

Name: Daniel Hardy

Student number: 1900408

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Tutor: Dr Roisin Mullins

A Quantitative Research Project in Regards to Exercise in Response to the Global COVID-19 Pandemic

Introduction

It is evident to see that the global COVID-19 pandemic has forced billions of people around the world to spend the majority of their time in isolation as a result of social distancing, government restrictions and lockdowns. Sporting facilities such as swimming pools and leisure centers have shut their doors for the foreseeable future and even various public parks have been closed in regards to the fear of contracting the deadly virus. This as a result has deprived many of an opportunity to take part in physical exercise and sporting activities “with 58% [of people] saying they would like to do more physical activity once Covid-19 restrictions are removed” (Sport England, 2021, p.3). It is also noted by Ammar *et al.* (2020), that this period of hardship has resulted in the decrease of levels in physical activity, an increase in consumption of unhealthy junk foods and a 28% increase in daily sitting time, all clearly explaining that this last year has been a dark time for everyone. With this being said, I have developed an interest into the public response towards exercise in light of the pandemic as well as the motivations we have to stay healthy and physically active when we are restricted from the daily routines we were once accustomed to. Personally, I have found it extremely difficult to motivate myself to exercise during the last year and with this report, I shall present a study that looks to examine this personal interest through the broader public perspective.

The study undertakes a structured quantitative research approach through the medium of a questionnaire survey produced on Survey Monkey. As described by Moser and Kalton (1971, p.1) the use of a survey can be used to highlight administrative facts as it looks to formulate a definitive meaning upon a sociological theory or phenomenon.

Participant selection for this study was determined through the use of probability sampling, by doing this the study would avoid the potential for a bias outcome and instead allow for clear generalizations that will ultimately benefit the analysis and interpretation of the study itself. Once data was collected, it was then transferred into SPSS for analysis giving me the opportunity to cross-tabulate and correlate multiple variables thus identifying statistical relationships and appropriate concluding interpretations.

Procedure

As mentioned by Cohen *et al* (2018, p.3), the ways in which we research and enquire into the nature of reality and the nature of things has been defined as ‘epistemological assumptions’, this in turn causes ‘methodological considerations’ thus creating the mean in which we collect our data. It was through this process that the need for a quantitative approach was identified, thus giving me the opportunity to gain the most authentic and broad understanding from the study’s ontology “the nature of existence and what constitutes to reality” (Gray, 2014, p.19). As explained by Cottrell (2014, p.93) quantitative approaches focus on what can be measured in objective ways through the medium of structured interviews, surveys and questionnaires that offer closed questions. These approaches in turn can allow the researcher to conduct data collection on a large scale that consecutively will help to draw out credible generalizations and conclusions.

Once identifying the study and reviewing relevant literature and theories, I started to design and develop the questions that would make up my survey. Designed on Survey Monkey, I decided to take on an objective approach towards the questions that I would be asking, this would allow me to eliminate any bias opinions I may have towards the study itself thus giving the participants the opportunity to complete an entirely neutral questionnaire. By including a series of questions relating to the individuals gender, age, type of occupation and current working conditions to name but a few, I would be able to identify potential trends within a range of demographics that in turn would allow me to highlight which members of the public were more or less likely to take part in physical activity in response to the pandemic. With these questions in place I would then add two descriptive questions asking the participant to explain his or her motivations towards exercise both prior to and during the pandemic

thus providing further evidence to help draw out an authentic interpretation from the overall data. With the questionnaire finalised, I then shared the survey on a variety of different platforms whilst also asking family members to do the same on their social media pages. By doing this, it was of my intentions to again eliminate any bias within the sampling as I knew that if I was to just ask my friends to fill in the survey, the data would most likely swing towards a certain direction. Once all the data had been collected, I then manually transferred and entered it into SPSS in which I would use a series of cross-tabulation and correlation tools to identify, validate and draw out various conclusions that appeared across the study.

Data Presentation and Findings

After entering the data collected from the survey, it was clear to see that I had come face to face with a factor that could potentially alter the reliability of the study outcome. When looking at gender throughout this study, it is evident to see that 70% of respondents were female and 30% male. Although this shouldn't be seen as a problem, I believe it is important to note that data throughout the study could be seen as uneven or even bias to some readers.

		Gender			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	12	30.0	30.0	30.0
	Female	28	70.0	70.0	100.0
	Total	40	100.0	100.0	

