

Perception towards Humans Being Quarantined - Good For Nature?

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Abstract:

Aim:To evaluate and create awareness of the natural quarantine, changes that it has brought to earth among general public

Introduction:Quarantine is a limitation on the motion of individuals and products which are expected to halt the spread of disease or pests. COVID 19 outbreak has created a pandemic and lock down has been implemented by the government. COVID 19 has a noticeable impact on global economic growth and human life, but it has an unexpected positive effect on nature.The current study gives statistics on people's knowledge and awareness about the good side of the lockdown.

Our team has rich experience in research and we have collaborated with numerous authors over various topics in the past decade (Ariga *et al.*, 2018; Basha, Ganapathy and Venugopalan, 2018; Hannah *et al.*, 2018; Hussainy *et al.*, 2018; Jeevanandan and Govindaraju, 2018; Kannan and Venugopalan, 2018; Kumar and Antony, 2018; Manohar and Sharma, 2018; Menon *et al.*, 2018; Nandakumar and Nasim, 2018; Nandhini, Babu and Mohanraj, 2018; Ravinthar and Jayalakshmi, 2018; Seppan *et al.*, 2018; Teja, Ramesh and Priya, 2018; Duraisamy *et al.*, 2019; Gheena and Ezhilarasan, 2019; Hema Shree *et al.*, 2019; Rajakeerthi and Ms, 2019; Rajendran *et al.*, 2019; Sekar *et al.*, 2019; Sharma *et al.*, 2019; Siddique *et al.*, 2019; Janani, Palanivelu and Sandhya, 2020; Johnson *et al.*, 2020; Jose, Ajitha and Subbaiyan, 2020).

Material and method:An online study was conducted among the general population of Chennai using Google forms .The study was conducted in March-May 2020 .A total of 100 individuals attended the Survey consisting of 20 questions. The results were analysed using SPSS software and were depicted as pie charts.

Results and discussion :Most of the participants (80%) agreed that “humans being quarantined – boon for nature”. It appears, with things occurring around ,nature is returning back and flourishing.70% of them think lockdown is essential for containing the spread of the disease.69% thinks coexistence with other living creatures is possible and we can change everything.

Conclusion:The present study shows that people are very well aware about the quarantine and its benefits to humans as well as nature. Practicing quarantine and social distancing is the best that can be done in this situation.

Keywords: Animals;Awareness;Coexistence;Nature;Positive impact;Quarantine,

Introduction

Quarantine is a state of period or place of isolation in which people or animals that have arrived from elsewhere or been exposed to infectious or contagious disease are placed. It is a limitation of movement of individuals and goods which is expected to spread the disease. It is practiced for clearing a disease, or preventing movement of the individuals who may have transmitted a communicable disease, which doesn't have an affirmed clinical finding and proper treatment (Anonymous, 2019). The CDC says that practice of quarantine started during the fourteenth century in an effort to shield coastal urban communities from plague epidemics (*History of Quarantine / Quarantine / CDC*, 2019). Quarantines are for individuals or groups who don't have symptoms yet but were exposed to the infection. Quarantine helps in keeping them away from others, so they don't infect anyone (*COVID-19: Understanding Quarantine, Isolation and Social Distancing in a Pandemic*, 2020). Effective method controlling the spread of infectious disease has become a basic focal point of disaster planning. To some extent, certainly quarantine will be a key part of the overall public health strategy used during a pandemic, an act of bioterrorism or different crisis involving infection agents (Manuell and Cukor,

2011)

The current outbreak of the novel coronavirus, caused by SARS- COV2, highly believed to have originated from the Labs of Wuhan city, China (Chowdhury and Maranas, no date), a remarkable coincidence of human invention is observed in creation of the virus. The COVID-19 has created a pandemic, i.e The outbreak is discussing over a wide geographic area and affecting an exceptionally high proportion of the population(*1918 Pandemic (H1N1 virus) / Pandemic Influenza (Flu) / CDC, 2020*)([No title], no date) and it is a novel form of coronavirus which has gained resistance (Girija *et al.*, 2020)(Ashwin and Muralidharan, 2015). Nations worldwide are entering lockdown and all the industries, shops and etc. are closed to” flatten the curve” by following social distancing and other preventive measures against COVID-19. People on the other side take natural herbs which might boost immunity and has antimicrobial effects like neem,turmeric , ginger , zinc and etc to prevent contact of disease(Selvakumar and Np, 2017; Vaishali and Geetha, 2018; Maajida Aafreen M, Geetha RV and Lakshmi Thangavelu, 2019)(Lakshmi *et al.*, 2015)

(Rajeshkumar, Agarwal, *et al.*, 2018; Rajeshkumar, Venkat Kumar, *et al.*, 2018). vaccination or contracting the disease itself will only provide immunity against the virus(Pratha and Geetha, 2017)(Priyanka Shenoy and Brundha, 2016). Following the preventive measures ,good mind, good sleep , and diet during the quarantine protect us from the disease(Kumar, Ashok Kumar and Brundha, 2016)(Ravichandran and Brundha, 2016). Proper The COVID-19 quarantine has caused a big impact on the global economy, but it has also saved from unrequited expenses. A study comparing the quarantine effect in countries which followed it and not followed it concluded that quarantine can contain a variety of emerging infectious diseases and also cost in contrast to when not implementing a widespread containment(Gupta, Moyer and Stern, 2005). Although COVID has caused a lot of negative impacts on human life. It has also caused an unexpected positive Impact on the Environment in many ways the natural world has emerged as humans were quarantined. From reduction in traffic to limited zero tourism in many areas of the planet, people are able to see nature recover as we’ve never seen it before (Cochran, 2020)(Brundha, 2015).

