


# COVID-19 Pandemic, Personality and Geriatric Population: Proposed Pragmatism

Journal of Patient Experience  
Volume 8: 1-9  
© The Author(s) 2021  
Article reuse guidelines:  
sagepub.com/journals-permissions  
DOI: 10.1177/23743735211059051  
journals.sagepub.com/home/jpx  


Souvik Dubey<sup>1</sup> , Samya Sengupta<sup>2</sup>, Ritwik Ghosh<sup>3</sup> ,  
Mahua Jana Dubey<sup>4</sup>, Subham Chatterjee<sup>5</sup>, Gautam Das<sup>1</sup>,  
Dipayan Roy<sup>6</sup>, Biman Kanti Ray<sup>1</sup>, and Julián Benito-León<sup>7,8,9</sup> 

## Abstract

The elderly population is a sensitive and delicate cohort of society who is being compelled to bear the significant smoulders of disruptive social behavior of humankind amidst the COVID-19 pandemic. Our aim for this review was (1) to find out the root of disruption of societal integrity and self-centeredness by analyzing the spokes of HEXACO; (2) to delineate their possible relationships with the formation of Neuroticism and eventually Psychopathy, which have endangered human civilization the most in this pandemic; and (3) to search for the potential ways to get rid of these dark times. The constellation of different negative human behaviors probably originate from the negative deflection of components of the HEXACO model of personality towards the genesis of the dark triad. COVID-19 pandemic and upsurge of the dark triad in the form of Neuroticism, Narcissism and Machiavellianism potentially portend major mental health threats. Cultivation and practice of positive emotions and triumph of honesty, humility and humanity are imperative to save the mankind from the savagery of this pandemic.

## Keywords

COVID-19, pandemic, personality, elderly, HEXACO, dark triad, neuroticism, machiavellianism, psychopathy

## Introduction

In several aspects, human civilization has been atrociously threatened by the 2019 coronavirus infectious disease (COVID-19) pandemic. Keeping aside the severity of the disease and the toll it already claimed, the psychosocial impact of this pandemic has been prodigious (1). A detailed analysis revealed that the core of this substantial societal disintegration lies dormant amidst the human nature itself. Human beings play a pivotal role in maintaining societal integrity, and personality traits are the building blocks of an individual human being. So, personality traits are considered to be responsible for all the goods and evils in relation to social behavior, social cognition, and meta-cognition (2,3). Distortions in social behavior and social cognition are becoming formidable during the pandemic. The elderly people and children are the two most sensitive segments of society. However, disruption in societal integrity affects the elderly more, as most of them are already suffering from several other issues like frailty and neuropsychiatric disorders (4).

Neuroticism, the tendency towards experiencing negative emotions, has emerged as a marker of vulnerability during COVID-19 pandemic. Neuroticism paves the way towards

the Dark Triad, consisting of Machiavellianism and Psychopathy, and has been negatively correlated to the adoption of healthy human behavior. The constellation of different

<sup>1</sup> Department of Neuromedicine, Bangur Institute of Neurosciences, Kolkata, India

<sup>2</sup> Department of General Medicine, Apollo Gleneagles Hospitals, Kolkata, India

<sup>3</sup> Department of General Medicine, Burdwan Medical College & Hospital, Burdwan, India

<sup>4</sup> Department of Psychiatry, Berhampore Mental Hospital, Murshidabad, India

<sup>5</sup> Department of Psychiatry, Institute of Psychiatry, Institute of Post Graduate Medical Education and Research, Kolkata, India

<sup>6</sup> Department of Biochemistry, All India Institute of Medical Sciences (AIIMS), Jodhpur, India

<sup>7</sup> Department of Neurology, University Hospital "12 de Octubre", Madrid, Spain

<sup>8</sup> Centro de Investigación Biomédica en Red sobre Enfermedades Neurodegenerativas (CIBERNED), Madrid, Spain

<sup>9</sup> Department of Medicine, Complutense University, Madrid, Spain

## Corresponding Author:

Julian Benito-León, Department of Neurology, University Hospital "12 de Octubre", Madrid, Spain.

Email: jbenitol67@gmail.com



negative human behaviors probably originates from the negative deflection of components of the HEXACO model of personality towards the genesis of the dark triad. In this literature review, we aimed (1) to find out the root of disruption of societal integrity and self-centeredness by analyzing the spokes of HEXACO, (2) to delineate their possible relationships with the formation of Neuroticism and eventually Psychopathy, which have endangered human civilization the most in this pandemic; and (3) to search for the potential ways to get rid of these dark times.

## Materials and Methods

For this narrative review, we conducted a literature search on PubMed, Embase, Scopus and Google Scholar with the following key terms: “COVID-19”, “SARS-CoV-2”, “pandemic”, “personality”, “dark triad”, “elderly population”, “geriatric population”, “Neuroticism”, and “HEXACO”. Few newspaper reports related to COVID-19 were also consulted for our social critique and discussion.

The literature acquired from the database search were combined to obtain a total 116 articles. Then, the relevant articles for our manuscript were shortlisted by three independent reviewers after careful scrutiny and removal of duplicates. An article was included if it discussed— (1) how COVID-19 or the pandemic has affected the health of the geriatric population; (2) the negative personality changes in the backdrop of COVID-19; and (3) the psychosocial effect of the pandemic on the elderly. These shortlisted articles were further combined to obtain 27 articles, included in the final manuscript.

