FACULTAD DE CIENCIAS DE LA EMPRESA

The strategy of counter-knowledge in pandemic time in Morocco and Spain

Final Master Thesis

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Analysis the strategy of counter knowledge in pandemic time from the perspective of two countries: Morocco and Spain.

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Analysis the strategy of counter knowledge in pandemic time from the perspective of two countries: Morocco and Spain.

Abstract: The main purpose of this study is to analyse the strategy of counter knowledge in pandemic time; from the perspective of two countries: Morocco and Spain. Disinformation is spreading alongside the outbreak of the new coronavirus. While the COVID-19 outbreak is a global public health crisis, it has led to a parallel pandemic of disinformation that directly impacts lives and livelihoods around the world. Falsehoods and misinformation have proven deadly and sowed confusion about life-saving personal and policy choices (UNESCO, 2020). In order to analyse the strategy of counter knowledge in pandemic time from the perspective of two countries, this work collect a sample of 108 from Morocco and 151 from Spain. It presents results and finally, include the more relevant conclusions, limitations of this study and future lines of research

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1. Introduction

The objective of this work is to analyse the strategy of counter-knowledge during the pandemic. And comparing the perspectives of two different countries; Morocco and Spain. Analysing the resemblance and the differences.

During our times; known as the technology era, it became so easy to contribute to the sea of knowledge, with a simple click, a post or even the simplest "I've heard" (Schneider, 1966).

Disinformation during this pandemic was spreading so fast and impacting directly lives and livelihoods of the individuals. like this video that appeared showing corps of Chinese people laying on the ground of the streets of Shenzhen, after fact-checking this supposedly photo of those bodies fainted on the streets of Wuhan, the reality check shows that this photo goes back to 2014 of an art project in Frankfurt, and as this image got shared and created speculation around the world, and Spain was one of those countries..*"*(EU DesinfoLab, 2020)

Just sharing a single video from an angel or a photo can transmit a whole different idea from the reality, so the power of visual is very strong and can be a misinformation if not joined with a writing statement that describe the exact event, the why and the who.

This paper focuses on the analysis of counter-knowledge, how it affects the lives of the individuals in the context of a global pandemic, the sources behind this counter-knowledge and the results of it on people's lives.

This study is structured on a theoretical frame work; presented in 2 sections and a third section that represents the methodology, the first section talks about misinformation and the way it can be used as a strategy, either for businesses purposes or on a general note and examples on how can it be done, by the help of social media and how this tools helps the rapid spread of misinformation in a community, and how misinformation have played in the middle of the current global pandemic of covid-19, from the conspiracy theories around it, to manipulative information or rumours that held people from getting vaccinated, and how did different organizations try to fight against this misinformation, due to the sensitivity of the subject or context.

On the second section; it represents more explanations in details what is counter-knowledge by the help of books and different academic articles, discussed counter-knowledge as a management

strategy; how can managers use it to better up the employees work and integration inside an organization, and counter knowledge from two perspectives a negative and a positive one.

The third section and last part is the breakdown of the Methodology, on how we gathered data from a number of people from both Morocco and Spain, and the breakdown of these results with the SPSS program., And finally, we present the main conclusions, limitations of this study and lines futures of research.

2. Misinformation as a general strategy

Like any major national or international event, the deep health crisis we are going through carries its flood of fake news of all kinds. The presence of "fake news" is centuries old in history, existing in more or less simplified or complex forms, since man made society(SAINT-ARNAUD, 2020).

In history, this exploitation of information manipulation is present even in Greek mythological accounts(Stanford Encyclopaedia, 2020), filled with betrayals and lies aimed at influencing the actions of such god or such human. They give birth in the 8th century BC at the poet Hesiod to the goddess Apate, divinity of deception and dishonesty, herself daughter of Nyx, goddess of night and darkness. Later, the concept of information falsification was explicitly theorized in the 4th century BCE by Chinese strategist and general Sun Tzu in The Art of War. In it, he exposes the necessity, in a conflicting and warlike environment, for the dissemination of false information, a clever mixture between lie and truth, a subtle balance between plausibility and unbelief. Closer to home, many episodes, in often paroxysmal contexts like the present one, have been the time of an excessive profusion of false news. Let us cite the well-known example of the Dreyfus Affair ("The Dreyfus Affair : An Exposition of the Case with Its Political and Literary Dissension .," 1964); where both sides used the press mass or political - to try to manoeuvre public opinion, we then disseminate false information to feed and maintain the collective belief in a victorious outcome; conversely, we seek to effectively and severely control information to limit defeatism as much as possible.

We can find numbers of words that can express something similar to misinformation, the more popular notions and that are used daily, like Spam (Rajdev & Lee, 2016); which is a message that get sends to a big number of people, Rumors, that are confirmed or not, but in the majority of the cases a rumor is just a rumor that is unconfirmed (Rajdev & Lee, 2016). Those are the general similar terms to misinformation, but the closest term to it and the one that people can confuse between is disinformation, the difference or the points where you can tell the difference is that disinformation is the act of creating a false information to fool or misguide, and misinformation is that this false information was not done or created on purpose (Morgan, 2018).

A good example of misinformation as a strategy or even more as an industry, also mentioned in Damian Thompson's book Counter-knowledge, that there is people that can be described as smart or dynamic/ energetic make their money from counter-knowledge (Thompson, 2008)

counter-knowledge became an industry, and people who start it are now called counter-knowledge entrepreneurs, the brightest among them have a big understanding about the social pandemics, they network, and spread the word, they can be businesses contacts in different industries , and if done well or they get lucky, it turns out to be a free publicity (Thompson, 2008).

A Polish movie called Hater "Hejter" Released 2020 and directed by Jan Komasa (Jan Komasa, 2020), it is a thriller drama, a very bright example to demonstrate how misinformation can and does work, and the consequences of it, the story is about an expelled law student who got a job in a "PR marketing Agency" and his job was to create fake news and manipulate the public either about a product, a public persona and in the politic campaign to eliminate competition. Even if it is only a movie; but it does relate on a big level to the reality that the world has become, the effects of social media on manipulating individuals for a certain goal. Since information is very valuable, imaging twisting it for the purpose to eliminate your business's competitors, now adays a single tweet doubting the quality of a certain product or service can ruin the integrity and the image of a company/ business/ person. And this is what you can see in images in this movie (Jan Komasa, 2020).

2.1   The concept of hiding knowledge:

The concept of hiding knowledge exists in every sector, it is also found in the current existing organizations (Gottman et al., 1998) and the results of this knowledge hiding can be very devastating (Serenko & Bontis, 2016), when the second party or the other person finds out that their co-workers have a hiding knowledge behavior their organizational commitment reduces, and the optimal level is not going to be achieved; affecting all aspects in the organization, from the stakeholders to the costumers (Serenko & Bontis, 2016). Authors like Catherine Connelly, Anders Dysvik think that this concept of knowledge hiding is not empowered by individual's selfishness but rather by expectations and reciprocity (Connelly et al., 2019), but this is discussed that is influence the trust between the supervisor-supervisee relationship as a result of hiding knowledge (Rani et al., 2017), studies from Connelly and Cerne; showed that knowledge hiding affects the manager's efficiency of productivity in a bad way (Connelly et al., 2019).

And the concept of governments hiding knowledge from the people; is a well discussed subject between people, everyone has their own opinion about this, what does our government hide from us, and why. Since knowledge is power; whom ever have the knowledge is the one that is in a powered position, but in the concept of a global pandemic, in theory all humans should be working toward one thing; which is to save humanity and defeat the virus, but governments are used to detain information and knowledge from the people ages ago (Walth, 2019), a group of governments defends themselves with the excuse that retaining information from the people is done for the security of the nation (Liber et al., 2013).

A government who keep knowledge from its citizens and hide information from them, only means that this government don't trust it's own people; and that can only result in a group pf citizens who don't have trust in their government (Liber et al., 2013).

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a. The real number of deaths from covid-19:

During this pandemic of Covid-19, there has been some knowledge that was and still hidden from the citizens, for example in Spain the real number of deaths because of covid-19 is unknown, the pandemic started in China in December 2019 (Schumaker, 2020) and Spain August 2020 is still counting its dead or in better words, recounting the numbers that it had announced (Minder, 2020), many citizens believe that the Spanish government is hiding information and data from them, "Spaniards deserve a government that doesn't lie to them"(Casado, 2020) words that came out of the mouth of the leader of the opposition popular party in Spain, many claims that the numbers of victims can be double (Minder, 2020), each autonomous region in Spain is doing the count on their own way, taking the example of Catalonia region; at first the region was only taking into account the deaths that were confirmed at the medical centers, but from mid-April they started also including numbers of the deaths that happened not only in medical center but also funeral homes, care homes and unidentified locations(Catalan News, 2020), what the rest of regions are including the data of people who died in welfare centers and the reason why is because the Spanish Health Ministry has not revealed these numbers yet (Catalan News, 2020). This is clearly an embodiment of the concept of hiding knowledge; the government from the public. A Spanish journal stated that they gathered data from 3 different facilities and the number that they got was way higher than the official one that the government has published (Romero, 2020). INE abbreviation of the National Statistics Institute, as a result from a study that they made there was until March 14th 3000 fewer deaths if compared to last year same time in 2019 (Romero, 2020), this non accordance of numbers raise suspensions and loss of faith in the system.

b. Face masks:

The second big subject that each individual has their doubts about during this pandemic is face masks, are they really a good? I remember at first wearing a mask was only obligatory in closed spaces, and when there was no social distancing, but after a while the Spanish government made it obligatory to be worn everywhere, in parks, in the streets, what has changed? if in other countries like in the Netherlands, it is not mandatory to wear face mask in public open spaces (Government of the Netherlands, 2020) and they have lesser covid-19 cases than Spain and Morocco.

