

## SARS-CoV-2 pandemic as an anomie

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### Abstract

SARS-CoV-2 is a pathogenic viral infection that was identified in Wuhan, China, in late 2019. After just a few weeks, further viral infections have also been detected in other countries. In March 2020, the World Health Organization declared a pandemic, and in April 2020, numerous infections and deaths were reported in almost all parts of the world. The dynamic development of this virus infection and the COVID-19 disease caused by it have led to restrictions and new regulations being introduced in almost all countries to halt the exponential growth of infections and protect the health and life of citizens. The most common restrictions are the closure of places of education, culture and work until further notice, breaks in tourist traffic and forced social isolation. The new restrictions make many people fear the possibility of illness and death, economic crisis, and the uncertainty of the future, but they also adopt attitudes of rebellion or rejecting the possibility of danger. Some may try to take advantage of the new circumstances to make money from trading in rare goods. The pandemic, and in particular the experiences and behaviours that accompany it, has led to the disintegration of ex-

isting rules within society while introducing new rules that are necessary to achieve new goals: survival, avoidance of infection and maintenance of social order.

The research was conducted among students from Poland and Iraq. The aim was to determine different ways of adapting to the anomie (according to Robert Merton's theory) among students. The research was conducted from the 30th of March to the 16th of April 2020. The research tool, a survey questionnaire, was distributed via the internet. A total of 502 students participated in the survey. The results showed that conformist behaviour is the most common among the respondents, while deviant ways of adaptation to new conditions were noticed only incidentally. Students from Iraq followed rules that can help to reduce the infection more than students from Poland. Medical students much more practised the principles associated with quarantine and personal hygiene than by students of other faculties. Moreover, these principles are more often observed by residents of large cities and rarely by those living in the countryside.

**Keywords:** social change, coronavirus, anomie, methods of adaptation, Poland, Iraq.

## 1. Introduction

COVID-19 is a pathogenic viral infection caused by the coronavirus of severe acute respiratory syndrome SARS-CoV-2, which was identified in the city of Wuhan, China, in late 2019 (Park 2020). On the 31<sup>st</sup> of December 2019, the Chinese Centre for Disease Control and Prevention reported numerous cases of pneumonia of unknown causes among Wuhan residents (Lu et al., 2020). Based on patient samples, a new coronavirus was identified (Paraskevis et al., 2020).

Observations in the first months of 2020 confirmed human susceptibility to the spread of this virus all over the world. The infection occurs because of close contact with an infected person who, by coughing, sneezing or simply breathing, excretes aerosols containing the virus that may infect others around the infected person (Shereen et al., 2020). Besides, the virus can spread when a healthy person touches objects infected by an infected person and then transfers the virus by touching the mouth, nose or eye. It is also possible that the virus spreads through ways not yet recognised (Bablani et al., 2020).

On the 11<sup>th</sup> of January 2020, the World Health Organization (WHO) called the infection Coronavirus Disease 2019 (COVID-19) – (Park 2020). It has been established that SARS-CoV-2 is spreading around the world at an exponential rate, much faster than other dangerous viruses. Data as of the 25<sup>th</sup> of April indicated almost 3 mln con-

firmed cases of infection in almost all countries, and complications related to the disease led to the deaths of almost 200,000 people globally (Coronavirus cases, 2020). The pandemic revealed weaknesses in both the global approach to health and the preparations for unexpected but possible diseases (Gudi, Tiwari, 2020). To date, there is also no vaccine against SARS-CoV-2 (Bakar, Rosbi, 2020).

## **2. Pandemic as a period of sudden social changes**

The dynamic spread of the virus and the increase in COVID-19 morbidity and deaths has led governments in many countries to introduce restrictions to reduce new infections from the first months of 2020. The first of such measure already introduced in Wuhan was the isolation of people with symptoms of respiratory failure (Huang et al., 2020), followed by the introduction of a city blockade by suspending all means of transport, including bus, rail and air transport (Wu et al., 2020). Then, meetings in public places were restricted, schools, some workplaces and offices were closed, people were ordered to wear face masks, and people who might have contact with an infected person were ordered to be quarantined (Tabish 2020a).

In many countries where SARS-CoV-2 infections have been identified, blockades, curfews, and compulsory social isolation have been introduced, schools have been closed and substituted with e-learning via the internet, and many jobs have been closed until further notice (Armitage, Nelluns, 2020; Tabish 2020b). In some countries, e.g. Poland, a ban on leaving home for minors without adult supervision was introduced, parks and forests were banned, cultural institutions (cinemas, theatres and others) were closed (Snoch-Pawłowska 2020). Significant sports events were also cancelled, including football, Euro 2020, Olympic Games, and tennis tournaments (Hawkins 2020; Lytvynenko 2020; McCurry, Ingle, 2020). In many countries, authorities recommended the voluntary isolation of people over the age of seventy (Armitage, Nelluns, 2020). The most important objectives common to all during a pandemic are to survive without infection, to help the infected, to support the medical services and to impede the economic recession of countries.

However, the blockades introduced by governments have disorganised the functioning of societies to date, causing a growing economic collapse and a record

rise in unemployment (Bakar, Rosbi, 2020). The pandemic was defined as the most prominent global crisis of the century (Tabish 2020b), not only in economic terms but also affecting the mental condition of entire societies. In addition to a state of a permanent health threat and fear of death, changes in behavioural patterns, and cessation of normal daily functioning that can lead to serious mental health consequences (Galea et al., 2020). The introduction of total quarantine, closure of schools and workplaces, prevention of travel, increased the fear of illness, fear of losing loved ones, and depression after the loss of friends and family members, represent essential factors contributing to the mental health condition (Fardin 2020).

### 3. Pandemic and social space

Social space is produced by people living and operating in real social structures (Jałowicki 1988). It is the result of relations between the actors who produce it, and it is a sphere of co-existence of many trajectories of changes taking place, and – what is essential – it is always in the process of becoming. Social space reflects the preferences and aspirations of the social group for which it has exceptional value and is considered by that group as its own. However, the same physical space may have a completely different value for different groups (Rykiel 2008).

It should be noted here that there is a fundamental difference between geographical and social space. Geographical space is a part of the universe that man tries to know, tame, describe but does not necessarily intend to arrange or transform it. The overriding concept is the universe, which has a superhuman scale. Geographical space is an element of the universe; it has a human dimension, available in a physical, worldview and intellectual sense. The dualism of the natural world and the world of culture permeating it determines the most critical plane of relations: social space. This space is a derivative of culture, a derivative of the value system of the group that creates it. It is the result of a relationship and thus is a relational space (Rykiel, Pirveli, 2005).

Creating a space of shared culture, values and experiences is a process that requires commitment and respect for the ideas familiar to people create the space. However, events and processes that cause fear and uncertainty make it possible for each individual to experience these events in different, difficult to predict ways (Rid-

dell 2020). The pandemic has affected the mental condition of people under quarantine or mandatory homestay. Fear of isolation, racism, discrimination and marginalisation with all its social and economic consequences are fundamental phenomena observed with the identification of a new outbreak coronavirus (Dubey et al., 2020).

During the development of the pandemic, significant changes could be observed which the relational nature of constructing common spaces suffered. The relational space of citizens was reduced to houses, flats and roads to work. Permanent public places, where both work and leisure time have been spent so far, where values constructing a given community were produced and nurtured, were closed (Zaremba 2020); cultural, entertainment, catering and commercial activities were limited (*Ograniczenia...*, 2020).

In social discourse, the notions of distance (in this context keeping a distance of about 2 m from other users of public places), isolation and quarantine have grown in importance, which began to define the limits of interpersonal contacts, the necessary resignation from a bunch of cultural events (concerts, sporting competitions, joint stays in cinemas, theatres and others, but also playgrounds, kindergartens, schools, and universities). There were also calls for voluntary isolation from other participants in social life as part of infection prevention, as well as the introduction of mandatory institutional isolation for people suspected or diagnosed with SARS-CoV-2 infection. The preventive measures were introduced include moving work to home, closing schools and switching to online education, cancelling or postponing the dates of conferences and other large meetings (Maragakis 2020). The coronavirus pandemic has become a test of cooperation between social groups and entire nations in the face of a common challenge (Bachelet, Grandi, 2020).

