Connecting with nature post Covid-19

Aim

This research studies at what rate people are starting to connect with nature due to not being able to go on holidays, restaurants, bars or cinemas like they used to due to the lockdown after the pandemic following corona virus.

1. Introduction

1.1 A background to the virus:

A dangerous virus named Corona virus (Covid-19) began spreading from Wuhan, China to the rest of the World that goes back as early as August 2019 (Christopher Giles, Benjamin Strick, Wanyuan Song, 2020). This virus is particularly life threatening to those with lung diseases causing pneumonia, fever and coughing (Zie Yu Zu, et al., 2020). BBC news reports that in just the US alone, there have been approximately 170,000 deaths (Figure 1).

1.2: Lockdown Restrictions:

In response to this, many European governments including the UK, Turkey, Italy and Spain were forced to announce lockdown. This involved people only being allowed outside their homes for a limited number of times a day, and businesses such as gyms, bars, restaurants and leisure centres shutting down temporarily. Most of these countries' lockdown rules and regulations differed from each other. For instance, the UK announced on March the 27th that people must only leave their homes once a day for exercise, work, and buying food and medicine (Adam Bienkov, 2020). On the other hand, Australian states have different rules from one another. For example"In Queensland, 100 people from different households can visit whereas in Tasmania, only 20 visitors are allowed over. However, in Queensland you cannot visit anyone in a care facility but in Tasmania up to 2 people are allowed" (The Guardian, 2020).

1.3: How lockdown may change opinions:

This study is important as over the last decade or so, people and especially children and adolescents have noticeably shifted to a more digital lifestyle, ending up spending less time outdoors. For example,79% less adolescents that have access to some sort of screen before bedtime slept less than 9 hours compared to those that slept less than this time in 1991. Short sleep has been linked to diabetes, obesity, depression and many more issues (Jean M. Twenge, Zlatan Krizan, Garrett Hisler, 2017). Another study found that children aged 24-36 months that had increased screen time had poorer developmental performance (Sheri Madigan, Dillon Browne, Nicole Racine, 2019). In short, the digital lifestyle can have a negative effect on us and our families. It would be expected that people would have even less connection with nature. Fortunately, "It appears people have a limited time outdoors so they make the most of their few hours a day out in nature, and begin to be more aware of their surroundings."

On a global scale, the people not being able to travel anymore due to covid-19 was found to be correlated with CO₂ emissions falling. Daily activity has dropped by 75%, surface transport has dropped by 50% and industry and public sectors have reduced their emissions by 35% (Corinne Le Quere et al., 2020).

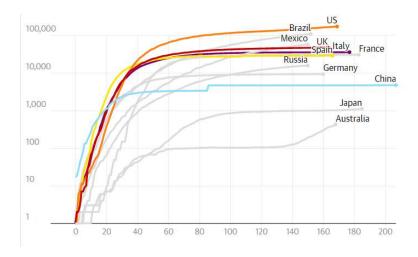


Figure 1: Deaths from Coronavirus in 12 countries (Johns Hopkins, 2020).

2. Methods

A 12-question survey was designed using Google Forms (Figure 2) and was open from the 19th of August 2020 until the 28th of August. Responses were gained by sharing the survey on FSC social media platforms such as Facebook, Instagram and Twitter and asking friends and family to also share it. In total, there have been 70 responses. These were the following questions;

- 1. What was your favourite activity to do in your free-time before lockdown?
- 2. Before lockdown, what would be your ideal way to spend a Sunday?
- 3. Before lockdown, what was your preferred type of holiday?
- 4. Have you associated your free-time with more outdoor activities since lockdown? If so, which kinds of activities?
- 5. Have you been concentrating on tending any local green space?
- 6. Have you been making any web-based searches regarding nature or wildlife recently?
- 7. Has sustainability become a priority for you?
- 8. Do you now find yourself planning more nature based trips on holidays?
- 9. Do you feel you're becoming more entertained by the simpler things like a bike ride than expensive nights out?
- 10. Do you feel you're becoming used to the outdoors and feel bottled up indoors compared to before lockdown?
- 11. On a scale from 1 to 5, how has your interest/enthusiasm about nature changed in general?
- 12. How likely do you feel you will stick to this lifestyle even if everything were to switch back to normal?

A few scaled questions were included to look at to what extent the participants' feel a certain way which is more resolute. The "Yes" "No" questions were added to the survey as they all contribute to nature and also, questions in which participants can answer however they like in a short answer were involved in the survey to get more detailed answers. In the beginning of the survey, participants' ages and country/town they spent lockdown in was also asked as this information may bias the results because different countries had different lockdown regulations.

