

# Effects of Digitization on Society with Reference to Increase Usage of Technology in New Normal of COVID-19 Pandemic



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*The current coronavirus pandemic not only poses a large threat to the health of our population, but also has impacted our daily lives in a disorganized manner. Although most of the mainstream services are available through our accessibility to technology and internet, the constant isolation and loneliness has caused a silent uphill battle with emotional and mental health. This study will be observing the over-usage of internet as a current trend with a stark contrast of abrupt social changes that were caused by the pandemic.*

**Keywords:** Digitization, COVID-19, Mental Health, Work From Home, Lifestyle, Emotional Distress, Technology, Internet

## 1. Introduction

Coronavirus outbreak has alarmed the global population with its long-term ramifications. It will influence different spheres of life, such as the economy, industries, agriculture, global marketplace, and health generally. The emphasis of the governments and its people around the world at present is to monitor and minimize the effects of this pandemic. The world is moving towards digitization where it has seen modifications of a 2 year period within the matter of months. From E-commerce to academia, work-life to recreational has majorly shifted to online means. But a large proportion of the population is left exposed to variety of not-so-endearing factors, where mental health has been left stifling during times where isolation has become paramount. The focus of this study will be on the contrasting relationship between the increased excessive reliability on the internet during the pandemic with factors leading to non-strenuous changes in lifestyle. Psychosocial elements such as emotional, mental, ad physical attributes have been some key factors in this study.

## 2. Literature Review

Sr No	Title	Publishing And Year	Author	Findings
1	Emotional distress and associated socio-demographic risk factors during the COVID-19 outbreak in Spain (Muñoz-Navarro et al., 2020)	May 30, 2020 <a href="https://doi.org/10.1101/2020.05.30.20117457">https://doi.org/10.1101/2020.05.30.20117457</a>	Roger Muñoz-Navarro, Antonio Cano Vindel, Florian Schmitz, Rosario Cabello & Pablo Fernández-Berrocal	The findings indicate severe to moderate symptoms of anxiety and depression with at least one in four participants experiencing panic attacks, majority of respondents being females, and young adult. Significant risk factors were: single, unemployed, and low income.
2	Fear of COVID-19 and the Mental Health Consequences in America ( <i>Fear of COVID-19 and the Mental Health Consequences in America - PubMed</i> , n.d.)	American Psychological Association 2020, Vol. 12, No. S1, S17–S21 ISSN: 1942-9681 <a href="http://dx.doi.org/10.1037/tra0000924">http://dx.doi.org/10.1037/tra0000924</a>	Kevin M. Fitzpatrick, Casey Harris, Grant Drawve	The findings indicate that respondents were fearful of COVID-19. As with mental health consequences (anxiety and depressive symptoms), on an average, of the sample stated mediocre response to severe anxiety symptoms. Moreover detailed psychosocial study is required using countrywide descriptive samples that can aid in informing probable mental health dangers, as well as by aiming precise mental health mediations.

3	<p>How mental health care should change as a consequence of the COVID-19 pandemic (<i>How Mental Health Care Should Change as a Consequence of the COVID-19 Pandemic - The Lancet Psychiatry</i>, n.d.)</p>	<p>Lancet Psychiatry 2020; 7: 813–24 July 16, 2020 <a href="https://doi.org/10.1016/S2215-0366(20)30307-2">https://doi.org/10.1016/S2215-0366(20)30307-2</a></p>	<p>Carmen Moreno, Til Wykes, Silvana Galderisi, Merete Nordentoft, Nicolas Crossley, Nev Jones, Mary Cannon, Christoph U Correll, Louise Byrne, Sarah Carr, Eric Y H Chen, Philip Gorwood, Sonia Johnson, Hilikka Kärkkäinen, John H Krystal, Jimmy Lee, Jeffrey Lieberman, Carlos López-Jaramillo, Miia Männikkö, Michael R Phillips, Hiroyuki Uchida, Eduard Vieta, Antonio Vita, Celso Arango</p>	<p>The findings indicate that irrespective of the diversity of universal health systems, efforts have been made to familiarize the supply of mental health care utilities to the demands of COVID-19. Mental health issues have been talked by familiarizing mental health services, adapting admission to analysis and action, giving care to populations at high risk of mental health issues. Justifiable editions of distribution systems for mental health care should be advanced by specialists, clinicians, and service users, and should be exactly intended to moderate differences in health-care provision.</p>
4	<p>How Parents and Their Children Used Social Media and Technology at the Beginning of the COVID-19 Pandemic and Associations with Anxiety (<i>#HealthyAtHome - Healthy Parenting</i>, n.d.)</p>	<p>CYBERPSYCHOLOGY, BEHAVIOR, AND SOCIAL NETWORKING Volume 23, Number 11, 2020 DOI: 10.1089/cyber.2020.0284</p>	<p>Michelle Drouin, PhD, Brandon T. McDaniel, Jessica Pater, and Tammy Toscos, PhD</p>	<p>The findings indicate that mostly parents and their children have reported that since the phase of lockdown there was increased use of social media. Furthermore, structural equation models displayed that parents and children with greater level of stress were most possibly to raise their technological use and use social media and phones to connect. Among parents, greater stress was connected to using social media for both social support and information seeking.</p>
5	<p>The Need for a Mental Health Technology Revolution in the COVID-19 Pandemic (Figueroa &amp; Aguilera, 2020; )</p>	<p>2020 American Psychological Association 2020, Vol. 12, No. S1, S55–S57 ISSN: 1942-9681 <a href="http://dx.doi.org/10.1037/">http://dx.doi.org/10.1037/</a></p>	<p>Caroline A. Figueroa; Adrian Aguilera</p>	<p>The findings specify how technology offers an intermediary for bringing mental health services distantly and on a large or broader scale, which is mainly significant while maintaining the social distancing requirements. Even when the extremely bad phase of the COVID-19 pandemic has diminished, probably a greater requirement for mental health support and services brought through technological know-how will always exists. Digital mental health tools should be reasonable, nearby, and suitable for a comparatively bigger group of people with changing demographics.</p>

