



Article **To Be Scared or Not to Be Scared: Social Representations of COVID-19 in Young People (A Cross-Cultural Study)**

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Abstract: The COVID-19 pandemic is a serious global threat to the world's population. The aim of the presented exploratory study was to reveal and analyse social thinking about COVID-19 in two different cultural contexts: Russia and Malaysia. Social representation (SR) theory is a promising framework to analyse the symbolic response to the global health emergency. This exploratory study was conducted at the time of new COVID-19 variants' emergence, accompanied by quarantine measures, and mass vaccination was not elaborated yet (12 October–15 December 2020). The total sample (convenience sampling) consisted of 349 young adults from Malaysia (n = 195, 35.4% males, 64.6% females) and Russia (n = 154, 10% males, 90% females) aged 17–36 years. Convenience sampling was used to recruit participants, and an online version of the questionnaire was proposed to participants. The free association technique was used as the main tool in order to reveal the content of SRs. This prototypical analysis allowed us to reveal a hypothetical structure of SRs in the two cultural groups. These SR structures in each sample were crystallised around mostly negative elements. While in the Malaysian sample, the key elements were troubling and disturbing (death, pandemic, virus, quarantine), in the Russian sample (quarantine, disease), these elements could be seen as a rationalisation (or even a denial) of the COVID-19 threat.

Keywords: COVID-19; social representation theory; cross-cultural study; social thinking

1. Introduction

The entire history of humankind can be explained through the prism of diseases: how they emerged, how they spread and eventually vanished, and how, in each instance, societies have tried to combat these threats and find ways to enhance well-being and quality of life (Nikolaeva 1995). Infectious diseases always threaten humankind (Eicher and Bangerter 2015; Graham et al. 2013). People have tried to make sense of epidemics by searching for the causes of a disease (Herzlich and Pierret 1987). They elaborated certain strategies in the face of a threat, most often by leaving dangerous places and avoiding or even isolating certain groups (Eicher and Bangerter 2015; Herzlich and Pierret 1987). These strategies of action fulfil the function of protecting the physical and symbolic integrity of a group (the consistency and coherence in the use and interpretation of symbols within the group) in the situation of infectious disease spread (Schaller et al. 2022). The latter function becomes extremely important in the situation of disruption of meaning. The disruption occurs as a result of a sudden outbreak of a new infectious disease. It is extremely true in



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Copyright: © 2024 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). case of the COVID-19 pandemic: a new disease had emerged and became a global threat by spreading rapidly across the whole planet. The old strategies of leaving, avoiding, and isolating were easily activated.

It should be emphasised that health and illness are the focus of attention of one of the main European theoretical traditions in social psychology—social representation theory.

This theory highlights the role of collective beliefs and cultural norms in shaping understandings of health and illness. It emphasises the influence of cultural dynamics and shared knowledge in forming social representations of health and illness, thereby impacting individual health experience. It is worth recalling that the classical works by Moscovisi, Herzlich, Jodelet, de Rosa, Joffe, and many others (de Rosa 2012; Herzlich 1973; Jodelet 1991; Joffe 1999; Moscovici 1976) carried out within the framework of this theory broadly deal with the problems of health and illness from the very beginning of the development of this approach. Moreover, a bibliometric analysis of publications based on the ideas of the theory of social representations realised by Eicher with colleagues (Eicher et al. 2011) revealed a class of issues that unite the problems of health and illness.

In examining how modern humans interpret the threat posed by the COVID-19 pandemic and explore the symbolic coping developed in response to this global health crisis, social representation theory emerges as the most relevant and fruitful framework. Individuals faced multiple challenges caused by the pandemic, and the theory of social representations provides a robust framework for understanding how societal knowledge and shared understanding contribute to the development of coping mechanisms and the formation of social representations of the global emergency.

In the theory of social representations (SRs), there are a number of definitions of SRs, in particular, those proposed by S. Moscovici himself (Moliner and Bovina 2021). In one way or another, these definitions emphasise that SRs are a kind of theory developed and shared in communication to explain phenomena and objects, to make familiar something that is threatening and unfamiliar (Moscovici 1973, 1976, 1984). In case of the COVID-19 pandemic, individuals were confronted with a huge amount of contradictory information disseminated by both mass media and new social media, and they shared these pieces of information in order to make sense of an unknown global threat.