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Neither the Moroccan or the Spanish government have expressed or explained to their opinion about face masks, if they are good or bad for health and if they make a difference, as Morocco was the hero maker of face masks during this epidemy, where they got to produce at a rate of million mask a day (Navarro, 2020) but no certain statement on how efficient is the use of masks, only backing up the statements and advice of WHO; the World Health Organization about the use of masks, that it prevents the spread of the virus (World Health Organization, 2020),and no open discussion of the bad side of wearing a face mask for so long, but it exists a number of articles and studies that demonstrate that wearing a face mask during a long time period can be harmful (Elisheva, 2020) from psychological troubles to physiological ones; and having to deal with this kind of troubles don't help with getting work done efficiently (Elisheva, 2020), one of the side effects can be; headaches due to the lack of ventilation, we keep breathing the same air we inhale and exhale, this means an increase level of CO_2, and a brain that doesn't get enough oxygen to it or more CO_2 than it needs can affect the brain activity, (Xu et al., 2011). And the humidity and warmth that breathing into a face mask does to the skin from discomfort up to hyperthermia (Elisheva, 2020) and what other women and myself have noticed is the acne that appears on the skin where it is usually covered by the face mask, the other scenario that glasses users have shed light to, is the air that we exhale most of the time goes upward straight to the eyes; this is a discomforting scenario where a normal person will get the urge to touch the eyes; in this case if we have touched an infected surface with our hands, this act is a direct way into getting contaminated (Taarifa, 2020), so beside all the health and daily life discomfort we have the economic one, since this became an added daily cost to everyone, not everyone can afford buying a mask that we have to wear a new one every day if not changing it during the day (Nortajuddin, 2020), what happens to the homeless and the poor? Back in August this year the Moroccan Authorities have launched a campaign of distributing free face masks for a targeted population in poor neighbourhoods and populated areas, since it is compulsory to wear the face masks in the streets, there was a royal directive to distribute reusable masks to those that are in need (Hatim, 2020).

c. The environmental disaster:

Other major subject that no government want to discuss is the environmental disaster that face masks are causing; today the earth is facing a global warming and climate change a big problem that humanity is facing (Mann, 2020), the discussion about what face masks are doing to the environment never existed; and the effects of it are very clear, since these masks that are made of plastic, and how they are single use and on many big numbers they are a real threat to wildlife, nature (CGTN, 2020) (Parkinson, 2020) where is this waste going to? How this big number of wastes is being a threat to wildlife in the ocean? And can they even be recyclable? Since a large number of these face masks are made of layers of plastic, the answer can be no, since everyone knows how long does it take for plastique to dissolve it is approximated from 10 to 1000 years (LeBlanc, 2015) and the worldwide sales of facemask only went to 166$ billion this year (2020) (United Nations Conference on Trade and Development, 2020) the numbers are overwhelming. But it exists no information whatsoever about how this waste is being dealing with, not a single information nor from the Spanish or the Moroccan respective government.

d. The expert committees that advise governments:

A government who keep knowledge from its citizen only means that it doesn't trust them and that can only result of citizens who don't trust their government (Liber et al., 2013), and trust is very important especially when it's a global pandemic, it's important that the citizens feels safe and trust into the people in power because this is a matter of their own life that we are talking about, in any article there is to announce a new measure there is always this phrase " Government advisors" or "experts say" "the committee" (De Benito. Emilio & Lucas, 2020), it's like a mystery; no names are ever mentioned, in any article or publication, hiding this knowledge from the people and to journalists under the excuse of that this might be subject to public pressure (Domínguez & Darbishire, 2020), and according to the Transparency Spanish Law, when names of people are directly related to any functioning or work that is related to public bodies these names have to be published, and not only by the Spanish Transparency law but also according to the general Spanish public health law, law 33/2011 from 4 October. BOE of 05/10/2011; article 11 that states" the health administration demands transparency from scientific professional organizations and the experts that they collaborate with in public health actions, for this reason the composition of the

committees and groups that advice or take any actions for public health will be public(ABC SPAIN, 2020a), not only the government is not respecting this law, but keeping knowledge from their citizens and in a public way, with no further explanation from their part, apparently only the vice president of the congress of the deputies Pedro Sanchez who have this knowledge, even the other political parties for example the second vice president of the congress of deputies Ana Pastor or José Luis Martínez-Almeida the mayor of Madrid who kept asking to clarify this and that they own to the public a complete transparency (ABC SPAIN, 2020b) since every decision that this "committee" makes touch their individual lives, how this pandemic is managed and by whom is a right that has the public and is not getting and we are in November.

On the other hand Morocco has published that they have what it's called " scientific and technical committee" that helps with advising the government about the pandemic situation in the Kingdom part of "Institut Pasteur" in Morocco (Institut Pasteur du Maroc, 2020) alongside with the king's orders and the help of civilians and military doctors and experts (Saad & El, 2020)

Put in what it's "Watch Committee" in order to anticipate and make the right decisions of the direct and indirect economic impact of the Covid-19 to help the sectors that've been touched by this crisis and the needy families; the people that take part of this committee are published publicly (CRI, 2020) (HYN, 2020).

e. The real needs of health workers:

When the pandemic of covid-19 started to spread in every single country, the first people that were on the frontline to the risks of getting the virus were the health workers, the doctors and nurses; that found themselves from one day to another facing a virus that they've never dealt with, not knowing what they're facing in reality.

It's well known that Spain has one of the best healthcare systems and doctors and experts in the world; that is not a secret, it's one of the things that makes Spaniards proud, and this is supported by a ranking from "World Economic Forum" (El Mundo, 2020), Spain counts 650000 health workers according to the ministry of health (MSSSI, 2020), on the first months of the lockdown in Spain, Spanish citizens went out to their windows and balconies to applause as an act of recognition and showing their support to the health worker that are the heroes in this scenario.

The scenario is Morocco is a little bit more complicated, there is some big challenges, a big population on a general note cannot access health care especially in the rural sides, and the big difference between public hospitals and private ones, lack of management and coordination (Hassan, 2010), when the pandemic started a lot of Moroccans felt the fear of what can come next, since they have very little faith in the health system in their country (Jacobs, 2020) (Masbah & Aourraz, 2020), surprisingly the state has mobilized every force they had to combat it, but it was a short term victory, due to the low health care quality in Morocco and the lack of health workers, and also the lack of public trust in the health system that has been rooted years ago (Jacobs, 2020), but what are the real needs of the health workers?

Data showing that over 7000 health workers have died from Covid-19 all over the world (McCarthy, 2020), in the period of March 70% of the cases in Spain that have been reported were among the health workers staff (AFP/The Local, 2020). A lot of explanations that have been put into the table are; the non-preparation of the pandemic, the lack of PCR tests and protective equipment; from masks to gloves (Salas, 2020), even the health ministry has recognized that the infections among health workers was due to the lack of these protective equipment(Benito & Jan Cecilia, 2020), for this high health system to be putted in this situation for being improperly protected is critical. "Having people working a full day with a mask that only insures 10 minutes of protection" stated the general council of nursing associations, this issues with the lack of protective gears was going active up until April, that was the period where the race of buying PPE face masks around the world from the different countries was going, the world has witnessed a war in that sense.

What the medical staff needed was a proper protective equipment to help them do their jobs properly, especially in the private sector(Benito & Jan Cecilia, 2020) the PPE are on their way but they were not distributed evenly, there has been 20 Spanish epidemiologists and public health experts that have made and published a letter in a journal called "The lancet" where they make a public demand of an independent review of the response that has been made in Spain concerning Covid-19 (García-Basteiro et al., 2020), calling it a second opportunity for a better preparation for a second wave or another pandemic.

Having to face such a big pandemic and witnessing deaths everyday must be a big weight on the psychological state of these people (Arroyo & Alfageme, 2020), The health workers are on the verge of depression, anxiety and post-traumatic stress(Arroyo & Alfageme, 2020), the covid-19

crisis has put the mental health of everyone on risk, and especially the people that were on the front line, the doctors, nurses and all the medical staff (Marroquín et al., 2020) (Muller et al., 2020a), a statement from a Moroccan nurse after losing her first patient to the virus is heartbreaking, she keeps having nightmares and says that "the tragedy of this man losing his life will never leave her as long as she breaths" (EL MASAITI, 2020). The healthcare worker's mental state is directly related to the direct exposure to what is really happening during the covid-19 spread and the heavy workload they indorsed and being away from their families (Muller et al., 2020b).

2.2 The role of social media in spreading misinformation

Social media is a group of platforms, websites and applications that allows to people to shares, create and post either videos, photos articles, all in real time. when social media first appeared; for example Facebook it was first accessible only from a computer, no application was created and you could´ve just post photo publication or video, with time they started to add more features and having mobile phone's applications, so much easier to use at any given time, With just one click you can express your ideas and opinion and post with no limits and contribute to this "sea" of social media... So, the spread of misinformation with social media is like a "virus" and people who believe these "fake news" are like "infected" you can be surprised by how many people are likely to spread it (Kaynar, 2016). as I mentioned before there is a thing line between misinformation and disinformation, and with social media you have a big room of liberty to share either, if you do it on purpose or not, no one can tell or hold you accountable because it´s so hard to track who first shared or even posted. One of the most sensible areas that get affected by this is in the health field, because this affect directly lives of others, especially in the pandemic that we are living. Misinformation in the health field has always existed, even in the earliest days of medicine, but now with social media what is different is the speed that false information spread between the people.