### 3. Research Methodology

**Rationale:** It has become very difficult for everyone to work seamlessly without the internet. However, the adverse problems being faced by people due to the internet have become very severe. Not only the internet but also the overall digitization of the globe because of the pandemic COVID-19 has increased the level of physical, mental and emotional misbalance within the society. Henceforth, the study is carried out to explore and verify the damages done by the digitization in this pandemic.

#### Objectives

1. To study the impact of digitization during the new normal of COVID-19.
2. To analyze the perception of society towards all the technological changes.
3. To study the cause of health and mental problems faced by people during COVID-19.
4. Identifying the psycho-social consequences of individuals during the pandemic.

**Hypothesis****H01: The time spent on internet varies according to age.**

ANOVA						
		Sum of squares	df	Mean Square	F	Sig.
Around 1 hour	Between Groups	3.636	1	3.636	1.196	.000
	Within Groups	145.884	98	3.039		
	Total	149.520	99			
Around 2 hours	Between Groups	1.949	1	1.949	.344	.001
	Within Groups	271.971	98	5.666		
	Total	273.920	99			
Around 3 hours	Between Groups	.158	1	.158	.053	.000
	Within Groups	143.842	98	2.997		
	Total	144.000	99			
Around 4 hours	Between Groups	.273	1	.273	.153	.002
	Within Groups	85.407	98	1.779		
	Total	85.680	99			
More than 4 hours	Between Groups	1.212	1	1.212	.105	.003
	Within Groups	555.108	98	11.565		
	Total	556.320	99			

Interpretation: The above table is the output of the ANOVA analysis and it shows whether there is any statistically significant difference between our group means. We can see that the value of significance is below 0.05, and therefore, we can accept null hypothesis that the time spent on internet varies according to age.

**H02: There is relation between age, feeling of isolation and time spent on internet.**

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Feeling of isolation	Between Groups	.249	1	.249	.155	.001
	Within Groups	77.031	98	1.605		
	Total	77.280	99			
Time spent on internet	Between Groups	1.340	1	1.340	.451	.002
	Within Groups	142.580	98	2.970		
	Total	143.920	99			

Interpretation: The above table is the output of the ANOVA analysis and it shows whether there is any statistically significant difference between our group means. We can see that the value of significance is below 0.05, and therefore, we can accept null hypothesis that there is relation between age, feeling of isolation and time spent on internet.

**H03: There is a relationship between level of job and mental trauma faced by people.**

ANOVA						
		Sum of square	df	Mean Square	F	Sig.
High	Between Groups	49.109	5	9.822	4.304	.003
	Total Groups	100.411	94	2.282		
	Total	149.520	99			
Middle	Between Groups	116.682	5	23.336	6.530	.000
	Total Groups	157.238	94	3.574		
	Total	273.920	99			
Low	Between Groups	12.571	5	2.514	.842	.002
	Total Groups	131.429	94	2.987		
	Total	144.000	99			

**Interpretation:** The above table is the output of the ANOVA analysis and it shows whether there is any statistically significant difference between our group means. We can see that the value of significance is below 0.05, and therefore, we can accept null hypothesis that there is relation between level of job and mental trauma faced by people.