The generation of SRs involves two sociocognitive processes: anchoring and objectification. Strange ideas are reduced to familiar categories and images and placed in the existing frame of reference. Anchoring is accomplished through classifying and naming. A variety of anchors were revealed in a number of studies on SRs of infectious diseases (for example, Eicher and Bangerter 2015; Joffe 1999; Joffe and Bettega 2003; Joffe and Haarhoff 2002, etc.), namely military metaphors (an invisible enemy infiltrates the human body) or biological weapons (referring to an artificial origin of a virus that was created in military laboratories, such as the idea that the HIV virus was created at the Pentagon laboratories) (Nattrass 2013); references to another disease in order to define a new one (AIDS was referred to as gay cancer and plague); otherness (referring to other groups in the case of HIV) (Joffe 1999; Páez and Pérez 2020). It is probably the oldest form of explanation, and it could be found in the case of plague epidemics during the Middle Ages (Cohn 2012; Herzlich and Pierret 1987). In the case of SRs of COVID-19, the same types of anchors (military metaphors, biological weapons, otherness, another known disease) were already discovered in various studies (Magarini et al. 2021; Uscinski et al. 2020; van Mulukom et al. 2022).

Objectification is the process that transforms something abstract into something concrete. As Moscovici put it, "The materialization of an abstraction is one of the most mysterious features of thought and speech" (Moscovici 2001, p. 49). Objectification refers to schematisation and personalisation. In the latter case, the key figures revealed in previous studies on SRs of infectious diseases were heroes, villains, and victims (Eicher and Bangerter 2015; Pizarro et al. 2020; Prati et al. 2021). These categories could be also applicable to the SRs of COVID-19: for example, villains refer to Chinese people

or representatives of political elites, while scientists and doctors should be considered heroes (Eicher and Bangerter 2015; Páez and Pérez 2020). Elderly people could be seen as victims.

A significant number of studies on COVID-19 were released in the framework of SR theory (de Rosa and Mannarini 2020; Jaspal and Nerlich 2023; Martikainen and Sakki 2021; Dontsov et al. 2021; Rateau et al. 2021). At the very beginning of the COVID-19 pandemic, scholars carried out numerous studies by using various methodological strategies for analysing SRs of COVID-19, referring to different cultural contexts, comparing various social groups (age and profession), or focusing on mass media analysis (de Rosa and Mannarini 2020; Fasanelli et al. 2020; Nerlich and Jaspal 2021; Souza et al. 2021). The COVID-19 pandemic officially lasted from 11 March 2020 to 5 May 2023. It was accompanied by the emergence of new variants, subsequent waves of the pandemic, and stricter quarantine measures. In essence, the evolution of the disease necessitated corresponding changes in the SRs associated with it.

Eicher and Bangerter (2015) underline that numerous studies have focused on SRs of infectious diseases, primarily examining their origins, transmission, and protective measures against health threats. However, the rationality and utility of the research on SRs of infectious diseases is determined by the fact that the outbreak of a new infectious disease is an opportunity to learn about the dynamics of SRs. Despite the extensive studies about SRs of infectious diseases, further studies emphasising the potential transformations of these representations throughout the course of a pandemic have become essential. Such research helps to reveal the dynamics of the SRs during various stages, including the emergence of the disease, its progression, and the eventual resolution of the disease. This is particularly important in the context of the COVID-19 pandemic.

The COVID-19 pandemic marked the first experience for the whole planet since the outbreak of Spanish flu in 1918–1920s. An unknown infectious disease emerged and became a serious threat to the world's population because of the lack of real protection. There have even been outbreaks of some other infectious diseases in the recent past (SARS, swine flu (H1N1), avian flu (H5N1), or Ebola virus). However, none of these cases had evolved into a global health threat on the scale of a sweeping pandemic affecting numerous countries and continents.

This point defined the research question of the presented study. During the period of the emergence of new COVID-19 variants, when strict quarantine measures were in place and the development of widespread vaccination strategies had not yet been established, a cross-cultural study was carried out. The purpose of the study was to reveal and analyse social thinking about COVID-19 in two cultural contexts (Malaysian and Russian), which was functioning in response to the global health threat (associated with the COVID-19 pandemic).