New research has reported this as “ Human quarantine, nature conjures new urban spaces (The Moscow Times, 2020)(*The urban wild: animals take to the streets amid lockdown – in pictures*, 2020)”. A study stated that humans have been exploiting nature to meet our own present needs (mischa, 2015). UN global assessment reports states that nature is being destroyed at a rate of ten times to hundreds times higher than the average for the past 10 years (*Website*, no date a). Everything has now changed for a while. Cities have been pulled to a standstill at the excuse of communicable disease and the skies and rivers are enjoying a positive reprieve(*Website*, no date b). The smog laden cities are now presenting with clear sky as quarantine pulls vehicles from the road and decreases functioning of industries, transportation etc. It has caused reduction in nitrogen levels and the flora are growing abundantly(Goldblatt *et al.*, 2009). Many positive things have occurred to the nature in this quarantine.(*These locked-down cities are being reclaimed by animals*, no date)

The aim of the study assesses the people’s knowledge and awareness about the good side of the lock down. Humans are not a problem, human liabilities are. Humans should practice consistency. No proper research has been done on quarantine effects on nature. This study aims to assess the knowledge of people about the quarantine and the changes that it has brought to earth.

Materials and method:

A cross sectional Questionnaire survey was conducted among the general population of Chennai, Vellore Tamilnadu, India during March-May 2020. A total of 100 participants were assessed using a structured questionnaire consisting of 20 close ended questions regarding participants' demographic details, nature effects, affects, lockdown etc. All the collected data were then analyzed and bar graphs and pie charts were plotted with the extracted data. The descriptive statistical analysis was done and chi square test was carried out to determine the association between the variables. The results were depicted in the form of pie charts and graphs

Result:

In the current study, A study population of 100 people were questioned out of which 52 were male & 48 females. The age range of the study subjects were from 18-50 and above. 70% of the respondents said that Lockdown is essential to control the spread of the disease while 30% disagreed. (figure-1)

Majority of the individuals (62%) have been affected by the complete lockdown and Quarantine. 38% have not.(figure 2).

Most of the population (48%) feels reduced pollution is the benefit (figure 3) from lockdown of factories of industries to the earth while 25% thinks reduced toxic waste release into water.47% of them think that human quarantine makes animals come out of their places and roam around the empty cities while 32% says no.

Results of the survey say reduced water pollution(44%), no fishing/tourism (33%)made animals thrive especially marine life. (figure 5, Figure 6).79% of the population feels humans are destroying nature while 26% says no (figure 7)and 69% of them think we can change everything by (figure 8) practicing coexistence while 31% says no.

Discussion:

Our institution is passionate about high quality evidence based research and has excelled in various fields ((Pc, Marimuthu and Devadoss, 2018; Ramesh *et al.*, 2018; Vijayashree Priyadharsini, Smiline Girija and Paramasivam, 2018; Ezhilarasan, Apoorva and Ashok Vardhan, 2019; Ramadurai *et al.*, 2019; Sridharan *et al.*, 2019; Vijayashree Priyadharsini, 2019; Chandrasekar *et al.*, 2020; Mathew *et al.*, 2020; R *et al.*, 2020; Samuel, 2021)

Countries that have been under stringent lockdown to stop the spread of the corona virus have experienced unexpected reductions in pollution and greenhouse gas emission. The Quarantine has caused a big impact on human life, and has caused an unexpected effect on the earth.Majority of the participants agrees that humans being quarantined is good for nature. By practising social distancing and quarantine, it is advantageous for the community & the global network to control the infection(Musinguzi and Asamoah, 2020)(Shreya and Brundha, 2017). Social Distancing and Lockdown are not desirable for us but it prevents the worldwide spread of the infection disease when there is no treatment or immunization. Stopping most human contact is the best way to stop the spread (*Why is coronavirus lockdown necessary?*, no date)(Preethikaa and Brundha, 2018). Covid 19 having aerosol mode of transmission , it is easy to spread from person to person(Swaminathan, 2013).

Quarantine has affected the majority of participants.The psychological impact of quarantine is wide ranging, substantial and long lasting (Brooks *et al.*, 2020) . According to research, the quarantine might lead to post traumatic stress with symptoms like depression, confusion , anger, fear and substance misuse (Webster *et al.*, no date)(Brundha, Pathmashri and Sundari, 2019).This is also a loss in the economics of the countries. Potential service of anxiety is around Finance with many people fearing loss of jobs for the self employed, complete loss

of income. This creates a socio economic distress (Cava *et al.*, 2005)(Kalaiselvi and Brundha, 2016). But not everything is bad, some make it productive like William Shakespeare, who wrote king Lear during the Bubonic plague. (Debczak, BY Smart Shopping Team and Cormier, 2020).The Online classes for students with activities , quiz and etc is one good move to make children be productive during this period.A study conducted by Brundha et al concluded that game based learning had better understanding of concepts by students than conventional method of learning. (Mp, Brundha and Nallaswamy, 2019)(Prashaanthi and Brundha, 2018)

Quarantine has caused so many benefits on nature, because of reduced pollution , especially from factories The satellite observations have shown that the temporary measures have also driven a significant decrease in harmful emissions (*Coronavirus lockdown provides vivid picture of how environment recovers without people*, 2020)(Harsha and Brundha, 2017) carbon dioxide is tied to industrial activity, electricity production and transportation, so anything that affects these sectors affects the greenhouse gas(Crist, 2020). Data shows main cities in quarantine reduced the level of harmful microscopic particulate matter P.M 2.5, Nitrogen dioxide release from the vehicles, power plant has a sudden fall, and reduced pollution caused blue skies signaling a dramatic shift in India (Rebecca Wright, 2020)(Hannah *et al.*, 2019)

