

Well-Being And Living Together During Short-Term Health Crises: The Case of The Brother FISLI Neighborhood of AZZABA, ALGERIA, During COVID 19.

Amira AFRI^{1*}, Ouahab RAHIM¹, Amira YOUBI¹, Fatma Zohra MELLOUK¹, Linda SAILI¹, Ameer BELMOUHOU²

¹ *Environmental research center, Algeria*

² *Département of civil engineering university of Skikda, Algeria*

Corresponding Author:

Amira AFRI

Email Id: amiraaf16@live.fr

ABSTRACT

The impact of the Covid-19 pandemic on individual well-being was significant. Containment measures, social isolation, fear of the virus and disruptions to daily life have resulted in higher-than-usual levels of stress, anxiety and depression in many people. The social impact of this global health crisis is undeniable, and its ripple effects are clearly visible on a local scale, notably in our society.

As part of our investigation into the consequences of this health crisis on living together and the well-being of individuals in public spaces, we have chosen a case study - the Frères Fisli neighborhood in the Algerian town of Azzaba - with a view to understanding the interactions between public space, the health crisis and well-being, in order to gain a better grasp of the health issues facing residents of housing districts, and their interactions with the quality of space.

To this end, a field survey was carried out between 2020 and 2022. The sample represents 25% of the district's total population. Questionnaires were distributed to residents, but also posted online on local electronic platforms. By analyzing the results of the survey, we were able to highlight the impact of the quality of the living environment on the residents' ability to cope with economic crises, or the need to improve their quality of life.

Key words: Covid 19, confinement, well-being, living together, Frères Fisli.

1. Introduction

The city carries health risks linked to environmental alterations and nuisances, which can give rise to so-called environmental pathologies or weaken states of health (**Bourdeau Lepage, 2014**). Of which Mental health problems often have as their corollary's feelings of isolation and loneliness (global surveys carried out in 2020 and 2021 revealed higher-than-usual levels of stress, insomnia, anxiety and depression) (**Bourdeau-Lepage & al, 2022**). So, the study of sociological phenomena that manifest themselves in different public spaces, namely well-being and living together, is an important subject, as several health phenomena can influence social life and also create a certain disorder in the lives of inhabitants (**Marie-Ève Clément & al, 2002**).

The concept of well-being has been the subject of much research and theorizing in various fields such as psychology, sociology, public health and philosophy. Well-being is generally perceived as a state of balance and satisfaction in life, encompassing physical, emotional, mental and social dimensions. Well-being is therefore a multidimensional concept, and there is no single definition that researchers agree on. According to Diener (1999), well-being can be understood as an overall state of personal fulfillment (**Diener, 1999**).

Research shows that psychological well-being plays a crucial role in preventing mental disorders and improving resilience in the face of stress. point out that factors such as self-acceptance and the ability to develop healthy interpersonal relationships are strong predictors of positive mental health (**Ryff & al 2008**).

The Covid-19 pandemic is not just a health problem. It is also a social phenomenon in its own right, affecting the wellbeing of its inhabitants (**Alizadeh & al, 2023**). Its spread around the world has been a source of anguish that is talked about more in families in all societies, leading to a change in the pace of life for citizens, it has had profound consequences on the way we live, work and exchange with each other in different spaces, as well as on the economic, human, social and ecological systems on which well-being is based (**Romeyer & al, 2023**). COVID-19 has therefore had a profound and multidimensional impact on people's psychological, social and physical well-being. The pandemic has exacerbated pre-existing problems while

creating new ones, significantly altering the way people experience and perceive their well-being **(Wang & al, 2020)**.

Managing this health problem at a societal level, however, requires distancing measures between individuals that transform social relations **(Romeyer & al, 2021)**. This management principle consists in prohibiting people from seeing, meeting, kissing or being close to each other **(Bourdeau-Lepage, 2020)**. Thus, a containment measure followed by this sanitary fact was the solution to reduce the spread of this pandemic, which therefore brought about considerable changes in the daily lives of individuals and communities.

The government-imposed confinement was therefore the event that shook up modes of exchange and communication, which changed profoundly **(Amaral-Prado, 2021)**. It is also the exceptional experience that has direct consequences for living together, social mixing and well-being **(Francesco Ficetola & al, 2021)**. Several factors can modify the way we react to this situation, positively or negatively. We are used to “face to face” and direct contact. In this health crisis, we have discovered other modalities of social relations, with a distinct impact on populations, depending in particular on age, gender, work, household composition and territory inhabited.

Thus, Covid-19 and containment measures have had a direct impact on social relations, living together, social ties, and therefore well-being in all countries **(Faulkner, 2021)**, particularly in Algeria, our case study. As David Le Breton describes it, *“The health crisis profoundly disrupts our interaction rites. Barrier gestures put the other's body at a distance, making a too-close presence suspect, and even more so the handshake or kiss, which impose contact”* **(LeBreton, 2020)**.

