#ECOINTEL INTELLIGENCE AND NON-CLASSICAL THREATS DETECTING AND PREVENTING BIOLOGICAL AND ECOLOGICAL THREATS TO SECURITY

COVID-19, THE EXTRA PANDEMIC RISK HUMAN STRUCTURAL INNER CHANGES TRIGGERED BY THE COVID-19 PANDEMIC. THREATS TO NATIONAL AND INTERNATIONAL SECURITY

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Abstract:

What is there, beyond Covid-19? The modification of human being behaviours put in place to safeguard health has a hidden and subtle risk that can be exploited by individuals or States that want to take advantage from it, illicitly profiting from masses.

What is there behind the Covid-19? Not intended as a geopolitical movement but as "what does it cause and will cause to the next generations?" The latest scientific studies have disseminated what the beliefs on the human brain were. Neuroscience has proven that there are modifications that can be impressed in an extreme short time and in an unconscious manner. Structural modifications that lead to changes in the human being's way of thinking, reasoning and behaving.

The paper analyses for the first time how people subjected to modifications caused by the pandemic have been rendered fragile and dangerously vulnerable to external attacks.

Keywords: *surgical mask, Covid-19, brain, intelligence, pandemic, behaviour.*

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Introduction

This paper does not address the Covid-19 from a medical point of view. It exclusively focuses on the security and intelligence field. This paper does not intend to provide an evaluation of the necessary protective measures States have put in place to protect their citizens' health.

The Covid-19 virus pandemic has highlighted two particular situations that alert those dealing with National Security. These situations lead populations to be more subjective to mass manipulation in extremely reduced times and, in some cases, to an irreversible manipulation as well. Therefore, there must be a global and unified alert in order to manage and intervene in brief times. In the present paper, Covid-19 is not intended as a virus triggering a respiratory pathology, but as the set of modifications that the global situation (defined as pandemic) has brought into the life of the subjects, the behavioural and physiological modifications (people's attitudes, social behaviours and daily routines) as well as the relapses that these have had within and on the individuals, determining modifications that have occurred and sediment within the individuals, indistinctly hitting every subject (intelligence practitioners included), and thus determining effects and dangers that differ based on age, but not attributable to the virus *per se*.

There are fundamentally two factors that affect, in a different manner, the practitioner and the population that will be analysed in this paper: the usage of personal protective equipment utilised for the pandemic and an exponential growth of internet utilisation which is itself connected to external-environmental factors. Furthermore, it deepens the study of the internet environment (where the individual is physically located while browsing the internet and what the individual performs on the internet, intended as a "non-place place").

The paper addresses how the wide use of surgical masks decreases the cognitive capability of who wears it, thus diminishing cerebral and physiological responds of the human being. In the field of National Security there are two main risks that articulate. One is linked to the intelligence practitioners that will be (as well explained in the paper) less attentive, less reactive, less able to create connections

between events and people and, therefore, analysis and projections; along with a lesser muscular, cardiac and pulmonary response.

The second risk is linked to the population that, suffering what the single intelligence practitioner is suffering, will diminish its abilities to contrast possible manipulations put in place by States or entities that want to modify its thinking and, contextually, its freedom, rendering the population more easily manageable and less incline to discuss and counterstrike possible positions or ideas that are inoculated to them via non democratic and/or manipulative ways.

The paper will enables work on the construction of algorithms with new strategies with the purpose of avoiding attacks that might lead to degenerations of different kind and likewise operating inversely.

During this last period, Covid-19 has been keeping company to almost every population, by creating a series of decompensations, some of them already assessable, while others will only be visible in the future.

On the one side, there are the different behaviours of intelligence practitioners, on the other, there is the fragility shown by the internet and the management of everything that 'lives' in it. It is easy to 'breach' the internet and gather data. Internet has shown how using it for online the current teaching methodologies) lectures (with recommendable, how more rapidly and frequently attention decreases if new methods are not employed (Magris & Grassi, 2020), how staying connected on the computer for long hours brings on acute behavioural modifications for the human being, and, as all the latest studies conducted in Europe have shown, pathologies linked to depression in vouth, who are forced to follow online lectures, have increased.

