alternate effects had raised international notion concerning the climate alternate as a fear over years (UNDP, 2007), yet this persisted non-extensive environment problem mainly in rich countries (Leiserowitz, Kates & Parris, 2005; Leiserowitz, 2006; Pew Research Centre, 2013). no matter truth that developing nations are the most uncovered to the outcomes of climate alternate, Pugliese and Ray (2009), in this connection, discovered that climate change is perceived as a large situation in industrialized international locations as opposed to developing ones. Even if sources are gathered to address the climate trade, and humans should be knowledgeable approximately the difficulty.

According to Eckstein et al. (2020) the most affected country in the world has been ranked because of it sever weather events between 1999 and 2018 is Pakistan and ranked the fifth most affected country all over the globe. The economy of Pakistan largely depends on the agriculture sector (Rehman et al, 2015), and any alteration in temperature and disruptions in water availability and patterns of monsoon can cause destruction on the livelihoods of millions of people. Impacts of climate change and sever weather can worsen the already severe problems of poverty and food security in the country. From 1998 to 2018, Pakistan seen 152 extreme weather events, lost 9989 lives and suffered drastic economic losses worth 3.8 billion dollar (Abubakar, 2020). Ajani and Geest (2021) checked out six weather-associated stressors—adjustments in weather styles, floods, Glacial Lake Outburst Floods, drought, heat waves, and sea-degree rise—inside coastal areas of Sindh, the barren region of Thar, the plains of Punjab, and the mountains of Hunza, Gilgit, and Chitral. speak me to humans at these frontlines of weather alternate discovered much approximately weather struggling and trauma.

Not simplest is the suffering induced by losses and damages to belongings and livelihood, however climate affects also take a heavy toll on humans' psycho-social well-being, exactly when they're displaced from their houses. The findings in addition show that humans try to adapt in diverse methods, as example by means of altering their agricultural practices, but they face excessive obstacles to effective model motion. Schooling is important step in encouraging the individuals in any respect tiers of society to take action in reducing and adapting to climate exchange. As a result, Kenya is taking into account altering its faculty curricula to contain climate change focus in any respect ranges, as verified within NCCAP 2013-2017. It is essential to research instructors' degrees of expertise and belief of climate alternate earlier than introducing weather change fabric into college curricula, particularly on primary college level, since this could possibly affect how instructors carry information within study room. Consequently, by way of reading extent of climate alternate knowledge

and belief among the number one college instructors in Kisumu Municipality, this looks at aimed to close this gap.

LITERATURE REVIEW

Awareness

Dowd, Howden, Jakku, Marshall and Park (2013) used adaptive ability to assess weather alternate awareness based totally on modern-day knowledge. Adaptive capability is made from four essential dimensions: (1) threat and uncertainty control, (2) planning, getting to know, and reorganizing the talents, (3) monetary and emotional flexibility and (4) hobby in adapting. and they discovered that primary producers who're greater privy to the climate exchange had an extra capacity to modify on at least 3 dimensions of adaptive capability. in keeping with Ochieng and Koske (2013), although Kisumu Municipality primary college instructors aren't especially beneath-knowledgeable on climate exchange, there have been massive gaps in their know-how. Furthermore, information revealed that primary college teachers in the Kisumu Municipality are concerned approximately weather trade. Consistent with Rahman et al. (2014), socio-economic variables which include faculty quality and sort, genders, faith, student grade, most important, and merit position, mother's education and career, circle of relative earnings and other factors affect student views on weather change and associated worries.

In spite of the great insurance of the troubles in media, students lack a proper and honest know-how of global and local climate exchange. Lee, Markowitz, Howe and Leiserowitz (2015) located that socio-demographic traits, location, perceived well-being, and ideals all had a relative impact on public weather trade awareness and threat perceptions on the countrywide degree. around the arena, instructional attainment is the maximum widespread predictor of weather change awareness. The manner of burning fossil fuels traps warmth in our environment, resulting in the sluggish growth in international temperature. In this linking, the perceptions of nearby temperature trade are the most crucial predictor of the climate trade danger insights in lots of countries in diverse situations, while understanding the human basis of climate change is the most important predictor in Latin the use and Europe. On the other hand, different critical variables likewise as public focus and danger perceptions highlight need for international locations to increase particular weather verbal exchange the strategies.

Perception

In step with the have a look at, herbal variability of nearby climate is in all likelihood the biggest barrier to public recognition of human-prompted climate trade. A survey within the U.S.A. confirmed that famous perceptions of latest nearby climate fluctuations have a substantial influence on the public opinion approximately the lifestyles and impact of world warming (Hansen, 2012). On this study, human beings' perspectives of climate exchange and edition within arid region of Pakistan had been explored in terms of temperature and

precipitation variant, drought and desertification, meals shortages, effect on the agriculture, river waft, and seasonal variability. for this reason, a survey of public opinion on weather alternate and its implications on social, monetary, demographic, and agricultural sectors turned into conducted within the decrease Punjab, as well as sections of Sind, Baluchistan, and Gilgit Baltistan provinces.