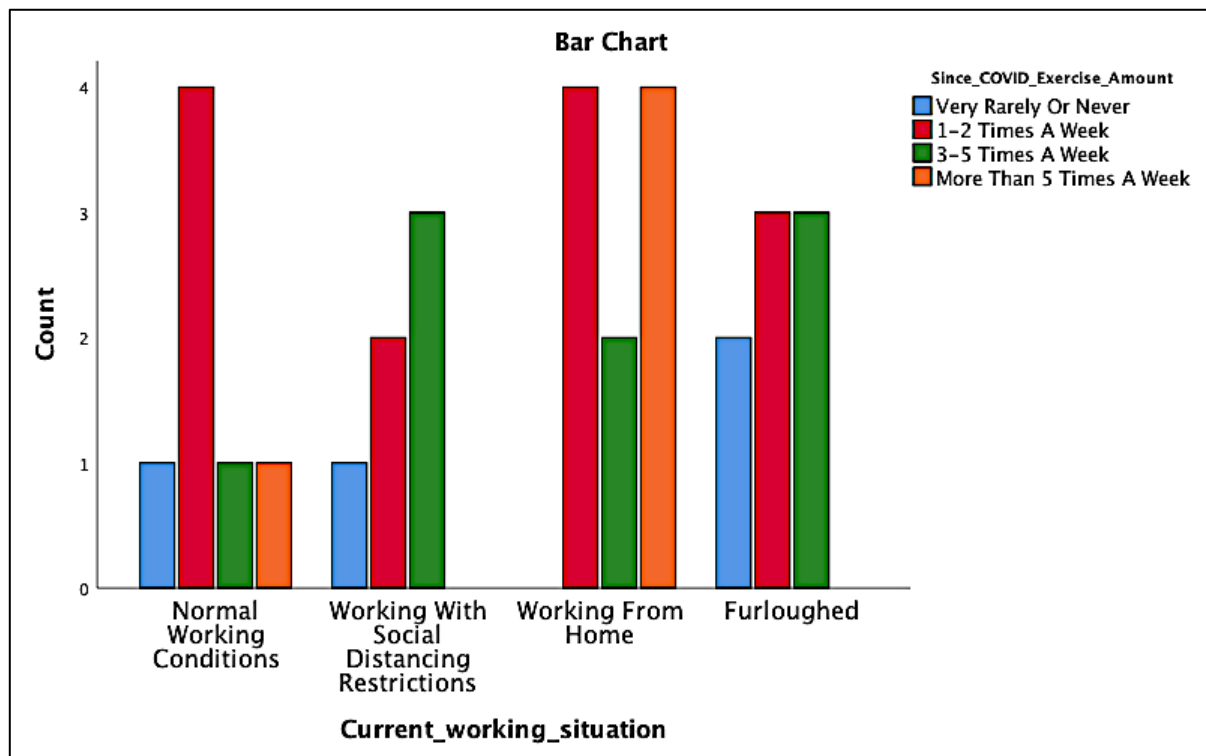
In regards to the amount of exercise taken place both prior and present pandemic, it was evident to see that there had been an increase in exercise throughout the majority of each age group. Participants between the ages of 35 and 44 projected a decrease in exercise time since the introduction of the pandemic, however, it is important to note that only 4 participants from the study were a part of this age bracket. This leads me to believe that the overall response in regards to exercise time per week had seen a positive change.

Age Vs. Exercise Time						
Count		Before Covid-19				
		Very Rarely Or Never	1-2 Times A Week	3-5 Times A Week	More Than 5 Times A Week	Total
Age	18-24	0	2	3	0	5
	25-34	4	1	2	4	11
	35-44	1	1	0	2	4
	45-54	0	2	2	3	7
	55-64	3	2	4	1	10
	65-74	0	2	1	0	3
Total		8	10	12	10	40

Age Vs. Exercise Time						
Count		Since Covid-19				
		Very Rarely Or Never	1-2 Times A Week	3-5 Times A Week	More Than 5 Times A Week	Total
Age	18-24	0	1	3	1	5
	25-34	1	4	4	2	11
	35-44	1	3	0	0	4
	45-54	1	2	0	4	7
	55-64	2	2	4	2	10
	65-74	0	2	1	0	3
Total		5	14	12	9	40

Throughout this global pandemic, many people have been put onto the governments furlough scheme with others even left unemployed as a result of the huge economic downfall. In regards to this study, 25% of participants who had been put on the furlough scheme had recorded that they had very rarely or never taken part in exercise since the start of the pandemic. In comparison to other current working conditions, participants on furlough averaged higher than any other working condition in regards to the lack of exercise time. From my interpretation, this leads me to believe that although people on furlough may have more time on their hands than others, the fact

that their working life has been put on hold could perhaps show that the motivation to take on an alternate lifestyle may be lacking.



Many participants throughout the study when asked about their motivation to exercise before the pandemic had provided similar responses rightly explaining that they take part in exercise to maintain positive physical and mental health. Although it is not possible to provide every single response on this report, there was a clear theme throughout the responses that leads me to believe that physical exercise can be seen as an important part of maintaining a healthy lifestyle to the majority.

“To get outside, boost mood, keep healthy and active and improve concentration in working day.”

“To keep active and healthy and to help with mobility problems.”

“Tune into my body, breathe and be with myself.”

In regards to the response to motivation during the pandemic, it was clear to see that there was no decrease in motivation to exercise but instead many participants had

stated that the pandemic had only made them more conscious of their health and that they were perhaps even more motivated to exercise as a result.

“Health has been in the forefront of my mind much more now, in comparison to pre COVID-19.”

“I have more time on my hands so exercise is a fun way to fill it.”

“I have been more determined and working at home has made it easy to exercise in shorter bursts.”

Conclusion / Reflection

From the data drawn from this study, It was evident to see that the general response to exercise since the wake of the pandemic had been positive leading me to believe that physical health and exercise remains to be an important part of public life regardless of the huge change we have experienced in the last year. When I look back at this study, I believe it is very difficult to take away a definitive conclusion, as it is clear to see that many categories were hugely uneven, not forgetting the fact that this study is based off of 40 randomized participants. I believe that deciding to include questions within the survey that asked participants to explain their motivations could be seen as a potential weakness as I have found it very difficult to quantify this data thus leading me to believe that the study itself may not be seen as purely quantitative and perhaps a mixed method instead. As a whole I believe this study could be seen as very unreliable as it draws data from not only a small sample but also an extremely uneven sample .

Word Count - 1713

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