2. Problem Statement

The COVID-19 pandemic has profound consequences for the way we live, work and interact with each other, and for the economic, human, social and ecological systems on which well-being depends **(OECD, 2021)**.

In Algeria, after the first case of this pandemic was recorded, a kind of delirium and anxiety was marked among the inhabitants, as the contamination occurred in Blida during a wedding party. On this occasion, sixteen members of the same family were contaminated, spreading the infection across several wilayas. Weddings, an

important occasion for our people and a place for sharing, were the main reason for the spread of this disease in Algeria.

Our analysis of the epidemiological situation is based on statements made by the Ministry of Health. The latter, via the scientific committee, and the confirmation of the number of infected cases by Covid PCR. At first, this diagnosis was carried out exclusively by the Institute Pasteur of Algérie (IPA) in Algiers, but as the number of patients increased, other diagnostic centers were opened (Algerian Ministry of Health, Population and Hospital Reform).

This was an alert to the total containment strategy put in place by the government to reduce this health risk, which required people to stay in their homes or in a specific place. If people didn't respect this obligation, a penalty was imposed on the inhabitants. This was done to limit contact and friction between people, and thus the spread of contagion.

The Covid-19 pandemic has profoundly altered our daily lives, generating both health and social upheavals. Against this backdrop, it is crucial to consider the changes that occurred during the crisis, and the consequences for individual well-being. Containment measures, social distancing and uncertainty about the future have led to an increase in anxiety, malaise and stress.

In addition, social interaction, essential for personal development and bonding, has been significantly altered. Isolation has affected many groups, and these effects have led to problems of social cohesion and quality of life, especially in public spaces.

To this end: **What is the impact of a health crisis (Covid 19) on living together and well-being?**

2.1.Well-being and health crises

Well-being is an all-encompassing concept that refers to an individual's state of satisfaction and overall health, including physical, mental and social dimensions (Ruggeri & al, 2020). Here's a detailed overview of what well-being entails, as well as recent impacts, including those linked to the COVID-19 pandemic (Bourdeau-lepage, 2020). According to the World Health Organization (WHO), health is defined as a state of complete physical, mental and social well-being, and not merely the absence of disease. Well-being includes: physical well-being (general physical

condition, energy levels, absence of disease), mental well-being (emotional state, ability to cope with stress, psychological health), and social well-being (quality of interpersonal relationships and integration into the community) (Monteux, 2023).

To explore in greater detail the subject of well-being and living together, as well as the impact of the covid 19 pandemic on the latter and on the social life of the inhabitants, and the habits and changes brought about in their lives, we chose the scale of the neighborhood of an Algerian city (Frère Fisli neighborhood), based on the field survey methodology explained below.

2.2.The Frères Fisli neighborhood of Azzaba: a case study

Azzaba is a town in the southeastern part of the Skikda wilaya in eastern Algeria (Figure 1), located at the intersection of the NR 44 and NR 3 AB national roads, in the middle of four major urban centers: the city of Skikda on the national road 44 on the north-western side at a distance of 32 km, the city of Annaba on NR 44 on the north-eastern side at a distance of 69 km, the city of Constantine on NR 3 AB on the south-western side at a distance of 80 km, and the city of Guelma on NR 10 on the south-eastern side at a distance of 55 km(Figure 2).



Figure 1: Situation of the wilaya of Skikda in Algeria



Figure 2: Location of the Azzaba municipality

The Frères Fisli neighborhood, our chosen site for the study of the impact of the covid 19 pandemic on well-being and social life, is located in the center of the city (Figure 3). This is one of the oldest areas of the city, where original inhabitants can still be found, and where there is a mix of housing types. Its characteristics may have an effect on relations between residents of the district center, residents of the district center, residents of the intermediate spaces of the Frères Fisli district and residents of other districts of the city.

The Frères Fisli neighborhood is an old district that occupies an important place in the city (24 ha), located in the eastern part of the city. It is bordered by farmland in the northern and eastern parts, extensions of colonial single-family housing in the southern part, and multi-family and single-family housing in the western part. It is mainly made up of collective housing between social, participative social, and promotional, and individual between colonial, and allotment, with a number of 1129 dwellings and a density of 47 dwellings/ha, and 5225 inhabitants, with a density of 218 inhabitants/ha.

