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Author: Chanmitha Sarathchandra, Dr. Michelle Benedict

Business Management School, Sri Lanka

INFLUENCE OF COVID_19 GLOBAL CRISIS ON MENTAL AND BEHAVIOURAL CHANGES BETWEEN AGE 14-19 AND ITS PROBABLE LONG-TERM IMPACT ON THE FUTURE AT A LEVEL OF CLINICAL SIGNIFICANCE

Chanmitha Sarathchandra, Dr.Michelle Benedict

Business Management School, School of Science

ABSTRACT

The biggest public health challenge that humans faced in the current century is COVID-19 which is an infectious disease. It created a pandemic and influenced the lifestyle of all the people. There were 182,319,261confirmed coronavirus patients and 3,954,324 deaths worldwide have been reported in March 2020. This pandemic disrupted education systems affecting nearly 1.6 billion learners in more than 200 countries and more than 94% of the world's student population. This study aim was to identify the influence of the COVID-19 global crisis on mental and behavioural changes in individuals between the ages of 14 – 19 adolescents and its probable long-term impact on the future at a level of clinical significance. The methodology used was quantitative and the questionnaire was developed based on the literature survey findings on influence factors of school children's mental and behavioural changes due to the COVID-19 global crisis. The convenience sampling method was used in data collection and questionnaire was shared among school children through relations and friends. The most significant findings of this research were that majority of respondents suffer from anxiety and depression while their physical activities and eating patterns have changed drastically. The lack of socialization has influenced the weight management which has negative effects on self-esteem and cognitive development. This research finding suggests that the COVID-19 global crisis has influenced the adolescents' mental and physical behaviours which can cause long term effects on their health. Therefore, it is very important to address this isolation and less socialization issue among adolescents and find solutions to provide a better lifestyle.

Keywords: Anxiety, Behavioral change, COVID-19, Depression, Mental Health

INTRODUCTION

COVID-19 is an infectious disease caused by a SARS-COV-2 virus family. The World Health Organization (WHO) declared COVID-2 as a pandemic in March 2020 and 182,319,261confirmed coronavirus patients and 3,954,324 deaths worldwide has been reported (World Health Organization, 2021). International Committee on Taxonomy of Viruses (ICTV) named this virus as severe acute respiratory syndrome Coronavirus 2 (SARS-CoV-2). COVID-19 had spread in more than 200 countries so far (Chakraborty and Maity, 2020). The structure of the coronavirus is shown below in figure 1.
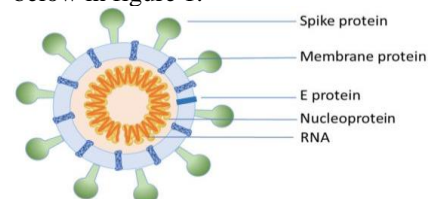

Figure 1 – Structure of Coronavirus (Khan et al., 2020)

COVID-19 virus is spread from person to person through respiratory droplet transmission, which occurs when a person is in close contact with someone who is actively coughing or sneezing. This occurs through the exposure of the mucosal surfaces of the host, that is, eyes, nose and mouth, to the incoming infective respiratory droplets. Transmission of the virus may also occur through fomites used by or used on the infected individual like bedsheets, blankets, kitchen utensils, thermometers and stethoscopes (Parasher, 2021). Coronaviruses are enveloped, positive-sense, single-stranded RNA viruses. It infects various types of host species. They are mainly four genera as α, β, γ, and δ. According to their genomic structure, α and β coronaviruses infect only mammals. Human coronaviruses like 229E and NL63 cause common cold and croup and these belong to α coronavirus. The four structural proteins of coronaviruses are Spike, membrane, envelope and nucleocapsid (Yuki, Fujiogi and Koutsogiannaki, 2020). The infection SARS-CoV-2 targets cells like nasal and bronchial epithelial cells and pneumocytes through the viral structural spike protein that binds to the angiotensin-converting enzyme 2 (ACE2) receptor. The type 2 transmembrane serine protease (TMPRSS2) which is present in the host cell that promotes viral uptake by cleaving ACE2 and activating the SARS-CoV-2 S protein. This mediates coronavirus entry into host cells. Similar to other respiratory viral diseases like influenza, profound lymphopenia may occur in individuals with COVID-19 when SARS-CoV-2 infects and kills T lymphocyte cells in the body. In the later stages of infection when viral replication accelerates the epithelial-endothelial barrier is compromised. In addition to epithelial cells, SARS-CoV-2 infects pulmonary capillary endothelial cells accentuating the inflammatory response and triggering an influx of monocytes and neutrophils. In severe COVID-19 the fulminant activation of coagulation and consumption of clotting factors occurs (Wiersinga et al., 2020). The respiratory system is primarily affected by SARS-CoV-2. The multiple infiltrates of both lungs may be present. Real-time PCR amplification of SARS-CoV-2 virus nucleic acid of nasopharyngeal swabs or sputum is needed to diagnose coronavirus (Azer, 2020). Trade and travel are the reasons for the widespread of infectious diseases. The COVID-19 pandemic also affected the economy in terms of decelerating the economic growth of affected countries and the lifestyles of people. This unprecedented time of COVID-19 and the implemented lock-down measures have influenced uncertainties regarding economic growth. The uncertainty on the global growth forecast by the International Monetary Fund (IMF) in 2020 is expected to decline by 3%, and by 6.1% for advanced economies. The impact that COVID-19 has on the health system differs in the world. Low and middle income countries with less developed health systems are likely to face more challenges and remain vulnerable in controlling COVID-19 compared to the high-income countries (Shrestha et al., 2020).