Covid-19, even when not physically infecting people, has acted against humans beyond its virological attack, by bringing some modifications into the subjects, into the masses and into the single intelligence practitioner. Situations that put at risk National Security since a changing into the masses in such a short time has never happened before. It becomes therefore indispensable being able to intervene in this physiological and behavioural changing of the masses.

This study is based on the research conducted, via computer systems, on what is currently academically acknowledged regarding the

pathologies indicated within this paper and the causes that lead to those pathologies. From the generic research, skimming has been conducted that led to synthetize a specific number of pathologies and disorders caused by the use of surgical masks for a long time, while excluding the assessment of the materials used in the making of masks and focusing the research on the specific physiological interactions linked to the diminishing of oxygen and increasing of carbon dioxide inhaled, due to the use of the sanitary device.

The analysis has been conducted by a team of psychiatrists, neuroscientists, psychologists, sociologists and intelligence experts correlating the various contributions in order to offer a multi-disciplinary and inter-disciplinary vision. The final evaluation also considered the direct observation of intelligence practitioners, from various Nations, since the beginning of the pandemic until October $1^{\rm st}$ 2020.

Covid-19 and its implications on the subjects

How does Covid-19 modify the physical, psychological and behavioural asset of any person? There are two main priorities by which it is possible to manage the subject's intellectual capabilities and, therefore, the single individual's behaviour, whether it is more or less gifted, through the utilisation of some rules. The sociological perspective will be subsequently analysed, i.e. the rules given by society that impose a behavioural dynamic on the subject.

It is important to start this paper not from what is behavioural dynamic but from what is physiological, from what those dealing with intelligence should know in order to manage situations, perform analyses and then impede attacks or manage manipulations.

A slight reduction of oxygen intake to the brain is sufficient to comprimise some functions. The surgical mask,¹ that everybody is

¹ In this paper the usage of the surgical mask, as is being described, must not be confused with the utilisation of doctors/physicians (or medical personnel) into the surgery room, which wear different types of surgical masks or personal protective equipment different than the ones used by common citizens; they wear them for a limited period of time compared to the generalised utilisation by the population, which uses the surgical mask for the entire day or for a wider period of time and for all their daily activities.

forced to wear during this long period defined as pandemic, begins to create disorders to the vigilance and behavioural response (Holey, Butcher, Nock & Mineka, 2017; Scharfetter, 2018) already after only 47 seconds of utilisation. These disorders become a physiological modification if the surgical mask is worn for several hours and over days (Grassi, 2020).

Vigilance lies at the basis of the memory as the brain, on the grounds of vigilance, decides into which memories it stores the information; and will consequently utilise what has been stored into the memory for the individual's behavioural purposes, intended as the way of responding to potential solicitations.

Specifically, the *obnubilation* phase manifests, with a slight decrease of the state of conscience along with sleepiness, difficulties of attention, concentration, perception, comprehension, elaboration, orientation and increasing of the attention stimuli threshold.

The behavioural response is subsequent to vigilance, therefore the lack of oxygen that is determined by the usage of the surgical mask begins to create problems and to compromise the vigilance. It is an impairment that, as before mentioned, becomes permanent if the utilisation of the surgical mask is protracted, even if in a non-continuous way during the 24 hours, but for at least 23 days.

A subject breathing less oxygen is a less vigilant subject and, primarily, with a different behavioural response, with a generalised and endocrine fragility. A subject that is thus more easily subjected to stress (the increase of cortisol is calculated with a 2 per cent increment), therefore less able of controlling him/herself.