However, already during the first weeks of the pandemic's development, social production of *social ghettos*, i.e. environments that are socially conditioned and exclude individuals living in a given space, could be observed (Pirveli, Rykiel, 2007). These were observed both in the form of institutional activities: full lockdown of cities, districts, creating specialist hospitals for Covid-19 patients, as well as non-institutional activities resulting from irrational anger towards the infected, ostracism

towards foreigners (Matys 2020) and also towards people working with Covid-19 patients, or only those suspected of being infected (Dubey et al., 2020).

Fear and uncertainty over the developing pandemic caused people of Asian origin to be treated as “scapegoats” to whom anger and hostility were directed (Bachelet, Grandi, 2020). In Poland, since the middle of May, the Silesian voivodeship has become a place covered by the stigma of the plague in the consciousness of many people, and the pandemic itself triggered a wave of internet hate on miners and more broadly Upper Silesians (Turecki 2020). Similar behaviours could be observed in many places around the world (Dedgaonkar 2020; Ryall 2020; Sharma 2020). The scale of social exclusion increased with the increase in the number of infections (He et al., 2020), especially towards ethnic minorities and people from marginalised environments (Kantamneni 2020).

Positive behaviours have also been observed, which are conducive to a collective experience of a “hard time”. For many people, the realisation of goals, personal needs and social contacts has been transferred to the virtual world, which has become not new, but a particularly important place of “becoming” a new social world. An essential role in nurturing values should be attributed to the creation of opportunities for remote learning, remote working, contacts via the internet, but also to the creativity of people who have been obliged or forced to isolate and, at the same time, creating balcony spaces of joy, hope, community, support and exchange of experienced emotions; concerts and balcony events (Bliss 2020; Sós 2020; Traverso 2020; Werf 2020). However, these behaviours were rare, and every manifestation of the community was widely commented on in the media, which suggests, on the one hand, the rarity of such behaviours and, on the other hand, confirms the readiness to tame a new, stressful situation and create new important spaces, especially in such unforeseen circumstances.

#### **4. Pandemic as an anomie**

Culture and society are inextricably linked categories. Just as the culture would not be able to be created without the participation of the human factor, the functioning of man among other people without the patterns that culture produces would be full of chaos, emptiness and uncertainty.

Anthony Giddens points out that culture, as one of the most widely used concepts in sociology, includes all types of human activity and refers to the lifestyle of both individuals and groups within which they function. Culture defines important community ideas contained in recognised values and norms, provides a model of interaction with the world, sets rules of behaviour according to these values, introduces order and gives a sense of security in mutual relations (Giddens 2001). Other authors presented a broad analogous approach to culture. According to Edward B. Taylor (1871), culture is a complex whole consisting of knowledge, beliefs, art, morality, law, customs and other skills and habits acquired by people as members of society. According to Jonathan Turner (1994), culture provides patterns of behaviour, indicates the right types of interaction between people and directly influences the creation of structures in contemporary societies (Turner 1994). Culture contains everything an individual should know in order to participate in social life in a way that is acceptable to members of a given community (Goodenough 1964).

In other words, the culture of a given community consists of a set of cultural norms (goals) and sanctioned possibilities of achieving them. Objectives are ordered in the hierarchy of values adopted in this community, and they are the basic principles of group life. The second element of the cultural structure determines and regulates how to achieve these goals. In each social group, their achievement is determined by rules rooted in customs or institutional regulations (Merton 1938).

According to Ruth Benedict (1971), however, an essential element of human nature is the fact that the whole of the created culture consists of endless combinations of its components. Taking into account the fluidity and dynamics of society, it can be assumed that the relationship between behaviour and the products of culture is also being transformed; patterns of behaviour are continually being modelled, some views and attitudes are being accepted, and others are being criticised and rejected until new products are transformed again (Benedict 1971). Thus, in the event of a sudden change caused by various factors (including wars, natural disasters, economic diversification and political system changes), cultural goals or ways of achieving them, or both, maybe transformed (Merton 1938). For example, as in the case of a pandemic, the cultural objectives remained somewhat similar to those before the



pandemic, but new ones have also emerged (e.g. stopping a pandemic threatening the whole of humanity, avoiding infections or survival). Some individuals or groups with the ability to adapt to new circumstances have no difficulty in doing so (e.g. have good access to medical facilities, have a permanent job, are young and resistant to infections, have commercial facilities). However, for people so situated in society that they do not have full access to the possibility of achieving these goals, criticism of previously unaccepted attitudes may change, which may result in the search for other ways to achieve the updated goals. As a consequence, this may lead to the breaking down or dramatic weakening of social bonds that are the source of morality (Merton 1938).

According to Raphael de Oliveira Reis (2020), the social consequences resulting from the spread of COVID-19 are an exemplification of the anomy, a progressive social disintegration and the intensification of numerous problems, including the economic crisis, unemployment, inflation, taking up behaviours resulting from atavistic life protection instincts. The collapse of the global economy may result in the sense of helplessness, permanent sadness, lack of perspectives which may encourage suicidal behaviour, breaking law, including the use of weapons, seeking relief in drugs, especially by individuals who have lost a stable source of income due to unemployment or a deepening recession (Auerback 2020).

The etymology of the term *anomy* is derived from the Greek language; it denotes a state of “lawlessness” and serves to describe the situation in a given society where, as a result of the fall of generally accepted norms and principles, the sense of instability, uncertainty and alienation increases (Garfield 1987). In sociology, this term was first used by Émile Durkheim (1893) in his work *De la division du travail social*. This author defined society as a set of ideas, feelings, beliefs and values that define patterns of social interaction. He argued that order and stability in society are maintained through social integration and balance, in the maintenance of which the developed and respected patterns of behaviour in each nation play a key role. He also noted that the intensive changes occurring in a developing society are influencing the emergence of new problems. As a result of the development of modernity, the traditional points of reference and norms set by religion have collapsed, which



means that many members of modern societies are doomed in their everyday lives to a sense of nonsense (Durkheim 1893). Considering society as a whole, which is affected by all processes occurring within, É. Durkheim noted that the inability to satisfy the needs arising in social systems (e.g. the need for stability, predictability and sense of security) might contribute to the emergence of anomie states (Durkheim 2003).

Robert K. Merton continued É. Durkheim's analysis. The anomaly in R. Merton's view (1938) relates to a state in which, because of the changes taking place, members of a given community have been deprived of the possibility of achieving culturally imposed goals through socially accepted means. Deviant behaviour, according to this theory, is a "normal" reaction to anomalous states for people undertaking such behaviour (Merton 1938).

Two terms are essential in explaining the origin of the anomaly: *social structure*, i.e. an organised conglomerate of social dependencies, and a *cultural structure* that consists of goals, values and norms common to the members of a given society, as well as the commonly respected means of achieving them (Merton 1938). The culturally imposed *rules of the game* within a society's transformations can lead to an increase in strong motivation tension among its members, especially when "there is a strong discrepancy between cultural norms and objectives and the socially structured capacities of its members according to these norms" (Merton 2002: 225-226). According to R. Merton, the tension associated with experiencing an anomaly must be reduced; the methods of adaptation to the transformations taking place may be correct or incorrect (leading to deviation). In his considerations, he indicated five available adaptive solutions, each of which leads to achieving the goal (tension reduction) in different ways, depending on the acceptance or rejection of both cultural goals and available institutionalised means necessary to achieve them.

The symbols in Table 1 indicate acceptance (+), rejection (-), abandonment of existing values (+/-), and replacement with new ones (+/-).