Form description					
What is your age?					
18-29					
30-49					
50-64					
65+					
Which country/town di	l you spend lockdo	own in?			
Short answer text					
1. What was your favori	e activity to do in	vour free time l	efore lockdown	2	
Long answer text	is detivity to do in	your moo time i			

Figure 2: My "Connection with nature post-Covid-19" survey

3. Results

3.1: Question breakdown:

Before lockdown, many people already had nature-based hobbies to do in their free-time on Sundays when asked these questions. Some said that they would go to the city, to the beauty salon, meals, the gym, shopping and museums. Of course, they did not have the opportunity to do these anymore so for question 4, the majority stated that they have begun walking more and someone even stated they started to notice how plants would change with seasons. Another said they started bird-watching and wildlife photography. A few people said they were not doing more than before. One participant said they had even started running less (Figure 3).



Figure 3: Word cloud of responses to question 4.

For question 3, many people stated they would go abroad for holiday but the majority of them said they would not plan field trips in question 8. More than half of them also answered "No" to question 5 and 6. For questions that got mostly yes votes, almost 3 quarters of the participants said they have started to consider sustainability, they are becoming more entertained by simpler things like a bike ride than an expensive night out and they are getting more used to the outdoors and feel more bottled up indoors compared to pre-lockdown (Figure 4).

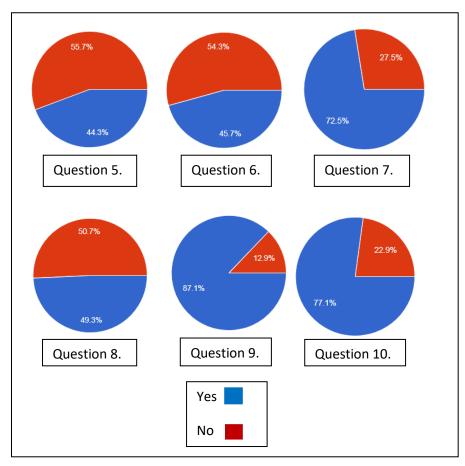


Figure 4: Pie chart table showing responses to yes/no questions (%).

For the scaled questions, there have been some positive responses. 5.7% of the participants claimed their enthusiasm towards nature has not changed, and 27% claimed that their interest has developed very much (Figure 5). In question 12, none of the participants said they would not switch back to their old lifestyle (Figure 6).

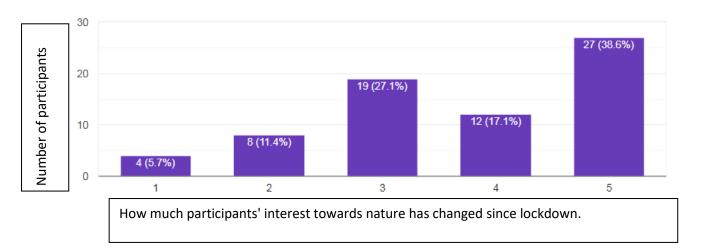


Figure 5: Question 11. (1- Not interested at all, 5- Very much interested.)

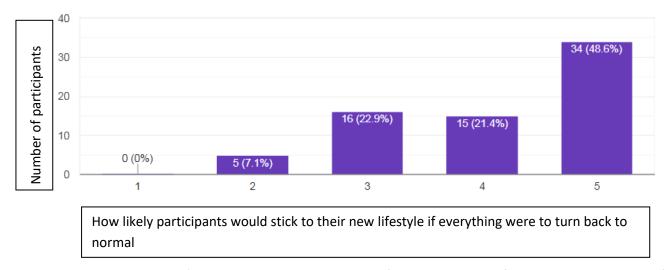


Figure 6: Question 12. (1- Would not stick to their new lifestyle, 5-Would definitely stick to their new lifestyle.)

3.2: Statistical analysis:

As for the chi-squared tests, it was found that there was no significant difference between people who quarantined in Cyprus that felt more entertained by simpler things like a bike ride than expensive nights out and people who quarantined in The UK. For every 1 person that answered "No" from the UK, 6 people said "Yes" (no:yes 1:6), making it similar in ratio with Cyprus (Figure 7). p=0.451533. In the second chi-squared test, there was no significant difference between the likelihood people of different age groups were to plan a field trip, p=0.1148991 (Figure 8).

Column1	Yes	No
UK	48	9
Cyprus	12	1

Figure 7: Comparison between answers of participants of The UK and Cyprus to question 9.

	yes	no
18-29	20	10
30-49	6	9
50-64	7	13
65+	2	3

Figure 8: Comparison between answers of participants of ages 18-29

4. Discussion

4.1: Summary:

Overall, it seems people are responding as if they are bonding with nature more after how lockdowns have shifted their lives. Shopping centres and restaurants temporarily closing down meant citizens did not really have a choice of a day out other than trips to the parks or walking. This, in the long term, made them more enthusiastic in nature. This naturally makes them more entertained outdoors performing simple activities like bike-riding or gardening, making them feel increasingly bottled up indoors. The important question to be answered is will they feel the same if everything were to go back to normal?