There are many viral videos circulating on social media showing animals trying to reclaim the dormant cities across the world.(Traveller, no date)(Singh, 2020). Other beneficial effects of humans being quarantined has reduced the noise pollution in cosmopolitan cities caused by vehicles, industries and manufacturing companies and etc. Reduction in noise pollution has a positive impact on domestic and wild animals.Majority of the people said that marine life is thriving because of reduced water pollution. The dolphins and fishes were swimming through crystal clear water in the canals of Venice which was once polluted by human activities (*Venice's canals clear as tourists stay away due to coronavirus*, 2020)(Balaji and Brundha, 2016).Water pollution is one of the main reasons for the death of the animals. In the course of the most recent decade, we have created more plastic than we have used over the most 100 years. Plastic kills fish, fowls, marine mammals and ocean turtles. It has also demolished sea habitats and even influenced creatures' mating rituals, which resulted in decline of breeding of the species. In the Florida Keys, better water quality forms a sound marine biological system. For example, toxic metals, oils, pesticides, manures and industrial wastage were dumped in the water bodies causing abundance algae growth development and other harmful effects.(Kumar and Preethi, 2017; Timothy, Samyuktha and Brundha, 2019)

Animal habitats are shrinking as humans are expanding habitation by agriculture, mining, Industrialisation &etc.Most of them realise how life threatening we are to other species. We have to practice Coexistence,the state of living or existing together at the same time/in the same place (Karr, 1995) and 69% says it's possible .A Wageningen Scientist filled study says that humans and animals can live better with each other. We can conserve nature to a much greater extent and let go of excess economic growth. Human kind should attempt everything in power to conserve(Sommer, 1999)(*People and Nature*, no date)(Brundha, october2016).

Conclusion:

The data obtained from the survey shows that people have adequate knowledge about quarantine and its positive impact on nature. Males are more knowledgeable about the benefits of human quarantine than females and they are also aware of those who have been affected by quarantine as well. People have also recognized how threatening they are to other creatures of the world. The current scenario may or may not change after quarantine comes to an end. But people should realize the importance and should change for the benefit of the world and themselves.

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Author Contribution:

Swetha. G carried out execution of the work, data collection and drafting of the manuscript. Dr.Leslie rani, carried out the concept and design of the study, validation of the data collection, revision and proofreading of the manuscript. Dr.Brundha, revise and proofread the manuscript.

Conflict of Interest: None to declare

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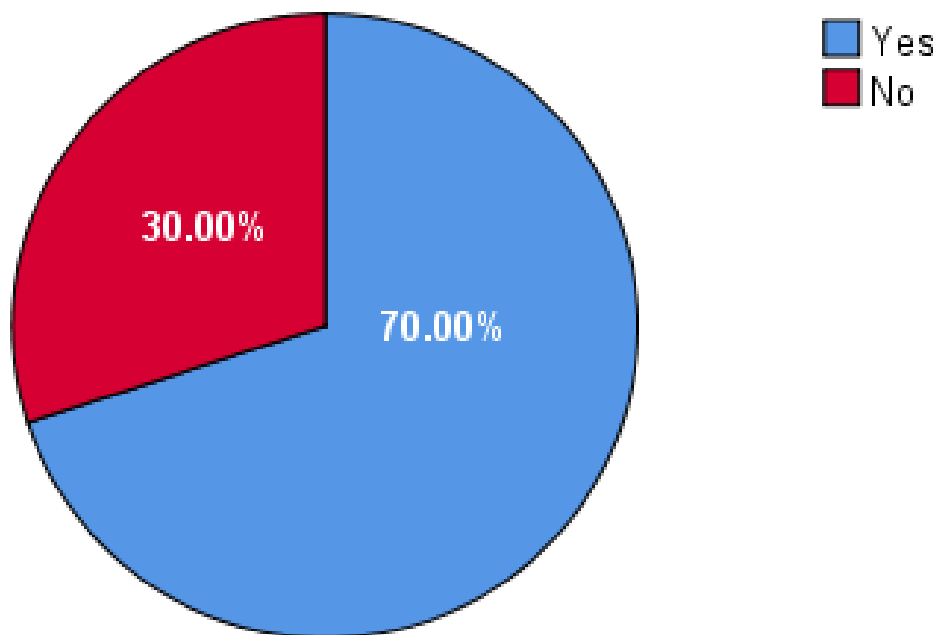


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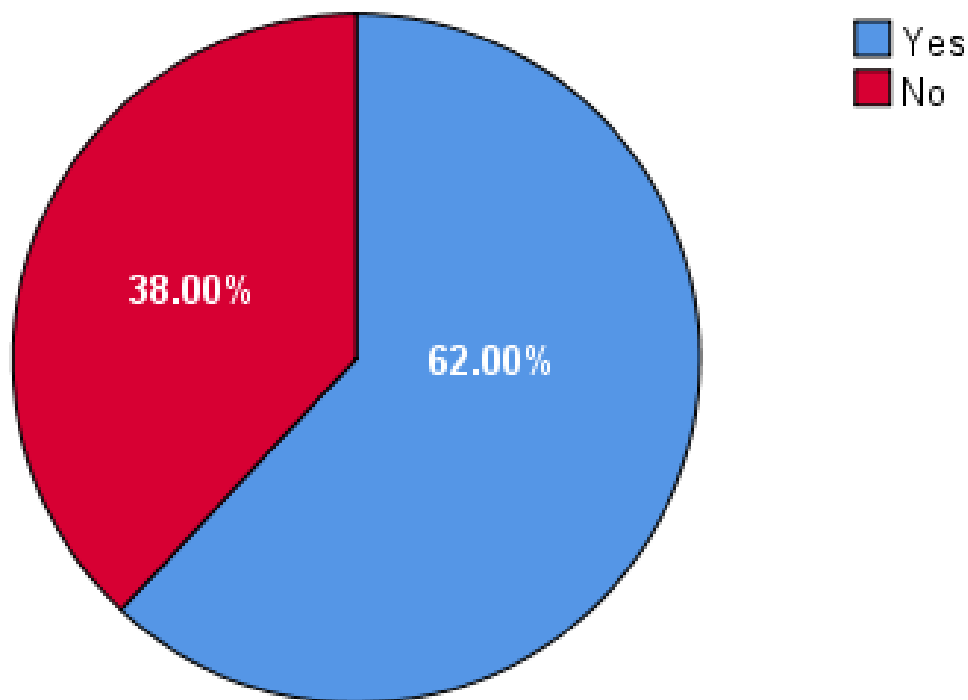