Table 1. Modalities of individual adaptation to anomie

Adaptation methods	Culture goals	Institutionalised means
conformity	+	+
innovation	+	-
ritualism	-	+
retreatism	-	-
rebellion	+/-	+/-

Source: Merton 1938: 676

Summing up the theory of social anomie, É. Durkheim wrote that its source is chronic normative deregulation, while R. Merton visualised it as the outcome of the gap between the norms and goals of the community and the means available (or not) to achieve them (Bernburg 2002). In the conducted and presented studies, theoretical assumptions, according to R. Merton, were used.

## 5. Participants and methods

### 5.1. Aim

The present study aims to determine the ways of adaptation of the respondents to the circumstances related to the SARS-CoV-2 pandemic. The theoretical framework of the research was Robert K. Merton's theory of anomie. Referring to the assumptions of this theory, current cultural goals were presented, and the institutional means to achieve them were indicated, as well as indicators of five ways of adapting to changing conditions were established. The cultural objectives presented in Table 2 have been defined based on observations of the changes occurring due to the development of the pandemic; the increasing number of infections, the incidence of Covid-19, the lockdown many cities, mandatory quarantine and the need to help both the sick and those who help them in their treatment. Institutional methods of achieving the indicated objectives established both based on the introduced restrictions and the opportunities offered (e.g. online education and online work).

Table 2. Cultural goals and individual adaptation to anomie during the SARS-CoV-2 pandemic

Cultural goals	Institutional means to achieve them
Stopping the pandemic, reducing the development of infections, helping the sick, supporting medical services, protecting self and others, stopping the economic recession, maintaining the social order.	Government regulations, restrictions on the purchase of goods, closing of malls, closure of cultural facilities, limiting the number of customers in shops, restriction of gatherings, the possibility to participate in religious rituals through the media, restrictions on public transport, quarantine, online education, remote working.
Indicators of ways to adapt to the anomie	
Conformity	Acceptance of regulations, enhanced hygiene, avoidance of gatherings, acceptance of quarantine, volunteering to help the sick and senior citizens.
Innovation	Willingness to pay for the virus tests even though they are not available to others, e.g. medical services, buying large quantities of food and hygiene products.
Ritualism	Participation in liturgical rites, visiting parents.
Retreatism	Indifference to the objectives and the means available to achieve them.
Rebellion	Disregard of objectives and findings, breach of the quarantine status, orientation towards financial benefits, attending public places without the necessary protection (masks, gloves), failure to apply the rules.

Source: Own list

Indicators of adaptation methods (according to R. Merton theory) were determined arbitrarily based on observations and review of publications. Details are presented in Table 2.

## 5.2. Questionnaire

Based on the adopted indicators of conformism, innovation, ritualism, retreatism and rebellion, a questionnaire form was constructed, which was used to know the ways of adapting the respondents to the pandemic. The prepared form consisted of 31 questions (26 single-choice questions, two questions with the possibility of indicating several answers and three metric questions (gender, the field of study and place of residence)).

## 5.3. Sampling procedure

A purposeful sample selection was used, which was conditioned by the availability of respondents, and a survey was conducted among students from Iraq and Poland. The decision to make a deliberate and therefore not random selection was made due to difficulties in direct contact with the respondents resulting from the introduced quarantine and the lack of possibility to apply random selection (not every student has access to the internet, so units which could not participate in the sample could be drawn). The participants were mainly students of medicine (the University of Baghdad and other medical universities from Iraq), sociology, and social work (the University of Rzeszów in Poland) and students of several universities from Cracow in Poland. Using this selection, the aim was to identify relationships in attitudes resulting from cultural differences (Iraqis and Poles), as well as identifying differences associated with the field of study of the respondents. Students were sent information about the implementation of the research via e-mail with a request to consider participation in the project. In the next message, a link to the questionnaire was sent, which was available for electronic completion. A total of 502 students participated in the research, including 237 from Iraq and 265 from Poland. The survey was distributed from 30<sup>th</sup> of March to 16<sup>th</sup> of April 2020, via the Google Forms internet platform, and the students were informed about the voluntary participation in the project while being anonymous.

#### **5.4. Research questions**

The following research questions were formulated:

- (1) Do the respondents use institutional ways of adapting to the pandemic?
- (2) Do the respondents undertake deviant methods of adapting to a pandemic (innovation, ritualism, retreatism, rebellion)?
- (3) Are there statistically significant differences in compliance with the new rules related to the reduction of infection risks between students from Poland and Iraq?
- (4) Are there statistically significant differences between the field of study and observing the basic rules for reducing infections?
- (5) What is the relationship between the gender of the respondents and observing the basic rules for reducing infections?
- (6) What is the relationship between the place of residence and observing the basic rules for reducing infections?

#### **5.5. Statistical analysis**

The data were coded and analysed using IBM SPSS Statistic 20. The statistical significance of the relationship between variables was determined using the chi-squared test ( $\chi^2$  test) while implementing Cramér's V coefficient as the measure of the strength of association. The values of  $p \leq 0.05$  were assumed to be statistically significant.

## **6. Results**

### **6.1. General data**

A total of 502 people participated in the research, 53% of whom were students from Poland, and 47% from Iraq. Females prevailed, accounting for three-quarters of the research sample (75%). Taking into account the field from which the respondents were recruited, almost half (47%) were students of medicine, 33% of social work, 10% of sociology and 10% represented other faculties (mainly philosophy, economics, law and psychology). One-third of the respondents (33%) were residents of cities sized over one million inhabitants, the second group in terms of numbers were respond-

ents living in rural areas (28%), followed by residents of cities between 50,000 and 500,000 people (18%), residents of small towns – up to 5,000 people (12%), and living in cities between 0.5 and 1 mln people (9%).

Most respondents (52%) followed the development of SARS-CoV-2 infections from the first information about the outbreak in China. Similar percentages were interested in this topic since the virus appeared in Europe (20%) or since the first infections in their country (21%). Others were those who drew attention to the epidemic when the virus appeared in their region (3%). Some students indicated that they were not interested in the topic (over 4%).

In the test sample, only two individuals (0.4%) reported that a member of their family was infected with the coronavirus, and the same number reported that a member of their family died of COVID-19. Seven percent admitted that they know people infected with SARS-CoV-2 in person.

Seven percent of respondents admitted that they were terrified of getting sick, 71% also confirmed their fears of the infection, but indicated that they were actively doing their best to prevent it from happening. One-fifth of respondents did not have such fears (these data are discussed in detail in further analysis).

The respondents most often found out about the current epidemiological situation by following the media (73%) or social media (61%). Obtaining information from friends was indicated by a quarter of the total respondents' sample (25%), and 15% using other sources of information. During quarantine, respondents most often browse social networking sites (62%), learn (58%), browse the internet (56%), spend time with their families (55%), watch TV (54%), clean (52%), cook (51%), read books (50%), play video games (26%), practice sports (15%) and do other activities, most often work-related (10%). The answers to the two issues do not add up to 100% because the respondents could indicate several answers.

Almost everyone (99%) agrees that it is crucial to comply with the introduced rules and regulations, but 28% of respondents believe that the government's actions to prevent the development of infections are inappropriate. Nineteen percent of respondents decided to help people in need of help (the elderly and the sick) as part of volunteering. Eighteen percent believe that the pandemic cannot be stopped.

## 6.2. Conformist behaviours: adapting to the new rules

According to the adopted assumptions (Table 2), the conformist behaviours are mainly the adaptation to the new rules introduced (observing physical distance of 1.5-2.0 m from others, quarantine or avoiding gatherings), and increased hygiene (wearing protective masks, disposable gloves, using disinfectants, washing and disinfecting purchases). Tables 3 and 4 show the answers to the questions on how to comply with these principles.