With the traditional media, always accompanied by caution, the credibility is well understood, but with social media it is challenging trying to track the source as the users themselves are the publishers, with no official form of verification or accountability, people started to treat information from the internet as being credible as information from TV and radio.

To this day no one can say in fact which misinformation was made and posted on purpose or no on social media, and neither the ones who manage these social media platforms. The origins of what we now call "fake news" in general are frequently the media, the internet and what comes with it (social media), but since the apparition of these articles and reports concerning the Russian Facebook ads, over 3000 Russian-linked ads (Shane & Isaac, 2017), now we started to pay more attention to the so called algorithms of social media and business models; but still, very few people would dare to argue the reasons behind it, and exists very few theories if not none, about this.

How do a large number of people receive the knowledge of this fake news? Could it be the same reason people buy and enter the high rated by costumers reviews pages and products? The very

first pages and recommended products by reviews on the first page of google? This can show an important relation between fake news and bots "the robotic programs that are able to chat and offer users services according to their requests", usually this bots that we are talking about don't attract a big attention to them unless they create a trend or a big wave of popularity, the article that bustle.com have published talks about the vending machines in Moscow to buy fake likes and even followers, for a very low price (Aggeler, 2020), social media platforms and big search engines like the most popular one; googles ads had a big part in helping bringing attention to fake news, this is a politically exploitable fake news business model; more than sixty websites in a research conducted by Craig Silverman that publishes fake news earn income with advertising networks, large number of them work with google AdSense and Revcontent, (Silverman et al., 2017) this is a new industry of fake news that help make a big large of money is now a real existing business (Jan Komasa, 2020).

Whether it is misinformation or disinformation, they both have a thing in common which is that they both cause distress especially when this information is health related. During an epidemic it can be very serious and dangerous, even threatening to the lives of the individuals.

During the spread of the actual virus a lot of social media platforms have taken a unprecedent measures to tackle disinformation over COVID-19, but there was still room for improvement, platforms like Facebook, Twitter and google; have gone to great lengths to identify content that shared false or incorrect information, removing the most damaging posts. Facebook said that it has identified 40 million deceptive COVID-19 posts in March, and that 95% of users had not viewed the content; and that anyone who has interacted with a post on the coronavirus labelled as dangerous will now receive a message in their news feed. But according to a BBC article that dates from 4 June 2020 "some 649 posts were reported to Facebook and Twitter, including false cures, anti-vaccination propaganda and conspiracy theories… 90% remained visible online afterwards without any warning attached … Facebook said the sample was not representative". The social network insists that they have made efforts to bring disinformation about the covid-19 under control. One of the few explanations I have found was by Robert Evans a reporter for the Bellingcat survey site says "The statistical problem here is insurmountable. Facebook is fundamentally too big for them to monitor this sort of things." (Spring, 2020).

Posts that are misleading people, most of the time are still up online, and most of the time not reported, or even when they are, nothing happens, and this is the concerning part, it can cause some serious damage for the public health as indirect harm in times of the pandemic.

2.3 Misinformation during the pandemic

The pandemic that we are witnessing of Covid-19 is one of the pandemics and health crises that literally paralyzed the world, schools were closed, streets were emptied, and people got locked down and quarantined. No one thought that it would get to the amplitude that it had, I remember seeing on the web viral videos of people in China just fainting in the street, people crying over their beloved ones dying because the hospitals got overwhelmed, a hospital being built under a week of time (china), it looked like some horror movies and we used to say it's in China, it's so far there is no way that it will get to us, the events went so fast that before we knew it, it has spread all over the world, the spread of coronavirus SARS-CoV2 or Covid-19; was accompanied by a wave of a worldwide disinformation, uncommon for a health subject, content, remedies, medical advice from non-medical experts and a large number of conspiracy theories, that started to circulate on media platforms. The Canadian university Sherbrooke made a statistical study about this in Canada; 52.7% of the 600 people interrogated says that they are aware that they got exposed to fake news related to Covid-19, 38.4% of them believe that their government is withholding and hiding important information surrounding the coronavirus from them. And 15% have a strong believe that the pharmaceutical industry is involved in the spread of the coronavirus (Gabriel Blouin-Genest et al., 2020).

a. Conspiracy theories:

Misinformation from remedies to conspiracy theories, like "the virus does not resist heat well, so you should consume hot drinks such as tea or boiled water with some herbs or a soup will neutralize the virus" this grandmother's remedy with no scientific basis whatsoever is not a natural way to recover if you have the coronavirus. Or when the president of the united; Donald trump stated or proposed in a press conference that maybe scientist should try and think about the idea of inserting disinfectant to our bodies since they kill the virus if we clean with them different surfaces (Stephen McDermott, 2020), that this according to him may help treating covid-19. This kind of comments and words can have harmful effects, especially coming from a person with such influence, and just because he is president of a country people may take his word so literally because he is entitled to his title, and a title with such power has a big influence on the people. One desperate person can take this theory that Mr. Trump suggested to and try to execute it, drinking cleaning liquids and

exposing himself to harm.(*Trump Says His Remarks on Using Disinfectant inside People's Bodies Were Sarcastic - Reuters*, 2020)

b. Vaccination:

The whole world's eyes are now toward the Scientifics waiting for some hope, some brilliant scientist that is going to come up with the vaccine to save humanity today, whit this; an anti-vaccination campaign has appeared and making claims toward the coronavirus vaccine that hasn't even been discovered yet. ("Coronavirus False and Misleading Claims about Vaccines Debunked," 2020). the example of Pakistan and the hesitation of its people towards the vaccination, big number of conspiracy theories that started to appear on social media, with a country that sensitive to this kind of conspiracy tales and the collapse of the polio vaccination program in the country as a result to other conspiracy theories related to it, this time the people who have a big weight in the Pakistani community, that have raised rumours about the Covid-19, stating that it is just a big lie and conspiracy against the Muslim communities, a big statement like this has just worsened things related to vaccination, now the Pakistani community just got cold feet and another stay backwards to accepting a vaccine.(Khan et al., 2020) conspiracy theories like the existence of a nano ship that will be injected into the human body and that they can be controlled by the "new 5G towers" (OpIndia Staff, 2020) and a various number of other theories that are discussed through social media by the Pakistani community.

c. The fight against the misinformation related to Covid-19:

The antidote to this pandemic of disinformation is evidence-based information and analysis, during the pandemic it was essential the statements and information coming from doctors, scientists and journalists and professionals, to make sure they inform the public and guide them to more "healthy" choices and decisions, in the situation of a pandemic making the right decisions and moves can save lives, this is why from the beginning of the declaration that there is a pandemic, international journals like (NBC NEWS..) research institutions like (Insitut Pasteur, oxford internet institute) and the WHO the world Health Organisation, tried to identify disinformation and refute it, organizations and teams that are dedicated to fact-checking from the FactCheck.org, BuzzFeed News and so on were also looking into the verification of broadcast content, requested by

individuals, this project has been organised by the international network IFCN (Poynter, 2020), aims to model fake news about Covid-19 have also appeared, website like The tortoise Media that classifies two criteria, the themes of the messages that are circulating and the nature of these messages; as conspiracy theories or fake visuals.

Two middle-aged South Asian men belonging to a low socioeconomic class, that have been in contact with people who got Covid-19 positive, they got both of them to a hospital that treats COVID-19 patients in Qatar after both of them have injected to their bodies respectively 15ML and 100ml of surface disinfectant and alcohol-based hand sanitizer, they both had at the end a serious clinical course, they have both teste positive of the virus afterwards, the two man have said that they injected themselves with the disinfectant and sanitized after a social media advice with such a strong belief (Siddiqui et al., 2020) these two cases has been described as "the tip of the iceberg" of this hidden pandemic in other words "counter-knowledge" about non-medical conversations and advices about the virus that are not limited neither geographically, culturally or social class frontiers. (Siddiqui et al., 2020).

WHO; the World Health Organization along with the United Kingdom government started a campaign to raise awareness about misinformation and its risks, the name of the campaign is "STOP THE SPREAD" , this campaign is not only focused toward the UK population but on a worldwide level (WHO, 2020).