Adjustments in earth geography, conflicts, and adjustments in the stress patterns, populace enlargement, and improvement of the water reservoirs, water resources, and modern-day authorities' rules are among the crucial issues in questionnaire (Aslam, 2012). Thus, some respondents are inclined to take individual steps to remedy climate trade, in keeping with Yu et al. (2013), and that they pay more attention to climate change or trust that climate change damages residents and society. The manner of burning fossil fuels traps warmth in our environment, resulting in the sluggish growth in the international temperature. In this linking, they, alternatively, have little consider inside the authorities to combat the climate exchange, believing that monetary and tax rules are the most effective policy tools. About fifty-eight percentage of those polled had been capable of accurately identify the causes of climate trade. Others, however, are hesitant to behave and say that weather alternate will have unavoidable results.

Attitudes

Respondent attention is linked to respondents consider in the scientific evidence and their efforts to avoid relying on a single source of information. students that are well-versed in climate change are frequently put up-materialists. knowledgeable scholars, on the other hand, do not experience the extra involved or are greater in globally minded than others. Notwithstanding the dearth of a clean link among awareness and consumerism, the higher knowledgeable the scholars are, extra they consider they undergo personal responsibility for weather exchange. women aren't always greater knowledgeable than males, but they do have an extra feel of personal duty. As a result, examiner proven primary assumptions about unspecific weather alternate know-how in the specific putting and offered public segmentations for the destiny social-advertising and marketing motives (Skalik, 2015). The look at explored that students' age, gender, faith, situation association, and mother and father' educational degrees all had effect on students' information, attitudes, and actions, according to the look at.

The college students' information of weather exchange issues is barely low, whilst their mindset in the direction of the subject is marginally superb, in step with the findings. They interact in actions that do not predispose environment to the catastrophic consequences, especially flooding. Other than gender, all other unbiased variables distinguish students' knowledge while moms' educational stage seems to the effect student practices. As an end result, instructors need to be privy to students' degree of weather alternate kind, attitudes, and practices, as well as be accurately organized to update college student understanding

of climatic troubles. Falaye and Associates (2016). according to Yang et al. (2018), general public of respondent experience weather exchange is bad in popular (83%) and damaging for human fitness (88%), most effective 67% accept as true with it is controllable. Massive majority of respondents known negative air best as a probable effect of climate alternate (ninety-five percentage), and heat strain (93%) and the severe weather occurrences (91%). regardless of this, handiest 39% of respondents diagnosed malnutrition as result of meals shortage due to climate change.

About fifty-eight percentage of those polled had been capable of accurately identify the causes of climate trade. Capacity to perceive fitness influences of climate trade became not linked to know-how of the causes of weather alternate. but, among scientific and nursing students, know-how of weather change reasons changed into robust predictor of faster awareness of the bad results of weather trade, even though this turned into no longer the case amongst public health opposite numbers. College students in China have a negative knowledge of the reasons of weather exchange. As an end result, instructors need to be privy to students' degree of weather alternate understanding, attitudes, and practices, as well as be accurately organized to update their college students' understanding of climatic troubles. They could perceive the direct hyperlinks between climate occurrences and health, but they may be much less in all likelihood to realize ramifications of complicated methods. The want for extra studies and training at the underlying mechanisms of weather exchange's fitness results is vital.

Activities

School college students clinical and idiosyncratic perspectives at the extent to which numerous acts may want to assist to lessen international warming. Many college students identified that falling industrial and automobile emissions may also make the contribution notably to this discount, and that producing electricity from renewable resources become some other famous alternative. Fewer scholars identified the significance of person efforts, consisting of "saving" power and recycling paper, likely indicating that the young humans experience powerless on this hassle. actions to help reduce worldwide warming may be taught using a taxonomic framework of the discount, recycling, substitute, and growing, in keeping with researchers (Boyes, 2003). Ojala (2012) determined that numerous coping methods have been located using thematic evaluation and included de-emphasizing the hazard of weather trade, distance, hyper-activation, superb reappraisal, faith in the diverse societal actors, problem-centered coping, and existential desire. furthermore, youngsters used much less hassle-focused coping and extra distance to deal with strain than the two older organizations.

Consequently, consistent with findings. Whilst it came to resources of hope, children hired much less superb the reappraisal as well as positioned extra religion in the researchers and technological growth than the two older corporations. As an end result, instructors need to be privy to the students' degree of the weather alternate understanding, attitudes, and

practices, as well as be accurately organized to update college students' understanding of climatic troubles. Training's realistic consequences for sustainable development are tested. Other than gender, all other unbiased variables distinguish students' knowledge while the moms' educational stage seems to effect student practices. In line with Hman and Hman (2012), interactive processes do not constantly bring about greater varied information. The instructors, in this linking, have to therefore take note of the scholars' ruling strategies and sometimes dispute the dominant viewpoint a good way to allow for exchange options and views in diverse situations.