## Results/Discussion

### *Social Cognition and Emotion During the COVID-19 Pandemic*

COVID-19 has taken the world by storm. There have been over 248 million total detected cases and more than five million deaths due to COVID-19 in the world to date (5). In the light of this current cataclysmic event, there has been a radical change in the social aspects of human cognition, especially pertaining to the personality traits of the general population. Social aspects of human cognition refer to the evidence that an ability to achieve a precise balance between representing the self and representing other people is crucial in social interaction. Imitation, perspective-taking, the theory of mind, and empathy are essential components of social cognition (6), the disruption of which may have psychological and social consequences, including social anxiety, post-traumatic stress disorders, and psychopathy and personality disorders (7). The prevalence rate of personality disorders is approximately 10% of the population (8). Human beings form the building blocks of society and human personality traits form the pillars of social welfare. According to cognitive-behavioral models, traits, triggering events,

cognition, and adverse behaviors play a pivotal role in developing and maintaining health anxiety (9). During a pandemic, anxiety is widespread. The personality traits, health-related anxiety, cyberchondria, and coping in the context of pandemic serve as risk factors. Accurate information about the pandemic and adaptive emotion regulation might represent buffering factors for anxiety (9).

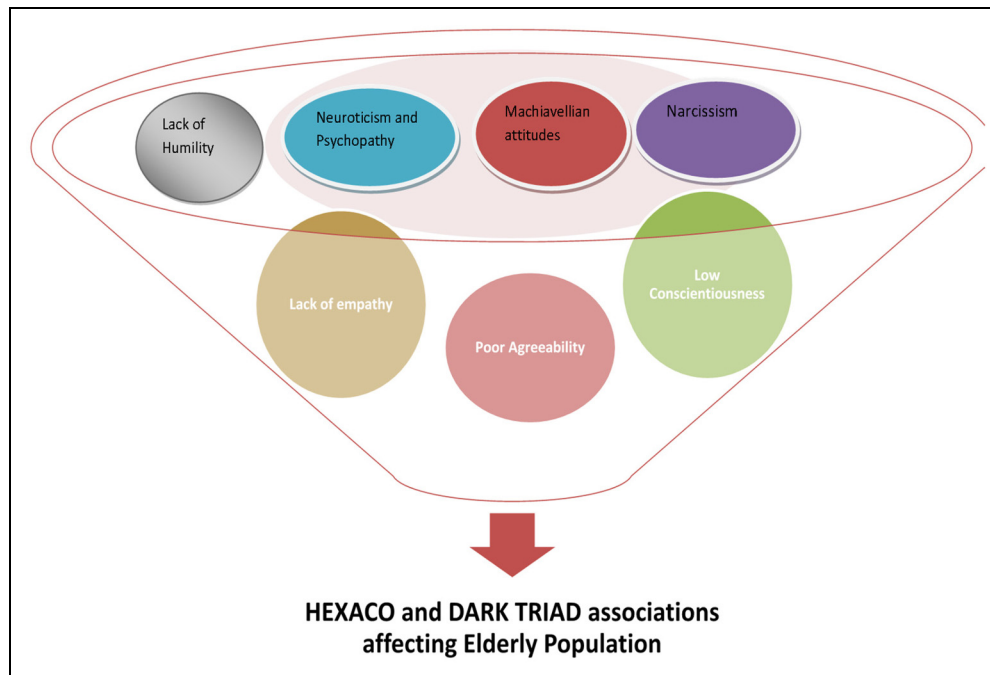
Maladaptive emotion regulation by various personality traits imposes a cascade of negative psychological responses in the general population (10). This complex and sometimes confusing interplay between personality traits and the pandemic has dethroned a gross sense of morality and sparks new facets of mental inflexibility, culminating in various psychological morbidities. Looking back into Ashton and Lee’s HEXACO model of personality (11), interesting observations such as the transition of selected components of the HEXACO into the Dark triad of Narcissism, Machiavellianism and Psychopathy can be pondered upon (12). Depression, stress, anxiety, stockpiling of foods, drugs, misinformation through social media, black marketing, surge of domestic violence, greed, corruptions, addictions (13,14), economic crisis, and stagnation in the educational sphere during these times are supposedly stemming from stringent administrative protocols and the resulting maladaptive emotional regulation by various personality traits (10). A great deal of threat to humankind that has risen due to the combination of these factors can only be tackled through restrained emotional regulation, Openness to Experience, Agreeability, rational expression of Conscientiousness and lastly, the gentle and healing touch of Honesty and Humanity.

### *Elderly and the Pandemic*

The elderly are most vulnerable to any pandemic due to already existing multiple co-morbidities, the need for poly-pharmacy, frailty, poor mobility, and cognitive dysfunction (Figure 1). COVID-19 pandemic is also not an exception (15) (Figure 2). The scenario is further complicated by several media’s harsh, emotionless, narcissistic, and negative posts on older people. Yellow journalism in terms of continuous propaganda that COVID-19 affects the elderly with co-morbidities the most imposes immense threat and forced older people to suffer from outmost fear, panic, anxiety, stress, and depression (16).

### *Sufferings of the Elderly: Something New in This Pandemic or ‘Veritate’?*

Money-driven society, the ever-evolving concept of the nuclear family, and the self-centred approach of human beings around the globe have rendered the elderly lone for long, adding to their sufferings in this pandemic (4). Emotional blunting, Lack of Empathy, and time constraints to deliver tender care towards the older make them helpless, which became overt during this pandemic. Lack of Honesty,