It is highlighted that the increase of cortisol also leads to another state which is an increase of depression. Cortisol, defined as the stress hormone, is a chemical substance produced by the human body when under stress or facing a threat. Cortisol impairs the abilities of the prefrontal cortex of the brain, the area of the brain dedicated to reasoning, to planning complex cognitive behaviours, to asses which decision is best based on the available information, as well as to moderate social behaviour. Hence, the increasing of cortisol implies a decreased ability of the individual to conduct reasoned action adequate

to the present situation (Dedovic, Duchesne, Andrews, Engert & Pruessner, 2009; Stark et al., 2006).

Inherently to the lack of oxygenation to the brain, thus vigilance and behavioural response, it is referred to what in the medical field is defined as hypoxia² – the pathology that creates a series of clinical disorders, such as primarily asthma, which for the specific context of discussion – intelligence – has a relative interest but is significant if directed to the masses field. Yet, hypoxia creates a series of cerebral lesions. Since dealing with intelligence, it has to be considered that healthy individuals, in the light of the time for which they have been using the surgical mask, will become subjects with a clinical disease connected to severe hypoxia. For example, problems connected to memory, to listening skills and analysis, to vigilance are observed.

Hypoxia, mainly at a severe level, creates problems to the memory and to the calculation and analysis functions. The study carried put in 2014 demonstrates the way the state of cerebral alert – thus stimuli response – is extremely limited into the subjects having breathing limitation with impossibility circumscribed in time (Zani, Marsili, Rizzi, Senerchia & Proverbio, 2014).

Consequently, it emerges that the utilisation of the surgical mask, therefore the lack of oxygenation, implicates a modification of the medial anterior cingulate cortex and of the para-hippocampal gyrus in the left hemisphere of the brain. It is recalled that within the left hemisphere it is also situated the part which concerns the language, therefore, there will be an expression difficulty, a decrease of the utilisation to read, write and pronounce words and a lower possibility of memory acquisition of what is related to the verbal, written and para-verbal language.

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² Some of the demonstrated causes of hypoxia are ageing, smoking, air/atmospheric pollution, stress, different diseases, obesity and the impediment of breathing the air in a natural way. Other causes are food pollution, water pollution, domestic pollution, sleep apneas, and utilization of heavy metals. Hypoxia symptoms are headache, fatigue, nausea, and shortness of breath, dysphoria, lightheadedness, euphoria, and hilarity, inability to coordinate the movements, dyspnea, cyanosis, tiredness, and sleepiness.

The cerebral cortex plays a key role in the control of the cognitive capabilities, sensory functions and movements. The medial anterior cingulate cortex plays a key role particularly in the memory, in learning, in language comprehension, in thought, attention and conscience (Bertossa & Ferrari, 2002; Balconi, 2006). It is also in charge of the visual-space orientation function, and therefore the subjects will be more susceptible to the environment's modifications generating states of anxiety and addictions. Hence the subject will easily have responses of addiction to everything that is proposed that trigger the emotion endocrine responses.

With regard to the medial cingulate cortex, this is connected to the foresight function and to conduct's outcome. Therefore, in the field of foresight it is very dangerous not to have alarm systems completely functional and thus to overestimate or underestimate the result/outcome of a conduct. It applies for the intelligence practitioner as well as for the offender that can find him/herself committing offensive actions.

Furthermore, the medial cingulate cortex is in charge with the elaboration of information of the decisions and is directly connected to the reward system (system that creates the positive or negative addictions, the lack of an alert system can ensure that a negative response can be considered as a positive one, such as the utilisation of alcohol and drugs with the aim of obtaining a result).

Here it denotes an effort and a distress for the subject that bring him/her, in order to survive, to not consider everything that is reported as a non-primary necessity. Recent scientific discoveries demonstrate that the human being's DNA is modifiable in a few hours, the modification becomes stable within 23 days following a precise cellular cycle or following a considerable stress suffered by the individual that can induce a DNA modification in a much shorter time.