Malaysia and Russia offer unique cultural landscapes. Malaysia's multi-ethnic and multi-religious society, encompassing Malay, Chinese, Indian, and indigenous cultures (Noor and Leong 2013), contrasts sharply with Russia's blend of Eastern and Western influences (Makarova et al. 2019), reflecting diverse ethnicities and historical backgrounds. While the countries exhibit mixed scores on various cultural dimensions, such as similarities in long-term orientation but disparities in individualism–collectivism (Minkov and Kaasa 2022), there is a distinctive cultural dimension differentiating Russia and Malaysia, which could be significant in understanding SRs of the COVID-19 pandemic. Specifically, uncertainty avoidance varies substantially, being low in Malaysia and high in Russia (Lu 2023). The period when the data were collected coincided with the early stages of the pandemic, when uncertainty was exceptionally high, and this cultural contrast in uncertainty avoidance may serve as a crucial explanatory factor for the prevailing social discourse surrounding the pandemic. This selection of Russia and Malaysia enables us to delve into how these varied cultural contexts shape responses to global health crises, enriching this study's external validity.

The profound impact of the COVID-19 pandemic on social beliefs and behaviours in Malaysia and Russia is evident through various lenses. In Russia, the evolution of public health and social policy responses has shifted from concerns about the border with China to addressing confirmed cases across all regions of the country (King and Dudina 2021). Also, the pandemic has raised concerns about the health and isolation of labour migrants, who constitute a vulnerable population due to their social status (Poletaev 2022). In Malaysia, the economic impact of COVID-19 has been significant, with the pandemic being associated with a negative relationship with economic growth in Malaysia (Onyechege et al. 2022).

Studies have underscored the influence of beliefs and attitudes towards COVID-19 vaccines, alongside the prevalence of misinformation and conspiracy theories, on individuals' vaccination intentions (Chu and Liu 2021; Enders et al. 2022). In Malaysia, the determinants of COVID-19 vaccine hesitancy encompass age, susceptibility, religious beliefs, attitude, subjective norms, and trust in the vaccine (Ng et al. 2022). Additionally, the pandemic has spurred the implementation of psychosocial support systems, involving collaboration among the healthcare system, community organisations, and policymakers (Hock et al. 2022). In Russia, the following factors have been considered as the determinants of COVID-19 vaccine hesitancy and resistance: risk perceptions, self-rated health, COVID-19 experience, and regional epidemiologic situations (Roshchina et al. 2022). Therefore, recognizing the cultural nuances between Malaysia and Russia is vital for a comprehensive understanding of SRs related to the pandemic response, informing tailored interventions and public health narratives based on cultural context.

Among the four main approaches (sociogenetic, structural, sociodynamic, and dialogical) developed inside the theory of SRs (Moliner and Guimelli 2015), the structural approach was chosen in the presented study. In the structural approach, it is postulated that an SR consists of two parts: the core and the peripheral system (Abric 1993). The core of an SR is defined as a stable part, formed by a small number of elements; these elements are rooted in culture. The core part performs very important functions, such as (1) giving meaning to the whole SR, (2) organising the SR, (3) and maintaining the stability of the SR (Moliner and Abric 2015). The core elements are crystallised in the value system shared by group members and are maintained through collective memory (Abric 1993).

The peripheral system of an SR could be seen as a mediator in between the core part of the SR and reality itself. The peripheral system is formed by a significant number of elements. Due to the variability of the peripheral system, an SR adapts to changing context without changes (Moliner and Abric 2015). The peripheral system is considered a "protective system" for the whole SR (Abric 1993).

It is obvious that the ideas of this approach are pertinent to reveal and compare the SRs of COVID-19 in the two cultures selected.

In the proposed study, a cross-cultural approach was preferred. The main assumption of this approach is that "different cultural insertions imply not only different positions in relation to the object of SR under study, but also different systems of norms and values" (Moliner and Guimelli 2015, p. 37). The symbolic coping strategies in the two cultural contexts that were produced in response to the global health threat (associated with the COVID-19 pandemic) were the focus of this exploratory study.