Impact of COVID-19 on school education

The COVID-19 pandemic disrupted education systems affecting nearly 1.6 billion learners in more than 200 countries and more than 94% of the world's student population. Lockdown and social distancing measures due to the COVID-19 pandemic have led to closures of schools, training institutes and higher education facilities. Educators make a valiant effort to deliver quality education through various online platforms. Online learning, distance and continuing education have become a panacea for this unprecedented global pandemic despite the challenges posed to both educators and learners

(Pokhrel and Chhetri, 2021). UNESCO recommends distance learning programs and open educational applications during a school closure caused by COVID-19. As a versatile platform for learning and teaching processes, the E-learning framework has been increasingly used. E-learning is defined as a new model of online learning based on information technology (Gopal, Singh and Aggarwal, 2021). Online learning is unfair for poor students who cannot afford the necessary equipment and devices for online education. In the underdeveloped and developing nations where many students cannot afford internet connection or the necessary gadgets needed for online connectivity. The COVID-19 lockdown has significantly hampered the teaching-learning process using online modules. It is imperative to thoroughly understand the teaching-learning process to take the necessary steps to smoothly run the two-way process (Qazi et al., 2020).

There is various technology available for online education. It has created a lot of difficulties such as downloading errors, issues with installation, login problems, problems with audio and video, bandwidth limitations and many more (Parkes, Stein and Reading, 2015). Sometimes students find online teaching less interesting and unengaging. Not getting personal attention is also a huge issue facing online learning. Students want two-way interaction but it is difficult to implement such ways via teaching online. The learning process cannot reach its full potential until students practice what they learn. Sometimes online content is all theoretical and does not let students practice and learn effectively. Students feel that lack of community, technical problems and difficulties in understanding instructional goals are the major barriers to online learning (Dhawan, 2020).

According to the WHO definition, mental health is the state of wellbeing in which an individual realizes their capabilities to combat normal life stressors and work competencies in contributing to the belonged community (Mukhtar, 2020). Due to pandemics, many are suffering from elevated anxiety, anger, confusion, and posttraumatic symptoms. The spatial distancing, self-isolation, quarantine, social and economic discord and misinformation are the major factors towards unusual sadness, fear, frustration, feelings of helplessness, loneliness and nervousness. Quarantine periods, closure of schools, unable to engage in outdoor activities, aberrant diets, disrupted sleeping habits, domestic violence, and child abuse have resulted in monotony, distress, impatience, annoyance, and neuropsychiatric problems for some children (Peters and Bennett, 2020). Children are one of the main victims of quarantine strategies' effects and they become vulnerable to various mental health problems (Liu et al., 2020). These extensive effects on their daily routines including leisure time activities, sleep, and even social communications (Dalton, Rapa and Stein, 2020). Different sleep patterns and less physical activity affect the children's physical and mental health that results in consequences like gaining weight, home violence, post-traumatic psychological stress, decreased social contacts and increased screen time (Ranjbar et al., 2021).

Adolescents are at increased risk for negative mental health outcomes since the beginning of the COVID-19 pandemic. Adolescents are in a formative period for socioemotional development and they are not as mature as adults, making them vulnerable to the effects of the current pandemic (Lee et al., 2021).

Conditions that can affect due by mental and behavioural changes

They are many mental parameters that can be considered for this mental state change. Anxiety is the main factor that adolescents have been affected. Anxiety is one of the complex nervous disorders