**Figure 1.** Association of factors affecting elderly population.

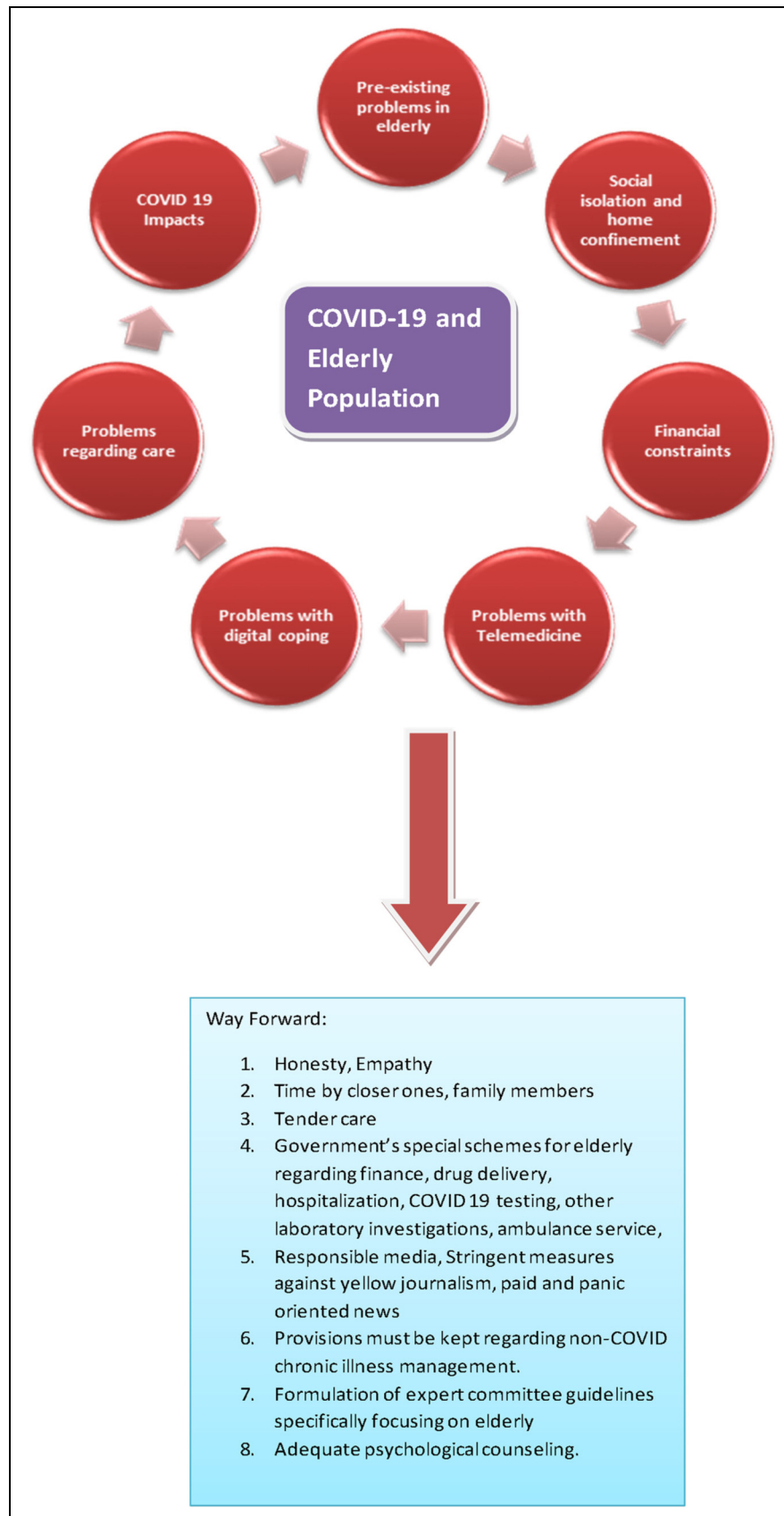
Humility and poor Conscientiousness levels of society have put a burden on their financial issues (17). The aimless pursuit of society towards achieving pre-fixed goals (economic, job-related, education, and business) has thrown them into the sea of frustration and despair where they become forced to lock their destiny in the hands of paid caregivers instead of their near and dear ones. This pandemic further aggravated this situation due to lockdown-related issues, fear of getting infected by caregivers, and financial constraints (18). Older adults have been left in the sphere of silence, where they only perceive the sounds of the graveyard. Intense greed, corruption, black marketing, stockpiling in the time of the pandemic, stemming from lack of Honesty, Humility, poor Conscientiousness, Lack of Empathy (17), Emotionality, and lack of Openness to Experience have left the elderly struggling to avail basic amenities such as drugs, non-COVID-19 hospital care, proper ambulance services, and baking services associated with substantial financial constraints (19). On the other hand, the media, open ringing the death alarm to their ears by repeating, “*Elderly people are at risk in COVID-19*”, is only adding to the distress. Societal Neuroticism that the elderly are the source of spreading infection force them to keep themselves socially isolated with emotional torsion, anxiety, stress, depression. and thought rumination regarding the well-being of their near, dear and beloved ones (20,21). Difficulty in digital coping further lengthens the list of sufferings, as almost all work communication have suddenly taken a leap towards digitalization. What sort of comfort telemedicine brings to the elderly people is debatable. However, undoubtedly there are increasing concerns such as wrong diagnoses, over-dependence on investigations, and related health hazards, as most of the

older people cannot properly convey the history of their illnesses due to cognitive dysfunction, guarding to express or problems due to digital coping (22). The authors’ intention here is also to find the root of the issues of older people concerning the HEXACO model of personality and how it changes into Neuroticism and Psychopathy to affect human beings and society as a whole.