Mitigation & Adaptation

According to Oruonye (2011), 18.2 percent of scholars polled had never heard of weather alternate. Of 81.8 percent who have heard approximately climate alternate, 89 percentage don't have any idea what it is, what causes it, what affects it has, as well as what model or mitigation strategies are available. This have a look at the indicates that weather exchange recognition clubs be mounted at tertiary institutions to train destiny leaders about the need of preparing for climate change worries. Consistent with Abbas (2013) for scientists working on carbon mitigation or the weather exchange mitigation challenges around the world, lower back casting isn't a singular concept. Again, casting is the method of creating a roadmap for attaining low-carbon dreams and offering them as quantitatively as viable. Fewer scholars identified significance of person efforts, consisting of "saving" power and recycling paper, likely indicating that young humans experience powerless on this hassle. Quantitative methods and tools utilized to accomplish returned casting benchmarks were point of interest of study.

The examiner discovered that all of those models are exceptionally proper and relevant in Asian nations, however that actual applications are rare. Researcher additionally concluded that these computer-based quantitative models are beneficial to almost all the Asia-Pacific countries that face problems consisting of records shortage, restricted assets, and lack of government participation. As end result, instructors need to be privy to students' degree of the weather alternate understanding, attitudes, and practices, as well as be accurately organized to update the college students' understanding of climatic troubles. In line with Bofferding and Kloser (2015), adolescent weather the exchange mitigation measures are actually conflated with unrelated environmental problems extensively much less than in previous surveys. college students, instead, showed poor awareness of adaptive weather exchange reactions. The students had stronger system and motion expertise after taking part in climate trade teaching program, but sizeable fallacies about mitigation and version to climate alternate remained.

Gender

In keeping with Bhutta and Yousuf (2012), there was no widespread difference in attitudes about environmental issues between male and lady students. The have a look on findings

screen vital information on male and lady college students' attitudes about environmental issues and area in each public and the personal secondary faculty. Hassan, Noordin and Sulaiman (2010) discovered that scholars in secondary college validated a "high level" of environmental focus while it got here to the idea of the sustainable development. In this connection, it showed that female college students had a "higher" stage of environmental awareness than male college students, (ii) science circulation students had a "better" level of the environmental awareness than arts stream college students, and (iii) students in city schools had a "better" level of environmental attention than college students in suburban colleges in diverse situations.

The Pearson correlation found out fine however modest affiliation between environmental focus and sustainability sports, attitudes, and moral concepts. The emotional, attitude, and practices of the sustainability focus have been discovered to be the three classifications of environmental consciousness standards within the observe. Gazzaz and Aldeseet (2021) found that the sample scholars have the high degree of know-how of weather change's nature, causes, and impacts. but, on common, extra students inside the sample recognize approximately effects of weather change (n = 223, percentage = 79.3%) than the nature (209, 73. five%) and reasons of weather alternate (n = 223, percentage = seventy-nine.3%). (a hundred ninety, 66.9 percentage). Moreover, the girl students had higher degrees of preferred weather exchange know-how than their male opposite numbers, and agriculture college students have better degrees of the weather alternate attention than technological know-how colleagues.

Objectives of Study

- 1. To find out the differences in the level of awareness of intermediate students on the concept of climate change based on gender.
- 2. To find out Perception, attitudes and activities among intermediate students for protection of climate change.
- 3. To find out the knowledge and method of mitigation and adaptation to secure climate change.

RESEARCH METHODOLOGY

The present study has been conducted on the topic of "climate change awareness and its concerns among intermediate students (male & female) special reference to District Kech". Quantitative research methodology was used for the present study. Type of research was explanatory. Researchers took the total enrollment of students from college administration which was 3913 and for the sample size Rao-soft calculator was used and got 351 sample size. For allocation and distribution of the responses Proportionate sampling was applied and further convenience sampling was used for allocation of responses. Method of study was survey. Tool for data collection was a structured questionnaire. In this connection, the questionnaire was adopted from the Christensen (2015), Michael (2016), Paul (2012) and

Whitmarsh (2007) after a minor change as per the local community approach. Data were analyzed through SPSS software. Further, data were tabulated into sample tables for the frequency and percentage analyzes and contingency tables were used for the bivariate relationship of variables.

RESULT AND DISCUSSION

According to sample features respondents were divided equally respectively. Majority of respondents were lie in the age of (16-18) because of the respondents were intermediate students with 42.7% of boys and 57.3% of girls. Researcher chosen college going students because, researcher wants to know relationship between climate change and its concerns among students. Researcher also find that many of student's parents' income was below 20,000 in Pakistani rupees that is 92.3% with graduation in education with 24.5%, it means that most of the parents are graduated but earned money bellow 20,000. Another table described that majority of respondents parents have self-business owner with 40.7% since in Pakistan this is not easy to get the better job and many of the peoples have skills and also want job for their families, so they start self-business. In the frequency table of source of information, many of students hear information about climate change over television with 31.1% its mean that television provide information more than others but respondents get information's from internet.