which is affecting adolescents and it is marked by excessive uneasiness and apprehension. This happens typically with compulsive behaviour or panic attacks (Runcan, 2021). If anxiety level increases in adolescence it can cause panic attacks and Phobias which affect mental health. If anxiety can be identified early it can be treated before it is deeply affected (Beesdo, Knappe and Pine, 2009). Depression is like anxiety which is common in adolescents. The enforced social isolation of COVID-19 has increased depression (Knopf and Knopf, 2020). Depression occurs later during adolescence or early adulthood. If depression increases in adolescents it can lead them to suicide (Kalin, 2021). Risk perception is defined as an estimate of the possibility that specific harm can occur (Tagini et al., 2021). This is a mental change that can affect. If this is stated to grow this can lead to stress, anxiety and depression conditions in adolescents (Kalia, Knauft and Hayatbini, 2020). Adolescence and young adulthood are periods for emotional and social development and the COVID-19 pandemic threatens this development. An individual with higher levels of emotional reactivity shows stronger responsiveness to environmental influences. Negative emotions in adolescents can cause stress and depression. And these negative emotions affect mental health (Green et al., 2021). Self-concept is one's perception about oneself or the general opinion about self-esteem. Self-concept is important in adolescence since everyday emotions and feelings are essential in personal development. Self-concept represents a protective factor against disruptive behaviour, enhancing both mental health and positive peer relationships. The positive self-concept in students during the school years produces successful socio-emotional situations and educational settings. The negative self-concept can lead to negative emotions,

anxiety, depression and stress (Alessandri et al., 2021).

Many behavioural changes occur due to COVID-19 in adolescents and the sleep is the main change that occurs. They tend to sleep more than usual and it harms mental and physical health. This COVID-19 impact allows adolescents to follow their naturally delayed sleep pattern by delaying school-start time could be a feasible, affordable and efficient way to improve their sleep health. This is expected to improve their resilience in the face of the challenges and stress caused by COVID-19 (Reut et al., 2020). Sleep can cause obesity and weight gain in adolescents. Obesity and weight gain are associated with metabolic changes that increase the risk of non-communicable diseases such as diabetes and cardiovascular disease (Stavridou, A et al., 2021). Observational studies in adolescents show that an increase in weight with decreases in sleep time (Kansagra, 2020). According to physical health-related behaviours adolescents have been found to have less physical activity, less outside time and more screen time during COVID-19 compared to before COVID-19 (Becker et al., 2021). Physical activity is described as the total amount of time spent engaged in daily life activities, work and school activities, recreational and sports activities, and other activities that increase the energy expenditure of the body. Decreased physical activity can cause the development of chronic diseases, obesity, anxiety and depression (Zenic et al., 2020). By closing schools, the pandemic is preventing many children and adolescents from socializing with others. Not socializing for adolescents can lead to increasing social rejection, growing impersonality and individualism and the loss of a sense of community (Sikali, 2020). Physical distancing and self-isolation strongly impacted citizens live and affecting in particular eating habits

and everyday behaviours. Eating habits and lifestyle modification may threaten the health of adolescents (Di Renzo et al., 2020). The eating habits of adolescents by enabling non-isolated families to consume healthy food less frequently. The low consumption of in-nature or minimally processed foods and the excessive intake of ultra-processed foods have been associated with unfavourable health outcomes like high energy consumption with nutritional inadequacy, excess body weight, deterioration of insulin and lipid profiles and decreased high-density lipoprotein-cholesterol levels and high triglyceride levels in adolescents (Teixeira et al., 2021). The mandatory directives locking down outdoor activities inevitably disrupted the daily routine of children including regular physical activity and exercises. This increased the risk of weight gain for children already prone to gaining weight. Children need to play and keep physically active to protect their physical and emotional health during growth. A healthy diet and behaviours like physical activity, limited screen time and enough sleep help children to deal with these social restriction rules which are contributing to positive emotions, emotional stress responses, weight control and health (Calcaterra et al., 2020).

Objectives
General objectives
This study aims to identify the influence of the COVID-19 global crisis on mental and behavioural in individuals between the ages of 14 – 19 and its probable long-term impact on the future at a level of clinical significance. To achieve this aim, the following objectives are identified.

Specific objectives
• To study the influence of the COVID-19 global crisis on mental and behavioural changes in individuals between the ages 14 - 19 and its probable long-term impact on the future at a level of clinical significance.

• To identify the impact of COVID-19 during school closure for school children

• To understand which key areas under both mental and behavioural categories are more affected.

• To understand how the restrictions imposed due to the pandemic would lead to clinical conditions in both the near and distant future.

Materials
The questionnaire developed based on the literature survey findings on influence factors of school children's mental and behavioural changes due to the COVID-19 global crisis is given below in table 1.

Table 1 – Questionnaire items and expected results

Questions	Responses		
Gender	Male	Female	
Age	Age >14	Age 14 – 19	
School	Government schools	Private schools	Semi government schools
Homeschooling and learning to be more difficult	Yes	No	No change
Arguments had increased in the family	Yes	No	No change

Trouble relaxing	Yes	No	No change
Becoming easily annoyed or irritable	Yes	No	No change
Had trouble concentrating	Yes	No	No change
Felt sad	Yes	No	No change
Have nightmares	Yes	No	Covid has not impacted
Stand up for my right	Yes	No	I always did what was fair
Hyperactivity	Yes	No	No change
Peer problems	Yes	No	No change
Happiness and Satisfaction	Yes	No	No change
Freedom from Anxiety	Yes	No	No change
Sleeping hours	>5 hours/>5	6 - 10 hours	> 10 hours
Waking hours	Before 8.00 am	After 8.00 am	Before 11 .00 am
Inactive	Yes	No	No change
More screen times	Yes	No	No change
4 or 5 meals a day	Yes	No	No change
Meals prepared by yourself	Yes	No	No change
Visiting friends or family	Yes	No	No change
For entertainment and outside activities	Yes	No	No change
Been able to plan healthy meals	Yes	No	No change
Felt in control of my eating	Yes	No	No change

METHODOLOGY

This research used a quantitative method, and the questionnaire was designed based on the factors influencing school children's mental and behavioural changes due to the COVID-19 global crisis identified through the literature.