### **HEXACO Model of Personality: Can It Open the Knot of Bizarre Understanding Regarding Pandemic?**

The HEXACO model of personality, if expanded, constitutes (H) Honesty, Humility, (E) Emotionality, (X) Extraversion, (A) Agreeableness, (C) Conscientiousness and (O) Openness to Experience. Honesty, Humility and Agreeableness are essentially related to altruism; philanthropy versus antagonistic behavior forms two sides of the same coin, effectively termed ‘Reciprocal Altruism’ (23,24). On humanitarian scales, a person scoring low on Honesty-Humility is more prone to materialism, unethical business practices, and deviant sexual behavior. On the other hand, a high degree of Agreeableness has more proclivities towards kindness, forgiveness, and a general empathy towards the sanctity of life and nature. The objective endpoint of Agreeableness is mental flexibility.

Extraversion is formed on the pillars of assertiveness, cheerfulness, communication, optimism, leadership, and liveliness. It essentially characterizes decision-making ability, planning, and sequencing of ideas into effective developmental strategies and maintaining an educated optimism through every step of execution. Extraversion is the key to develop pro-social behavior (25). Emotionality can



**Figure 2.** Existing social issues for the geriatric population and the way ahead.

be fragmented into the facets of fearfulness, anxiety, dependence, and sentimentality (26). On one arm, an emotionally labile person exhibits oversensitivity to external stimuli brought forward by electronic and print media, and expresses fearfulness and anxiety in unprecedented environmental circumstances. On the other side, emotionally stable individuals show self-assurance, boldness, and courage in almost every dire consequence. Self-esteem, self-consciousness, and self-regulation are imperative in maintaining a proper emotional outlook, resilience in crisis and confidence in moderating ways to tackle the same. Conscientiousness essentially means the essence of the individual conscience, which can make them disciplined, diligent, cautious, and constantly aiming towards perfectionism and pragmatism (27). The downside is that it makes them lazy, reckless, absent-minded, and often irresponsible. Lastly, Openness to Experience measures personal innovation, intellectualism, creativity, and esthetic appreciation (28), whereas lack of Openness makes abstract thinking unappealing, and makes people unimaginative and grossly conventional. Besides an optimum amount of extraversion, Openness to Experience, high levels of Conscientiousness, and Agreeableness and Humility construct a compelling pro-social personality in human beings. Grossly fragmented pro-social personality is mainly constituted by egalitarianism, generosity, and reciprocity in economic events. Pro-social personalities are sharing, helping, and contributing to social welfare, which aims towards a just and equal world even in the time of evident or imminent crises (29). Honesty with empathy from Emotionality domain, communication, optimism and leadership from Extraversion domain, integrity, generosity and collaboration from Agreeableness domain, organization, persistence and planning from Conscientiousness domain, growth mindset and global awareness from Openness to Experience domain are quite essential in effective formulation of strategies to fight against this pandemic and to save elderly people, children and society.

### ***The Dark Triad: Has Anything Left Beyond Its Captivity? Can It Unmask the Basis of Human Suffering?***

The ongoing pandemic inflicted by the SARS-CoV-2 with its deadly toll on the country's healthcare system and economy has surprisingly not spared its infusion into the deepest crevices of the human psyche. We can hypothesize that honesty, humility, and empathy have altered their path into Neuroticism, a prequel to the famous Dark Triad having Narcissism, Machiavellianism, and Psychopathy as its components. Neuroticism is a harbinger for complex negative emotions such as lack of empathy, hostile interpersonal relationships, offensive, and rash attitudes (30). It often leads to social vices like domestic violence, child sexual abuse, elder abuse, and criminal activity. Social media has a monumental role in the rapid downhill transition as most of the time; it

showcases false and baseless news uploaded and shared by random users imbibing panic, phobia, and anxiety, thus attributing to the aforementioned behavioral alterations (31). The imposition of a countrywide lockdown leads to the cessation of daily activity, increasing the volume of populations who are forced to either stay back home or work from home, exposing themselves to the poisonous fangs of the electronic media. Although social media has its fair share of benefits wherein people can stay in constant contact with their family and loved ones (32), excess uses of social media platforms stem from low Conscientiousness, Emotional lability, low Agreeableness, and exaggerated Extraversion. Social media in the current COVID-19 pandemic have become a platform for flaunting images of lavish home-cooked meals, expensive stocked up liquor, fancy clothes, accessories and electronics, as well as a platform to spread baseless, unscientific reports and information on COVID-19 and to highlight negative health aspects of elderly people. Such narcissistic and exhibitionistic mentality, constant need of admiration, and a sense of entitlement cause unnecessary bullying and belittling of certain groups of people, creating jealousy and vengeance in them. It also affects the people who are unable to afford such a luxurious lifestyle, ultimately leading to a strange and inexplicable restlessness, anxiety, and resultant depression in certain groups of people. It has been observed that histrionic, borderline, and narcissistic personality traits are the ones who succumb to the Lazarus pit of social media. Such barbaric and vandalistic nature stems from greed for appreciation, pride and a fictitious sense of dissatisfaction brought by a virtual, imaginary world. Narcissism, labile emotion with resultant anxiety and helplessness, gives rise to a world devoid of kindness and acceptance. It creates an image stripped of moral and human values, essential to formulating a flexible and pragmatic community. Obsessive-compulsive personality traits are generally the forerunners of hoarding, which gives rise to stockpiling of basic and essential amenities of activities of daily living, depriving a larger part of the community with resultant black marketing and pseudo crisis. A lack of Openness to Experience is a prerequisite for developing superstitions, further enhanced by schizotypal personality traits with eccentric magical thinking. It falsely promotes methods and cures of COVID-19 by ridiculous and peculiarly primitive techniques, which are effectively backed up by the political influence cooked in the broth of low education and garnished by illogical assumptions. The attitude of certain governments towards migrant workers, slum dwellers, and daily wagers is a brilliant model to study the intricacies of deviation from the HEXACO model. The benefits offered to the said population may be high levels of Honesty, Humility, and Agreeableness. However, the execution of these arrangements in the last hour when death and desperation have ensued essentially shows low Conscientiousness, a lack of education, planning, pragmatism, organization, and sequencing. Advertisement of such philanthropy in social media and corrupt electronic