Namely, the obscure DNA (Bertoli, 2018). Human DNA is divided into a 20 per cent, containing genes that are involved in the building of the proteins essential for life, and a remaining 80 per cent – namely obscure DNA – a "place" of an intense biochemical activity of the human genome that hosts billions of interrupters for the activation or the silencing of the genes. The life style constantly modifies and reviews the

super-structure of the body. The genetic expression is malleable, the brain reacts to every modification it is subjected to; therefore a normosubject, or an intelligence practitioner has difficulty in managing his/her own brain. Applying the aforementioned from the individual to the masses, a series of other individual characteristics that modify people's behaviours must be also taken into consideration.

At this point an intelligence practitioner should evaluate: the lack of alarm stimuli of the masses and the modifications given, for example, by the design of the lie (DTL) (École Universitaire Internationale, 2019), where by design of the lie is intended how a place, i.e. the place the subject is situated, modifies his/her own behaviour. The environment, the decor of the environment, the people in the environment modify the state of the subject; it has been proven that a subject modifies his/her own posture, attitude and behaviour on the base of the people in front of him/her or of the place s/he is situated in (Gennaro & Scagliarini, 2014; Costa, 2016).

Even more, a subject does not realise s/he is manipulable into his/her own environment. Internet, therefore, becomes the best place in which to put in place conscious and unconscious manipulations. The subject's environment, i.e. what has inappropriately been named "comfort zone", is precisely the place where the cognitive capabilities of the subject can be undermined in a short period of time.

In the comfort zone, the subject has no barriers. Connected to what was stated above, it is extremely easy to understand how manipulable a mass is by utilizing appropriate language and images, and how criminality and the future generation of terrorists are extremely manipulable. A phone or a computer represent the comfort zone of the majority of people. The single individual becomes the mass and is under the same type of inference, which is amplified by the lack of oxygenation to the brain that will be analysed below.

Hypoxia effects on the masses

The lack of oxygenation caused by the surgical mask increases the difficulty to breathe and therefore physical fatigue under stress. Indeed, it increases the cognitive fatigue, modifies the mood tone, modifies the determination of the objective, and modifies self-control; it becomes generalized hypoxia and progressively tissue hypoxia.

Generalized hypoxia refers to the lack of oxygen that concerns the entire body; by tissue hypoxia we refer to the lack of oxygen that concerns some regions of the organism. Hypoxia realizes acidosis, hence the releasing of transition metals such as iron and copper, and become hydro-peroxide and thus free radicals circulate; these radicals exert a direct damaging action at the extra-cellular level and create an oxidative stress problem, and therefore a different type of emergent risk factor for the health. This factor must be evaluated from the perspective of the health care costs that a State must sustain in order to treat its own population.

Basically, hypoxia always leads to premature aging and, according to World Health Organization (WHO) data, at least to 100 pathologies among which arteriosclerosis and cancer (Bonsignore, Marrone & Morici, 2011). Hypoxia is early recognisable by the pallor and by the confusion and tiredness that those wearing surgical masks have already felt even after half hour of wearing it, without realising it except at the end of the day. This is due to the annulment of the vigilance systems.

One feels slightly inebriated, almost drunk, but at the basis, there is the reduction of perceptive capacity, thus the Central Nervous System applies an automatic rule of not triggering the alarm. An extremely dangerous factor that makes the individual to push over the security levels, creating irreversible damages. Hypoxia can also lead to death. The lack of the alert systems leads the individual to committing also dangerous or illogical actions with no inhibitions.

During the initial phase, this lack of oxygenation interests the nervous tissues, most of all the brain and the hearing and visual apparatus compromising their functionalities. Compromising is then added to the already scientifically demonstrated limits of the subject's hearing and visual apparatus in normal conditions. Once again, the hearing and visual apparatus must be safeguarded with the aim to prevent the subject from being manipulated.

Indeed, under normal conditions, the human being ear perception is around 65/70 per cent, that is only the 65/70 per cent of

what we hear matches reality. And it must be taken into account that a human being is aware of only the 7 per cent of the communication s/he receives, 7 per cent of that already diminished perception above mentioned. The rest is the result of the elaboration of the brain that, however, is based on its own elaboration and interpretations based on the information the individual has already stored in memory, therefore what the individual hears does not match reality but is rather a personal interpretation of reality. Taking into consideration the sight, the real perception of what any individual sees is assessed at 45 per cent, and still, only the 7 per cent of that 45 per cent corresponds to reality (Siegel, 2013).