4.2: Changing behaviours pre, during and post lockdown:

Looking at questions 1 and 2, it seems many participants were already preoccupied with nature related activities such as gardening anyway. Some of them went shopping and restaurants and holidays abroad

before lockdown which they could not do during lockdown, other than that, which may be the logic behind why many participants claim they have not been performing more outdoor activities compared to before. Another person said they are limited to 1 hour only outside in Melbourne which, again, supports the point that the country of lockdown may affect their opportunities (See answers to question 4 in survey). Questions 5, 6 and 8 have been responded to as "No" at least over 50%. It is no surprise that there were not many people that voted yes to tending any local green space more since the lockdown, as the majority of responses came from London (Figure 9) which is a capital city and not many people have gardens or green areas around where they spent lockdown in. There are many young participants, mostly 18-29 year olds making up the responses (Figure 10). This may mean many of these participants have families and children, and once again, due to fear of catching the virus, may avoid going on any sort of trips. Older people on the other hand, may refuse nature-based vacations and field trips as these involve a lot of hiking and activities as such which they will struggle to perform. Additionally, they must be more inclined to stay at home as they are more susceptible to the virus (Centers for Disease Control and Prevention, 2020). Even though going out for food and medicine shopping was permitted, due to the fear of catching the virus whilst being out, where possible, many people have become more interested in being more careful with using up resources.

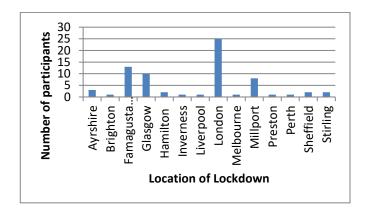


Figure 9: Lockdown locations responses came from.

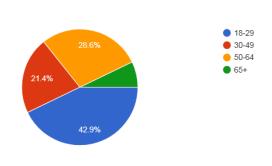


Figure 10: Age groups of survey participants (%).

4.3: Changing attitudes pre, during and post lockdown:

Questions 9 to 12 focus on how participants' felt towards this situation. Looking at the scaled questions and question 9, the responses make it clear that they are becoming more interested in nature, and suggests that they are happier outdoors? Before lockdown, all the restaurants and bars being open would distract the public away from outdoor activities. Them becoming more connected to nature is making them more appreciative of life and the outer world, potentially making them happier and more satisfied by simple activities.

4.4: Finding out if age and country of lockdown shift results:

It was found there was no significant difference between age and interest in planning field trips or the country lockdown was spent in and how participants feel about simpler activities compared to expensive nights out. The p-value for the age test, however, was closer to 0.05 compared to the other test. The reason being is there are more similar responses to question 9 between participants from UK and North Cyprus in ratio. However, although there was no significant difference when question 8 was analysed, compared to the answers of question 9, the differences were very considerable between 18-29 year olds and other age groups (More 18-29 year olds answered yes than no than other age groups.) (Figure 8). With

both tests, there are no significant differences as although participants were from different countries, the rules and regulations of lockdown were fairly similar, not biasing the results. As for question 8, 3 of 4 of the age groups had a similar yes to no ratio making them similar in results. In conclusion, these factors did not bias any results.

4.5: Limitations:

The research would have been more accurate with a larger sample size and more questions could have been asked but not too many to the extent that it may demotivate participants. If more questions could be asked, it would be beneficial to ask how their "screen time" has reduced or not, what sector they work in as if it is more nature-based being interested in it would have been a necessity nevertheless, and moreover, their marital status and if they have children or not as having children might be a result of going out more to entertain them. Besides age and country of lockdown, more personal questions could be asked like gender, but participants may be uncomfortable answering so many personal questions and could put them off.

5. Conclusion

5.1: Final statements:

In conclusion, when the report is looked at from a broader perspective, there is quite a big change in people's approach to nature after lockdown emerged. Although responses to some questions have been just over half No's had over Yes's, they are only a few questions out of many questions that have feedback with answers linking to a positive approach to nature. Although this is a way in which corona virus has a good effect on the world, what is more important is knowing whether or not the effect will last if the pandemic were to end and if those that were already interested in nature did not feel an effect at all. According to this research, nobody said their lives will go back to normal (Figure 6), but that may be in the long run and not permanently.

5.2: Future studies:

This could be part of a future study in which a year or so later after lockdown were to be released, research on whether or not people's lifestyles have stayed the same or gone back to the way it used to be. Additionally, a good idea for a future study would be testing if results change if age and location of lockdown were to be controlled and why some results came out differently to how it was expected, such as answers to question 8. Moreover, it would be a massive contribution if a future study looked into how people felt about the changes in their lives (if they felt happier or not).

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