Table 1 Findings of Sample Tables

Response Options	Frequency	Percentage	Cumulative Percentage	
	Gender			
Male	150	42.7	42.7	
Female	201	57.3	100.0	
Age				
16-18	324	92.3	92.3	
19-21	27	7.7	100.0	

Table 1A Findings of Sample Tables

Family Income				
Below 20,000	121	34.5	34.5	
20,001-40,000	106	30.2	64.7	
40,001-60,000	82	23.4	88.0	
60,001-80,000	14	4.0	92.0	
80,001 And above	28	8.0	100.0	
Head of Family Education				
Masters	69	19.7	19.7	
Graduate/Diploma	86	24.5	44.2	
Intermediate	52	14.8	59.0	
Matric Below	63	17.9	76.9	
Literate	81	23.1	100.0	

Table 1B Findings of Sample Tables

Response Options	Frequency	Percentage	Cumulative Percentage		
Head of Family Occupation					
Government Job	99	28.2	28.2		
Self-Business	143	40.7	68.9		
Private Job	102	29.1	98.0		
Unemployment	2	.6	98.6		
Semi Government	5	1.4	100.0		
	Source	e of Information			
Television	109	31.1	31.1		
Newspaper	9	2.6	33.6		
Internet	96	27.4	61.0		
Environmental Group	4	1.1	62.1		
School/College	91	25.9	88.0		
Governmental Agencies	4	1.1	89.2		
Friends/Families	38	10.8	100.0		

Table 1C Findings of Sample Tables

Response Options	Frequency	Percentage	Cumulative Percentage	
Level of Awareness About Climate Change				
Low	44	12.5	12.5	
Moderate	112	31.9	44.4	
High	195	55.6	100.0	
Their Level of Attitudes About Climate Change				
Low	61	17.4	17.4	
Moderate	65	18.5	35.9	
High	225	64.1	100.0	

Table 1D Findings of Sample Tables

Response Options	Frequency	Percentage	Cumulative Percentage		
Level of Perception					
Low	50	14.2	14.2		
Moderate	124	35.3	49.6		
High	177	50.4	100.0		
Level of Activities					
Low	39	11.1	11.1		
Moderate	124	35.3	46.4		
High	188	53.6	100.0		
Level of Mitigation & Adaptation					
Low	47	13.4	13.4		
Moderate	73	20.8	34.2		
High	231	65.8	100.0		

In the frequency table of level of awareness, majority of the respondents have high level of climate change awareness with 55.6% which means that respondents know what climate change is. In the frequency table of happening of climate change, majority of respondents were strongly agreed for climatic effects with 45.9%. On other table most of respondents were agree for climate change is manifests in diverse ways in the world with 43.9%. Most of respondents experiencing impact of climate change with 58.1%. Many of respondents want to take immediate and urgent concern about climate change with 42.7%. Many of respondents was accepted that climate change is the threat for sustainable development with 42.2%. Most of the respondents were know that in all around world many of agencies at national and global level work for reduce climate change with 31.6%. According to the level of attitude. Most of the respondents have high level of attitudes with 64.1%. Another table showed that, most of the respondents were agree for concern about climate change with 53.8%.

Many of respondents said that climate change impact on environment with 52.7% and future generations with 53.0%, many of respondents were agree for that statement which is, individuals can make the positive change with 37.6%. Respondents was aware about its negative impacts on our lives with 40.5%, and have willingness to serve for the future with 43.9% and also agree with importance of climate change problems with 52.4%. According to the level of perception of respondents about climate change, most of the respondents have high level of perception with 50.4%. Many of respondents know that climate change is very harmful then beneficial with 41.9%, most of the respondents were strongly agree with that climate change caused by human activities after caused by natural with 40.2%, respondents also agree with climate change is change the surface temperature with 40.7%, increase intensity of extreme weather with 44.7%, effects on agriculture negatively with 49.0%, threatened in food security with 47.6% and also cause on the economic depression with 39.9%.

According to level of activities, many of respondents have high level in activities to stop climate change with 53.6%, most of respondents agree to recycle daily/regular products with 36.2%, but agree with to conserve energy with 35.0%, most of the respondents were used public transport for college going with 30.5%, many of respondents turn the lights off before leaving the room with 36.5%, and also strongly agree with to take part in a campaign to climate change with 35.6%. According to level of mitigation and adaptations, respondents have high level of mitigation and adaptation with 65.8%, they wanted to help for stop climate change by using public transport with 45.9%, and respondents agree to stop climate change by using more renewable sources of energy with 49.0%. Respondents wanted to grow more fruits and vegetables with 54.9%, many of respondents were agree by using the less electricity with 44.7%, planting more trees and buying more local goods with 48.1%.

Table 2 Summary of Hypothesis

Level of Awareness	Chi-square	df	Asymp. Sig. (2-Sided)
Attitude	15.081	4	0.005
Perception	19.475	4	0.001
Activities	22.294	4	0.000
Mitigation and Adaptation	33.768	4	0.000
Gender	2.279	2	0.320

Table No.2 depicts the results of hypothesis which are statistically tested with chi-square test of independence and Phi value of significance. However, first hypothesis was climate change awareness is likely to be related with attitudes. Chi-square test of independence was performed to examine relation amid climate change awareness and attitudes of students. The relation between these variables was significant, X2 (4, N = 351) = 15.081, p = .005. The climate change awareness was more likely to be related with the attitudes of students. As per review of previous literature, relationship might exist between beliefs and intentions (Christensen, 2015). On other research, knowledge of climatic change issues is slightly low among the students, while attitude is slightly favorable (Falaye, 2016). University education should indeed play critical role in raising the awareness and moulding attitudes and habits of future generations toward sustainable activities (Huang, 2018). Thus, relationship amid awareness and attitudes among students exist according to the hypothesis and statistically proven from the result as well.