In an already existent fragility of the human being, the interference that hypoxia creates and the states of the design where the subject finds him/herself operating, lead to a significant variation of the perception of the truth and of the 'here and now' status, perception of the self and thus, consequently, a wrong memorization of what is perceived. A low intake of oxygen to the brain provokes a mistaken perception of the colours, a sight restriction and a loss of the central vision.

The main issue is that the subject, with a lack of oxygen, is unable to know the symptoms if s/he does not recognize them. Therefore s/he tends to perceive the air that is breathing, even if it has a lower level of oxygen as the air with the optimal oxygen level. One of the causes of hypoxia is alveolar hypo-ventilation. Therefore, an air that arrives full of oxygen to the alveolus. Likewise, indeed, it is an air that arrives full of carbon dioxide and limited of oxygen, due to the nosemouth respiration that is limited by the surgical mask (LaMotte, 2020).

After at least 8 days of utilisation of devices that impede normal breathing for at least 4 hours per day various symptoms emerge: evaluation errors, loss of self-criticism, dizziness, slow thinking, depression, tachypnoea, muscle spasms, convulsions, tremors at the extremities, decreased muscle strength, loss of consciousness. For each listed symptom the symptomatology can be either individual or plural.

Considering all the above, Covid-19 has generated a series of subjects that can easily be manipulated at individual or masses level. On the operational level, the terrorist or the economic crime offender can

be handled by modifying or reasoning on the parameters of the subject. Contextually, work must be done in order to impede a vulnerability of the intelligence practitioner that will have to face, unknowingly, the same issues faced by any other individual subjected to the continuous utilisation of the surgical mask.

Learning, use of Internet and design of the lie

Learning is experiential, thus the result of experiences. The massive usage of internet from the individuals leads all individuals to the same experiences since Internet forms induced experiences which, therefore, homologates all individuals rendering them all identical.

Among the typologies of learning there is a particular kind of learning, the insight learning (Kohler, 1969). It is a typology of learning that is based on intuition, which involves a rupture and consequently a restructuration of the cognitive process. The insight is the set of elaborations given by experience, hence the elaborating memory of the individual which is based on the capabilities that the cingulate cortex allows to structure. At this point, the limited possibility of memory and the limited thought structuring, as above described, impede the individual from having a global complete vision hence a completed foresight elaboration of the "here and now". Consequently, there will be a delay in the managing of the occurring (or contingent) situation and an erroneous reading, analysis and foresight of the future.

With insight learning, the organism reaches the objective through a cognitive restructuration of the environment. Insight learning is not a type of associative learning but takes place following a restructuration of the elements of the visual and phonetic field. What modifies the human being is the place in which s/he is in, true or verisimilar (context and scenario design (Bellomo, 2011) that contextualised becomes "the context modifies the individual's self") (Bellomo, 2015).

The non-place place, in this specific case the Internet, modifies the individuals' perception. Therefore, the subject's state is modifiable with the utilisation of words/sounds/images or by activating the sounds and images' frequencies that activate when the subject reads certain words or images (due to hypoxia individuals will be more inclined to mentally read certain sounds, certain words, certain images and to exclude others). In this case, reading (images or words) is considered as thought restructuring. It is understandable that the concept of design of the lie is based on the existing inference among places, objects, people and images, on how the individual modifies his/her behaviour and his/her way of being based on the places s/he enters in, and/or is immersed in, and based on his/her mnemonic knowledge.

It appears obvious how social media can be used as containers of a design of the lie that self-enforces and is being imposed on the subject who loses the capability to re-elaborate. A continuous and pervasive process that destructs culture, destructs human being's intelligence and his/her elaboration capability, since the subjects develop a unidirectional intelligence that loses capability of association and of response to external stimuli with a subsequent decrease of the subject's intellective capabilities. The design is built. Where the environment can be natural, the design is the product of human elaboration.