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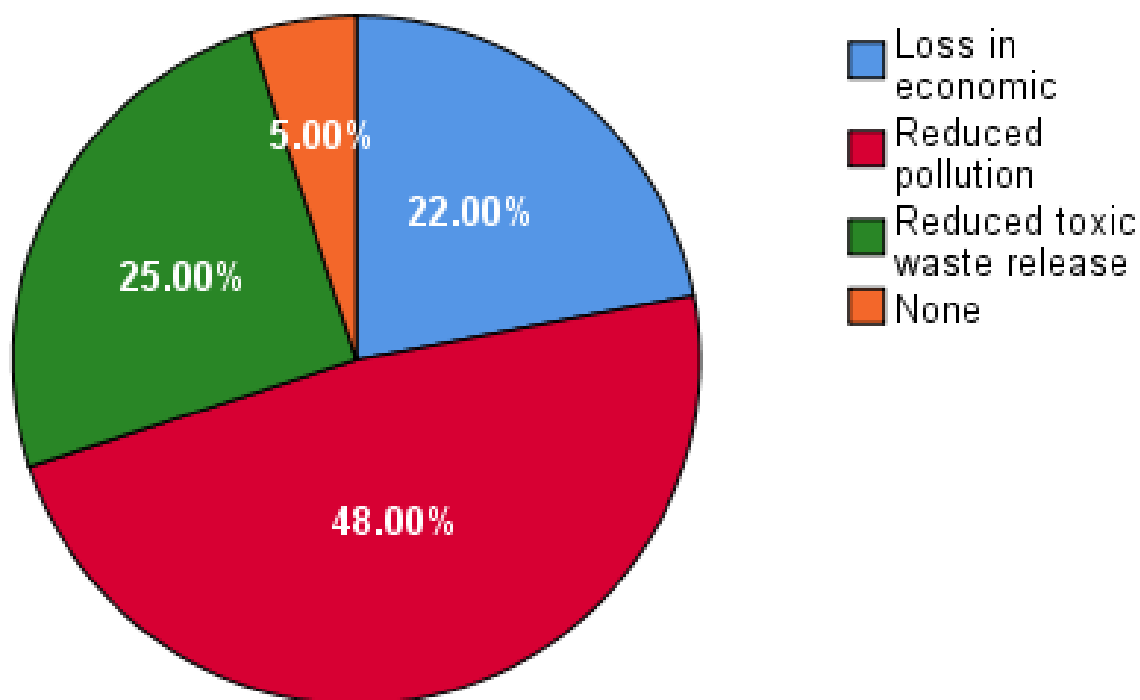


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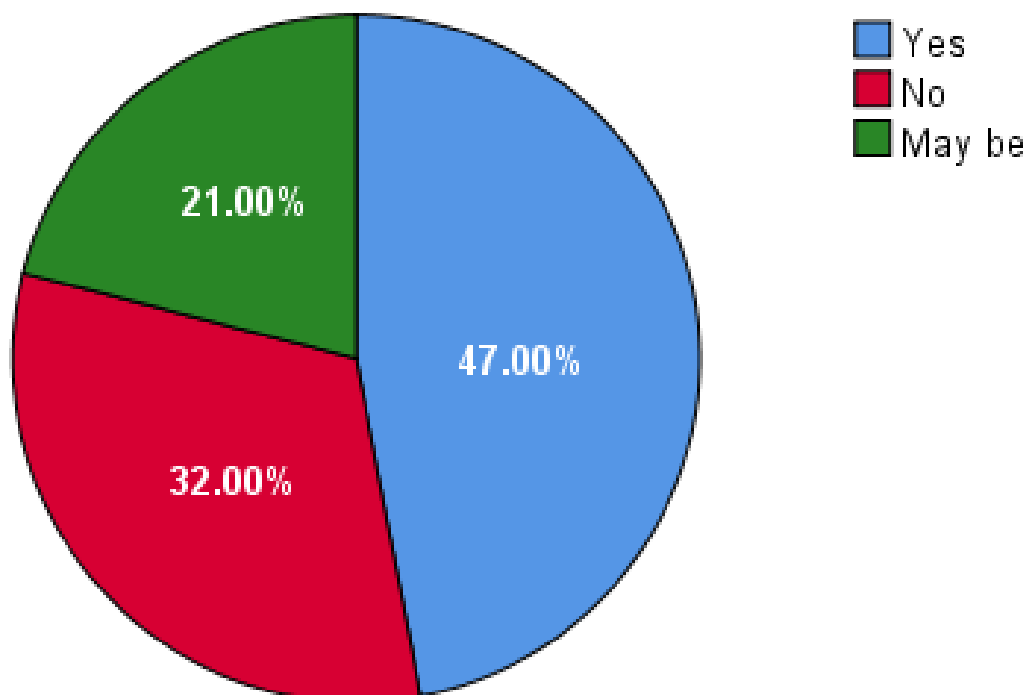