2.4 Misinformation used as a strategy for business, government or individual level:

Manipulating information is not a new phenomenon, the reason why it´s more noted recently is due to the fast growing and circulation of it in the era of social media, according to Damien Thompson (Thompson, 2008) he talks about the example of the book or the DVD "the secret" as an example to what he called the industry of counter-knowledge the famous book that gained such popularity after being endorsed by Oprah Winfrey in 2007, it's a book that in short talks about law of attraction, and that our ideas and the way we think affects how the universe work around us, so each person is the master of its own life, a formula that can be summed up in three words: Ask, believe and receive. This has no scientific background that supports it, by the end of 2007; 5 million copies were sold, despites the obvious, the book falls into the category of titles known in the publishing industry as 'review-proof' meaning that their following is so strong that no number of bad reviews can affect the sales, the co-creator of '*chicken soup for the soul* series' Jack Canfield explains that "the secret" entered the territory knows as brand hijacking; brand hijacking is where the public says ' just move out the way, we want this, and we're going to buy it'. The success that this 'movement' have witnessed does in fact show the affinity between counter-knowledge and the social epidemics, us as humans we tend to react in front of something, we think is part of a secret in an empowered way and by this knowledge. And then tend to hijack "the brand", then hundreds of people started to join the "brand" and each one of them started to believe they were a guru, and expert, creating YouTube channels, writing books of their success stories and podcasting their knowledge to the rest of the world, this all of a sudden got from a normal book that helped their writer get through some hard times to a huge movement that got to be used as a business a way to earn money. So, for misinformation to be used as a strategy there has to be a public, a public to influence their opinion and seek to impose a belief or an attitude, and not to let them make and manage their own decisions. So it is only possible when there is a public space, a place to debate of certain plurality of opinions and knowledge, therefore misinformation or disinformation is only possible where there is imperfect knowledge of reality; to weaken the adversary, it is indeed an instrument in a conflict and tends to diminish the offensive capacities of the other. Misinformation increases confusion and disorder as an erroneous, confused and biased representation of reality. It can be deducted that misinformation when used as a strategy it does not only have an object, it has a path, it is content that supposes a container: it needs vectors of

propagation, multipliers, in short, media. The recovery in heads follows the reproduction by words, pictures, and now electronic bits.

We tend to forget that misinformation can be also with images and videos, us as human beings get affected more by visual this is how our nature is. Visualization just works for humans, we respond and react to visual data more than any other type of data, we as humans we can process up to 60000 images faster than texts, it is 90% of information going directly to our brain all visual (Harris Eisenberg, 2014) images shapes our way of analysing things and interpreting them, manipulating images and texts in order to win some kind of strategy, it can be done in few minutes or hours, the technology that is available with the digital processing there is almost no limits to what can be done.

Since it's so easy manipulating information in order to influence people, then misinformation is indeed the strategy of the era, there is argument about what if manipulation occurs when people in power abuse and misuse their power to influence the people that don't (Van Dijk, 2006), for example drug companies are attacked for being accused of manipulating the results of their tests, they tend to only show the positive results and findings and hiding a little the negative ones, when publishing the reports that on purpose only highlights the positive findings this is manipulating the readers (Goldacre, 2012) as it is often debated that when manipulating an information this can directly affects how and what people can believes (Slovic, 1987). This may also be the reason why there is so many rumours or sayings about the vaccine that everyone is waiting, people are starting to lose faith in the people in power, a large number of people believes that the governments are going to try inject some kind of ship to keep information about everyone and be able to track them or even to the extend to modify our DNA ("Coronavirus False and Misleading Claims about Vaccines Debunked," 2020), massive number of the population around the world are showing concerns and not feeling safe to get the vaccine. Fear of vaccination has really become a global issue (Cornwall, 2020).

Misinformation can be agonistic reality, a deliberate attack by the weapon of information, translating relationships between materialized organizations (parties, clans, companies, States..) but also a technical reality, conditioned by the material modes of propagation and transmission specific to an era, it is not indifferent that we are placed between two systems of transmission, that of the mass-media and that of New Information and Communication Technologies, it's like a strategic phenomenon that we try to deal with, the so-called information economic war. In the

context of globalized and hypercompetitive competition, this is a rather vague designation of the brutal processes that flourish, sometimes close to industrial espionage or computer sabotage, sometimes taking the form of smear campaigns and by which international companies fight each other. The information war has therefore revealed two phenomena that shed light on the new uses of disinformation. First, the fragility and desirability of information. The conflicts now relate to its appropriation (intelligence, surveillance, etc.), to its propagation and finally to its penetration in the sense that it is possible to infiltrate systems and databases to change or destroy information. On the other hand, we are witnessing an obvious privatization of disinformation.

3.   Counter-knowledge

It's misinformation packaged to look like fact (Damian, 2008), it is the opposite of scientific knowledge, tend to try and fit under that is part of a scientific knowledge but it's not, with no support whatsoever from any evidence, it uses it as a way to support it. (Cegarra-navarro, 2014) counter-knowledge can certainly be all the opposite of knowledge, both a powerful concept, and only one of them is true, we live in times where the technology that exist is affordable and available to be able to evaluate and make the difference between truthful news and information and the fake and false one, but still we all are substile of falling for it, since science is based on observation and tests, there is certain subjects and areas like for example the supernatural world this can't be applied to it, to the lack of facts and tests, this kind be used both ways, since there is a lack of facts and evidence it can also support the information provided about but we can't know for sure. And this what counter-knowledge represents (Thompson, 2008).

The evolutions that has happened for the last 30 years and the changes have helped in the accumulation of counter-knowledge.(Damian, 2008) the way we started to see and react to information and what to believe and what not, and especially when the internet started to be a big part of our life

The first part of this chapter is about how counter-knowledge is used in management strategies, as information strategy is one of the strongest weapons today (Cegarra-Navarro et al., 2012), the second part is going to be about seeing counter-knowledge from a positive point of view, just because it is considered and is misleading it doesn't mean there is only bad sides to it, and the third part is going to be about counter-knowledge from a negative point of view, how it is perceived.

3.1 Counter-knowledge as a management strategy:

Knowledge-management is a field that is particularly under theorized in management science, although the notion relieve an epistemological concept that is the knowledge, a concept that is at the centre of many philosophical debates, and the notion management which is linked to the perspective of effective action in the company. The two terms induces the idea of an action situated in relation to a teleological knowledge or in other terms beliefs and certainties of a very special nature this can also be seen as one of the signs of the institutionalization of the company which is now supposed to create and manage knowledge, when counter-knowledge is used as a term to describe the imperfection of each individual's model of thinking, that gets born from all the rumours and wrong information that circulate around that affects the costumer relations. (Cegarra-Navarro et al., 2012) Counter-knowledge has big roles in providing entrepreneurial actions (Cegarra-Navarro et al., 2012), the existence of this counter-knowledge affects the knowledge that is provided to managers (Gibb, 1997) the relation between counter-knowledge and management strategies is very close since management strategies lay on the knowledge itself, and most if not all company's accomplishment is build up their base of knowledge. So, the main issue for these organizations is to actually the fight with misinformation or using it in a way that can benefit the organization itself. The business environment affects directly the type of information that affects directly the company's vision, success and the evolution of its strategy (Kokemuler, 2016) the knowledge that circulate inside an organization is very important to the knowledge management. And as knowledge being considered as a big resource for firms especially in their business environment; still this knowledge that exists today is most of the time based on gossip, and considering how important is external information, knowledge is for the evolution of the employee's knowledge (Lance & Shaker, 2020) the capacity of a firm's of captivating does show its valuable side of making new knowledge (Peter J. Lane et al., 2020).

Information is considered to be the power inside society (Cegarra-navarro, 2020) gossip is an important variable that says a lot about an individual, socially speaking; and can show a lot about them from the way they react and engage with it. (Baumeister et al., 2004) gossip serves to help people learn about how to live in their cultural society, it's an extension of

observational learning, that allows everyone to learn from the triumphs and misadventures of the others (katheleen D. VOHS, 2004), having a control over what circulate inside an organization as information is very important in order to be informed and be able as a manager to make the right decisions in managing the people of the organization.

Indeed, top management benefits from implementing a new strategy or a new organization. Therefore, effective internal communication would largely avoid the proliferation of rumours that are harmful for the climate and for teamwork. Here, local management has a big role to play, by being very close to its employees and by remaining very attentive to their complaints. Once the rumour is there, it's not easy to get rid of it. The manager's role is crucial in resolving this delicate situation. Rule number one is to communicate quickly on the subject, while remaining factual, The best way to defeat a rumour at work is to talk about it. Then, it is necessary to indicate if the rumour is indeed founded. In the event of a false rumour, managers must deny the information and at the same time ask employees why they are worried (Kapferer, 1987) unbounded counter-knowledge can set back the learning in both single and organizational level (Cegarra-navarro, 2014) absorptive capacity can be explained by each firm's capacity to identify the worth of new information (Levinthal & Cohen, 2012), this absorptive capacity relies on the internal social bridging and the external relations, the company have to make us of this external knowledge in order to engender innovations, this absorptive ability is a long process of accumulation of knowledge mixed with the great capacity to identify and value this new information; knowledge, because this new information that is flowing to the company and knowledge is a source of creating innovations.

Counter-knowledge can be seen as the result of the failure of organizational knowledge (Damian, 2008) , most of the time it's with accompanied with negative results for the learning and the production of an organization, if the use of information that is the result or the fruit of rumours and gossip; this affects the learning process and slows it down by impersonating as a source of knowledge (Akgün et al., 2007). There is a need to pay attention to the employees that have a tendency to accept the rumours and the fake news, because there is a big chance that this behaviour increases. Because counter-knowledge can show us or make us doubt the quality of individual's mental model, along with the aspects of the characteristics of the knowledge that is being shared between the individuals and their environment.

3.2 Counter-knowledge from a positive point of view

a. Gossiping as a learning culture

Everything comes with two side of, even if on a general note counter-knowledge is considered as bad, there is a positive side to it, to certain parties. Counter-knowledge or what we can call fake news and gossip; can serve as a cultural learning (Baumeister et al., 2004), the authors of this article " Gossip as a cultural learning" suggested that gossiping actually can help people to know how to live in their society, in this article there was also mentioned an anecdote, about a known person to the authors; that actually represents an other side of gossiping; another important trait that we tend to overlook, that sometimes may be helpful or useful information that is hidden there, and this is a representation of how our today's life works.(Baumeister et al., 2004), there is a good side of learning from the experiences of the others, observing previous events that we may have witnessed and try to avoid it.