In Sri Lanka, children are studying in government schools, semi-government schools and private schools. Since the details of the population are difficult to find, the convenience sampling method was used to collect data. The questionnaire was shared with school children (age of 14 – 19) through relations and friends.

WhatsApp, Email and SMS were used to share the questionnaire link created in Google form.

Results

There were 40 responses received during two weeks of data collection period and the following table 2 presents the details of responses.

Table 2 – Responses received

Topics	Questions	Responses		
General questions	Gender	Male	Female	
	No of responses	18	22	
	Age	Age >14	Age 14 – 19	
	No of responses	1	39	
	school	Government schools	Private schools	Semi government schools
	No of responses	18	13	9
The perceived burden of the pandemic	Homeschooling and learning to be more difficult	Yes	No	No change
	No of responses	25	12	3
	Arguments had increased in the family	Yes	No	No change
	No of responses	13	13	12
Mental parameters				
Anxiety	Trouble relaxing	Yes	No	No change
	No of responses	13	21	6
	Becoming easily annoyed or irritable	Yes	No	No change
	No of responses	21	12	7
Depression	Had trouble concentrating	Yes	No	No change
	No of responses	27	9	4
	Felt sad	Yes	No	No change
	No of responses	22	10	8

Threat perception	Have nightmares	Yes	No	Covid has not impacted
	No of responses	8	24	8
	Stand up for my right	Yes	No	I always did what was fair
	No of responses	12	8	20
Emotional	Hyperactivity	Yes	No	No change
	No of responses	15	16	9
	Peer problems	Yes	No	No change
	No of responses	14	19	7
Self-concept	Happiness and Satisfaction	Yes	No	No change
	No of responses	19	13	8
	Freedom from Anxiety	Yes	No	No change
	No of responses	23	14	4
Behavioural parameters				
Sleep	Sleeping hours	>5 hours	6 - 10 hours	> 10 hours
	No of responses	11	21	8
	Waking hours	Before 8.00 am	After 8.00 am	Before 11 .00 am
	No of responses	16	17	7
Physical activity	Inactive	Yes	No	No change
	No of responses	13	22	5
	More screen times	Yes	No	No change
	No of responses	35	5	0
Eating habits	4 or 5 meals a day	Yes	No	No change
	No of responses	18	21	1
	Meals prepared by yourself	Yes	No	No change
	No of responses	23	14	3
Socializing	Visiting friends or family	Yes	No	No change
	No of responses	6	32	2
	For entertainment and outside activities	Yes	No	No change

	No of responses	7	31	2
Weight management	Been able to plan healthy meals	Yes	No	No change
	No of responses	22	13	5
	Felt in control of my eating	Yes	No	No change
	No of responses	22	13	4

The responses were entered into excel spreadsheets and the following analysis and graphs were created. Figure 2 presents the perceived burden of the pandemic faced by adolescents.
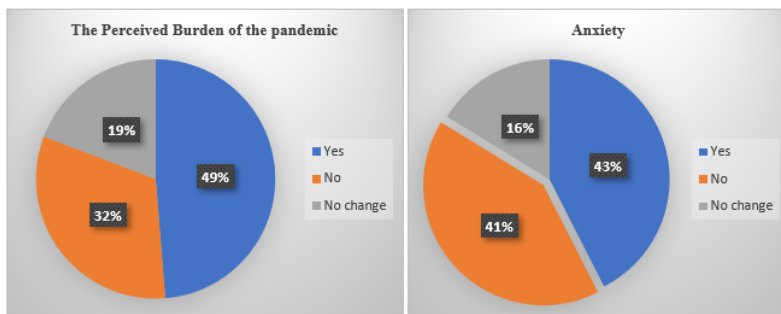

Figure 2 - Summary of the perceived burden of the pandemic

Figure 3 - Respondents with Anxiety

Figure 3 indicates the anxiety is experienced by adolescents while figure 4 presents that majority of respondents are having depression.
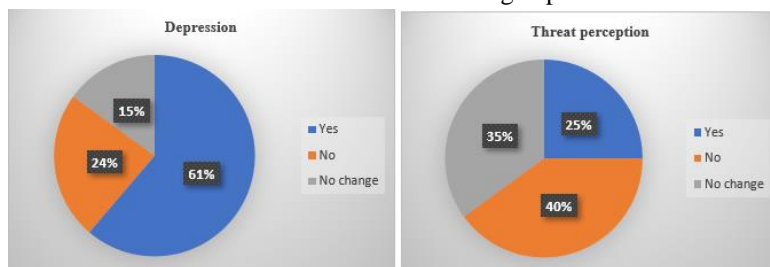
Figure 4 – Depression Figure