The students' attitudes depend on institutional environment, people change their attitudes according to awareness. Second hypothesis was climate change awareness is likely to be related with level of perception. Thus, a chi-square test of independence was performed to examine the relation between climate change awareness and perception of students. The relation amid these variables was significant, X2 (4, N = 351) = 19.475, p = .001. Climate change awareness was more likely to be related with perception of students. According to previous studies, it poses significant risks (Akerlof, 2010). Public perceptions of recent local climatic fluctuations have a significant impact on public opinion regarding the reality and relevance of global warming (Hansen, 2012). The public's perspective of climate change is examined in terms of numerous swaying elements, and some scientific data (Wang, 2013). Findings and past studies show that there is link amid climate change awareness and level of perception about climate change. If peoples were aware about issues, they could have reacted to towards climate change.

Third Hypothesis became climate change cognizance is probably to be associated with the activities. consequently, a chi-square takes a look at of independence become achieved to look at the relation among climate exchange attention and sports of students. The relation between these variables became good sized, X2 (4, N = 351) = 22.294, p = .00001. climate change attention become more likely to be associated with activities of students. reduced

business and car emissions, according to previous examine, would possibly play a huge component on this reduction, and producing energy from the renewable resources turned into some other popular thought (Boyes, 2003). Children's used much less hassle-focused coping and more distancing to cope with fear than the older (Maria 2012). Past research and the existing research proved that there is a relationship among the climate exchange consciousness and activities degree. teens are greater conscious than older humans about climate trade and their sports.

The fourth hypothesis became weather trade cognizance are possibly to be associated with the mitigation and adaptation. thus, a chi-rectangular check of independence turned into executed to have look at relation between climate alternate consciousness and mitigation and edition of students. The relation among those variables changed into considerable, X2 (4, N = 351) = 33.768, p = .00001. weather exchange cognizance was much more likely to be associated with the mitigation and adaptation of college students. in step with beyond research weather change need to be dependent so that the individuals see their actions as part of the shared social attempt (Patchen, 2010). projects taken for disaster education in Nepal are not sufficient and a primary task for disaster risk discount in school network for a country like Nepal is implementing strategies, specifically at person degree (Bhandary, 2013). Consequently, there is a dating among focus and willingness to do for saving the environment. on this look at researcher found that the respondents want to do for it, and additionally seeking to mitigate our self with the help of adapting the techniques to reduce results of climate change.

The fifth Hypothesis was weather exchange is possibly to be associated with the gender. Accordingly, a chi-rectangular check of independence became completed to observe the relation between climate change recognition and gender of college students. The relation between these variables was insignificant, X2 (2, N = 351) = 2.279, p = .0320. Weather trade awareness become now not probably to be associated with the gender of college students. in line with the previous researches, that there was no significance difference between male and lady students' mind-set toward environmental issues (Bhutta & Yousuf, 2012). every other research indicated that the extent of environmental cognizance for the lady college students have been "better" than the male students. As per present research there is no relation between the weather trade focus and gender. All respondents (male & woman) use records technologies inside identical manner, sometimes women are extra sensible and privy to societal risks than male. Female students take part in diverse sports than male college students. Scholar became no longer located link among weather exchange awareness consistent with gender.

CONCLUSION

As the present study aims to examines the level of awareness of climate change and its concerns on the intermediate students male and female. The researcher found that many

of respondents fall in age group of 16-18, many of respondents heard information about climate change from television and internet. Findings indicates that respondents have information and aware about climatic issues its seriousness and harmful effects on human and all living things. Researcher identify that level of awareness is likely to be related with attitudes, activities and perception as if people aware about something they will react to it. Level of awareness is also related with attitudes, mitigation and adaptation of respondents about climate change. Rok (2013), it is critical to measure teachers' levels of understanding and perception of climate change, particularly at primary school level, since this is likely to impact how teachers undertake knowledge transfer in classroom. Over and above natural fluctuation, climate changes caused directly/indirectly by human activity (UNFCCC, 1992). Religion, gender, parental education, employment and wealth, among other factors, might influence pupils, as Maruf (2014). Hassan (2010) claims that female students have "greater" level of environmental awareness than male pupils. Climate change awareness is not linked with gender in current study.