2. Materials and Methods

2.1. Participants and Procedure

The total sample consisted of 349 young adults from Malaysia (n = 195, 35.4% males) and Russia (n = 154, 10% males) aged 17–36 years (correspondingly, $M_{age} = 22.36$, $SD_{age} = 3.07$, and $M_{age} = 19.17$, $SD_{age} = 2.57$). Convenience sampling was used to recruit participants. Students were proposed to participate in a study on COVID-19; if they agreed to participate, an online version of the questionnaire was proposed.

The study was carried out from 12 October 2020 to 15 December 2020.

The study was conducted in accordance with the Declaration of Helsinki, the APA Ethical Standards and the Code of Ethics of the RPS (Russian Psychological Society), and the protocol was approved by the Ethics Committee of RUDN University (#050422-0-037).

2.2. Measures

2.2.1. Free Association Technique

The free association technique was used in order to reveal the content of SRs in the two cultural contexts (Moliner and Lo Monaco 2017). The participants were asked to produce 5 words that came to their mind while they were thinking about a stimulus (COVID-19).

2.2.2. Valence

A 7-point Likert scale (from very negative (-3) to very positive (+3)) was used to reveal the evaluative connotation of each answer. The average score was calculated for each element.

2.2.3. Representational Structure Analysis

A prototypical analysis was used in order to reveal the hypothetical structure of the SRs (Moliner and Lo Monaco 2017). A free-association data matrix was composed of words evoked by at least 10% of respondents in each sample. A threshold of 10% was adopted in this research, aligning with the precedent set in one of the pioneering studies introduced by Vergès (Vergès et al. 1994). Words below the threshold of 10% were examined and assessed for their relevance to the overall narrative and findings; however, the screening by researchers did not uncover any substantive contributions to the primary narratives from either a theoretical or empirical standpoint. The data matrix was analysed by using IRaMuTeQ software, Version 0.7, alpha 2 (Camargo and Justo 2013).

Among the ideas implied by the prototypical analysis, the main one is that the core elements are more salient in comparison with non-core ones (Moliner and Lo Monaco 2017). In order to operationalise this idea, two parameters, namely, the frequency of an association (quantitative parameter) and its appearance ranking (qualitative parameter), should be crossed (Moliner and Lo Monaco 2017). The combination of these parameters is a measure to formulate a hypothetical structure of the SR that should be verified in a further study (Lo Monaco et al. 2016). The total number of associations in each sample was lemmatised and categorised into the different semantic units.

The University Research Ethics Committee has approved the study.

3. Results

3.1. Malaysian Sample

The first zone, the core zone (elements with high frequency and low appearance ranking; the potential core elements or so called "candidates to the central core" (Lo Monaco et al. 2016) are situated here) was formed by the following elements: *death*, *pandemic*, *virus*, and *quarantine* (see Table 1). All elements except for quarantine (an element with neutral connotation) had negative connotations. One sample *t*-test was calculated for the valence of each element of the core zone (average valence for each element was as follows: *death*, M = -2.50 (SD = 1.30); *pandemic*, M = -2.10 (SD = 1.42); *virus*, M = -1.80 (SD = 1.73); *quarantine*, M = -0.50 (SD = 1.86)). In all cases except for the element *quarantine*, the valence was very negative (*t*-test value varied from -13.02 to -6.78, significant at least at p < 0.01).

Frequency	Appearance Ranking \leq 2.82 ***	Appearance Ranking > 2.82
Frequency ≥ 34 ***	Core zone * (Zone I)	First peripheral zone * (Zone III)
	death (47; 2.80; -2.50) **	
	pandemic (43; 1.70; -2.10)	lockdown (59; 3.00; -1.00)
	virus (42; 2,10; -1.80) quarantine (34: 2 70: -0 50)	mask (53; 2.90; 1.30)
Frequency < 34	Contrasted elements zone * (Zone II)	Second peripheral zone * (Zone IV)
	stay home (29; 2.80; 0.60) fear (24; 2.80; -2.50) disease (21; 2.30; -1.90)	hygiene (30; 3.80; 2.30) social distancing (29; 3.30; 1.40) everything online (25; 3.60; -0.70) economic impact (20; 3.10; -2.00)
		restrictions (20; 3.20; -1.70)

Table 1. Hypothetical structure of SR of COVID-19 (Malaysian sample).