5 - Threat perception responses

The threat perception ratio highlighted that the majority 40% of respondents do not have threat perception as shown in figure 5. The level of emotional change is presented in figure 6.
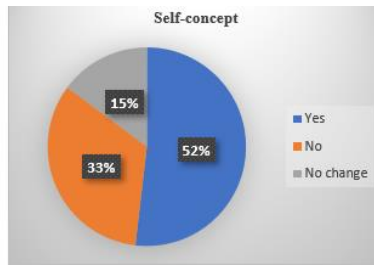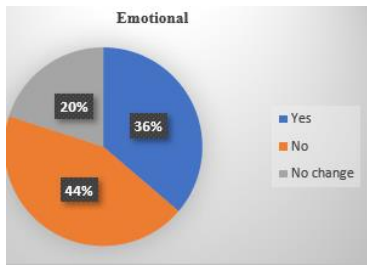
Figure 6 - Emotional change responses   Figure 7 - Adolescents having Self-concept

The adolescents with high self-concept are found and presented in figure 67 and their sleep has not been impacted due to this pandemic situation as shown in figure 8.
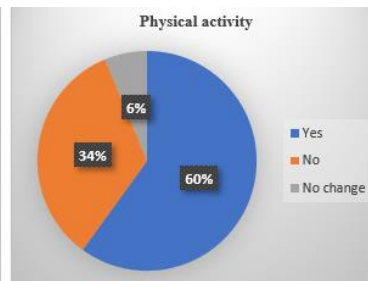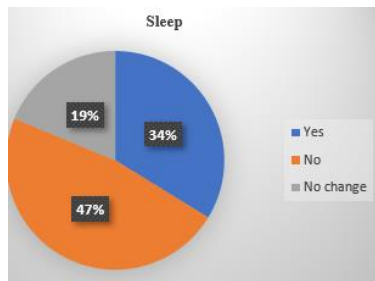

Figure 8 - Impact of sleep   Figure 9 - Level of Physical activity

The respondents' physical activities have changed due to the current situation as shown in figure 9. Further, their eating habits also have been impacted – refer figure 10.
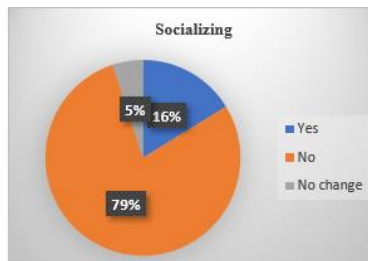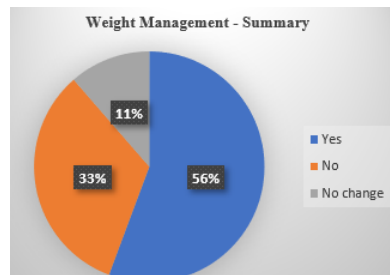

Figure 10 - Change of Eating habits   Figure 11 - Level of socializing

The majority of respondents did not have socializing due to isolation as shown in following figure 11. Due to being at home, the respondents have been able to manage their weight as shown in figure 12.

Figure 12 - Weight management status

DISCUSSION

The questionnaire in three languages (English, Sinhala and Tamil) was shared with school children between 14 – 19 years of age using social media. The 40 responses were received during two weeks and the analysis of the data was done using the Excel application. This survey was responded to by 18 (45%) males and 22 (55%) female students. The majority of respondents were from government schools 18 (45%) while 13 (32.5%) students were from private schools and 9 (22.5%) students were from semi-government schools. This study results revealed that the majority of 49% of Sri Lankan respondents have been affected by the COVID-19 and indicated their burdens or negative impact on their lifestyles which is similar to the findings of other researchers in Asian countries. In Indonesia, the lifestyle changes during the COVID-19 pandemic was around 50% (Wiguna et al., 2020) and in Korea approximately 48% paid increased attention to physical health and 37% of the participants had concerns about mental health (Zhu, Zhuang and Ip, 2021).

The COVID-19 pandemic caused physical interactions due to long-term isolation and closure of schools hence behavioural issues such as loneliness, suicide attempts, low self-esteem, and distress increased the risk for adolescent mental health. This study found that 43% of adolescents shown anxiety which is similar to other country's findings. In China, 43% of adolescents were suffering from anxiety (Qi et al., 2020) and 37.4% has shown anxiety symptoms (Jiang et al., 2020). If the anxiety symptoms get higher it can cause severe physical and mental impairment and disability (Garcia and O'Neil, 2021). Further, this study results showed 61% of adolescents having depression symptoms which are lower than in some countries. In the United States, 86.17% of adolescents reported clinically elevated depressive symptoms (Schleider et al., 2021).