media exposes such acts as the antagonistic arm of reciprocal altruism. Machiavellianism portrays a selfish, sceptical, and manipulative personality trait. This component of the Dark Triad has pushed a dagger into the heart of the medical community in particular (33). Relatives of patients having strong suspicion for COVID-19 often hide their symptoms, shamelessly deny any recent travel or contact history, and often refuse to be swab tested for the screening of COVID-19. As a result, doctors, nurses, and other healthcare providers are unnecessarily exposed to the deadly virus. It often goes to the extent that the family of patients do not hold back on the physical assault of healthcare workers and using paid predatory media and yellow journalism to spread hatred against doctors and health care workers. Such insensitive acts hamper the employments of the healthcare providers, many succumbing to the disease and even breathing their last fighting in the line of defense. Like a vicious cycle, Machiavellianism leads to the shutting down of small to large healthcare facilities and the general population who fail to get quality medical care, invasive ventilators support, and even beds in COVID-19 observation wards. The moral incentive and enthusiasm of the doctors and healthcare workers are shattered as collateral damage of this extreme communal disharmony and negative media coverage. Another striking example of Machiavellianism is propagated by a fraction of the community wherein they bribe the law enforcers through their political influence to procure alcohol, cannabis, and other euphoriant drugs amidst lockdown (14). They easily pay excess money to the local drug peddlers, who are generally poor and eager to sell drugs even to children for their daily quota of rice. Hence, there is a magnanimous impact of addiction and addiction-related catastrophes in the community, such as domestic violence, financial loss, further lockdown violation, and pervasive sexual attitude. A general downward skew of all components of the HEXACO are contributors to addiction. Patients with antisocial personality disorder, impulse control disorders, and other psychiatric ailments are more prone to get addicted and suffer from addiction-related behavioral problems.

The claw of manipulation does not spare political leaders as well. Self-proclaiming medical experts, they misuse their position and power to give a comic representation to the pandemic and start prescribing trash therapeutic escapades en masse. Completely dismissing the economic setbacks and need for protective equipment for healthcare workers, they never back off from chanting false and demeaning propaganda, putting the people at the doorstep of the graveyard. Even the health organizations, created to fortify public health, become fickle and juggle with the merits and demerits of one or more drugs, which may help control or contain the disease. Self-contradictory statements in quick succession by leading health organizations lead to misinterpretation of the disease dynamics of COVID-19 and create a ghastly image of the misadventures in the therapeutic dimensions. Forged scientific articles in this pandemic also suggest absolute lack of empathy and poor Conscientiousness of so-called scientific-minded people towards the ailing patients. Seeing

their rendition to public health, the population finds itself in a state of utter dilemma and helplessness. The anticipation of an ever-extending lockdown once imbued into the minds of the common person creates the stage for the development of black marketing where the costs of products of daily utility rise exuberantly. The helplessness of the suffering population is manipulated by the black marketers, which presumably have surprisingly low levels of Conscientiousness and extreme greed. Again, tracing our steps back to the HEXACO model and trying to predict the final common pathway, we can prophesize that extremely low Conscientiousness and lack of Openness to experience cultivated on the soil of paranoid personality traits causes rejuvenation of an already existent ethical mismatch of political ideologies. Ultimately, there is the development of international conspiracy theories, which, when boosted by social and electronic media, make the convalescent world finds itself at the brink of war, devastation, and utter catastrophe. Phobia, panic, and outrage ensue, hopes are lost, and hence the third of the Dark Triad commences in the blink of an eye. The most malevolent of the Dark Triad called Psychopathy can be heralded as the emperor of all maladies (34). A transient transgression of moral insight, unexplained obsessions, and compulsions leads to the absolute abolition of sanity, patience, and fruitfulness of human existence. A constant need for escapism and instant gratification in playing violent video games, aimless scrolling, and viewing pornographic content on the web, creating and spreading mindless and substance-less video clippings in displaying applications, are all soft markers of a latent and dormant Psychopathy. Once the curtains unveil, what is seen is an almost irreversible putrefaction of a once nurtured and constructed human mind. Not only has it caused the enactment of violence at home, but it has also led to pervasive sexual behavior and the promotion of communal disharmony. Thus, humanity traces back its steps of Darwinian evolution back to instinctually, idiosyncrasy and self-mutilation. The slow but holistic progress where humanity travelled towards self-improvement and appreciation is turned spastic and quadriplegic when Racism and Stigmatization resurface like hounds of hell. Deficient sociability component of the Emotionality domain, an almost vanishing global awareness component of the Openness to Experience domain and gross dilapidation of Agreeableness are all factors that promote one of the cruelest of human vices called Racism. Paranoid, narcissistic, and antisocial personalities who do not value the existence of equality and fraternity practice racism to vent out their pent-up frustration in a locked-up world where death and disease are the routine daily news. SARS-CoV-2 related illness is associated with stigmatization, which targets patients, their caregivers, and healthcare workers. Frontline COVID-19 warriors face social discrimination and stigmatization more than fear of contracting the infection itself. They are driven out of their cooperative housings and rented apartments and constantly harassed by the public, particularly those harboring obsessive-compulsive, paranoid,