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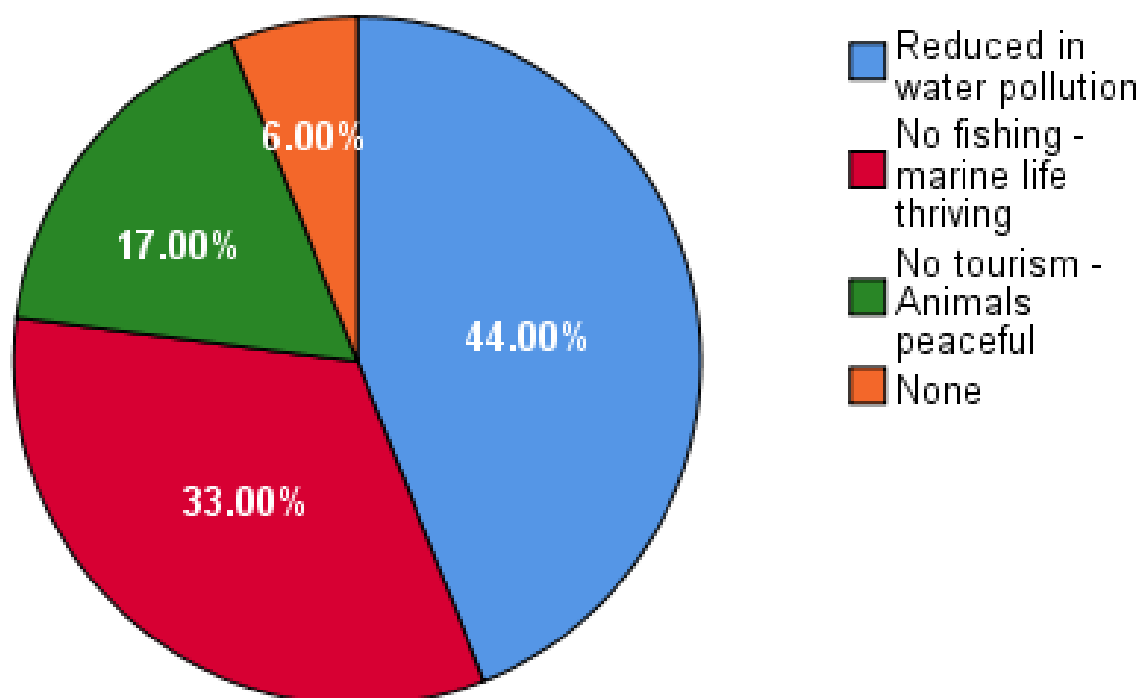


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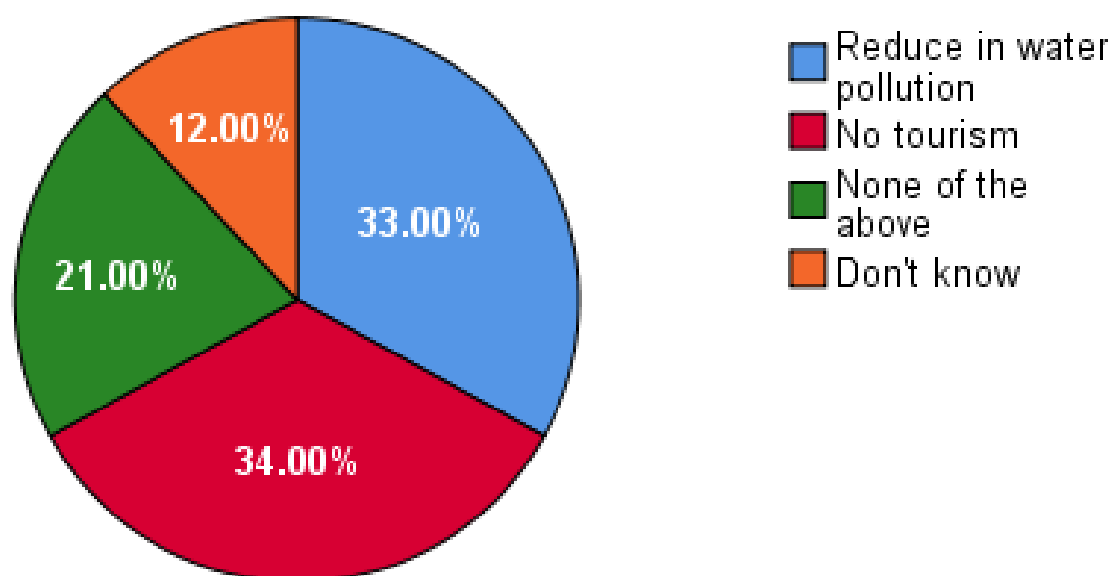


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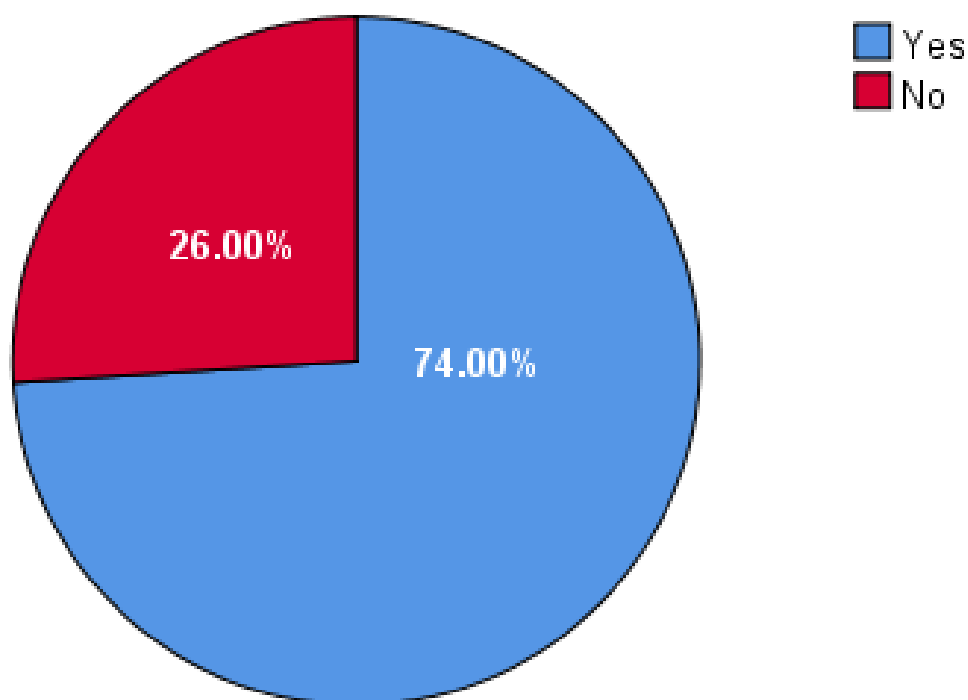