Another finding of this research was that 40% of adolescents threat perception has not been affected while 25% of them have been affected. 44% of respondents have stated that emotions have not affected and 52% of the adolescents mentioned that they have a self-concept that is closer to the findings of another researcher which indicates 60% of respondents have self-concept (Fernández-Bustos et al., 2019).

The normal lifestyles have changed due to the COVID-19 pandemic which is supported by the change of sleeping patterns. The average sleep needed for an adolescent to maintain good health is 8 to 10 hours per night (Kansagra, 2020). Sleep makes adolescents less prone to stress and affecting their mental health (McManimen, Ross and Wong, 2021). It was revealed through parents that adolescents had more sleeping time during COVID-19 than before with clinically elevated rates from 24% to 36%. This study showed 47% of respondents' sleep has not been reduced so they had more time to sleep which is comparable to another research that indicates that 49% of children had no sleep disturbance during the pandemic (Sharma et al., 2021).

This study found that 60% of the respondents' physical activities were affected due to isolation hence they were mostly on-screen which is similar to other research findings. Ng et al. (2020) found that 50% of the adolescents reported that their physical activities were reduced. World Health Organization (WHO) targets to decrease inactivity by 15% by 2030 (Ng et al., 2020), therefore, it is important to find mechanisms for physical activities during COVID-19.

This research revealed that 51% of respondents had their eating habits changed due to the new lifestyle which is comparable to other researchers' findings. In Italy, 48.6% has affected eating habits

which caused obesity (Di Renzo et al., 2020). Obesity has been associated with a more severe clinical course of COVID-19 and the risk of fatality (Sidor and Rzymski, 2020). In this research, 79% of adolescents had no socialization due to this global crisis and 56% has accepted that their weight management has been affected. This can cause obesity and overweight in adolescents (Robinson et al., 2021). Obesity increases the risk of diabetes and cardiovascular diseases in adolescents (Woodard, Louque and Hsia, 2020). Further, obesity can impact idiopathic intracranial hypertension and has negative effects on self-esteem and cognitive development in adolescents (Bradwisch et al., 2020). Therefore, it is very important to address these factors for future health care planning.

CONCLUSION

COVID-19 is the biggest public health challenge that humans have had to face in the current century. This paper comprehensively discussed the impact of the COVID-19 pandemic on adolescents and found their mental and behaviours have changed. The most significant findings are that majority of respondents suffer from anxiety and depression while their physical activities and eating patterns have changed drastically. Therefore, this research concludes that the COVID-19 global crisis has influenced the adolescents' mental and physical behaviours which can cause long term effects on their health. Therefore, it is very important to address this isolation and less socialization issue among adolescents and find solutions to provide a better lifestyle.

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IS DEMOCRACY IN DANGER? SALVAGING DEMOCRATIC LEADERSHIP FROM AUTHORITARIAN POPULISM

Michael A. Genovese

President, Global Policy Institute, Loyola Marymount University, USA

Of its many valuable contributions to the study of leadership, perhaps the key finding to emerge from the field of Leadership Studies is the emphasis on context as a tool for understanding the limits and possibilities of leadership. Context sets parameters, opens or closes doors to power and leadership, signals leaders with a green light, or a red light.

Today, the context of global leadership is rapidly changing. The past is no longer prelude. And yet, we are still applying Gutenberg practices in a Zuckerberg world.

Across the industrialized world, countries face a crisis of governing due to the rise of "democratic discontent." Liberal democracies, once seen as the solution to the problem of governing are increasingly seen as the problem to be solved. Those with "passionate intensity' now dominate the public space, calling liberal democracies "weak," and "unable to govern." A brand of Illiberal Democracy is at the rise. The old order is often attacked as corrupt (a swamp) and dominated by selfish elites who squeeze resources out of the system for their benefit and not for "the people." The response of liberal democracies has been largely defensive. More of the same, rather than reform has been the conventional response.

Our leaders face a changing world (context) using the tools and concepts of yesterday. But the context has changed dramatically. Globalization and Hyper-Change are game-changing forces that require an abandonment of old models of leadership, and an embrace of a new model of democratic leadership. This, as the very concept of power is also changing.

The conventional wisdom was useful in conventional times. But we are today in anything but conventional times. We live in an age of hyper-change and globalization. Disruptive forces, rather than being occasional paradigm-shifters, are now the new normal.

We can respond to this new reality by relying on old, familiar models of understanding. If we do, the pessimist will see the glass as half empty, while the optimist will see the glass as half full. But we are arguing that the glass is broken, and we need new models to fit this new age. What new age?