narcissistic traits with trace amounts of Conscientiousness, Agreeableness, Humility and Openness to Experience. Belligerent propaganda by world leaders, confusing representations by health organizations, yellow journalism, and “infodemic” promulgated by social media make the platform for brewing Neuroticism. Thus, humanity is further immersed into the sea of the Dark triad. Therefore, the social burden is formed by the dependent, obsessive-compulsive, avoidant and paranoid personality traits, showing a downward skew of every component of the HEXACO model. There is a fundamental difference between the need to leave confinement to avail daily necessities, emergency medical services and unapparent thrill-seeking. This simple pragmatism seems lacking among law enforcers during the lockdown. Uninhibited atrocities and prohibitions were imposed irrespective of true necessities and absurd frivolities. Inappropriate sudden unplanned declaration of nationwide lockdown with stringent administrative protocol rendered millions of people helpless, homeless (e.g. migrant workers), and foodless (e.g. daily wagers). This also took basic non-COVID-19 healthcare facilities far away from their reach in many countries, claiming a toll in silence. This, in turn, has led to social anxiety (35–37). Lockdown, though essential to stop the spread of COVID-19, should have been weighted against appropriate timing, anticipated inconvenience, and huge social, psychological, and economic impact. The inappropriately harsh and fruitless decision of lockdown, as evidenced by an increasing number of cases during unlocking in many countries, reflects a lack of emotional attachment, empathy towards fellow citizens and probable down skew of Conscientiousness and lack of Openness to Experience of decision-makers. The basic responsibility of containing the pandemic, which should have ideally been practiced by raising awareness about the disease, dynamics by unbiased media on social distancing and home isolation, went astray of its actual purpose. As a result, the mass was exposed to the barrel of the gun of law enforcers. The practice of violence on daily wagers and sellers of necessary amenities did not serve any fruitful purpose but was exhibited as video clippings in social media and sharing applications. This added to the phobia in a community already threatened by the anticipation of contracting the viral illness. The police driven way to control the pandemic, like demarcation of containment zones and patients’ transit to healthcare institutions, brings stigmatization and fear of ostracization. Coupled with joblessness, boredom, anxiety, phobia, panic, and the freshly brewed Psychopathy, the anticipation of an again disease-free and healthy world burns out and what remains is refractory depression, borderline and schizotypal personality traits, dysphoric mania, all of which join their hands together and finally lead civilized society to the verge of extinction.

Basic human education coupled with mental flexibility is the raw material for openness and creativity. Openness and creativity once enforced by facts, planning, and most importantly, judgment, formulates the theory of mind (38). Honesty-Humility, Conscientiousness, Agreeability and

Openness to Experience are supplemented into the self-awareness for effective formulation of empathy. A misdirected self-esteem with loss of empathy towards the patients affected by SARS-CoV-2 and the healthcare providers combating it is imprinted in the human mind and expressed as selfishness. Overemphasized selfish demands and a covert grandiosity denuded of fellow feeling can be a probable trigger for unmasked Psychopathy. Elderly people, the most vulnerable and the most sensitive part of society, are affected worst by the ways of social disruption stemming from misdirected spokes of HEXACO, eventually leading to enormous suffering.

## The Way Ahead

This beautiful blue planet with its inhabitants has been cursed with a cruel and gruesome challenge in the form of a deadly virus. The COVID-19 pandemic has shaken the foundations of humanity. The complex interplay between limbic cortex (especially amygdala) and neocortical substrates like the cingulate gyrus, orbito-frontal cortex, ventromedial prefrontal cortex, dorsolateral prefrontal cortex along with parahippocampal gyrus form intricate loops to sub-serve action, blended with emotion and cognitive excursion (39). For long, the frontal lobes have been implicated in the neural mediation of both normal and abnormal moral conduct and social behavior (MCSB). MCSB is chiefly orchestrated by the prefrontal cortices and their dense connections with the temporal poles, anterior insular cortices, related subcortical structures, and pathways (thalamic dorsomedial nucleus and the anterior thalamic radiation). This designates that MCSB is shaped by the dynamic interplay amidst subordinate psychological domains, such as moral sensitivity, judgment, and their neural correlates (40,41). Sensitivity, judgment, morality, and empathy are necessary to save older people as well as human civilization. According to expert committee guidelines, treatment of the aged with tender care can save them from both COVID-19 and non-COVID-19 ailments. Pragmatic planning by government and non-governmental organizations for activities of daily living and to mitigate financial constraints are of utmost importance (42). Responsible social and electronic media can heal their agony, anxiety, and depression by spreading accurate scientific news and awareness campaigning. Despite this global catastrophe, there is always scope for humanity to repair, re-educate and reform itself. People must maintain proper hygiene and sanitization and spend time with their elder parents and helpless children (43). Utilization of this valuable time towards self-improvement in the form of enhancing their fitness and rekindling the passions they left behind in the race to earn their daily bread can be worthy. People can participate wholeheartedly in scientific and literary research. By random acts of kindness and charity, the economic burden will be minimized (44). Lastly, we should stand by the frontline COVID-19 warriors and hold the morals high to combat this pandemic (45). Earth is

today at threat by the COVID-19 pandemic; like a patient predator, the Dark triad is hiding at the corner of the alley, waiting for the ultimate breaking point when it will pounce and butcher every human value. The only way to save her and its children is the 'H' factor of Honesty and Humility, which, once remembered, revisited, fortified, and practiced, will lead to the upliftment of all the components of the HEXACO model. Humanity will then find a way with honest science and technology and will be salvaged and rejuvenated.

"Ashes and sparks, my words among mankind! Be through my lips to unawaken'd earth

The trumpet of a prophecy O Wind, If Winter comes, can Spring be far behind?"

---- [Ode to the West wind] Percy Bysshe Shelley.


### Declaration of Conflicting Interests


The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.


### Funding

The authors received no financial support for the research, authorship and/or publication of this article.