Note: * Four zones of SR hypothetical structure were revealed by the usage of the rank-frequency method (Moliner and Lo Monaco 2017), in the table, the names of the zones are highlighted in bold; ** Frequency, average rank of occurrence, and average valence for each element are indicated in brackets (Moliner and Lo Monaco 2017). Valence varies from -3 to +3, where [-3;-1]—negative, (-1;+1)—neutral, and [+1;+3]—positive connotations of each element. *** the thresholds were calculated by using mean for both parameters: rank and frequency.

The second zone, the so-called contrasted elements zone, consists of the elements with low frequency and low appearance ranking: *stay home, fear*, and *disease*. The first element had a neutral connotation, whereas the others had negative ones. Concerning the elements of the second zone, Abric proposed that a minority position or a complement of the first peripheral part could be found out in here (Abric 2003).

The third zone combines high-frequency and high-appearance-ranking elements and is called the first peripheral zone. It could be considered as a kind of afterthought in relation towards the object of an SR, including elements such as *lockdown* (an element with a negative connotation) and *mask* (an element with a positive connotation). Rethinking Abric's idea concerning the content of the second zone just mentioned above, a certain consonance between the elements of the second and third zones could be observed: the afterthought in the relation to COVID-19 was mostly concerned with protective measures (stay home, lockdown, mask); the corresponding elements varied in their connotations.

Finally, the fourth zone consists of the elements with low frequency and a high appearance ranking (it is called the second peripheral zone): *hygiene, social distancing, everything online, economic impact,* and *restrictions*. The elements of this zone varied in their meaning and connotations. The first two elements (*hygiene, social distancing*) had positive connotations, one element (*everything online*) had a neutral connotation, and the last ones (*economic impact, restrictions*) had negative connotations. The new themes that corresponded to the economic consequences (*economic impact*) of the COVID-19 pandemic and to the changes in daily life (*everything online*) were somehow inhibited in the social thinking about COVID-19.

The elements with the most negative valence were *death and fear*, while the element with the most positive valence was *hygiene*.

3.2. Russian Sample

The results from the Russian sample can be described using the same framework applied earlier to describe the results in the Malaysian sample.

The first zone (the core zone) was formed by the elements *quarantine* and *disease* (both with negative connotations) (see Table 2). One sample *t*-test was calculated for the valence of each element of the core zone (average valence for each element was as follows: *quarantine*, M = -1.70 (SD = 1.25); *disease*, M = -2.40 (SD = 0.91). In all cases, the valence was very negative (*t*-test value varied from -17.90 to -12.79, significant at least at p < 0.01).

Frequency	Appearance Ranking \leq 2.68 ***	Appearance Ranking > 2.68
Frequency ≥ 36.36 ***	Core zone * (Zone I)	First peripheral zone * (Zone III)
	quarantine	mask
	(85; 2.40; -1.70) **	(53; 3.20; -0.40)
	disease	fear
	(46; 2.40; -2.40)	(45; 2.70; -2.20)
Frequency < 36.36	Contrasted elements zone * (Zone II)	Second peripheral zone * (Zone IV)
	virus (34; 2.20; -2.10) pandemic (31; 1.90; -2.60) danger	death (35 ; 3.10 ; -2.70) online classes (21 ; 3.00 ; -0.60) restrictions (19 ; 3.00 ; -1.20)
	(16; 2.60; -2.20)	healthcare $(15:3.80; -0.60)$

Table 2. Hypothetical structure of SR of COVID-19 (Russian sample).

Note: * Four zones of SR hypothetical structure were revealed by the usage of the rank-frequency method (Moliner and Lo Monaco 2017), in the table, the names of the zones are highlighted in bold; ** Frequency, average rank of occurrence, and average valence for each element are indicated in brackets (Moliner and Lo Monaco 2017). Valence varies from -3 to +3, where [-3;-1]—negative, (-1;+1)—neutral, and [+1;+3]—positive connotations of each element. *** the thresholds were calculated by using mean for both parameters: rank and frequency.