Transformational change is about innovation and adaptation. In both business and government, successful change leaders institutionalize a culture of innovation in their organizations. This can be done either formally (e.g. the United States Department of State's Office of Innovation) or informally (e.g. articulating

a vision of innovation for the organization).[1]

New methods threaten old orders. Reward systems change, power relations are altered, new skills must be developed. Our comfort zones are threatened by change. We fear the unknown that might lurk around the next corner. So we stay where we are. Better the devil you know than the devil you don't.

We know that change must come. How do we bend that change in desired directions?

And although leaders can be key, a variety of forces are involved in the change process. And this process—and we need to think of change as a process—involves a variety of actors. Political scientist John Kingdom calls our attention to the "pattern of events" that leaders can help manage: "Leaders," Kingdom argues, "are like surfers waiting for the big wave. Individuals do not control waves but can ride them. Individuals do no control events or structures but can anticipate them and bend them to their purpose to some degree."[2] And Tom Cronin and I have characterized the change process as best understood resembling a three-act play. In Act I, new ideas are formulated and presented. In Act II, these ideas begin to attract a following. In Act III, leaders finally get involved, overseeing their enactment and implementation. Not that leaders only get actively involved at the end of the process.[3]

Today, change occurs more rapidly than ever before. [4]No sooner do you buy the iPad than the iPad2 comes out. As soon as you buy HDTV, 3D comes along. The ability to adapt to all these changes is the key to survival and growth, both individually and organizationally. So how does one get the wind to blow into the sails of change?

Both internal and external factors from expected and unexpected sources can trigger change. New technologies, shifts in power, economic changes, natural and man-made disasters, etc. all can drive change.

In individuals, change triggers a set of predictable stressors: anxiety, confusion, fear, frustration, and anger; our basic defense mechanisms take over often mimicking the stages associated with the Kubler-Ross Stages of Grief: denial, anger, bargaining, depression, and acceptance. Or we may over personalize. When the leader calls for change, some listeners hear that they are no longer valued.

Change on an individual level can be difficult and require a reversing of the brain. Our brains are wired to the status quo. What we have done repeatedly in the past is what the brain is biased toward. Our brains become wired to a default position that is directed toward what we know, what we have done, what our brains have become accustomed to. To change, new wiring is required, and that rewiring can only come about through repetition until repetition becomes habit and our brains forge new connections, new pathways, new wiring. We must "create new neural pathways in the brain." As Kevin Hogan writes,

The status quo is the status quo for just this reason. That which is familiar is the path of least resistance. This is also why the brain reacts so strongly with a

[1] Clayton M. Christensen, The Innovator's Dilemma, 1997.

[2] John Kingdom, Agendas, Alternatives, and Public Policies, 2nd ed. (New York, NY: Longman, 2003), pp.224-226.

[3] Thomas E. Cronin and Michael A. Genovese, Leadership Matters: Unleashing the Power of Paradox (Boulder, CO: Paradigm Publishers, 2012), pp. 185-194

[4] P.C. Nutt, "De-development as a Way to Change Contemporary Organizations," in Research in Organizational Change and Development, ed. R. W. Woodman and W. A. Pasmore (Oxford, England: Elsevier, 2001), pp. 81-115.

negative response to all but the most familiar requests or behaviors. It takes enormous initial effort to change because one literally must forge new highways in the brain. Once formed, the highways must be strengthened through regular usage and maintained by even further usage.[5] This takes a great deal of energy, and as our brains are mostly gluttonous consumers of energy; the brain resists. The easiest way to get someone to change – a secret the military and religious cults have known for years—is to totally change one's frame of reference or one's environment. Strip a person down and rebuild him. Yet how often can we do this?

And yet, leaders, organizations, and states in Machiavelli's time as in ours, know that while threatening, change is necessary, inevitable, and often worthwhile. How then, do we pave the way for constructive, intentional change?

The Key Challenges # 1: Hyper-Change

Change happens far too quickly for us to keep up. Tomorrow it will only get worse.

Rapid-fire change is upon us. In the future, the speed of change will increase dramatically. Can we keep up?

Can we prepare the leaders of tomorrow for the change of tomorrow? In the coming years, as hyper-change alters the governing domain, leaders will be forced to change the ways they govern and lead. The old top-down command model will recede, and a "new" model of leadership— leveraged leadership, discussed later— will become the dominant theory of leadership.

Change, like life, is a process, not a destination. Change is inevitable. The seasons of the year, the rhythms of our lives, all bring change and transformation, sometimes rebirth, sometimes death. Yet we struggle with change, are made uncomfortable by it, resist it. We are now in an age of hyper-change. Change is difficult, hyper-change will test our temperaments and abilities to their limit. If, as the old saying goes, "the only person who likes change is a wet baby," and if hyper-change is inevitable, how can we learn to cope, make peace with, accept, and even manage change?