Other positive point of view of counter-knowledge is that it can be a big launcher that helps shaking the citizen's entourage; the more an individual starts to doubts the manipulative rumours and misinformation, the more this individual starts to pay attention to what he absorbs of knowledge(Chapman & Ferfolja, 2001a), this can help awaken them up and to start asking question, to investigate and pay attention is what they are encountering is real or unverified information, a step away from being naïve and manipulative, " a community's weakness is as big as its counter-knowledge (Jones, 2007) in this way the knowledge can be updated or changed completely (Chapman & Ferfolja, 2001a) this takes us to the next point; the unlearning process.

b. Unlearning and self-awareness:

It exists two kind of unlearning, the intentional and unintentional one, we can define the intentional unlearning as the act of forgetting and leaving the previous knowledge and or behaviour (Cegarra-navarro, 2014) this is considered a very difficult process, due to the fact that it needs that the individual leave and in a way forget the way he accordingly lived his life before, creating awareness for the individual and showing him that there is a new method of dealing with a certain phenomenon or subject, and helping him forget the old habits and their old ways can make the unlearning process easier (Becker, 2010) with this process comes the self-awareness, that can be

improved by direct interaction with new information and counters, unlearning does exists in companies, organizations, it comes in hand in the case of change of an organization's goals, orientations and challenges (Tsang E. & Zabra S, 2008) the unlearning process is indispensable in an organization, when one is changing its routines, each routine is based on a certain knowledge and practices, the unlearning process is giving up this knowledge and values consciously in order to be able to learn the new routine and absorb this new knowledge. (Baker & Sinkula, 2002) (Ali E. Akgün et al., 2003) in order to relearn there must be an unlearning. Unlearning context can be possibly added to an organization's program, by creating a healthy and secure culture and space that will help individuals to do the effort of learning new knowledge; by this, people will start making more attention to their surroundings(Becker, 2010), what means more self-awareness and openness to correct and relearn.

3. 3 Counter-knowledge from a negative point of view

Counter-knowledge is viewed as highly important, since humans interact in a universe where they don't know everything (Cegarra-navarro, 2014) resulting them using unverified information and assumptions about subjects that they have doubts about or where they are clueless, when people run to gossiping and bad lies in their life and learning process, they result of accumulating to their knowledge "counter-knowledge" (Damian, 2008). Deceiving and manipulating people has bad consequences, where we convince individuals that the information that we are providing to them is the truth but in reality is not, whether in politics, health or just in general, (Jan Komasa, 2020) this movie Heatjer is the exact representation of the negative side of counter-knowledge, when these fake rumours and information both written and visual start to affect people's choices based on this manipulative information that got introduced to them and resulting ruining on a big scale even people's life, for people that are easily manipulated and not self-aware, that just believe what is posted on social media or what has been told to them and not searching for the facts and real information.

Counter-knowledge the misinformation that is dressed as facts (Damian, 2008) can be so convincing that people will not question it, since there is no fact supporting it, there is also no fact to contradict it (Damian, 2008) people will start acquiring this counter-knowledge as the truth and be misguided all the way.

In the middle of a global pandemic counter-knowledge can be very dangerous, when it comes to health, conspiracy theories will be hitting a sensitive nerve and threatening individual's lives. The manipulation of the public's opinion with manipulative treatment of information (Vladimir Valkoff, 1984).

Other negative perspective of counter-knowledge is that at a certain point, people will start having difficulties in distinguishing the truth from lies.

It exists a number of authors that holds to the idea that counter-knowledge delays individual's capacity to make decisions and interact in advocacy activities (Martelo-Landroguez et al., 2019) (Cegarra-navarro, 2014), in the research of Navarro he talked about the counter-knowledge that results from unverified origins of information can be controlled but not in totality (Cegarra-navarro, 2014), it clearly explains the relationship between the knowledge management

procedures and its performance, in this research you can spot different negative points of counter-knowledge especially when this one can't be controlled.

Generally speaking, fake news would spread more widely by exploiting strong emotions, such as fear and disgust. (Agence Science-Presse, 2020) (Vosoughi et al., 2018), starting to believing in the fake news and counter-knowledge also can have effects on the mental health of the individuals, anxiety and confusing, a research from the Canadian University Sherbrooke states that these mental troubles are really present on the National territory and getting worse with the spread of misinformation, Data suggests that one in four Canadians (25.5%) has a probable pandemic-related post-traumatic stress disorder, and an equally high proportion (25.4%) have a post-traumatic stress disorder. generalized anxiety likely (Gabriel Blouin-Genest et al., 2020). All this confusion is leading to a loss of confidence in media, political or social institutions, and you can realise this just by asking your group of friends, when the citizen no longer have faith or confidence in their institutions well; the citizen will no longer play his role of a citizen. Misinformation is making the pandemic even worse (Brainard & Hunter, 2020).

4. The cases in Morocco and Spain. Methodology

4.1. Data collection

Convenience sampling was used, participation invitations being distributed in the second week of April 2020 to the distribution list of two universities, one located in Spain and the other in Morocco. The list included teachers, students, grant holders and researchers and administrative staff. Over 1000 citizens were contacted and had 263 finally filled in the questionnaire by the beginning of May 2020 (155 from Spain and 108 from Morocco). The database was then filtered on purpose to control the adequacy of the sample. Only Spanish or Morocco residents were kept for further analysis. After filtering the collected data, 259 responses finally resulted (151 from Spain and 108 from Morocco). In terms of the sample, a small majority of respondents were female (51 %) and the average age of citizens who participated in this study was 35 years.

We also conducted several tests to prevent common method bias. Harman's one-factor test was conducted to assess common method bias, which used on factor account for the majority of covariance in variables (Podsakoff et al., 2003). (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). In this study, the test reported two factors with eigenvalues greater than 1.0 with an explained variance of 81.79%, indicating that common method bias was not a serious problem. Furthermore, the independent sample t-test revealed no significant difference between 1=male and 2= female (p =0.134, and p =0.224 respectively). In addition, the measurement model fits better than the one-factor model (i.e. Satorra-Bentler $\chi^2_{(8)}$= 19.12; $\square2$/d.f= 2.39 and Satorra-Bentler $\chi2_{(9)}$= 210.88; $\chi2$/d.f=23.43 respectively).Thus, common method bias is possibly not a threat here as a whole (Armstrong & Overton, 1977).

4.2. Measures

All constructs were self-reported and operationalised with a rating scale from 1 = "high disagreement" to 5 "high agreement" (see Table 1 for a list of items). Scales were constructed through a literature review. Furthermore, an expert panel was also used to identify the correct items for this construct. Previous studies by Yerkovich (1977) and Baumeister, Zhang and Vohs (2004), provide guidance in developing items to measure what we call "good counter-knowledge" (hereafter GCK). Three items assessed the importance of 'jokes and sharp barbs' for social influence, entertainment, and even improve our mood. What we call "bad counter-knowledge" (hereafter BCK), was measured by using an adapted scale from Cegarra-Navarro, Eldridge and Wensley (2014). In this vein, factors relating to the lack of congruity between news, information and features on COVID-19 and their recipients (e.g., misunderstandings), exaggerations, and partial truths are included in the scale (Chapman & Ferfolja, 2001b; Thompson, 2008).

The confirmatory factor analysis (CFA) did fit reasonable well (Satorra-Bentler $\chi^2_{(8)}$= 19.12; χ^2/d.f= 2.39; GFI=0.96; CFI=0.98; IFI=0.98; RMSEA= 0.073) (J. Hair et al., 2010). Good and bad counter-knowledge were specified as factors given that there are dimensions connected with human activity(J. F. Hair et al., 2013). The standardized factor loadings ranged from 0.829 to 0.941 and all items loaded significantly. The composite reliability (SCR) exceeded the threshold of 0.700 (Bagozzi and Yi, 1988) and the average variance extracted (AVE) indicators exceeded the common cut off threshold of 0.500 (Bagozzi and Yi, 1988). Above all of the results signified that our measurements had adequate convergent reliability and validity. The discriminant validity was assessed by using the Heterotrait-monotrait ratio of correlations (HTMT), which showed values below the threshold of 0.90 (Henseler et al., 2015).

Analysis the strategy of counter knowledge in pandemic time from the perspective of two countries: Morocco and Spain.

Table 1. 1: Construct summary, confirmatory factor analysis and scale reliability

Construct	VIF	Loading	
Bad counter-knowledge			
BCK1: There is gossip that thrives on lies, exaggerations and partial truths about COVID-19	3.875	0.941***	AVE=0.863
BCK 2: There are malicious rumours about COVID-19 which support mistrust	3.307	0.921***	SCR=0.950
BCK 3: There are malicious stories about COVID-19 that often lead to misunderstandings	3.172	0.925***	HTMT=0.454
Good counter-knowledge			
GCK1: There are jokes and sharp barbs about the government that help lighten your mood	1.927	0.901***	AVE=0.758
GCK2: There are jokes and sharp barbs about the government that may be useful for social integration	2.009	0.829***	SCR=0.903
GCK3: There are jokes and sharp barbs about the government that may be useful for entertainment	2.170	0.880***	HTMT=0.454

Notes:

*** <0.01

VIF=Variance Inflation Factor; AVE=Average Variance Extracted; SCR=Scale Composite Reliability SCR; HTMT= Heterotrait-monotrait ratio of correlations;

The fit statistics for the measurement model were: [Satorra-Bentler $\chi^2_{(8)}$= 19.12; χ^2/d.f= 2.39; GFI=0.96; CFI=0.98; IFI=0.98; RMSEA= 0.073].