REFERENCES

- Abbas, S., Ali, G., & Qamer, F. M. (2013). How Effectively Low Carbon Society Development Models Contribute to Climate Change Mitigation and Adaptation Action Plane in Asis. *Renewable and Sustainable Energy Reviews*, 26, 632-638.
- Abubakar, S. M. (2020). Pakistan 5th most vulnerable country to climate change, reveals German-watch report. DAWN News. https://www.dawn.com/news/1520402.
- Adeel, M., Ashraf, M. Q., & Wahab, P. (2010). Knowledge and Perception about Inmate Change among People of Urban Area in Attock, Pakistan.
- Agyeman, J., & Kollmuss, A. (2010). Mind the Gap: why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental Education Research*, 8(3), 251.
- Ajani, A., & Geest, K. (2021). Climate change in rural Pakistan: evidence and experiences from a people-centered perspective. *Sustainability Science*, 16(6), 1999-2011.
- Ajzen, I. (1985). From intentions to actions: A Theory of Planned Behavior. Action Control: From Cognition to Behavior. New York: Springer-Verlag.
- Ajzen, I. (2002). Perceived Behavioral Control, Self-efficacy, Locus of Control, and the Theory of Planned Behavior. *Journal of Applied Social Psychology*, 32(4), 665-683.
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitude and predicting social behavior*. Englewood Cliffs, NJ: Prentice Hall.
- Akerlof, K., Berry, P., Clarke, K. L., & Debano, R. (2010). The Public Perceptions of Climate Change as a Human Health Risk: Surveys of the United States, Canada and Malta. *International Journal of Environmental Research and Public Health*, 7(6), 2559-2606.
- Akintude, E. A. (2017). Theories and Concepts for Human Behavior in Environmental Presentation. *Journal of Environmental Science and Public Health,* 1(2), 120-133.

- Aslam, P. M., Khan, M., & Khan, S. (2012). People Perception about Climate Change and Adaptation in Arid Region of Pakistan. 2nd world Sustainability Forum. Institute of Geography. Urban & Regional Planning University of Peshawar, KPK, Pakistan, 1-13.
- Babbie, E. (2004). *The practice of social research.* (10th edition). Singapore: Thomson Asia Ptc. Ltd.
- Bafferding, L., & Kloser, M. (2015). Middle & high school student's conceptions of climate change mitigation and adaptation strategies. *Environmental Education Research*, 21(2), 275-294. Baker, T. L. (1988). *Doing Social Research*. (3rd edition). Lahore: Allah wala printers.
- Bashir, Q. A., Batool, M. and Zahra, S. (2016). Impact of global climate change on economy of Pakistan: how to ensure sustainable food and energy production. *Advance in Plants and Agriculture Research*, 5(2), 508-513.
- Bhandary, N. P., Dahal, R. K., Tuladhar, G., & Yatabe, R. (2013). Knowledge of disaster risk reduction among school students in Nepal. *Geomatics, Natural Hazards and Risk*, 5(3), 190-207.
- Bord, J. R., Fisher, A., & O'Conner, E. (1998). Public perceptions of global warming: United States and international perspectives. *Climate Research*, 11, 75-84.
- Bord, R. J., Connor, E. & Fisher, A. (1999). Risk Perceptions, General Environmental Beliefs, and willingness to Address Climate Change. *Risk Analysis*, 19(3), 461.
- Bostron, A., Morgan, M. G., Fischhoff, B., & Read, D. (1994). What do people know about global climate change? *Risk Analysis*, 14(6), 959-970.
- Boyes, E., Daniel, B., & Stranisstreet, M. (2003). How Can We Best Reduce Global Warming? School Students 'Ideas and Misconceptions. *International Journal of Environmental Studies*, 61(2), 211-222.
- Brown, J. D. (2004). Yates correction Factor. Shiken: JALT testing and evaluation SIG newsletter 8(1), 22.
- Burgess, J., Harrison, C., & Filius, P. (1998). Environmental Communication and the Cultural Politics of Environmental Citizenship. *Environment and Planning*, 30, 1445-1460.
- Butta, D., & Yousuf, A. (2012). Secondary School Students Attitude Towards Environmental Issues in Karachi Pakistan. *International Journal of Scientific and Engineering Research*, 3(10), 229-5518.
- Canadel, J. G., Ciais, P., Dhakal, S., Dolman, H., & Friedlingstein, P. (2010). Interactions of Carbon Cycle, human activity, and the climate system: a research portfolio. *Current Opinion in Environmental Sustainability*, 12, 301-311.
- Capstick, S., Pidgeon, N., Poortinga, W., Whitmarsh, L., & Upham, P. (2015). International trends in public perceptions of climate change over the past quarter century. *WIREs Climate Change*, 6, 35-61.
- Christensen, R., & Knezek, G. (2015). Climate Change Attitude Survey: Measuring Middle School Student Beliefs and Intentions to Enact Positives Environmental Change. *International Journal of Environmental and Science Education*, 10(5), 773-788.