Today there is an emerging consensus that a new paradigm is needed to explain the world around us, and to give us a clearer roadmap for the future. There is ample evidence to conclude that the new paradigm is to recognize that we are entering a world of hyper-change.6

Key Challenge #2: Globalization

Our world is faster, closer, more connected. What was once a collection of semi- independent sovereign nations is becoming, as predicted, a global village.

Globalization is a process that has been going on for centuries, drawing us closer together and connecting us in multiple ways. We are today more interdependent and interconnected than ever before. And this connecting process will continue. With new technological developments, change in communication and travel, we are beginning to form a global community.

The Politics of Globalization is changing the political landscape both at home and internationally. In Western democracies, office holders are losing their authority to govern. Their legitimacy is being threatened. Their skills are being questioned. It is not altogether their fault.7

Does Globalization lead to a Rising Democratic Distemper? Globalization is creating a crisis of governability

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[5] Kevin Hogan, The Science of Influence (Hoboken, NJ: Wiley, 2011), pp. 2-3.

throughout the West. There is a growing gap between what the electorate wants and expects from governments and the governments' ability to satisfy those demands. It is no secret why this gap exists. Governments no longer have the capacity to direct policy outcomes as they once did. In an age of globalization, all major policies require multilateral agreements, and as such agreements are exceedingly difficult to achieve in our fractious world. Publics see governments as failing to deliver, corrupt, or merely incompetent.

Increasingly, political leaders will be unable to satisfy the demands of their citizenry because some power to shape events will be slipping through their hands. This will ratchet up the pressures on leaders while also increasing the instability of most regimes. If they can't deliver, how can they ensure stability and order?8

Increasingly, politics will not be the sole province of governments. Private organizations, like WikiLeaks, corporations, NGOs as well as lone individuals and terrorist groups will be empowered in this new age.

And while advances in technology will give governments' greater information, communication capacity and interconnectedness, they will also be more vulnerable to disruption and mischief…

So how can leaders induce other to act—to pull their oars in the same direction—to solve problems that no single nature can conquer, but that require cooperation and multilateral consensus? Pending crises such as global climate change, refugee issues, nuclear proliferation, terrorism and a host of other problems cannot be solved by one nation alone. They require cooperation from multiple actors—and not just nation states.

Scottish historian Niall Ferguson sees history as the struggle between networks, and hierarchies. But today, as hierarchies break down, networks become increasingly important in global problem solving.

The reaction against globalization and the West can further be seen in the rise of illiberal democracies across the globe. Liberal democracy—limited government, guarantee of individual rights, political and religious freedom, rule of law—is giving way to illiberal—a system with free elections but where once elected, governments impose centralized control while failing to protect the rule of law or individual and property rights—in many regions.

In Russia, Vladimir Putin—while popular and popularly elected—exercises a brand of heavy-handed control that stifles freedom all in the name of the new (or old) Russia. Witness also the leadership shifts in Turkey, the Philippines, and elsewhere.

Putin in Russia, and Xi in China, offer two alternative models to liberal democracy.

Putin's "winner-take-all" brand of democratic authoritarianism offers the plebiscitary brand of leadership, of "star power" some find quite appealing.9

The battle between liberal and illiberal notions of democracy and leadership is stark and consequential. American notions of political leadership are grounded in Age of Reason/Enlightenment assumptions that are being challenged in an age of globalization and hyper-change. Citizens/voters throughout the West, believing that their governments, their society's elites, and their evolving political cultures do not serve their needs nor represent their insults.

A period characterized by angry voters who display insurgent, anti-government and anti- establishment sentiments presents us with a stark contrast between the liberal forces of the status quo and the demands of voters who see their governments as serving and representing "them," or "the other." Populist

movements have challenged the established order10 and threaten regime change in several countries.11 Anti-immigrant, and anti-diversity forces, are on the rise, and liberal governments are on the defensive. Outsiders, Trump in the U.S. Le Pen in France, once seen as unelectable, are now closing in on power.

This has led to a growing belief that the old order should be shattered, as it is too slow to move, too supportive of cosmopolitanism, and too skewed toward "them." In France, the U.S.,

the U.K. and elsewhere, voters want to "take back their countries"

The immediate cause of this may be the aftermath of the 2007 economic slump and the slow and uneven recovery, with growing economic inequality mixed with stagnant economies and stagnant wages, but the real culprits are globalization and hyper-change.

Liberal government have not—and perhaps cannot—respond quickly or forcefully enough to the forces unleashed by globalization and hyper-change. Angry and impatient for results, voters choose the illiberal alternative—eliciting strongmen who can lead with force.

In this context, the promise of the leaders as savior becomes appealing. The model?

Identify the enemy (immigrants, or governmental weakness, or cosmopolitanism), bring in the savior, and throw out the status quo. In this context, Putanism (a strong leader riding on the shoulders of the people, blaming "them" for our troubles) becomes the go-to option.

That the Putanist model has become so popular is testimony to the perceived failure or weakness of liberal governments throughout the West.