The asymptotic covariance matrices were generated to obtain the scaled chi-square Satorra and Bentler, 1988) and robust estimation of standard errors.

5. Results

The system repeated ANOVA measures were used to prove the explanatory power of only one factor or independent variables. Table 2 exhibits statistics on each variable and their differences. Table 2 shows that the national culture (NC=1 if the citizen lived in Spain and NC = 2 if the citizen lived in Morocco Good) has no significant effects on Good counter-knowledge, whereas the national culture is positively related to Bad counter-knowledge. The system repeated ANOVA of Bad counter-knowledge and Good counter-knowledge (i.e. BCK and GCK) reveals that the coefficient of BCK was significantly greater In Spain than In Morocco.

Table 2. 1: ANOVA nationality factor (individual variables)

| Variable	Nationality (*NC*)	*Mean*	*S. D*	*N*	*F*	Partial Squared	Observed Power
Bad-Counter-knowledge	Spain	3.90	1.00	151			
	Morocco	3.36	1.31	108			
	Total	3.68	1.17	259	13.799**	0.051	0.959
Good-Counter-knowledge	Spain	3.04	0.97	151			
	Morocco	3.03	1.27	108			
	Total	3.03	1.10	259	0.000	0.000	0.050
Wilks' Lambda= 0.811**					60.04	0.189	1.000
Tests of within-subjects effects *NC∗Counter-Knowledge=* 9.01**					12.02	0.045	0.933
Test of between-subjects effects *NC∗ Counter-Knowledge=* 9.197*					5.114	0.020	0.615
Box's M$_{(3)}$= 16.002***					5.287		

Notes:

S.D.= Standard deviation;

$**p < 0.01$; $*p < 0.05$

Analysis the strategy of counter knowledge in pandemic time from the perspective of two countries: Morocco and Spain.

Figure 1 provides a visual summary of the effects of each of the factors relative to the response site (Morocco and Spain), the average value of the sample is plotted on the vertical axis, while the horizontal axis shows the two types of counter-knowledge (i.e. 1= Bad counter-knowledge; 2= Good counter-knowledge). Results suggest that while Spain is more positively associated with higher levels of BCK, the two countries score the same and equal when we refer to GCK.

Figure 1: Summary of mean responses of the factors relative to the response site
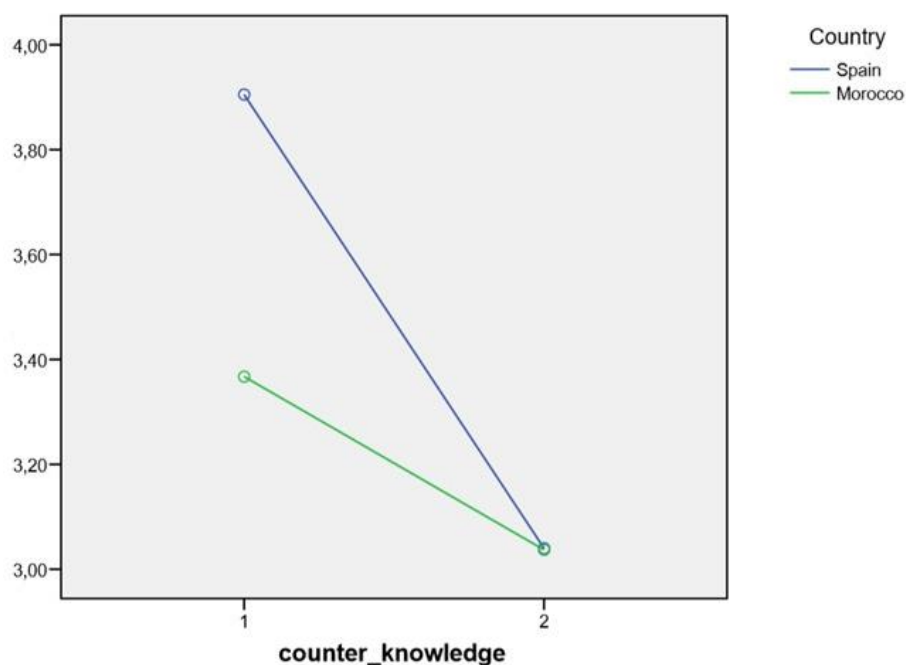
Notes:

1= Bad counter-knowledge; 2= Good counter-knowledge;

6. Conclusion

The main purpose of this study is to analyse the strategy of counter knowledge in pandemic time; from the perspective of two countries: Morocco and Spain. Counter-knowledge always existed all the way back from the ancient Greek mythology and with different names, the purpose of this research is to study how counter-knowledge is playing in the context of a pandemic, all the results and effects that it can have on individuals, on organizations and governments, going through the academic references that already exists about counter-knowledge and misinformation and different statistical studies that have been done about individual's behaviour towards certain points; for example the Pakistani population and their absolute refuse of getting vaccinated; and that this choice was made based on conspiracy theories. Explaining the impact of misinformation when it affects the health sector and the safety of the other, during this pandemic all humanity has faced two viruses, the covid-19 and the large sea of misinformation and rumours, but hopefully a lot of public organizations and associations made an effort to try to eliminate this false information that has been circulating and to sensitize the public about it.

Just as any other concept in life counter knowledge have two sides, you can view it from both negative and positive point of view, we can hold the idea that one of the negatives point of views of counter-knowledge is how it delays individual's capacity to make decisions and interact in advocacy, and that this side of counter-knowledge can't be fully controlled, and that it can have serious effect on the mental health; from anxiety to confusing, and that this misinformation is making this present pandemic even worse, but individuals can also take advantage of the good side of counter-knowledge; making rumours a way to help citizens how to live in their society and cope and learning from previous experiences, also how counter-knowledge improves the self-awareness of the people and question the information and knowledge they receive, and openness to correct and go through the process of unlearning and relearning, and that comes very handy for organizations, when policy, goals and strategy changes.

In an economy where the only certainty is uncertainty, the only source of sustainable competitive advantage is knowledge, so knowledge management inside a business is a very important point that managers needs to pay attention to, since it is not touched and uncontrollable, we move from an essential economy based on physical resources to an environment in which critical factors are

intangible in nature and since the company doesn't own this added value that is knowledge unless it is well managed and shared inside the organization, in order to not lose this knowledge when a holder of this specific knowledge leaves the entity.

What we have concluded was that counter-knowledge; misinformation etc… will always exist and circulate, especially when something big and that affect a large number of people is happening, in this scenario the global pandemic of covid-19 was happening, it just opened our eyes to the power of social media and the fast circulation of information and how hard it can be to fight against it, that why people in power and government leaders needs to be clear and transparent with the citizens, mutual trust is fundamental to fight such thing, if we add to the pandemic a second one that is misinformation that gets complicated especially when the livelihood of people is on the line; it will be understood that knowledge management is first of all an activity based on the interaction, real or virtual, between humans.

With that being said; there will be expected a new wave of counter-knowledge and maybe misinformation about the vaccine, if it continues the lack of transparency of governments and misinformation about this matter, we can witness a second wave of conspiracy theories about the vaccines, and people drawing back from getting it.

One of the limitations that we have encountered doing this paper personally, is since this subject is not a popular discussion and the pandemic is very actual and present; is maybe the small number of academic references, and for the methodology part the sample is small and that could've been extended in number and other countries to get more clear results and interpretations, from different cultures and continents and adding new inquest about the new information that is being out about every country's strategy to vaccination and rules to stop spread of the virus after the second wave.

7. References

ABC SPAIN. (2020a). Esta es la ley que obliga al Gobierno a desvelar los nombres del comité de expertos. *ABC SPAIN*.

ABC SPAIN. (2020b). The Government violates the law by hiding the name of the experts who decide on the de-escalation phases. *Society*.

AFP/The Local. (2020). Coronavirus in Spain: 70 percent of new cases are among medical staff. *The Local Es*, *5* may *2020*.

Agence Science-Presse. (2020). *Quels sont les impacts de la désinformation_ _ Agence Science-Presse*.

Aggeler, M. (2020). You Can Buy Instagram Likes From A Vending Machine Now Because Nothing Is Sacred Anymore. *Life*. https://www.bustle.com/p/you-can-buy-instagram-likes-from-a-vending-machine-now-because-nothing-is-sacred-anymore-63121

Akgün, A. E., Keskin, H., Byrne, J. C., & Aren, S. (2007). Emotional and learning capability and their impact on product innovativeness and firm performance. *Technovation*, *27*(9), 501–513. https://doi.org/10.1016/j.technovation.2007.03.001

Ali E. Akgün, John C. Byrne, & Gary S. Lynn. (2003). *Organizational Learning: A Socio-Cognitive Framework*.

Armstrong, J. S., & Overton, T. S. (1977). Estimating Nonresponse Bias in Mail Surveys. *Journal of Marketing Research*, *14*(3), 396. https://doi.org/10.2307/3150783

Arroyo, J. M., & Alfageme, A. (2020). "I said, 'Everything will be fine,' but I failed her. *Society*.