Table 3. Respecting with restrictions on contact with other persons

Restrictions	Answers			
	Avoidance of deliberate meetings	Strictly 88%	Meeting with friends 9%	
Compliance with the quarantine	Strictly 44%	Shopping and helping others 48%	Sports activities 6%	Disregarded 2%
	Avoidance of public places	Yes 98%		No 2%
Leaving the house without a cause	Yes 13%		No 87%	
	Recognition of the new rules	Yes 72%		No 28%

Source: Own research

As can be seen in Table 3, the vast majority of respondents avoided meetings, and only a small fraction of them did not give up meetings with friends. Almost half of the respondents strictly observed quarantine, and the vast majority of respondents avoid public places. In their answers to the question about the current form of transport, they used to travel away from home, 2% indicated that they travelled by public transport, 42% indicated they used their cars, and 56% indicated they did not leave home.

In table 4, answers to questions are presented about preventive behaviour which can protect against pandemic development.



Table 4. Preventive measures to prevent infections

Forms of prevention	Answers			
	Hygiene compliance	More than before the pandemic	As before the pandemic	If circumstances allow
65%		26%	9%	1%
Use of protective masks	Always	When leaving home	Sometimes (shops, public transport)	Disregarded
	1%	25%	25%	49%
Use of protective gloves	Always	When leaving home	Sometimes (shops, public transport)	Disregarded
	3%	30%	37%	30%
Use of hand disinfectants	Always	After touching things outside	I do not use because I do not have	Disregarded
	29%	58%	10%	3%
Disinfection of purchases	Always	Sometimes		Disregarded
	46%	35%		19%

Source: Own research

As can be seen, most respondents follow basic hygiene rules more than before the pandemic. Similar percentages use masks and protective gloves; the vast majority are disinfecting their hands and shopping. With each question, one can also see answers confirming that these rules are not followed, suggesting that they are being disregarded. The data concerning the fact that a half of the respondents gave up wearing protective masks, the validity of which has been confirmed (Cheng et al., 2020; Phan, Ching, 2020) are particularly worrying. Conformist attitudes were also confirmed by more than half of the respondents (52%), who gave up participating in religious rituals in places of worship and fulfil their religious needs through the media.

When asked about maintaining direct contacts with their parents, the vast majority of the respondents (82%) confirmed that these contacts are maintained because they live with their parents, and 4% reported that they gave up direct meetings altogether, doing shopping for their parents without personal contacts with them. More-

over, 87% of the respondents confirmed that, in the last few weeks, they had not left home without special justification for doing so.

### 6.3. Other methods of adaptation to the pandemic

Tables 3 and 4 (in the right-hand columns) show the answers indicating non-compliance with the rules: 3% admitted that they do not avoid larger gatherings, 2% do not respect quarantine and move freely in public places, 13% leave the house without special justification, and 28% consider the restrictions to be unnecessary. In questions concerning preventive hygiene, only 1% of respondents indicated that they do not follow basic rules, and only 3% do not use hand disinfectants. However, almost a half admitted of the respondents not wearing protective masks, almost a third admitted not using protective gloves, and one in five did not wash or disinfect the purchases they brought home.

Twenty-two respondents (4.4%) admitted they are not at all interested in information about the pandemic and therefore do not follow the media describing the development of infections, while 23 people (4.6%) do not believe they can get COVID-19. Seventeen percent of the respondents also stated they are not afraid of the infection and the disease.

Forty percent of respondents admitted they have made stocks of food products and systematically replenished them, and 30% that they have stocks of hygienic and cleaning products, also systematically replenished. The others either did not see the need to make such stocks or used the goods they bought based on the *herd instinct*, after the first information about the pandemic in their region.

When asked about their views on the overpriced internet trading in safeguards, a vast majority (71%) agreed that the traders should be punished, 21% said they did not care, and 8% said it was an exciting way to make money.

When asked for their opinion on the idea of deliberately not restricting contacts so that society itself can acquire resistance to SARS-CoV-2 (i.e. the survival of the fittest) and leading to the status of a "herd immunity", 82% thought it should not be introduced, 7% said they did not care, and 11% said it was an excellent idea.

A quarter of the respondents (25%) were willing to pay much money for the possibility of testing for SARS-CoV-2.

When examining the behaviour adopted as indicators of ritualism, it was found that despite the attention paid to the risks to the elderly, 12% of respondents admitted they continue to visit their parents. Nearly one in eleven (9%) did not resign either from participating in religious rituals in places of worship, although this could be done virtually via the media.

#### 6.4. Differences in respecting the new rules between students from Poland and Iraq

During the analysis of the results, it was found that Iraqi students are much more compliant with the rules of the current quarantine than students from Poland. Similar indications concern compliance with the rules of preventive hygiene. Detailed data and statistics concerning these statements are presented in Table 5.

Table 5. Differences in respect of rules by countries

Rules	Poland	Iraq	p-value; Cramer's V
	%		
Quarantine	19	71	$\leq 0.05$ ; 0.531
Avoidance of being in groups	34	62	$\leq 0.05$ ; 0.289
Wearing of protective mask	6	46	$\leq 0.05$ ; 0.532
Wearing of protective gloves	20	42	$\leq 0.05$ ; 0.305
Hand disinfection	23	42	$\leq 0.05$ ; 0.204
Disinfecting purchases	29	64	$\leq 0.05$ ; 0.365

Source: Own research

### 6.5. Differences in respecting the rules between students of different fields of study

When checking the correlations between the respondents' field of study and compliance with the rules, statistically significant differences were also found. Medical students were much more likely to follow the introduced rules than respondents from other faculties. The differences and statistics concerning these statements are presented in Table 6.

Table 6. Differences in respecting the rules in fields of study

Rules	Medicine	Sociology	Social work	Other	p-value; Cramer's V
	%				
Quarantine	73	22	15	29	$\leq 0.05$ ; 0.316
Avoidance of being in groups	63	27	29	54	$\leq 0.05$ ; 0.232
Wearing of protective mask	45	8	3	21	$\leq 0.05$ ; 0.308
Wearing of protective gloves	41	18	20	23	$\leq 0.05$ ; 0.178
Hand disinfection	35	16	23	33	$\leq 0.05$ ; 0.127
Disinfecting purchases	63	29	28	36	$\leq 0.05$ ; 0.282

Source: Own research

### 6.6. Differences in respecting the rules and gender of respondents

No statistically significant differences were found when checking the relationship between the gender of respondents and in correspondence with respecting the rules. Similar percentages of both women and men confirmed the rules were observed. Therefore, gender was not recognised as a variable differentiating the respect of the rules introduced.

### 6.7. Differences in respecting the rules and place of residence of the respondents

When checking the relationship between the respondents' place of residence and compliance with the new rules, statistically significant differences were found. Students living in large cities were much more follow the recommended quarantine than respondents living in smaller towns. Inhabitants of large cities also much more often than those of smaller towns and villages avoid being in larger groups of people and much often wear protective masks when leaving home. Similar indications apply

to wear protective gloves, as well as to disinfect hands, and wash and disinfect purchases brought home. Detailed results and statistics of these statements are presented in Table 7.

Table 7. Differences in respect of rules and the place of residence

Rules	Village	City <50,000 inhabitants	City 50,000 to 500,000	City 0.5 to 1 mln	City >1 mln	p-value; Cramer's V
	%					
Quarantine	20	24	42	56	70	≤0.05; 0.256
Avoidance of being in groups	33	34	42	62	63	≤0.05; 0.186
Wearing of protective mask	4	3	26	35	48	≤0.05; 0.297
Wearing of protective gloves	17	24	32	26	45	≤0.05; 0.171
Hand disinfection	19	25	27	40	37	≤0.05; 0.121
Disinfecting purchases	32	25	45	51	64	≤0.05; 0.217

Source: Own research

## 7. Discussion

It should be noted that research in both Poland and Iraq was carried out at the beginning of the development of SARS-CoV-2 infections. On the 30<sup>th</sup> of March, the virus infected 2055 individuals and killed 31 (Medonet 2020). Epidemiological data from Iraq on the same day confirmed the detection of infections in 630 people, and the balance of deaths as of the 30<sup>th</sup> of March was 46 (Worldometer 2020). The situation, therefore, concerned the first weeks of the pandemic.