**Sample Design**

**Target Population** - The working individuals and students who have been operating online and have suffered due to digitization during the pandemic would be the target population.

**Sample Frame** - There would not be any sample frame for this research.

**Sample size** - 90 is the sample size taken to study the effects of digitization on the individuals.

**Sample Technique** - The sampling technique used for the research is snowball sampling technique.

**Data Collection** - The methods of data collection are primary method and secondary method.

- Primary Method - Questionnaire is used to take the responses from the sample size and it is used for the collection of primary data.
- Secondary Method - Internet, magazines, newspapers, etc. are used for the collection of secondary data.

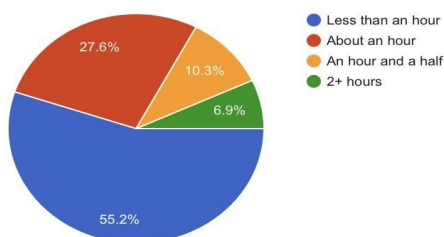
**Data Processing and Data Analysis Method**

- MS-Excel
- SPSS

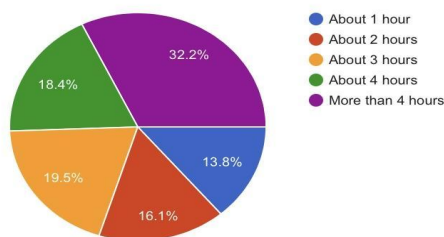
Cronbach Alpha should be less than .8, thereafter which the questionnaire will be valid to use.

**Data Interpretation**

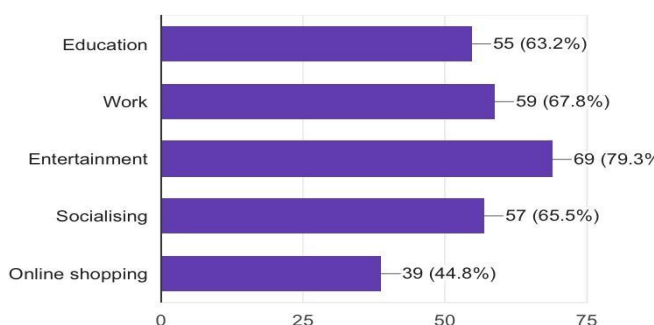
The form of data collected is primary which is through a questionnaire. All the responses have been referred consecutively and have helped us to interpret the data.



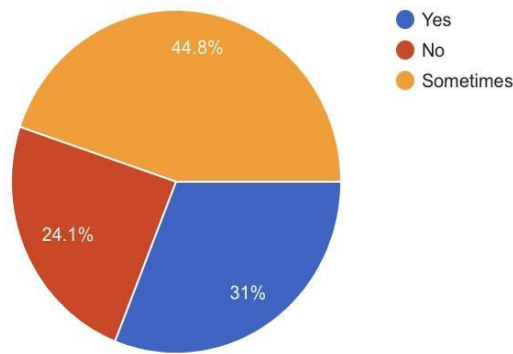
The above pie graph is a representation of the hours individuals invest in their self-care or grooming. The results are very appalling wherein majority of the individuals only are involved in self-care sessions which are less than an hour. Here, this could give a rise to unwanted problems.



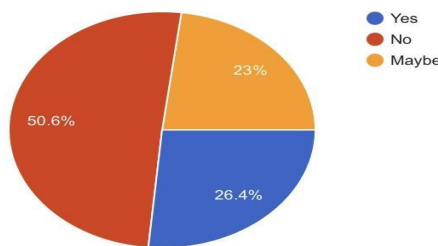
Above figure gives us a clear picture of the number of hours spent by an individual over the internet. The numbers show us the drastic change in pattern because people now have started spending excess time on the internet. Also, it has periodic changes because of the pandemic of COVID-19 where the major digitisation took place.



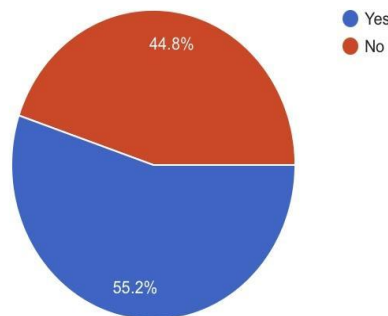
The bar graph figure above depicts the purposes for which the people have been using the internet. The trend visibly assures the fact of the internet being used for entertainment followed by work, and then education and socializing aspects.