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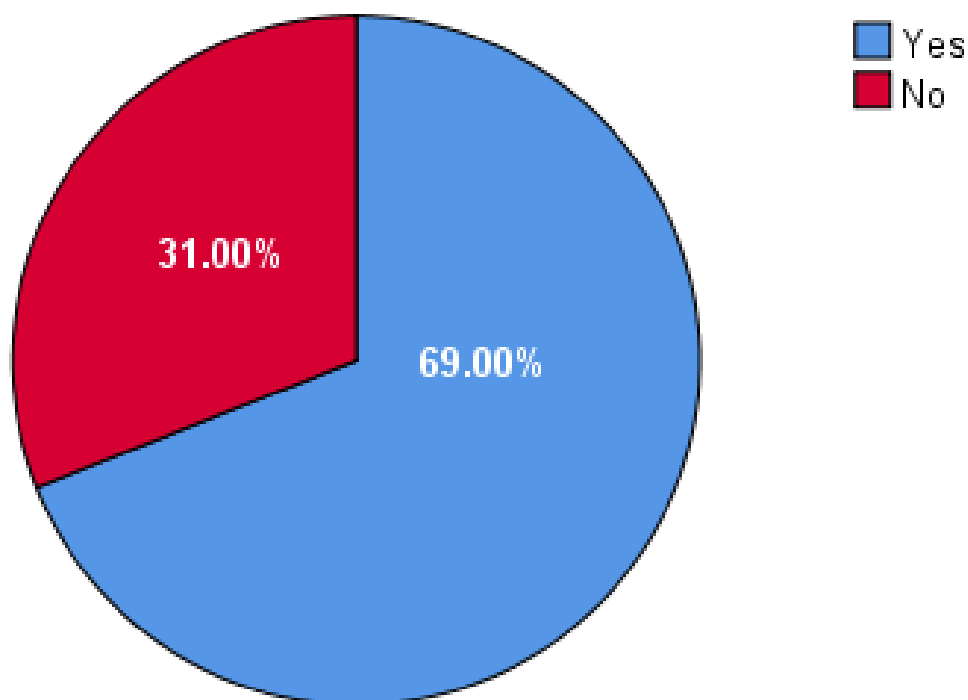


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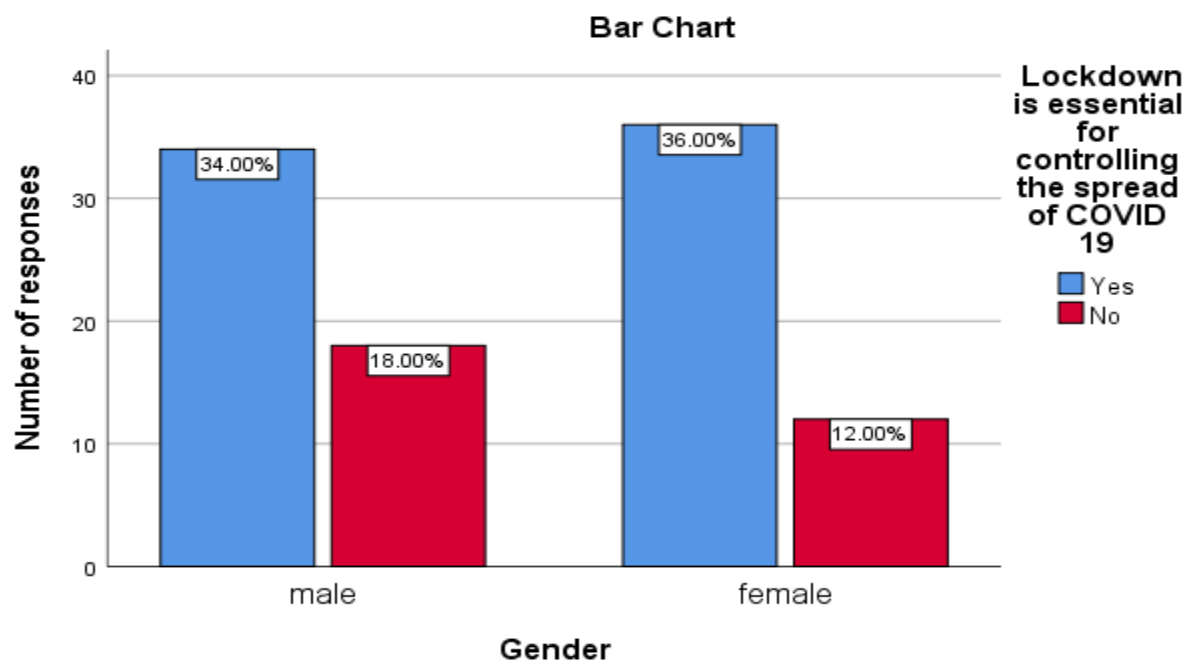