On the 24<sup>th</sup> of February 2020, the Iraqi Ministry of Health reported the first official case of SARS-CoV-2 in Iraq, although some data indicate that the first case of the virus in Iraq had been detected two days earlier (Al-Kuraishy, Al-Gareeb, 2020). As early as the 27<sup>th</sup> of February, schools, universities, and cinemas were closed in Baghdad, and public gatherings, including those of a religious nature, were banned throughout the country. In the following days, depending on the region of the country, further restrictions were announced, including the introduction of a curfew throughout the country until the 11<sup>th</sup> of April 2020 (Bhatia 2020). The restrictions

were also concerning the alternative methods of the burial of people who died as a result of COVID-19 (Karim 2020).

In Poland, the first case of infection was reported on the 4<sup>th</sup> of March. From the 14<sup>th</sup> to 20<sup>th</sup> of March, an epidemic emergency was in force in Poland: border controls and a mandatory 14-day quarantine for returnees were introduced, international air and rail connections were suspended, the operation of shopping malls was restricted, and catering facilities were closed (Świdrak 2020). On the 20<sup>th</sup> of March, the state of an epidemic was declared, under which the existing restrictions were maintained, and new ones were introduced (Kudelska 2020). The new regulations required the observance of quarantine, avoidance of gatherings, and maintaining a safe physical distance from others when having to leave home. Penalties were introduced for non-compliance with the new regulations, and even prison sentences of up to eight years for bringing about an epidemiological threat (Gmiterek-Zabłocka 2020).

Based on the results of the research, both Polish and Iraqi students were not too difficult to comply with the new rules and the required hygiene measures. The indications of deviant attitudes (other than conformist attitudes) occurred rarely, and the respondents usually strictly followed the introduced regulations. However, these attitudes could change with the prolonged duration of the restrictions. However, in order to verify this assumption, further research is necessary.

In China, the first study of social attitudes towards the COVID-19 epidemic was conducted in early 2020. In the sample covered by the study (N=6910), it was found that the introduced restrictions on movement throughout China, as well as the closure of cities and districts in the Hubei province, increased optimism and the level of confidence of the Chinese in the fight against the COVID-19. Most of them have abided to the strict prevention and control measures introduced by the authorities. However, it was found that some of the respondents acted at their discretion: 3.6% of the respondents were in crowded places, and 2.0% of those leaving their house did not use protective masks. These behaviours occurred mainly in men, people with a superficial knowledge of COVID-19 and students. Students who were more likely to stay in crowded areas and not to use masks when leaving home were associated with higher infection rates (Zhong et al., 2020). These results are, therefore, similar to

those in the current study and can be considered as potential behaviours that can occur in any community.

However, it is much more dangerous if behaviours that threaten social order begin to occur, and behaviours which can also encourage an increase in infections. The theory of anomie is illustrated by the experiences, behaviours and actions observed in many countries with increasing numbers of infections. Rajmund Klonowski conveyed the ideal message in its simplicity: “Times of crisis are connected with anomie – the phenomenon of the disappearance of social norms and institutions, caused by general confusion and change of prevailing relations. Antisocial behaviour always becomes more visible on this occasion. Nevertheless, one type of behaviour is that of the outcasts of society, who throw themselves with knives in quarantine, and the other is that of individuals who are so overwhelmed by prosperity in their heads that they think they are above society, so they do not have to follow its norms” (Klonowski 2020).

Examples of such behaviour can be observed in many parts of the world. Taking advantage of the chaos caused by the pandemic, the thieves robbed a gallery in Stockholm, stealing sculptures by Salvador Dali. At the beginning of March 2020, the robbers broke into the Singer Laren art gallery in the Netherlands and stole Vincent van Gogh’s painting and, in mid-March, three other paintings were stolen from Oxford College (Dumas 2020). In some regions of the United States, the number of robberies, car thefts, and other minor crimes increased (Sheets 2020). An increase in domestic violence was also observed in many regions of the world (Young et al., 2020).

According to a survey by Retail Economics, one in ten consumers in the United Kingdom is stockholding (Wilson 2020). Moreover, according to Adobe Analytics, online shopping increased by 817% in February 2020 compared to the previous month (Murphy, Tyko, 2020). To stop the over-purchase of food and cleaning products, some retailers have introduced new rules, for instance, in the UK, a decision about the limited purchase of goods was introduced in the Tesco store chain (possibility to buy no more than five specific goods, including antibacterial gels, cloths and sprays, dry pasta, UHT milk and some preserved vegetables (Wilson 2020). Similar decisions were made in early March 2020 by US store chains, where they introduced



limits for the purchase of disinfectants, protective, hygienic and other products, the supply of which increased spectacularly (Murphy, Tyko, 2020).

The psychological consequences associated with the development of the pandemic have been described in only a few studies carried out, especially among the first infected populations. A study conducted among 1210 Chinese people from 194 cities at the beginning of the pandemic found that many of the surveyed reported moderate or intense anxiety (54%), depressive symptoms (16%) and stress (8%) (Wang et al., 2020). Observers also point to increasing fear toward people in contact with patients, especially medical services, as well as family members of infected people, about the risk of new coronavirus infection (Wyrwał 2020). Behaviour discriminating against such people, e.g. from the owners of the apartments they rent, as well as some employers forcing family members of sick people to stop working, has been described as *coronaphobia* (Haktaniyan 2020; Kumar 2020). In some European countries, and also in Australia and the United States, coronaphobia is combined with an increase in racist behaviour towards foreigners, especially those with the “Asian appearance” (Abbany 2020; Asmundson, Taylor, 2020; Manning 2020).

It is also dangerous for the social well-being to declare to the public that there is no threat, and to ignore the possibility of infection. The Brazilian President, a representative of the far-right party, believes that the pandemic crisis is a media trick (Phillips 2020). The behaviour of Alexander Lukashenka, President of Belarus, who publicly ridiculed the world’s fears of a rise in COVID-19 by calling it “a mass psychosis”, was also surprising. Before the hockey match in which he took an active part, he confessed to the reporter: “There are no viruses here. Did you see any flying around? I do not see them either” (Karmanau 2020). He also said: “It’s better to die standing than to live on your knees” (ibidem). All of these attitudes and a lack of action represent confusing and irrational irresponsibility towards the SARS-CoV-2 pandemic.

## 8. Conclusion

Every sudden social change, in which both the aims of human activity and the ways of achieving them change, is perceived by society with different dynamics. Sometimes, the goals that are promoted socially exceed the ability of each member of

the community to achieve them and thus encourage all possible methods of achieving them, not necessarily per the generally accepted principles (Wrzesień 2019). A pandemic is a difficult time for society, and the difficulties in adapting to sudden changes in priorities vary in intensity. Common sense prevails, most people adapt to new circumstances and comply with new rules. However, some behaviours are an expression of rebellion and defiance, e.g. failure to comply with generally accepted rules (e.g. unwarranted leaving home).

Some behaviours may be an example of innovation in achieving new goals because they are achieved following their own rules (e.g. attempts to get rich by selling scarce goods). In Spain, where a ban on leaving home for no reason has been introduced, dog owners rent their pets to people who want to walk. Similar behaviours were observed in Poland (Chełmiński 2020). Some behaviours (visiting parents, participating in religious rituals in places of worship) confirm that it is difficult to get rid of existing habits. Since the introduction of restrictions, examples of such behaviour can be seen in many countries.

There are also examples of other behaviours that are positive and in line with generally accepted principles, and which are helpful to confirm social solidarity. Italians have been organised singing from their balconies across the country, to boost morale among citizens (Kearney 2020). Artists of the music scene offered their fans free online concerts (Gardner 2020). Many TV programmes, films and theatre performances have been made available online free (Keveney, Truitt, 2020). In many places in the world, there are also initiatives to help those in need of support during a pandemic. There are many attitudes of empathy and solidarity (Gallagher, 2020; Goldsmith et al., 2020; Kolirin, Khaliq, 2020).