Within the place-design s/he comes in, the subject loses his/her capability of responding and elaborating external stimuli and of putting them into relation with each other. A phenomenon that constantly increases, that had reached its apex during the lockdown and the restrictions that all have endured during the Covid-19 period that forced the subjects within confined places and forced them all to enter into the design-internet in order to communicate with each other, to work, to attend lessons.

The utilisation of online communication and interaction has, indeed, effects on every individual's brain (included the brain of the intelligence practitioner). The subject's brain, when responding to the "on-line stimuli" does not memorise as if it was physically present within an environment where it can interact with the others and with the environment itself. During on-line interaction and on-line learning (massively used around the world during the last 6 months) different parts of the brain are activated (i.e. T6, F1, F3) which are not involved with the frontal learning and that lead to the dispersion of attention and dispersion of information received by the subject (Magris & Grassi, 2020).

Internet is not the screen the user looks at but what s/he looks at inside the screen, what s/he sees. It is the deviated awareness one has. The awareness level that is modified. The non-response to the stimuli and an excessive response to a mental image that the user self-creates is not due to what s/he really sees, because Internet is not what one reads, one sees, but it is the stimulus the brain elaborates based on the inferences that make individuals freely obligated by their brains which impose them solutions based on what their knowledge, their nationalities, their biases are.

The Internet world is based on verisimilitude, not truth, on images read by the subject based on his/her individual predispositions. Tests carried out showing photos of faces, to subjects undergoing the test, have shown how every single individual could see a different emotional state compared to those seen by another individual to whom was shown the same picture. Something that occurs in a significantly inferior manner if the same test is administered in presence, and even inferiorly if to the subjects were physically shown the face of the person object of the analysis³.

Indeed, three different brain elaboration states that show how the brain interprets based on the place and the situation that is being created as framework of the fact, within the design of the context. It clearly emerges how the current situation that the human being lives is a condition deprived of physicality. We do not have places any more, we have Internet. The Internet has become the place of interaction, of opinion exchange, of education, of information gathering, of work.

However, the influences the internet-design exerts on the individual are not the same the physical environment would exert on the individual. The individual grows, since the very beginning, always in relation with the environment, from the moment s/he is conceived s/he

³ Controlled Oral Word Association Test - COWA (Benton and Hamsher, 1976, 1989; Spreen e Strauss 1991); Digit Span (Wechsler, 1945, 1955, 1981, 1987); Frontal Assessment Battery (FAB) (Dubois et al., 2000); Iowa Gambling Test (IGT) Bechara et al., 1994; Rey-Osterrieth Complex Figure Test (ROCFT) (Osterrieth, 1944; Bertolani et al., 1993, Caffarra et al., 2002); XXI Congresso Nazionale AIP della Sezione di Psicologia Sperimentale, Dipartimento di Psicologia e Scienze Cognitive Università degli Studi di Trento, 2015.

grows in relations to the environment, responding to the stimuli it proposes to him/her. However, the stimuli the Internet design send to the individual are perceived and stored within the memory differently by the subject, causing modifications on his/her behaviour and structural modifications in his/her brain. Hence, the individual behaviour is no more the result of mental associations, of an interactive-cognitive process (based on what the individual has learnt), but is the result of a moment, like that insight that in reality does not develop within the individual as the elaboration and restructuration of the information and knowledge in his/her possession, but rather as a direct result of a stimulus given by the Internet design. Product of a restructuration no longer intended as action of the individual on the external environment but rather as action of the Internet design on the individual's brain

Risks and emerging threats

The hypoxia, decreasing the alert responses of the Central Nervous System, leaves the brain and consequently the individual with no barrier in front of external stimuli and eventual manipulations that the brain is not able to filter, under such conditions. On the one hand, this works as if opening a dam since the brain, when receiving the signals from the extern does not filter them any more on the basis of the value and importance schemes usually used by the brain (hypoxia and micro-hypoxia condition does not permit it to), it remains barren and, in a way, more free to receive signals, precisely because it is not able to filter them anymore on the basis of schemes stored in the memory (which can be biased).