The second zone (the contrasted elements zone) included elements with negative valences: *virus, pandemic,* and *danger*. These associations may not have been predominant across the entire sample; however, it suggests the presence of a potential subgroup that placed emphasis on themes concerning the perception of a threat, the widespread transmission of the virus, and the potential risks involved.

The third zone (the first peripheral zone) was composed of two elements with neutral and negative connotations, namely, *mask* and *fear*. The element *mask* likely represented a neutral perspective, encompassing the practical aspect of protective measures against the virus. On the other hand, the presence of *fear* implied the existence of negative connotations, indicating the psychological and emotional responses linked to the pandemic.

Most likely, the elements of the second zone once again match better to the idea of the complementation of the third zone; however, the afterthought towards the object of the SR in this sample referred to the magnitude of the health threat and the fear associated with it.

Finally, the fourth zone (the second peripheral zone) consisted of elements with various connotations: *death* (an element with the most negative connotation among all other elements), *online classes* (an element with a neutral connotation); *restrictions* (an element with a negative connotation), *healthcare* (an element with a neutral connotation). This zone also consisted of the new themes concerning daily life changes and the lethal consequences of the disease.

These findings underscore the multifaceted nature of the pandemic experience, reflecting both the pragmatic approach to safety measures and the emotional challenges stemming from the uncertainty associated with the health crisis.

4. Discussion

Based on the key ideas of SR theory (Moscovici 2001) and taking into consideration the results of the research on SRs of infectious diseases (Eicher and Bangerter 2015; Joffe 1999; Magarini et al. 2021; Uscinski et al. 2020; van Mulukom et al. 2022), a cross-cultural study was carried out. The aim of the presented exploratory study was to reveal and analyse social thinking about COVID-19 in two cultural contexts (Malaysian and Russian) in order to understand the ways in which these societies responded to the overarching global health threat posed by the COVID-19 pandemic.

By considering both the content of the core zone and the peripheral system, it becomes evident that the obtained results align with the conceptual framework proposed by Moliner and Abric (Moliner and Abric 2015), particularly with regard to the distinctive characteristics of the core and peripheral elements. The core elements pertain to the overarching attributes of the SR's object and are abstract in nature, representing unconditional beliefs. Conversely, the peripheral elements are characterised as being more specific and tangible, contextualised within particular circumstances, and can be classified and conditional beliefs.

In the Malaysian sample, the SR of COVID-19 was crystallised around several elements (candidates for the core elements) with very negative connotations (*death, pandemic, virus*), and only one element was neutral: *quarantine*. These elements described the magnitude of the consequences of an infectious disease and also provided guidance on protective measures in the face of the pandemic. In the Russian sample, the SR of COVID-19 was formed around two elements with very negative connotations: *quarantine* and *disease*. COVID-19 was interpreted from different perspectives in these samples: In the Malaysian sample, the core zone elements were troubling and disturbing, concerning the variety of the consequences associated with COVID-19, versus the peripheral zones composed of preventive measures. In the Russian sample, the core zone elements made one think of a rationalisation (or even a denial) of the COVID-19 threat. This idea is reinforced by the fact of certain contradictions: the core elements were less alarming in comparison with the peripheral zones composed of the disturbing elements concerning the magnitude and consequences associated with COVID-19.

These findings could be explained by the public discourse of COVID-19 at the time of data collection. Russia's true death toll from the pandemic was announced only in December 2020, when officials confirmed that about 80% of the increase in mortality in 2020 was due to COVID (Dyer 2020). As data collection was implemented before this announcement, it could explain why "denial" of the death toll was suggested to interpret the high rank and low frequency of the word "death". Also, narratives about the pandemic were mostly focused on transmission and emphasised ways of transmission, symptoms, and containment measures like quarantine. Discussions of mortality risks may not have been as prominent yet in official communications. In other words, mortality was not made salient yet as Russia had not experienced significant explosive local outbreaks or an overload of its healthcare system early on; the severe impacts rising abroad may have still seemed a distant possibility.