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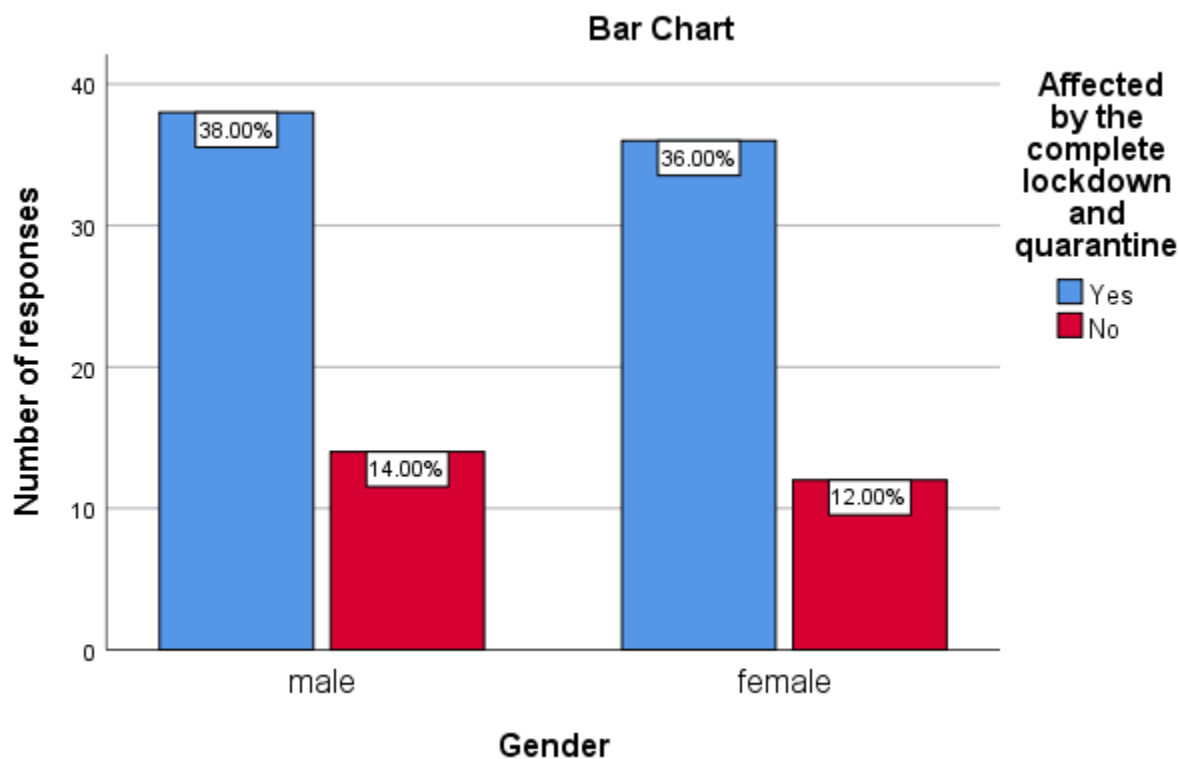


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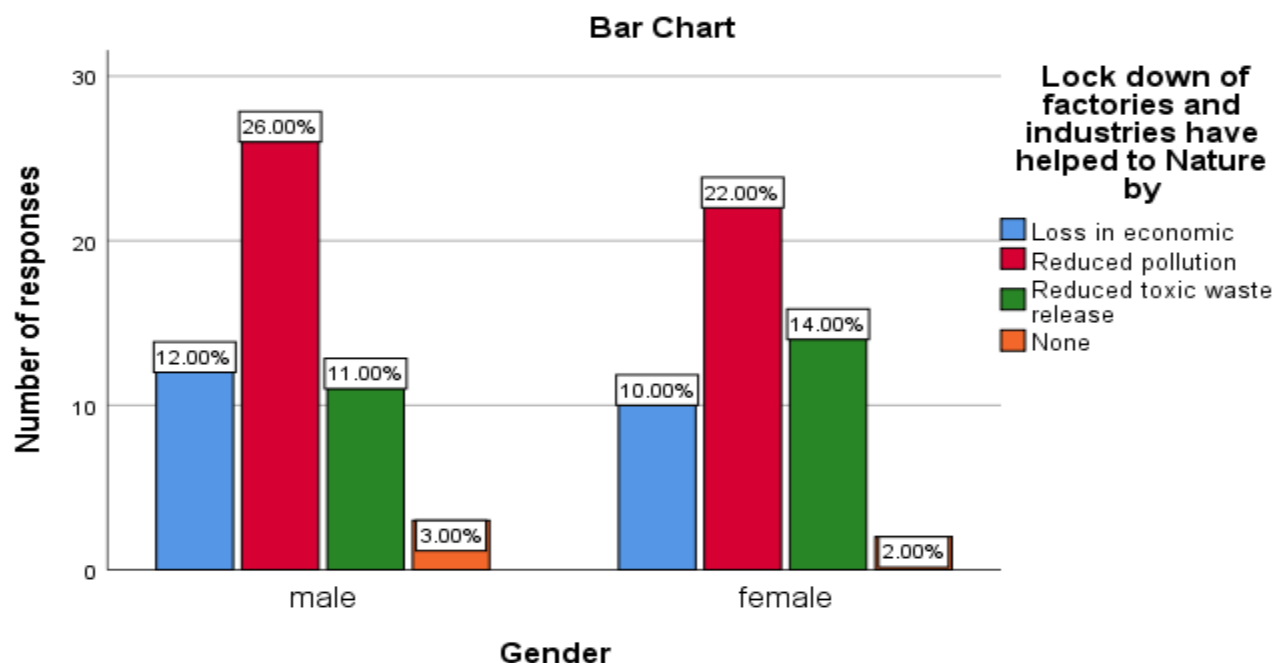