The brain allows all the external stimuli and communications to enter without the capability of giving them the right value and contextually "choosing how and if" to store them. On the other hand, in this "openness" situation of the brain, it is easier to activate manipulation and to give the brain those parameters and evaluation schemes that it is not able to adopt by itself and therefore adopts the ones given by the exterior. It adopts the design that is being proposed from the outside, in this case, indeed, a design of the lie. Now the

manipulation can take place in a more rapid and subtle way without the subject being aware of this.

The same condition occurs with the constant utilisation of the Internet - in the current context - flawed by the physio-sociological limitations "imposed" by the aforementioned pandemic period. In the moment in which s/he is connected to the Internet, the subject becomes less able to process the physical environment stimuli s/he is immersed, the environment s/he lives is the internet design. This way, once again, the subject - his/her brain - remains deprived of a filtration system of the stimuli s/he receives, keeping open a direct channel letting in the stimuli coming from the Internet environment. In this way the design proposed by the Internet environment manipulates the subject by offering him/her evaluation cognitive schemes that will sediment into the subject and through which the subject will evaluate and interpret the reality.

A specific situation, that needs a specific analysis, is connected to the present minors whose learning system has been modified and upon whom a series of reinforcement and recall signals have been involuntary inserted, that can be used against them, even when they will become adults – without them being aware of it.

It should be noted that the physiological and behavioural modification induced by the period of extreme stress (that is identified as Covid-19 period) together with the forced closure within closed locations and the type of communication that minors have been subjected to, along with the utilisation of surgical masks. A condition lived by the kids that are now living their period of major receptivity towards environment stimuli (0-6 years old) (Castelli, 2014; Magris, Grassi & Di Gioia, 2019).

Minors (0-16 years old) that have lived and are living under such conditions have developed an *access key* (due to these modifications that the external conditions determine within an individual, as before mentioned). An access key that has been individuated by École Universitaire Internationale research centre – though the institute considers best not to specify it in this context in order to protect National Security activities as it is not specifically linked to this specific discussion.

The set of external conditions and their echo within the individual have determined modifications that have been registered into their brain determining (considering the prolongation of this period) a modification that will last for a long time. It is this modification, registered within the brain, that will not only contribute to shape the future development of all minors that have lived this situation (with differences from nations to nations, based on the specific measures adopted by the reference States), but that could also be exploited by external agents as a "shortcut" in order to manipulate these individuals' brain. Indeed, an external agent can know the condition the subjects have lived (given that the global situation is public) and how this can be exploited to steer the subjects' thoughts and manipulate the subjects' behaviours today and later on, when minors become adults and the pandemic ends.

Flaws that refer to: the risk of a major difficulty in having a real vision of facts, a synaptic difficulty in connecting situations that thus imply a series of errors in predictions, technical-tactical errors in the management of operations, higher emotional fragility within the population and intelligence practitioners, higher predisposition to mental manipulation, greater diffusion of psychological and physical pathologies with a consequent increase of costs for the health systems, decrease of personnel deemed able to conduct tasks linked to security, greater vulnerability for democracies due to the easiest possibility of infiltration and subversion.

Global and European data already show the psychological stress and mental pathologies that the conditions imposed on the population by the pandemic have worsen and damaged the mental state of the entire population in both adults and minors. A multi-country research conducted in Spain, the United Kingdom, Germany, France, Poland and Italy on the effect of the pandemic on the population (referring to mental health and psychological distress) shows that there has been in an increment from 50 per cent to 69 per cent of psychological disorders among European citizens. Already during the first part of the pandemic, the conditions lived by the citizens have led to an increase in cases of depression and major depression, anxiety disorder, along with an increment of suicide and suicide attempt among the population

especially among youth (among which has been registered an increase of suicide and suicide attempts). Furthermore, the condition imposed by the pandemic has led to a great increase in the consumption of psychotropic medications (Casagrande, Favieri, Tambelli & Forte, 2020; Delmastro & Zamariola, 2020; Elma Research, 2020; Holmes et al., 2020; Mazza et al., 2020; Bambin Gesù Hospital, 2021).