Baker, W., & Sinkula, J. (2002). Market Orientation, Learning Orientation and Product Innovation: Delving into the Organization's Black Box. In *Journal of Market-Focused Management* (Vol. 5, Issue 1, pp. 5–23). https://doi.org/10.1023/A:1012543911149

Baumeister, R. F., Zhang, L., & Vohs, K. D. (2004). Gossip as cultural learning. In *Review of General Psychology* (Vol. 8, Issue 2). https://doi.org/10.1037/1089-2680.8.2.111

Becker, K. (2010). Facilitating unlearning during implementation of new technology. *Journal of Organizational Change Management*, *23*(3), 251–268.

https://doi.org/10.1108/09534811011049590

Benito, D. E., & Jan Cecilia. (2020). *Faulty batch of face masks prompts the isolation of more than a thousand Spanish healthcare staff | Society | EL PAÍS in English.* https://english.elpais.com/society/2020-04-21/faulty-batch-of-face-masks-prompts-the-isolation-of-more-than-a-thousand-spanish-healthcare-staff.html

Brainard, J., & Hunter, P. (2020). Fake news makes disease outbreaks worse. *UNIVERSITY OF EAST ANGLIA*.

Casado, P. (2020). *Parliment discussion.* https://english.elpais.com/politics/2020-04-10/congress-backs-pms-request-to-extend-confinement-measures-in-spain-until-april-26-with-a-further-15-days-likely.html

Catalan News. (2020). *Why is Spain as a whole reporting fewer new Covid-19 deaths than Catalonia.* https://www.catalannews.com/society-science/item/why-is-spain-as-a-whole-reporting-fewer-new-covid-19-deaths-than-catalonia

Cegarra-navarro, J. (2014). Counter-knowledge and realised absorptive capacity. *European Management Journal*, *32*(2), 165–176. https://doi.org/10.1016/J.EMJ.2013.05.005

Cegarra-navarro, J. (2020). *(186) International Conference on Business - YouTube*.

Cegarra-Navarro, J. G., Eldridge, S., & Sánchez, A. L. G. (2012). How an unlearning context can help managers overcome the negative effects of counter-knowledge. *Journal of Management and Organization*, *18*(2), 231–246. https://doi.org/10.5172/jmo.2012.18.2.231

CGTN. (2020). Disposable masks may pose environmental threat - CGTN. *Rediscovering China*.

Chapman, J. A., & Ferfolja, T. (2001a). Fatal flaws: The acquisition of imperfect mental models and their use in hazardous situations. In *Journal of Intellectual Capital* (Vol. 2, Issue 4, pp. 398–409). https://doi.org/10.1108/EUM0000000006087

Chapman, J. A., & Ferfolja, T. (2001b). Fatal flaws: The acquisition of Imperfect mental models and their use in hazardous situations. *Journal of Intellectual Capital*, *2*(4), 398–409. https://doi.org/10.1108/EUM0000000006087

Connelly, C. E., Černe, M., Dysvik, A., & Škerlavaj, M. (2019). Understanding knowledge hiding in organizations. *Journal of Organizational Behavior*, *40*(7), 779–782.

https://doi.org/10.1002/job.2407

Cornwall, W. (2020). Just 50% of Americans plan to get a COVID-19 vaccine. Here's how to win over the rest. In *Science*. https://doi.org/10.1126/science.abd6018

Coronavirus False and misleading claims about vaccines debunked. (2020). *BBC News*.

CRI. (2020). *COMITÉ DE VEILLE ECONOMIQUE*. https://www.casainvest.ma/fr/mesures-covid-19

Damian, T. (2008). *Counter-knowledge. how we surrendered to conspiracy theories, quack medicine, bogus science and fake history.* Atlantic Books.

De Benito. Emilio, & Lucas, B. (2020). Coronavirus lockdown in Spain_ Government advisors support reopening Spanish schools in September. *Coronavirus*.

Domínguez, P., & Darbishire, H. (2020). Access Info requests names of members of technical committee advising government on unwinding the lockdown. *Access Info*.

EL MASAITI, A. (2020). *Weary Moroccan medics fight virus, nightmares and tears*. https://apnews.com/article/acd8611c50e7de2fc947952d40d8aaa9

El Mundo. (2020). Our healthcare workers and scientific researchers, the real heroes in the fight against coronavirus. *El Mundo*.

Elisheva, R. (2020). Adverse Effects of Prolonged Mask Use among Healthcare Professionals during COVID-19. *Journal of Infectious Diseases and Epidemiology*, *6*(3), 6–10. https://doi.org/10.23937/2474-3658/1510130

EU DesinfoLab. (2020). *Covid-19 Disinformation: Narratives, Trends, and Strategies in Europe EU DisinfoLab*. April. https://www.disinfo.eu/wp-content/uploads/2020/04/20200402_covid19-disinformation_europe.pdf

Gabriel Blouin-Genest, Marie-Eve Carignan, Marc D. David, Mélissa Généreux, & Mathieu Roy. (2020). *COVID-19 _ des troubles de stress et d'anxiété bien présents au*.

García-Basteiro, A., Alvarez-Dardet, C., Arenas, A., Bengoa, R., Borrell, C., Del Val, M., Franco, M., Gea-Sánchez, M., Otero, J. J. G., Valcárcel, B. G. L., Hernández, I., March, J. C., Martin-Moreno, J. M., Menéndez, C., Minué, S., Muntaner, C., Porta, M., Prieto-Alhambra, D., Vives-Cases, C., & Legido-Quigley, H. (2020). The need for an independent

evaluation of the COVID-19 response in Spain. *The Lancet*, *396*(10250), 529–530. https://doi.org/10.1016/S0140-6736(20)31713-X

Gibb, A. A. (1997). Small firms' training and competitiveness. Building upon the small business as a learning organisation. *International Small Business Journal*, *15*(3), 13–29. https://doi.org/10.1177/0266242697153001

Goldacre, B. (2012). *Bad Pharma: how drug companies mislead doctors and harm patients* (Fourth estate (Ed.); Fourth Est).

Gottman, J. M., Coan, J., Carrere, S., Swanson, C., Gottman, J. M., Coan, J., Carrere, S., & Swanson, C. (1998). Predicting Marital Happiness and Stability from Newlywed Interactions Published by : National Council on Family Relations Predicting Marital Happiness and Stability from Newlywed Interactions. *Journal of Marriage and Family*, *60*(1), 5–22. https://doi.org/10.1002/job

Government of the Netherlands. (2020). Dutch measures against coronavirus: basic rules for everyone. In *Government.nl*. https://www.government.nl/topics/coronavirus-covid-19/tackling-new-coronavirus-in-the-netherlands/basic-rules-for-everyone

Hair, J., Black, W., Babin, B., & Anderson, R. (2010). Multivariate Data Analysis: A Global Perspective. In *Multivariate Data Analysis: A Global Perspective* (Vol. 7th).

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial Least Squares Structural Equation Modeling: Rigorous Applications, Better Results and Higher Acceptance. *Long Range Planning*, *46*(1–2), 1–12. https://doi.org/10.1016/j.lrp.2013.01.001

Harris Eisenberg. (2014). Humans Process Visual Data Better. In *Thermopylae Sciences + Technology*. http://www.t-sciences.com/news/humans-process-visual-data-better

Hassan, S. (2010). *THE MOROCCO COUNTRY CASE STUDY : Positive Practice Environments Morocco Case Study : Health Care Environments in Morocco*.

Hatim, Y. (2020). *Morocco's Local Authorities Begin Distribution of Free Face Masks*. https://www.moroccoworldnews.com/2020/08/316254/moroccos-local-authorities-begin-distribution-of-free-face-masks/

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant

validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, *43*(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8

HYN. (2020). Le Maroc Face Au Covid-19. *Revue Marocaine de Sante Publique*, *7*(10), 6–7.

Institut Pasteur du Maroc. (2020). *IPM*. http://www.pasteur.ma/gouvernance-conseil-scientifique.php

Jacobs, A. (2020). *Will COVID19 lead to health care reform in Morocco*. https://mipa.institute/7827

Jan Komasa. (2020). *Sala samobójców: Hejter*. Netflix.

Jones, S. C. (2007). Interest group strategies in multi-level Europe. *Journal of Public Affairs*, *7*(1), 39–53. https://doi.org/10.1002/pa

Kapferer, J.-N. (1987). *Rumeurs. Le plus vieux média du monde*. http://hdl.handle.net/2042/32266

katheleen D. VOHS. (2004). *Gossips as learning facilator*. UNIVERSITY OF UTAH.

Kaynar, B. (2016). *Rumor in Social Media : Role of Affect During Social Movements İstanbul Şehir University September 2016*. *September*.

Khan, Y. H., Mallhi, T. H., Alotaibi, N. H., Alzarea, A. I., Alanazi, A. S., Tanveer, N., & Hashmi, F. K. (2020). Threat of COVID-19 vaccine hesitancy in Pakistan: The need for measures to neutralize misleading narratives. *American Journal of Tropical Medicine and Hygiene*, *103*(2), 603–604. https://doi.org/10.4269/ajtmh.20-0654

Kokemuler, N. (2016). What Are Internal & External Environmental Factors that Affect Buiness? In *Chron* (pp. 1–12). http://smallbusiness.chron.com/internal-external-environmental-factors-affect-business-69474.html

Lance, N., & Shaker, A. Z. (2020). The evolving firm: how dynamic and operating capabilities interact to enable entrepreneurship. *British Journal of Management*.

LeBlanc, R. (2015). How long does it take garbage to decompose. In *Richland Center* (pp. 1–3).