The survey among Iraqi and Polish students show that compliance with the new rules is not a problem for most. Many of them are also involved in helping others. It should be noted, however, that the research among students was conducted during the first wave of the great fear of getting ill. As already mentioned, these are commonly observed behaviours. However, when such a state lasts too long, impatience, boredom and habituation to the state appear, which, in turn, may contribute

to another change in the methods of adaptation to new, admittedly dangerous, but already tame circumstances.

Authors of internet publications often express their longing for places considered before the pandemic as a friendly and safe social space where the individuals who created it combined trust and strong ties. There is also noticeable anxiety caused by uncertainty and anxiety about the loss of mental comfort and the space of normal functioning created, often for years. Therefore, projects are undertaken in which proposals are made, e.g. for a new arrangement of the space of shared living during work, which also pay attention to mental safety that fosters good social interaction (*Together Again...*, 2020).

The prognosis of the relationship between individuals and groups that have constructed the environment in which they meet suggests that the road to “normality” will be long and not smooth. One can count on the new rules, which were in force during the first wave of the pandemic, to become a permanent habit for a part of society. For the second part, however, the need to take part in sporting events, music festivals, collective worship, joint leisure, in general – staying together and sharing the same emotions – may be much more durable than the need to be cautious, and thus encourage the emergence of new outbreaks of infection, which may influence of negative on the space created – along with norms, prohibitions and restrictions that will have to be introduced again for the sake of safety (*Far from the...*, 2020). The social world created in the course of interaction faces significant challenges in which safety and avoidance of infections have got a priority.

## 9. References

- Abbany Z., 2020: *Corona-phobia: Like SARS, coronavirus fear feeds racism*, 04.02.2020; <https://www.dw.com/en/corona-phobia-like-sars-coronavirus-fear-feeds-racism/a-52252908> 11.04.2020.
- Al-Kuraishy H. M., Al-Gareeb A. I., 2020: *From SARS-CoV to nCoV-2019: Ruction and Argument*. “Archives of Clinical Infectious Diseases”, 5, e102624; <http://archcid.com/articles/102624.html>.

- Armitage R., Nelluns L. B., 2020: *COVID-19 and the consequences of isolating the elderly*. "The Lancet Public Health"; [https://doi.org/10.1016/S2468-2667\(20\)30061-X](https://doi.org/10.1016/S2468-2667(20)30061-X).
- Asmundson G. J. G., Taylor S., 2020: *Coronaphobia: Fear and the 2019-nCoV outbreak*. "Journal of Anxiety Disorders", 70, 102196; <https://doi.org/10.1016/j.janxdis.2020.102196>.
- Auerback M., 2020: *What Will the Post-COVID-19 Global Economy Look Like?*; 21.03.2020; <https://www.counterpunch.org/2020/03/20/what-will-the-post-covid-19-global-economy-look-like/>.
- Bablani P., Sharma M., Shamsi Y., Kapoor P., 2020: *Emergence of the Coronavirus (SARS-CoV-2) as a Pandemic*. "International Journal of Science and Research", 9, 4, 203-209.
- Bachelet M., Grandi F., 2020: *The coronavirus outbreak is a test of our systems, values and humanity*; 12.03.2020; <https://www.unhcr.org/news/latest/2020/3/5e69eea54/coronavirus-outbreak-test-systems-values-humanity.html>.
- Bakar N. A., Rosbi S., 2020: *Effect of Coronavirus disease (COVID-19) to tourism industry*. "International Journal of Advanced Engineering Research and Science", 7, 4, 189-193.
- Benedict R., 1971: *Patterns of Culture*. London: Routledge & Kegan Paul.
- Bernburg J. B., 2002: *Anomie, Social Change and Crime. A Theoretical Examination of Institutional-Anomie Theory*. "The British Journal of Criminology", 42, 4, 729-742.
- Bhatia N., 2020: *Closures extended to curb Covid-19 in region*; 29.03.2020; <https://www.meed.com/closures-extended-to-curb-covid-19-in-mena>.
- Bliss J., 2020: *Former Nashville Symphony musicians quarantined in Italy create community with balcony concerts*; 11.04.2020; <https://eu.tennessean.com/story/news/local/2020/04/12/coronavirus-concerts-italy-nashville-symphony-musicians/2930404001/>.
- Cheng V. C., Wong S. C., Chuang V. W., So S. Y., Chen J. H., Sridhar S., To K. K., Chan J. F., Hung I. F., Ho P. L., Yuen K. Y., 2020: *The role of community-wide*

*wearing of face mask for control of coronavirus disease 2019 (COVID-19) epidemic due to SARS-CoV-2. "The Journal of Infection", 81, 1, 107-114;*

<https://doi.org/10.1016/j.jinf.2020.04.024>.

Chełmiński J., 2020: *Koronawirus. Na spacer tylko z psem, i to krótki*; 22.03.2020;

<https://warszawa.wyborcza.pl/warszawa/7,54420,25810971,koronawirus-na-spacer-tylko-z-psem-i-to-krotki.html?disableRedirects=true>.

*Coronavirus cases*; 04.05.2020; <https://www.worldometers.info/coronavirus>

[/coronavirus-cases/](https://www.worldometers.info/coronavirus/coronavirus-cases/).

Dedgaonkar S., 2020: *People being ostracised for COVID-19 can now file FIR*; 16.03.2020;

<https://punemirror.indiatimes.com/pune/civic/people-being-ostracised-for-covid-19-can-now-file-fir/articleshow/74642864.cms>.

Dubey S., Biswas P., Ghosh R., Chatterjee S., Dubey M. J. Chatterjee S., Lahiri D.,

Lavie C. J., 2020: *Psychosocial impact of COVID-19. "Diabetes & Metabolic Syndrome", 14, 5, 779-788;* <https://doi.org/10.1016/j.dsx.2020.05.035>.

Dumas D., 2020: *Thieves Stole a Vincent van Gogh Painting Worth Millions Last Week.*

*This Is What Happens Next*; 10.04.2020; <https://www.esquire.com/entertainment/a32098106/vincent-van-gogh-stolen-painting-art-heist-robbers/>.

Durkheim É., 1893: *De la division du travail social*. Paris: Félix Alcan;

<https://archive.org/details/deladivisiondu00durkuoft>.

Durkheim É., 2003: *Les formes élémentaires de la vie religieuse*. Paris: Presses Universitaires de France.

Fardin M. A., 2020: *COVID-19 and Anxiety: A Review of Psychological Impacts of Infectious Disease Outbreaks. "Archives of Clinical Infectious Diseases", 15,*

*e102779;* <http://archcid.com/articles/102779.html>.

*Far from the madding crowd: social space after COVID-19*; 20.04.2020;

<https://www.atb.com/company/insights/the-owl/large-events-and-covid/>.

Gallagher S., 2020: *Coronavirus: how to help the elderly and other vulnerable people during the outbreak*; 15.04.2020;

<https://www.independent.co.uk/life-style/health-and-families/coronavirus-update-help-elderly-people-support-food-banks-uk-a9408871.html>.