The Diagnostic and Statistical Manual of Mental Disorder (DMS-5) states that a window of six months is needed in order to diagnose depression and at least 12 months to recover from it. Taking this into account, along with the constant medical alert during the pandemic, it can be said the warning following the end of the pandemic will last for at least 24 months after the pandemic. The populations that are suffering the above-mentioned conditions and distress live a condition that prevent them from making calculated decisions and create the humus for the growing of various type of crimes among which riots and terroristic attacks; at the same time it lives the masses more subjected to be manipulated by external entities.

In light of what is above mentioned, it is deduced that both the current situation and the short, long and very long term future present flaws in every National and International Security scenarios if actions, aimed at repairing the situation, are not taken. Actions, aimed at managing the situation that provide solutions that apply neuropsychological techniques such the *Psych-evolving techniques* (Magris, Di Gioia, Lamonato, Mihalache & Bellomo, 2020).

Conclusions

The sum of the situations defined in this paper, that people have unwillingly lived and are still living, has determined and will determine even more a particularly dangerous situation in terms of National and International Security.

On the one hand, we must take into consideration the problems induced in the population by the utilisation of surgical masks (and the implications at the physical level that this involves), and due to the behavioural and physiological modifications that determine an increased possibility of manipulation of the population. Manipulations

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and behavioural modifications that, as defined in this paper, are not only a characteristic of the present moment, but that have determined structural modifications not only among the adult population and current practitioners, but also among minors. Thus, opening current and future scenarios of manipulation for the single individual and for the masses that can be put in place in an extremely short time.

On the other hand, we must take into account that intelligence practitioners, as every other individual, have been subjected to similar influences and behavioural regimes imposed during this pandemic period.

Taking into account the fact that every human being behaves in a unique manner according to behavioural schemes that s/he tend to repeat over time (Siracusano, Sarchiola & Miolu, 2008), problems are determined or might be determine into the subject, of which the intelligence practitioner is not aware, and that will directly impact the practitioner and the results of his/her work.

Present situation issues can be detected at the level of micro (individual) and macro (population) system, issues that have to be faced simultaneously in order to be able to elaborate counter-actions in order to stem and reduce the emergent threats.

Counter-actions such as the creation of algorithms that take into consideration the hours in which the intelligence practitioner uses the surgical mask, characteristics linked to sex, age, weight and life style, pathologies, type of activities, diet and other information, in order to have a chart (that can be modify at all times) regarding the maximum daily time in which the practitioner should wear a mask. Yet, an algorithm that can be created always starting from the evaluation, in this case macro-systemic, of a State's population, aimed to have data that indicates the reaching of the crashing point of the considered macro-system. This, in order to put in place systems that can prevent the population from being an easy target of manipulation, for instance putting in practice specific high penetration informative campaigns.

Moreover, it needs to be considered that the surgical mask must be used and not over-used, masks should be made of specific materials (UNICEF, 2020; World Health Organization, 2020). It is useful for the population to be able to go outside, in the sunlight, without wearing a

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surgical mask for a part of the day, and aerate the place where they live or work letting the air in from outside rather than using air filters. These behaviours enable to slow down dysfunctions or pathologies that may arise within the population and intelligence practitioners.

Taking into consideration that the Covid-19 pandemic has arrived unexpectedly (without the possibility for States and people to prepare for it), what has been addressed in this paper describes the effects that the necessary measures aimed at safeguarding people's health have inevitably caused within the citizens, within the individuals that had (and have) to wear protective devices/equipment. At this stage, as there has not been the possibility to fight or to early respond to the virus threat, what can be done is to early analyse every consequences that some mandatory acts have entailed, and be ready and repair beforehand what can become damages on the long run and long-term threats.

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