- Christianson, G. E. (1999). Green house: The 200-year story of global warming. New York: walker and company.
- Cook, J., Nuccitelli, D., & Green, S. A. (2013). Quantifying the Consensus on anthropogenic global warming in scientific literature. *Environmental Research Letter*, 8(2), 1-7. Cury, J. (2011). Nullifying the Climate null hypothesis. WIREs Climate Change 2, 919-924.
- Dowd, B., Howden, A., Jakku, E. S., & Park, S. (2013). Climate change awareness is linked with enhanced adaptative capacity. *Agricultural System*, 117, 30-34.
- Dunlup, M., Howden, S. M., Meinke, H. (2007). Adapting agriculture to climate change. *The National Acadmy of Sciences of the USA*, 104(3), 1969.
- Falaye, F. V., & Okwilague, E. A. (2016). Assesing The Senior School Students Knowledge, Attitude and Practices Related to Climate: *Implications for Curriculum and Teacher Preparation*, *JISTE* 20(1), 43-53.
- Frank, P. (2008). A Climate of Belief: The Claim that anthropogenic Co2 is responsible for the current warming of earth climate is scientifically insupportable because climate models are unreliable. *Skeptic*, 14(1), 22-30.
- Godfrey, A., Le Roux-Rutledge, E., Cooke, S., & Burton, M. (2009). Report of Africa Talks Climate, The Public Understanding of Climate Change in ten Countries. Landon, UK: BBC World Service Trust.
- Government of Kenya (GOk). (2010). National Climate Change response strategy. Nairobi: Government Printers. Hansen, J. Rvedy, R. and Sato, M. (2012). *Perception of Climate Change*. PNAS 109(37).
- Hassan, A., Noordin, T. A., & Sulaiman, S. (2010). The status on the level of environmental awareness in concept of secondary school students. *Procedia-Social and Behavioral Science*, 2(2), 1276-1280.
- Holdren, J. P. (2006). Meeting Climate-Change Challenge. Assessed on 13-07-2018. http://www.whre.org/resources/essays/2005-2006,html#sthash.vDkM3KIF.dpu.
- Howe, P. D., Lee, T. M., & Leiserowitz, A. A. (2015). Predictors of public climate change awareness and risk perception around the world. *Nature Climate Change*.
- Hungerford, H. R., & Volk, T. L. (1990). Changing learner behavior through environmental education. *The Journal of Environmental Education*. 21, 8-21.
- Intergovernmental Panel on Climate Change (IPCC). (2007). The Climate Change 2001. Synthesis Report Contribution of Working Groups I, II and III to the Forth Assessment Report of the Inter-Governmental Panel on Climate Change (IPCC). Geneva, Switzer Land: IPCC.
- Intergovernmental Panel on Climate Change (IPPCC). (2001). The Climate Change 2001. Synthesis Report. Contribution of Working Groups I. II and III to the third assessment Report of the Intergovernmental Panel on Climate Change (IPCC). Geneva, Switzer Land: IPCC.
- IPCC, (2001). Report of Working Group I of inter-governmental panel on climate change summary for policy makers. Geneva: Inter-Governmental Panel on Climate Change.

- Khan, A. N. (2012). Planning for how to combat drought in Pakistan, *Environment* 3. Khoushab, R. R. (2017). The lack of awareness on climate change. *Past and Present Research Systems of Green Chemistry*, 3(3), 52.
- Koske, J., Ochieng, M. A. (2013). The Level of Climate Change Awareness and Perception among Primary School Teacher in Kisumu Municipality, Kenya. *International Journal of Humanities and Social Science*, 3(21), 174-179.
- Kumar, R. (2011). Research Methodology. (3rd edition). India: Sage publications. Lee, T. M., Markowitz, E. M., Howe, P. D., & Leiserowitz, A. A. (2015). Predictors of public climate change awareness and risk perception around the world, *Nature Climate Change*.
- Leiserowitz, A. (2006). Climate Change Risk Perception and Policy Preferences: The role of affect, imagery, and values. *Climate Change*, 77, 45-72.
- Leiserowitz, A., Kates, R. W. and Parris, T. M. (2005). Do global attitudes and behaviors support sustainable development? *Environment* 47, 22-38.
- Martin. (2017). Theory of Planned Behavior Definition, Explained, Examples. Assessed on 23-09-2018. https://www.cleverism.com/theory-of-planned-behavior/.
- Maruf, K., Tasmin, S., Touhidul-islam, M., & Rahman, A. (2014). Climate Change Awareness among the High School Students: Case Study from a Climate Vulnerable Country. *International Journal of Built Environment and Sustainability*, 1(1), 18-26.
- Michael, E., & Sola, A. (2016). Awareness of Climate Change and Sustainable Development among Undergraduates from two Selected Universities in Oyo State, Nigeria. *World Journal of Education* 6(3), 70-81.
- Moser, C., & Wolf, J. (2011). Individual understanding, perceptions, and engagement with climate change: insights from in depth studies across the world. *Wiley Online Library*, 2(4), 247-569.
- Neuman, W. N. (2014). *Social research method: Quantitative and Quantitative Approaches.* London: Allyn and Baron.
- Ogunhode, C. A., & Rasool, F. (2015). Socio-demographic Differences in Environmental Concern and Willingness to Pay for Addressing Global Climate Change in Pakistan. *Asian Journal of Social Sciences*, 43, 273-298.
- Ohman, J., & Ohman, M. (2013). Participatory approach in practice: an analysis of student discussions about climate change. *Environmental Education Research*, 19(3), 324-341.
- Ojala, M. (2012). Regulating worry, promoting hope: How Do Children, Adolescent, and Young Adults Cope with Climate Change? *International Journal of Environmental and Science Education*, 7(4), 537-561.
- Oruonye, E. D. (2011). An assessment of the level of awareness of the effects of climate change among students Metropolis Taraba state Nigeria. *Journal of Geography and Regional Planning*, 4(9), 513-517.
- Otieno, S., Paukar, E., & Maria, P. (2009). The Report of Kenya talks climate, the public understanding of climate change. Landon, U.K: BBB world Service Trust.