### ORCID iD

Souvik Dubey  <https://orcid.org/0000-0003-1733-3429>

Ritwik Ghosh  <https://orcid.org/0000-0002-8192-0807>

Julián Benito-León  <https://orcid.org/0000-0002-1769-4809>

### References

- Torales J, O'Higgins M, Castaldelli-Maia JM, Ventriglio A. The outbreak of COVID-19 coronavirus and its impact on global mental health. *Int J Soc Psychiatry*. 2020;66(4):317-20. DOI: 10.1177/0020764020915212.
- Goueli T, Nasreldin M, Madbouly N, Dziobek I, Farouk M. Social cognition in adolescent females with borderline personality traits. *Psychol Psychother*. 2019;93(4):739-753. DOI: 10.1111/papt.12257.
- Quidé Y, Cohen-Woods S, O'Reilly N, Carr VJ, Elzinga BM, Green MJ. Schizotypal personality traits and social cognition are associated with childhood trauma exposure. *Br J Clin Psychol*. 2018;57(4):397-419. DOI: 10.1111/bjc.12187.
- Domènech-Abella J, Lara E, Rubio-Valera M, Olaya B, Moneta MV, Rico-Urbe LA, et al. Loneliness and depression in the elderly: the role of social network. *Soc Psychiatry Psychiatr Epidemiol*. 2017;52(4):381-90. DOI: 10.1007/s00127-017-1339-3.
- COVID 19 CORONAVIRUS PANDEMIC. <http://www.worldometers.info/coronavirus/>
- de Guzman M, Bird G, Banissy MJ, Catmur C. Self-other control processes in social cognition: from imitation to empathy. *Philos Trans R Soc London Ser B*. 2016;371(1686):20150079. DOI: 10.1098/rstb.2015.0079.
- Patin A, Hurlmann R. Social cognition. *Handb Exp Pharmacol*. 2015;228:271-303. DOI: 10.1007/978-3-319-16522-6\_10.
- Sansone RA, Sansone LA. Personality disorders: a nation-based perspective on prevalence. *Innov Clin Neurosci*. 2011;8(4):13-8.
- Jungmann SM, Withöft M. Health anxiety, cyberchondria, and coping in the current COVID-19 pandemic: which factors are related to coronavirus anxiety? *J Anxiety Disord*. 2020;73:102239. DOI: 10.1016/j.janxdis.2020.102239.
- Lau JT, Griffiths S, Choi KC, Tsui HY. Avoidance behaviors and negative psychological responses in the general population in the initial stage of the H1N1 pandemic in Hong Kong. *BMC Infect Dis*. 2010;10:139. DOI: 10.1186/1471-2334-10-139.
- Lee K, Ashton M. Psychopathy, machiavellianism, and narcissism in the five-factor model and the HEXACO model of personality structure. *Pers Individ Dif*. 2005;38(7):1571-82. DOI: 10.1016/j.paid.2004.09.016.
- Paulhus DL, Williams KM. The dark triad of personality: narcissism, machiavellianism, and psychopathy. *J Res Pers*. 2002;36(6):556-63. DOI: 10.1016/S0092-6566(02)00505-6.
- Elbay RY, Kurtulmuş A, Arpacioğlu S, Karadere E. Depression, anxiety, stress levels of physicians and associated factors in covid-19 pandemics. *Psychiatry Res*. 2020;290:113130. DOI: 10.1016/j.psychres.2020.113130.
- Dubey MJ, Ghosh R, Chatterjee S, Biswas P, Chatterjee S, Dubey S. COVID-19 and addiction. *Diabetes Metab Syndr*. 2020;14(5):817-23. DOI: 10.1016/j.dsx.2020.06.008.
- Shahid Z, Kalayanamitra R, McClafferty B, Kepko D, Ramgobin D, Patel R, et al. COVID-19 and older adults: what we know. *J Am Geriatr Soc*. 2020;68(5):926-9. DOI: 10.1111/jgs.16472.
- Andreassen CS, Pallesen S, Griffiths MD. The relationship between addictive use of social media, narcissism, and self-esteem: findings from a large national survey. *Addict Behav*. 2017;64:287-93. DOI: 10.1016/j.addbeh.2016.03.006.
- Doraiswamy S, Cheema S, Mamtani R. Older people and epidemics: a call for empathy. *Age Ageing*. 2020;49(3):493. DOI: 10.1093/ageing/afaa060.
- Lima CKT, Carvalho PMM, Lima I, Nunes JVAO, Saraiva JS, de Souza RI, et al. The emotional impact of coronavirus 2019-nCoV (new coronavirus disease). *Psychiatry Res*. 2020;287:112915. DOI: 10.1016/j.psychres.2020.112915.
- WHO Must prioritise the needs of older people in its response to the covid-19 pandemic. *Br Med J*. 2020;368:m1285. DOI: 10.1136/bmj.m1285.
- Ishikawa RZ. I may never see the ocean again: loss and grief among older adults during the COVID-19 pandemic. *Psychol Trauma: Theory Res Pract Policy*. 2020;12(S1):S85-S86. DOI: 10.1037/tra0000695.
- Saltzman LY, Hansel TC, Bordnick PS. Loneliness, isolation, and social support factors in post-COVID-19 mental health. *Psychol Trauma: Theory Res Pract Policy*. 2020(S1);12:S55-S57. DOI: 10.1037/tra0000703.
- Nicol GE, Piccirillo JF, Mulsant BH, Lenze EJ. Action at a distance: geriatric research during a pandemic. *J Am Geriatr Soc*. 2020;68(5):922-5. DOI: 10.1111/jgs.16443.