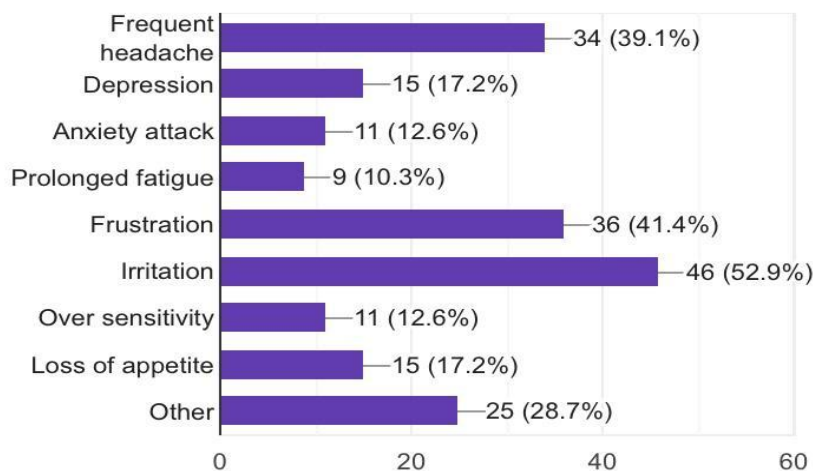
Lockdown phase during the pandemic was a life changing experience for many; the above pie graph studies the isolation and frustration that individuals felt due to the lockdown. As the percentage for sometimes factor on the graph is high, it indicates that many individuals more or less sensed the feeling of frustration and isolation during the lockdown period.



The figure above identifies whether people would have survived the quarantine without internet. The results give us a broad point view that around 50.6% of the total sample size would not have survived without the internet during the quarantine.

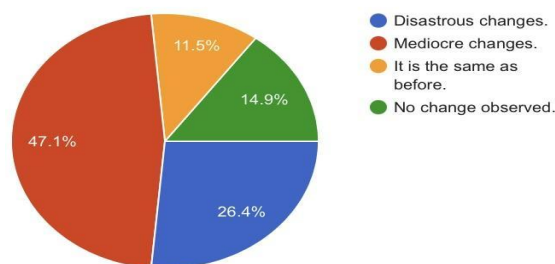


This graph pictures the stress felt at work by the people. Around 55.2% of people have had the feeling of stress when at work.

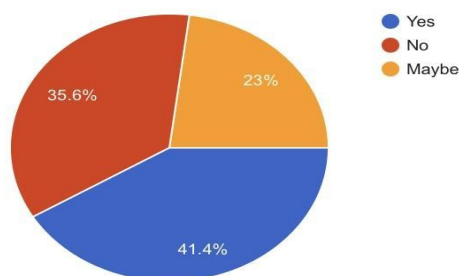


As 55.2% of people have felt stressed at work, the above bar graph will help us understand the problems these people have faced due to the stress. The major chunk of 52.9% felt irritated due to stress, 41.4% felt frustrated and 39.1% had frequent

headaches. This tells us that whether irritation or headache, stress at work is responsible for severe problems amongst the people.



People have noticed mediocre changes in the atmosphere due to technology, this can be referred from the above pie graph. 47.1% of people think the atmosphere has averagely been affected by the technological updates that occur from time to time.



The graph is a representation of people feeling anxious due to everything being online, and around 41.4% of the people are affected with anxiety because of offline to online diversification.

#### 4. Conclusions and Findings

The study helps understand that be it any individual, the results tend to vary with every aspect. However, based on our hypothesis and data Interpretation, age is the factor which is responsible for the problems faced by the individuals. There are several other important and critical implications from the findings.

The usage of internet varies according to the age, and the internet is used by them for various purposes which can be referred from the data interpretation. It can be concluded from the study that there is a significant relation between age, feeling of isolation and time spent on the internet.

Entertainment has been the major factor for which the internet has been used which is necessary to get beyond the feeling of isolation. Also the study gives a brief idea that the internet was very much necessary for individuals to survive the lockdown and quarantine period.

Overall the impact of digitization has made people anxious and the affected the atmosphere around them, not drastically but has brought certain changes to it.

#### Social Implications

The research study will bring a change in the society from the point of view of the internet usage, and will give a message of changing with technology without hampering people's physical and mental health.

Also, it will help the society understand that over usage of the internet will not benefit everyone, but will make them lose certain factors from day to day life.

#### 5. Future Scope

1. The study carried out has highlighted basic problems faced by the digitization and internet; however, in future there are many things which need to be explored.
2. The problems caused by digitization and the internet can be studied in depth along with the lifestyle changes that are caused by them.
3. Future longitudinal studies should explore the problems caused by digitization to people pre-existing with health problems.

#### 6. Bibliography

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