- Patchen, M. (2010). What Shapes the Public Reactions to Climate Change? Overview of Research and Policy Implications. *Analysis of Social Issues and Public Policy*, 10(1), 47-68.
- Paul, C. (2012). Climate change awareness amongst secondary level students and teachers in a Dares Salaam University College of Education (DUCE) affiliated school in urban Tanzania. Harold's Cross.
- Pew Research Centre. (2006). No global warming alarm in the U.S., China. Washington, D. C: The Pew Research Centre for the people and The Press.
- Piracha, A., & Shahid, Z. (2016). Awareness of climate change impacts and adaptation at local level in Punjab, Pakistan. *Water Science and Technology Library*, 72, 409-428.
- Pitpituge, A. D. D. (2013). Students Perceptions About Climate Change. *Asian Journal of Biology Education*, 7, 2-11.
- Pugliese, A., & Ray, J. (2009). Gallup presents a heated debate: Global attitudes toward climate change. *Harvard International Review*, 31, 64-68.
- Qurat, K. A. (2017). Climate Change: Implications for Pakistan and Way Forward. Institute for Strategic Studies, Research and Analysis (ISSRA). *National Defense University Islamabad*, 49-62.
- Republic of Kenya (ROK). (2013). National Climate Change Action Plan 2013-2017. Nairobi, Kenya: Government Printers. Rifat, M. Z. (2019). *Pakistan's Climate Change Strategy*. Daily Times.
- Sampei, Y. & Aoyagi-Usui, M. (2009). Mass-media coverage, its effect on public awareness of climate change issues, and implications for Japan's national campaign to reduce greenhouse gas emission. *Global Climate Change*, 19(2), 203-212.
- Santiago, J. (2015). 15 Quotes on Climate Change by World Leaders. World Economic Forum. Salkind, N. J. (2010). Proportional Sampling. SAGE Research Methods.
- Sarantakos, S. (1994). Social Research. Great Britian: The Macmillan press ltd. Schaefer, R. T. (2005). Sociology. (9th edition). USA: The MeGraw Hill company inc.
- Sexton, D. M., Rowell, D. P., & Folland, C. K. (2001). Detection of anthropogenic climate change using an atmospheric GCM. *Climate Dynamics*, 17, 669-685.
- Sheppard, B. H., Hartwick, J., & Warshaw, P. R. (1988). Theory of reasoned action: A metaanalysis of past research with recommendations for modifications & future research, *Journal of Consumer Research*, 15(3), 325-343.
- Sinatra, G. M., Kardash, C. M., Taasoobshiraz, G., & Lombardi, D. (2012). Promoting attitude change and expressed willingness to take action toward climate change in college students. *Instructional Science*, 40(1), 1-17.
- Skalik, J. (2015). Climate Change Awareness and Attitudes among Adolescent in the Czech Republic. *E-Journal for Environmental Education*, 10(4), 18023061.
- SPSS. (2010). IBM SPSS Statistics for Macintosh, version 22.0. EQUINOX, IBM corp.
- Taderera, D. (2010). South African's Awareness of Climate Change. Briefing Paper, No 235. Cape Town, S. A: The Catholic Parliamentary Liaison office.

- Taga, A., & Taga, A. A. (2009). An introduction to sociology. Lahore. Abdul Hamid Tag and Sons. TPB. (2017). Theory of Planned Behavior. Assessed on 21-07-2018.
- Trenberth, K. E. (2011). Attribution of climate variations and trends to human influences and natural variability. *Wires Climate Change*, 2, 925-930.
- UNDP. (2007). Fighting Climate Change. Human Solidarity in a Divided World. New York: UNDP. UNESCO. (2017). Climate Change Educations and Awareness. Assessed on 12-09-2018.
- UNFCCC. (1992). Convention on climate change. Germany: UNNEP/IUC for climate change secretariat. UNFCCC. (2007). Climate Change: Impacts. Vulnerabilities & adaptations in developing countries. Germany: The UNFCCC Secretariat.
- United Nations. (2019). Climate Change. Assessed on 03-01-2019. https://www.un.org/en/sections/issues-depth/climate-change/.
- UNWCED, (1987). Report of the world commission on environment and development: Our common future. Oxford: Oxford University Press.
- Wang, B., Wang, S., Yu, H., & Zhang, Y. J. (2013). Public perception of climate change in China: Results from the Questionnaire Survey. *Natural Hazards*. 69, 459-472.
- Washington, H., & Cook, J. (2011). Climate Change (IPCC). (2009). Climate Change denial: Heads in the sand. Landon, UK: Earth scan.
- Weart, S. R. (2010). The idea of anthropogenic global climate change in the 20th century. *WIRE: Climate Change*, 1, 67-81.
- Whitmarsh, L. (2007). Are flood victims more concerned about climate change than other people? The role of direct experience in risk perception and behavioral response. Tyndall Centre for Climate Change Research, School of psychology Cadiff University. *Journal of Risk Research.*
- Wiley, J. (2011). Corporate Carbon Strategies in Responding to Climate Change. *Business Strategy and the Environment*, 21(1), 33-48.
- Wired. (2018). what is climate change? The definition, causes and effects. Assessed on 16-05-2018. https://www.wired.co.uk/.