- Galea S., Merchant R. M., Lurie N., 2020: *The Mental Health Consequences of COVID-19 and Physical Distancing: The Need for Prevention and Early Intervention*. "JAMA Internal Medicine"; <https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2764404>.
- Gardner A., 2020: *Coronavirus: Every Artist Offering Free Online Concerts While You're Stuck at Home*; 15.04.2020; <https://www.glamour.com/story/coronavirus-all-the-artists-offering-free-online-concerts-while-youre-stuck-at-home>.
- Garfield E., 1987: *The Anomie-Deviant Behavior Connection: The Theories of Durkheim, Merton, and Srole*. "Current Comments", 10, 38, 272-281.
- Giddens A., 2001: *Sociology*. 4th edition. Cambridge: Polity Press.
- Gmiterek-Zabłocka A., 2020: *Kary za złamanie kwarantanny już się sypią*. „Trzeba zapłacić nawet wtedy, gdy ktoś się od niej odwoła”; 02.04.2020; <https://www.tokfm.pl/Tokfm/7,103085,25838503,kary-za-zlamanie-kwarantanny-juz-sie-sypia-trzeba-zaplacic.html>.
- Goldsmith A., Hosken O., Cantrell L., 2020: *How to Help Others During the Coronavirus Outbreak*; 09.04.2020; <https://www.townandcountrymag.com/leisure/arts-and-culture/a31480409/coronavirus-how-to-help/>.
- Goodenough W. H., 1964: *Cultural Anthropology and Linguistics*; in: D. Hymes (ed.): *Language in Culture and Society*. New York: Harper and Row; 36-39.
- Gudi S. K., Tiwari K. K., 2020: *Preparedness and lessons learned from the novel coronavirus disease*. "International Journal of Occupational and Environmental Medicine", 11, 108-112.
- Haktaniyan E., 2020: *'Coronaphobia' spreads quickly among people: Scientist*; 02.04.2020; <https://www.aa.com.tr/en/health/coronaphobia-spreads-quickly-among-people-scientist/1789883>.
- Hawkins B., 2020: *Coronavirus: Champions League and Europa League 'to be SUSPENDED by UEFA after round-of-16 matches' due to COVID-19*; 23.04.2020; <https://talksport.com/football/680575/coronavirus-champions-league-europa-league-suspended-uefa-covid-19/>.

- He J., He L., Zhou W., Nie X., He M., 2020: *Discrimination and Social Exclusion in the Outbreak of COVID-19*. "International Journal of Environmental Research and Public Health", 17, 8, 2933; <https://doi.org/10.3390/ijerph17082933>.
- Huang C., Wang Y., Li X., Ren L., Zhao J., Hu Y., Zhang L., Fan G., Xu J., Gu X., Cheng Z., Yu T., Xia J., Wei Y., Wu W., Xie X., Yin W., Li H., Liu M., Xiao Y., Gao H., Guo L., Xie J., Wang G., Jiang R., Gao Z., Jin Q., Wang J., Cao B., 2020: *Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China*. „The Lancet”, 395, 10223, 497-506.
- Jałowicki B., 1988: *Spoleczne wytwarzanie przestrzeni*. Warszawa: Książka i Wiedza.
- Kantamneni N., 2020: *The impact of the COVID-19 pandemic on marginalised populations in the United States: A research agenda*. "Journal of Vocational Behavior", 119, 103439; <https://doi.org/10.1016/j.jvb.2020.103439>.
- Karim A., 2020: *In Iraq, no resting place for coronavirus dead*; 10.04.2020; <https://www.thejakartapost.com/news/2020/03/30/in-iraq-no-resting-place-for-coronavirus-dead.html>.
- Karmanau Y., 2020: *What virus? Belarus rejects strict measures against pandemic*; 02.04.2020; <https://apnews.com/3f20af7942fee1bdcdbd775824ebb3251>.
- Kearney Ch., 2020: *Italians sing patriotic songs from their balconies during coronavirus lockdown*; 14.03.2020; <https://www.theguardian.com/world/2020/mar/14/italians-sing-patriotic-songs-from-their-balconies-during-coronavirus-lockdown>.
- Keveney B., Truitt B., 2020: *'Disney on Broadway' joins other shows, comic books and audiobooks to enjoy in quarantine*; 17.04.2020; <https://eu.usatoday.com/story/entertainment/tv/2020/03/18/coronavirus-free-tv-movies-stream-you-quarantine-home/5074254002/>.
- Klonowski R., 2020: *Spoleczeństwo czasów zarazy*. "Kurier Wileński", 14, 40; <https://kurierwilenski.lt/2020/04/11/spoleczenstwo-czasow-zarazy/>.
- Kolirin L., Khaliq A., 2020: *The people helping strangers during the coronavirus pandemic*; 26.03.2020; <https://edition.cnn.com/2020/03/26/europe/kindness-coronavirus-strangers-helping-gbr-scli/index.html>.



- Kudelska A., 2020: *Koronawirus – sprawdź co wprowadzenie stanu epidemii oznacza dla przedsiębiorców*; 23.03.2020; <https://www.parp.gov.pl/component/content/article/59130:koronawirus-sprawdz-co-wprowadzenie-stanu-epidemii-oznacza-dla-przedsiębiorców>.
- Kumar A., 2020: *Coronaphobia: Covid-19 warriors live in torment*; 28.03.2020; <https://www.indiatoday.in/mail-today/story/coronaphobia-covid-19-warriors-live-in-torment-1660577-2020-03-28>.
- Lu H., Stratton C. W., Tang Y. W., 2020: *Outbreak of pneumonia of unknown etiology in Wuhan, China: The mystery and the miracle*. "Journal of Medical Virology", 92, 401-402.
- Lytvynenko B., 2020: *Three Major Tennis Tournaments Cancelled Due to COVID-19*; 23.04.2020; <https://thelinknewspaper.ca/article/three-major-tennis-tournaments-cancelled-due-to-covid-19>.
- Manning P., 2020: *Corona-phobia. All in this together, or in danger of turning on each other?*; 03.04.2020; <https://www.themonthly.com.au/today/paddy-manning/2020/03/2020/1585889237/corona-phobia>.
- Maragakis L. L., 2020: *Coronavirus, Social and Physical Distancing and Self-Quarantine*; 25.06.2020; <https://www.hopkinsmedicine.org/health/conditions-and-diseases/coronavirus/coronavirus-social-distancing-and-self-quarantine>.
- Matys A., 2020: *Kwarantanna za ścianą. Ludzie się boją, że koronawirus może być u sąsiada*; 26.03.2020; <https://poranny.pl/kwarantanna-za-sciana-ludzie-sie-boja-ze-koronawirus-moze-byc-u-sasiada/ar/c1-14882521>.
- McCurry J., Ingle S., 2020: *Tokyo Olympics postponed to 2021 due to coronavirus pandemic*; 24.03.2020; <https://www.theguardian.com/sport/2020/mar/24/tokyo-olympics-to-be-postponed-to-2021-due-to-coronavirus-pandemic>.
- Medonet, 2020: *Zasięg koronawirusa COVID-19*; 04.05.2020; <https://www.medonet.pl/koronawirus/to-musisz-wiedziec,zasięg-koronawirusa-covid-19--mapa-artykul,54726942.html#sytuacja-w-poprzednich-dniach>.
- Mekala L., Kumar K. S., Mekala R., 2020: *Is nCov19 (SARS Cov2/ COVID19) A 3rd world war? A review the pros and cons in relation with immunity and LPG (Liberaliza-*

- tion, privatisation and globalisation). "Journal of Entomology and Zoology Studies", 8, 2, 1552-1556.
- Merton R. K., 1938: *Social structure and anomie*. „American Sociological Review”, 3, 5, 672-682.
- Merton R. K., 2002: *Teoria socjologiczna i struktura społeczna*. Warszawa: PWN.
- Murphy C., Tyko K., 2020: *Coronavirus rationing: Target, Walmart limit purchases of hand sanitiser, disinfecting wipes, toilet paper*; 11.03.2020; <https://eu.usatoday.com/story/money/2020/03/11/coronavirus-preparation-walmart-target-ration-limiting-hand-sanitizer-disinfecting-wipes/5020751002/>.
- Ograniczenia działalności gastronomicznej, rozrywkowej oraz funkcjonowania galerii handlowych; 13.03.2020; <https://www.gov.pl/web/koronawirus/ograniczenia-dzialalnosci-gastronomicznej-rozrywkowej-oraz-funkcjonowania-galerii-handlowych>.
- Oliveira Reis R. de, 2020: *Modelo de redação sobre coronavirus*; 13.04.2020; <https://www.estrategiaconcursos.com.br/blog/modelo-de-redacao-sobre-coronavirus/>.
- Park S. E., 2020: *Epidemiology, virology, and clinical features of severe acute respiratory syndrome -coronavirus-2 (SARS-CoV-2; Coronavirus Disease-19)*. "Clinical and Experimental Pediatrics", 63, 4, 119-124.
- Paraskevis D., Kostaki E. G., Magiorkinis G., Panayiotakopoulos G., Sourvinos G., Tsiodras S., 2020: *Full-genome evolutionary analysis of the novel corona virus (2019-nCoV) rejects the hypothesis of emergence as a result of a recent recombination event*. "Infection, Genetics and Evolution", 79, 104212.
- Phan T. L., Ching, C. T., 2020: *A Reusable Mask for Coronavirus Disease 2019 (COVID-19)*. "Archives of Medical Research", 51, 5, 455-457; <https://doi.org/10.1016/j.arcmed.2020.04.001>.
- Phillips T., 2020: *Brazil's Jair Bolsonaro says coronavirus crisis is a media trick*; 23.03.2020; <https://www.theguardian.com/world/2020/mar/23/brazils-jair-bolsonaro-says-coronavirus-crisis-is-a-media-trick>.