23. Lee K, Ashton MC, Morrison DL, Cordery J, Dunlop PD. Predicting integrity with the HEXACO personality model: use of self- and observer reports. *J Occup Organ Psychol*. 2008;81(1):147-67. DOI: 10.1348/096317907X195175.
24. Trivers RL. The evolution of reciprocal altruism. *Q Rev Biol*. 1971;46:35-57. DOI: 10.1086/406755.
25. Eisenberg N, Fabes RA. Empathy: conceptualization, measurement, and relation to prosocial behavior. *Motiv Emot*. 1990;14:131-49. DOI: 10.1007/BF00991640.
26. Veselka L, Schermer JA, Petrides KV, Cherkas LF, Spector TD, Vernon PA. A general factor of personality: evidence from the HEXACO model and a measure of trait emotional intelligence. *Twin Res Hum Genet*. 2012;12(5):420-4. DOI: 10.1375/twin.12.5.420.
27. Espinoza JA, Daljeet KN, Meyer JP. Establishing the structure and replicability of personality profiles using the HEXACO-PI-R. *Nat Hum Behav*. 2020;4(7):713-24. DOI: 10.1038/s41562-020-0853-6.
28. Gaughan ET, Miller JD, Lynam DR. Examining the utility of general models of personality in the study of psychopathy: a comparison of the HEXACO-PI-R and NEO PI-R. *J Personal Disord*. 2012;26(4):513-23. DOI: 10.1521/pedi.2012.26.4.513.
29. Zhao K, Ferguson E, Smillie LD. Prosocial personality traits differentially predict egalitarianism, generosity, and reciprocity in economic games. *Front Psychol*. 2016;7:1137. DOI: 10.3389/fpsyg.2016.01137.
30. Sosnowska J, De Fruyt F, Hofmans J. Relating neuroticism to emotional exhaustion: a dynamic approach to personality. *Front Psychol*. 2019;10:2264. DOI: 10.3389/fpsyg.2019.02264.
31. Smit CR, Buijs L, van Woudenberg TJ, Bevelander KE, Buijzen M. The impact of social media influencers on children's dietary behaviors. *Front Psychol*. 2019;10:2975. DOI: 10.3389/fpsyg.2019.02975.
32. Stieger S, Reips U-D. Well-being, smartphone sensors, and data from open-access databases: a Mobile experience sampling study. *Field Methods*. 2019;31(3):277-91. DOI: 10.1177/1525822x18824281.
33. Al Aïn S, Carré A, Fantini-Hauwel C, Baudouin JY, Besche-Richard C. What is the emotional core of the multidimensional machiavellian personality trait? *Front Psychol*. 2013;4:454-454. DOI: 10.3389/fpsyg.2013.00454.
34. Heym N, Firth J, Kibowski F, Sumich A, Egan V, Bloxson CAJ. Empathy at the heart of darkness: empathy deficits that bind the dark triad and those that mediate indirect relational aggression. *Front Psychiatry*. 2019;10:95. DOI: 10.3389/fpsyg.2019.00095.
35. Zheng L, Miao M, Lim J, Li M, Nie S, Zhang X. Is lockdown bad for social anxiety in COVID-19 regions?: a national study in the SOR perspective. *Int J Environ Res Public Health*. 2020;17(12):4561. DOI: 10.3390/ijerph17124561.
36. Atalan A. Is the lockdown important to prevent the COVID-9 pandemic? Effects on psychology, environment and economy-perspective. *Ann Med Surg (London)*. 2020;56:38-42. DOI: 10.1016/j.amsu.2020.06.010.
37. Siqueira C, Freitas YNL, Cancela MC, Carvalho M, Oliveras-Fabregas A, de Souza DLB. The effect of lockdown on the outcomes of COVID-19 in Spain: an ecological study. *PLoS One*. 2020;15(7):e0236779. DOI: 10.1371/journal.pone.0236779.
38. Meinhardt-Injac B, Daum MM, Meinhardt G, et al. The two-systems account of theory of mind: testing the links to social-perceptual and cognitive abilities. *Front Hum Neurosci*. 2018;12:25. DOI: 10.3389/fnhum.2018.00025.
39. Rolls ET. The cingulate cortex and limbic systems for action, emotion, and memory. *Handb Clin Neurol*. 2019;166:23-37. DOI: 10.1016/b978-0-444-64196-0.00002-9.
40. de Oliveira-Souza R, Moll J. Moral conduct and social behavior. *Handb Clin Neurol*. 2019;163:295-315. DOI: 10.1016/b978-0-12-804281-6.00016-1.
41. Yao H, Chen JH, Xu YF. Patients with mental health disorders in the COVID-19 epidemic. *Lancet Psychiatry*. 2020;7(4):e21. DOI: 10.1016/S2215-0366(20)30090-0.
42. Dubey S, Biswas P, Ghosh R, Chatterjee S, Dubey MJ, Chatterjee S, et al. Psychosocial impact of COVID-19. *Diabetes Metab Syndr: Clin Res Rev*. 2020;14(5):779-788. DOI: 10.1016/j.dsx.2020.05.035.
43. Ghosh R, Dubey MJ, Chatterjee S, Dubey S. Impact of COVID-19 on children: special focus on the psychosocial aspect. *Minerva Pediatr*. 2020;72(3):226-235. DOI: 10.23736/S0026-4946.20.05887-9.
44. Ghosh R, Biswas P, Chatterjee S, Sengupta S, Dubey MJ, Ray BK, Dubey S. Love and emotions at the time of COVID-19. *Minerva*. 2021;62(3):156-63.
45. Dubey S, Dubey MJ, Ghosh R, Chatterjee S. Children of frontline coronavirus disease-2019 warriors: our observations. *J Pediatr*. 2020;224:188-189. DOI: 10.1016/j.jpeds.2020.05.026.