Regarding rationalisation, as it has been mentioned, there were clear signs of the overload of the healthcare system and increased mortality among medical staff; however, the contradictive messages about the cause and consequences of this situation may lead to psychological distancing. Thinking about mass death can trigger severe emotional distress. As a means of coping with the initial uncertainty and threat, Russians may have instinctually avoided intense focus on worst-case scenarios in the early pandemic stages. According to research, by the end of 2020, the majority of Russians perceived minimal impact on their health and social relationships due to the COVID-19 pandemic; however, nearly a quarter reported adverse effects of the lockdowns on their families' economic security (Roshchina 2022) that could provide support for the 'denial' and 'rationalisation' of death in the Russian sample. Before the announcement of the real picture related to mortality related to COVID-19 in Russia, there was still hope the virus could be controlled and deaths minimised with proper precautions. This could have reduced fatalistic associations in initial SRs. If we add to this finding the fact that the element indicating the extreme consequences associated with COVID-19 (*death*) was situated in the second peripheral zone, it is possible to think that its appearance in the focus of social thinking was inhibited. The primary associations with COVID-19 during this period were centred around disease, quarantine, and viral transmission. This suggests that, at the time of data collection, Russians could be primarily focused on essential containment and prevention measures, with less emphasis on extreme health impacts such as death. While practical implications like mask usage and healthcare changes were emerging, they did not seem to be predominant concerns yet, reflecting an earlier phase. Emotional reactions, including negative associations and fear, were evident, but the results did not indicate the accumulation of severe local impacts. As COVID-19 progressed with increasing spread and mortality, it is highly likely that factors such as "death" and other severe outcomes could have shifted from the peripheral zones of thought to more central focus and concern in the country.

It is noteworthy that the emotional element *fear* was present in the SRs of COVID-19 in both groups, aligning with findings from other research (Idoiaga Mondragon et al. 2022; Jabłońska et al. 2021; Rateau et al. 2021, etc.). However, it appeared in different zones. In the Russian sample, *fear* appeared in the first peripheral zone, indicating that it was included in the associations of the majority of people but not in the forefront. Conversely, the results from the Malaysian sample suggest the possibility of a minority subgroup that ranked fear highly when thinking about COVID-19. This might be attributed to the cultural diversity of Malaysians, including predominantly Malay, Chinese, and Indian populations, each with their unique beliefs. For instance, Chinese culture embodies the concept of 'kiasi,' meaning 'fear of death,' which significantly influences everyday behaviour (Cyn and Ganapathy 2016). However, since this study is exploratory in nature, this conclusion remains an assumption and requires further investigation.

Another interesting finding is that the *economic* impact of the pandemic was not presented in the hypothetical structure of the SR of COVID-19 in the Russian sample. This finding could be referred to as the "mute zone" of the SR (Abric 2003). This observation requires further study and analysis.

Although the hypothetical structure of the SRs of COVID-19 in the two samples needs further testing, the obtained results allow us to reveal particularities of the symbolic coping strategies in the two cultural contexts. These presented results are in line with SR theory and correspond to findings obtained in other studies on SRs of infectious diseases in general and of COVID-19 in particular (Eicher and Bangerter 2015; Idoiaga Mondragon et al. 2022; Pizarro et al. 2020; Rateau et al. 2021).

However, some *limitations* of the presented study can also be highlighted. It is not uncommon in SR research that a hypothetical structure of SR is revealed and the obtained results are mostly discussed in line with SR theory, without further steps to test this hypothetical structure and answer the question of centrality of the core zone elements. Nevertheless, this fact could be seen as a limitation, and it is considered as such in the presented study, especially since conducting a further study to verify the hypothetical structures of the SR of COVID-19 was challenging due to the dynamic evolution of the virus during the pandemic. As announced by the WHO on 5 May 2023, the COVID-19 pandemic was over. New cases were not of major concern to medical professionals and were not considered a threat to the population as it used to be during the COVID-19 pandemic when the vaccine was not elaborated as a measure of protection. Nevertheless, a further study on SRs of COVID-19 seems important as it will shed light on the theoretical aspects of SR processes. Even if the pandemic is away in the past, the COVID-19 is still present in communications, and signs referring to the pandemic are still visible in public space (namely, a variety of posters that remind people to keep distance from each other or to wear masks in public transport). Furthermore, it is important to acknowledge that the sample used in this study was skewed toward females, particularly within the Russian subset. This skewed gender distribution may affect the generalisability of the study's findings to a broader and more diverse population.

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