Levinthal, D., & Cohen, A. (2012). Measurement of potential absorption capacity in Colombia's innovative companies. *Administrative Science Quarterly*, *38*(26), 1307–1321.

https://doi.org/10.2307/2393553

Liber, G. O., Dettke, D., Vogl, F., Forte, M. C., Falkvinge, R., Alwadi, N., Ian, C. J., & Najam, A. (2013). The Big Question: What should governments keep secret? *World Policy Journal*, *30*(3), 3–8. https://doi.org/10.1177/0740277513506373

Mann, M. E. (2020). global warming Definition, Causes, & Effects. In *Britannica*. https://www.britannica.com/science/global-warming

Marroquín, B., Vine, V., & Morgan, R. (2020). Mental health during the COVID-19 pandemic: Effects of stay-at-home policies, social distancing behavior, and social resources. *Psychiatry Research*, *293*(May), 113419. https://doi.org/10.1016/j.psychres.2020.113419

Martelo-Landroguez, S., Cegarra Navarro, J. G., & Cepeda-Carrión, G. (2019). Uncontrolled counter-knowledge: its effects on knowledge management corridors. *Knowledge Management Research and Practice*, *17*(2), 203–212. https://doi.org/10.1080/14778238.2019.1599497

Masbah, M., & Aourraz, R. (2020). *How Moroccans view the Government's Measures?* https://doi.org/10.13140/RG.2.2.14151.65445

McCarthy, N. (2020). *7,000 Health Workers Have Died From Covid-19 Around The World So Far*.

Minder, R. (2020). Spain Recounts Coronavirus Deaths - The New York Times. *April 16,2020*. https://www.nytimes.com/2020/04/16/world/europe/coronoavirus-spain-death-toll.html

Morgan, S. (2018). Fake news, disinformation, manipulation and online tactics to undermine democracy. *Journal of Cyber Policy*, *3*(1), 39–43. https://doi.org/10.1080/23738871.2018.1462395

MSSSI. (2020). *Banco de Datos del Sistema Nacional de Salud*. http://www.msssi.gob.es/estadEstudios/estadisticas/bancoDatos.htm

Muller, A. E., Hafstad, E. V., Himmels, J. P. W., Smedslund, G., Flottorp, S., Stensland, S. Ø., Stroobants, S., Van de Velde, S., & Vist, G. E. (2020a). The mental health impact of the covid-19 pandemic on healthcare workers, and interventions to help them: A rapid systematic review. *Psychiatry Research*, *293*(July), 113441.

https://doi.org/10.1016/j.psychres.2020.113441

Muller, A. E., Hafstad, E. V., Himmels, J. P. W., Smedslund, G., Flottorp, S., Stensland, S. Ø., Stroobants, S., Van de Velde, S., & Vist, G. E. (2020b). The mental health impact of the covid-19 pandemic on healthcare workers, and interventions to help them: A rapid systematic review. In *Psychiatry Research* (Vol. 293). https://doi.org/10.1016/j.psychres.2020.113441

Navarro, A. A. (2020). Masks for Coronavirus Diplomacy. *Atalayar.* https://atalayar.com/en/content/morocco-masks-coronavirus-diplomacy

Nortajuddin, A. (2020). The Struggle To Afford Masks. *The Asean Post*, *5 August 2020.* https://theaseanpost.com/article/struggle-afford-masks

OpIndia Staff. (2020). *Pakistani "expert" says Bil Gates will install nanotrackers inside coronavirus vaccine to enslave Muslims.*

Parkinson, J. (2020). Coronavirus: Disposable masks "causing enormous plastic waste." In *BBC News*. https://www.bbc.com/news/uk-politics-54057799

Peter J. Lane, Balaji R. Koka, & Seemantini Pathak. (2020). The reification of absorptive capacity: a critical review and rejuvenation of the construct. *The Academy of Management Review.*

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology*, *88*(5), 879–903. https://doi.org/10.1037/0021-9010.88.5.879

Poynter. (2020). *CoronaVirusFacts Alliance – Poynter.* https://www.poynter.org/coronavirusfactsalliance/

Rajdev, M., & Lee, K. (2016). Fake and spam messages: Detecting misinformation during natural disasters on social media. *Proceedings - 2015 IEEE/WIC/ACM International Joint Conference on Web Intelligence and Intelligent Agent Technology, WI-IAT 2015*, *1*, 17–20. https://doi.org/10.1109/WI-IAT.2015.102

Rani, H., Arain, G., Kumar, A., & Shaikh, I. (2017). Interplay between Trust and Distrust in the

Workplace: Examining the Effect of Psychological Contract Breach on Organizational Disidentification. *Journal of Asia Business Studies*, *12*, 0. https://doi.org/10.1108/JABS-02-2015-0022

Romero, J. M. (2020). Coronavirus The real Covid-19 death toll in Spain. *El Pais*, *31 July 20*(Society).

Saad, G., & El, D. (2020). *Les mesures prises par le Royaume du Maroc pour faire face aux répercussions sanitaires, économiques et sociales de la propagation du Covid-19*.

SAINT-ARNAUD, P. (2020). La lutte contre les fausses nouvelles passera par les internautes. *Le Soleil*, *Samedi 14 Novembre*.

Salas, J. (2020). Coronavirus Medical experts call for independent review of Spain's coronavirus response. *El Pais*, *1*(Society).

Schneider, U. J. (1966). *Counter-Knowledge: An Update on Foucault in the Age of Mobile Communication*.

Schumaker, E. (2020). Timeline: How coronavirus got started. *ABC News*. https://abcnews.go.com/Health/timeline-coronavirus-started/story?id=69435165

Serenko, A., & Bontis, N. (2016). Understanding counterproductive knowledge behavior: antecedents and consequences of intra-organizational knowledge hiding. *Journal of Knowledge Management*, *20*(6), 1199–1224. https://doi.org/10.1108/JKM-05-2016-0203

Shane, S., & Isaac, M. (2017). Facebook to Turn Over Russian-Linked Ads to Congress - The New York Times. In *New York Times* (pp. 1–6). https://www.nytimes.com/2017/09/21/technology/facebook-russian-ads.html?mcubz=0

Siddiqui, M. Y. A., Mushtaq, K., Mohamed, M. F. H., Soub, H. A. L., Mohamedali, M. G. H., & Yousaf, Z. (2020). "Social media misinformation"-an epidemic within the COVID-19 pandemic. *American Journal of Tropical Medicine and Hygiene*, *103*(2), 920–921. https://doi.org/10.4269/ajtmh.20-0592

Silverman, C., Singer-Vine, J., & Thuy Vo, L. (2017). In spite of the crackdown, fake news publishers are still earning money from major ad networks. In *Buzzfeed* (pp. 1–17).

Slovic, P. (1987). Perception of risk. *Science*, *236*(4799), 280–285.

https://doi.org/10.1126/science.3563507

Spring, M. (2020). *Social media firms fail to act on Covid-19 fake news*. BBC. https://www.bbc.com/news/technology-52903680

Stanford Encyclopaedia. (2020). *The Ethics of Manipulation (Stanford Encyclopedia of Philosophy)* (pp. 1–21). https://plato.stanford.edu/entries/ethics-manipulation/#toc

Stephen McDermott. (2020). From baking soda to urine_ How home remedies around the world were repackaged as Covid-19 "cures." *Thejournal.Ie*.

Taarifa, R. (2020). *5 Side Effects of Wearing Face Mask on* (p. 19). https://taarifa.rw/5-side-effects-of-wearing-face-masks/

The Dreyfus affair : an exposition of the case with its political and literary dissension . (1964). *Boston University*.

Thompson, D. (2008). *Counter-knowledge*. Atlantic Books.

Trump says his remarks on using disinfectant inside people's bodies were sarcastic - Reuters. (2020).

Tsang E., & Zabra S. (2008). *Organizational unlearning, Human relations*.

United Nations Conference on Trade and Development. (2020). *Growing plastic pollution in wake of COVID-19: how trade policy can help*. https://unctad.org/news/growing-plastic-pollution-wake-covid-19-how-trade-policy-can-help

Van Dijk, T. A. (2006). Discourse and manipulation. In *Discourse and Society* (Vol. 17, Issue 3, pp. 359–383). https://doi.org/10.1177/0957926506060250

Vladimir Valkoff. (1984). *A Novel Of Disinformation*.

Vosoughi, S., Roy, D., & Aral, S. (2018). The spread of true and false news online. In *Science* (Vol. 359, Issue 6380, pp. 1146–1151). https://doi.org/10.1126/science.aap9559

Walth, B. (2019). *Secrecy Versus sunshine: Efforts to hide government records never stop*.

WHO. (2020). Countering misinformation about COVID-19. In *WHO-Newsroom* (pp. 19–20).

World Health Organization. (2020). When and how to use masks. In *World Health Organization*.

https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/when-and-how-to-use-masks

Xu, F., Uh, J., Brier, M. R., Hart, J., Yezhuvath, U. S., Gu, H., Yang, Y., & Lu, H. (2011). The influence of carbon dioxide on brain activity and metabolism in conscious humans. In *Journal of Cerebral Blood Flow and Metabolism* (Vol. 31, Issue 1, pp. 58–67). https://doi.org/10.1038/jcbfm.2010.153

Yerkovich, S. (1977). Gossiping as a Way of Speaking. *Journal of Communication*, *27*(1), 192–196. https://doi.org/10.1111/j.1460-2466.1977.tb01817.x