- Pirveli M., Rykiel Z., 2007: *Enklawy i eksklawy społeczne późnej nowoczesności*; in: L. Gołdyka, I. Machaj (eds): *Enklawy życia społecznego*. Szczecin: Wydawnictwo Uniwersytetu Szczecińskiego; 95-112.
- Riddel P., 2020: *Why coronavirus lockdown rules will not be obeyed by everyone*; 25.03.2020; <https://theconversation.com/why-coronavirus-lockdown-rules-will-not-be-obeyed-by-everyone-134600>.
- Ryall J., 2020: *Coronavirus in Japan: Arson, ostracism, online attacks against medics, victims*; 14.05.2020; <https://www.dw.com/en/coronavirus-in-japan-arson-ostracism-online-attacks-against-medics-victims/a-53434373>.
- Rykiel Z., *Koncepcje przestrzeni i teorie regionu a wzorce uprawiania socjologii*; in: Z. Rykiel (ed.): *Nowa przestrzeń społeczna w badaniach socjologicznych*. Rzeszów: Wydawnictwo Uniwersytetu Rzeszowskiego; 13-38.
- Rykiel Z., Pirveli M., 2005: *Przestrzeń a środowisko w geografii; ujęcie krytyczne*; in: W. Maik, K. Rembowska, A. Suliborski (eds): *Geografia jako nauka o przestrzeni, środowisku i krajobrazie*. Łódź: Łódzkie Towarzystwo Naukowe; 130-148.
- Sharma N., 2020: *Stigma: the other enemy India's overworked doctors face in the battle against Covid-19*; 25.03.2020; <https://qz.com/india/1824866/indian-doctors-fighting-coronavirus-now-face-social-stigma/>.
- Sheets M., 2020: *Burglaries and car thefts DOUBLE in Queens community hit hardest by coronavirus – while major crime rate across NYC plummets 33% during lockdown*, 10.04.2020; <https://www.dailymail.co.uk/news/article-8206783/Burglaries-car-thefts-DOUBLE-Queens-community-hit-hardest-coronavirus.html>.
- Shereen M. A., Khan S., Kazmi A., Bashir N., Siddique R., 2020: *COVID-19 infection: Origin, transmission, and characteristics of human coronaviruses*. "Journal of Advanced Research", 24, 91-98.
- Snoch-Pawłowska A., 2020: *New restrictions in Poland due to COVID-19*; 11.04.2020; <https://www.umcs.pl/en/noticeboard,17743,new-restrictions-in-poland-due-to-covid-19,89688.chtm>.
- Sós P., 2020: *Impreza w dobie koronawirusa. Kolejna dyskoteka balkonowa w Zielonej Górze (ZDJĘCIA)*; 25.04.2020; <https://www.newslubuski.pl/spoleczne/item/8447->

[impieza-w-dobrze-koronawirusa-kolejna-dyskoteka-balkonowa-w-zielonej-gorze.html](https://www.dobrydziej.pl/impieza-w-dobrze-koronawirusa-kolejna-dyskoteka-balkonowa-w-zielonej-gorze.html).

Świdrak K., 2020: *Stan zagrożenia epidemicznego – co to takiego?*; 13.03.2020;

<https://www.medonet.pl/koronawirus/koronawirus-w-polsce,stan-zagrozenia-epidemicznego---co-to-takiego-,artykul,26683367.html>.

Tabish S. A., 2020a: *COVID-19 Pandemic: Calm before Storm*. "International Journal of Science and Research", 9, 4, 175-179.

Tabish S. A., 2020b: *COVID 19: the worst health calamity of the world*. "International Journal of Scientific Research", 9, 4, 1-4.

Taylor E. B., 1871: *Primitive Culture*. Vol. 1. London: John Murray.

*Together Again: The Future of Shared Spaces in the Office*; 01.07.2020;

<https://www.steelcase.com/research/articles/topics/post-covid-workplace/better-together-future-shared-spaces-office/>.

Traverso V., 2020: *Why do balconies inspire us?*; 10.04.2020; <http://www.bbc.com/travel/story/20200409-the-history-of-balconies>.

Turecki K., 2020: *A co będzie, jeśli lampka zgaśnie?*; 13.05.2020;

<https://wiadomosci.onet.pl/tylko-w-onecie/koronawirus-slask-kopalnie-i-gornicy-pod-ostrzalem/xf6msxz>.

Turner J. H., 1994: *Sociology: concepts and uses*. New York: McGraw-Hill.

Wang C., Pan R., Wan X., Tan Y., Xu L., Ho C. S., Ho R. C., 2020: *Immediate Psychological Responses and Associated Factors during the Initial Stage of the 2019 Coronavirus Disease (COVID-19) Epidemic among the General Population in China*. "International Journal of Environmental Research and Health Public", 17, 5, 1729.

Werf E. van der, 2020: *Watch: Quarantined Italians are singing their hearts out. It's beautiful*; 13.03.2020; <https://www.vox.com/culture/2020/3/13/21179293/coronavirus-italy-covid19-music-balconies-sing>.

Wilson B., 2020: *Coronavirus: Tesco limits sales of essential items*; 08.03.2020;

<https://www.bbc.com/news/business-51790375>.

*Worldometer – Iraq Coronavirus*; 04.05.2020; <https://www.worldometers.info/coronavirus/country/iraq/>.

- Wrzesień W., 2019: O *(de)kompozycjach współczesności*. „Ruch Prawniczy, Ekonomiczny i Socjologiczny”, 81, 3, 251-265.
- Wu J., Gamber M., Sun W., 2020: *Does Wuhan Need to be in Lockdown during the Chinese Lunar New Year?* “International Journal of Environmental Research and Public Health”, 17, 3, 1002.
- Wyrwał M., 2020: *Rozwija się koronahejt na medyków [OPINIA]*; 30.03.2020; <https://wiadomosci.onet.pl/tylko-w-onecie/koronawirus-w-polsce-hejt-w-wobec-lekarzy-pielegniarek-i-ratownikow/des0mdw>.
- Young A., Fevrier C., Cheval S., 2020: *Domestic violence on the rise: Global surge since coronavirus lockdown*; 10.04.2020; <https://www.france24.com/en/20200410-51percent-domestic-violence-on-the-rise-global-surge-since-coronavirus-lockdown>.
- Zaremba M., 2020: *Kina, teatry i muzea w Polsce zamknięte z powodu koronawirusa. Rząd podjął decyzję*; 11.03.2020; <https://zdrowie.wprost.pl/koronawirus/10305822/kina-teatry-i-muzea-w-polsce-zamkniete-z-powodu-koronawirusa-rzad-podjal-decyzje.html>.
- Zhong B. L., Luo W., Li H. M., Zhang Q. Q., Liu X. G., Li W. T., Li Y., 2020: *Knowledge, attitudes, and practices towards COVID-19 among Chinese residents during the rapid rise period of the COVID-19 outbreak: a quick online cross-sectional survey*. “International Journal of Biological Sciences”, 16, 10, 1745-1752.

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