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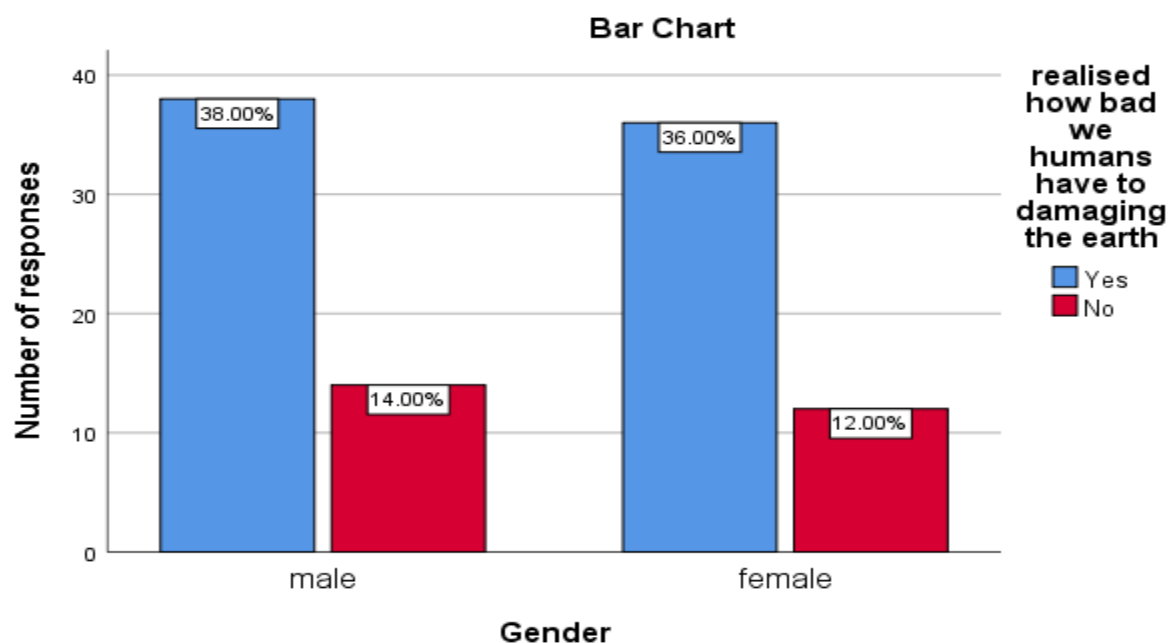


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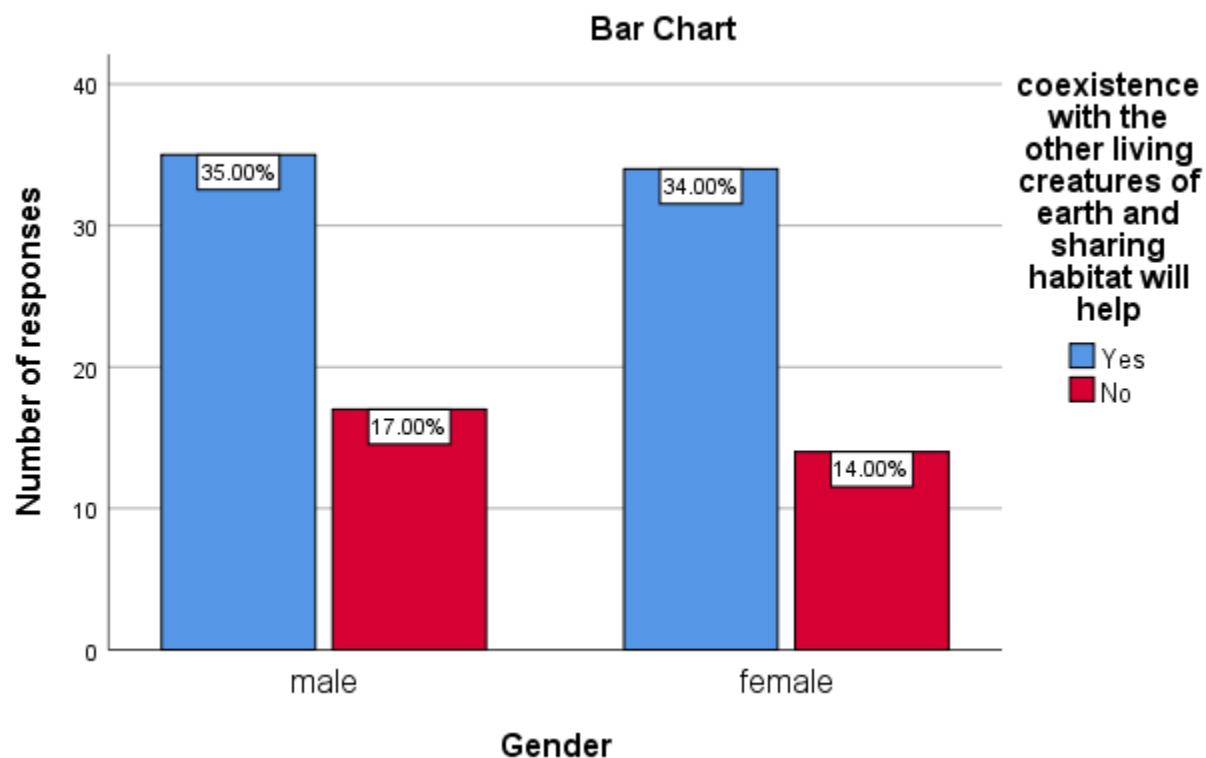


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