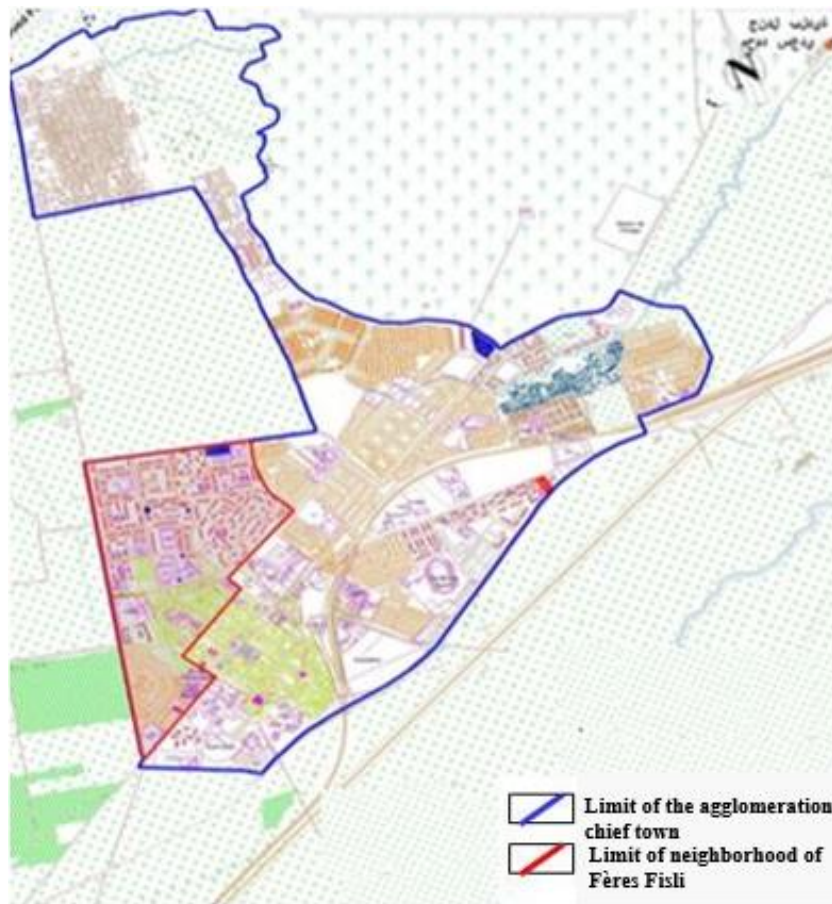


Figure 3: Situation of the Frères Fisli neighborhood of Azzaba

3. Methodology

Living together and well-being in the Frères Fisli neighborhood in the face of Covid-19

The Covid-19 pandemic and the containment measures were indeed two crucial elements in our research, in order to understand the impact of the health problem on relations between residents, changes in social practices and habits, living together and social relations. It is therefore important to look at what individuals experience during this period of physical distance.

It should be remembered here that the questionnaire survey is an observational tool that enables information to be quantified and compared. Some consider it to be a standard tool, even the ideal of scientific inquiry in the social sciences, due to the statistical nature of its use. This information is gathered from a representative sample of the population targeted by the assessment (**Parizot, 2012**).

the quantitative method represents a technique, widely used in socio-anthropological studies (Morin & al,2021), which enables us to understand the

experiences, attitudes, values and interpretations of those interviewed, while allowing them to express themselves freely. Moreover, this qualitative approach, similar to that used by Yi & Chiu (2023), proves particularly relevant for identifying the public's information needs and modes of access to information during a health crisis. The study by Mirzakhmedova et al (2023) uses methods to identify human values in discourse, which can be useful for analyzing perceptions of social mixing and living together.

With this in mind, a field survey was carried out between 2020 and 2022, distributing questionnaires to residents and posting them online on local electronic platforms, addressed exclusively to residents of the Frères Fisli district, with the aim of understanding the impact of this confinement on the well-being of people living in the area. The main objective of this survey was to understand how the inhabitants of the district have adapted to the various constraints imposed since the confinement linked to the Covid-19 pandemic, after a brief analysis of the main changes that have taken place in the daily lives of the inhabitants, namely: living habits, the rhythm of life of the inhabitants, the social relations between the inhabitants in the various spaces, their living conditions and the various changes to these, and finally their level of satisfaction during this period.

The questionnaire was designed by myself, following bibliographical research on the subject of Covid-19, its characteristics, its evolution in space and time, its consequences, and also on confinement, but also based on my experience as a resident of this neighborhood, witness to all the social evolutions of this period.

The questionnaire was entitled “How residents of the Frères Fisli district experienced confinement, and its impact on their daily lives”. It covers several areas, namely:

- ✓ The social characteristics of residents experiencing containment.
- ✓ Changes in the pace of life brought about by confinement.
- ✓ Changes in residents' habits.
- ✓ The impact of confinement on well-being, according to residents who responded to the questionnaire.
- ✓ The impact of confinement on residents' lives.
- ✓ What has this period of confinement added to your life?
- ✓ What do you consider to be the positive and negative points of confinement on your life?

This approach, which uses closed questions, enables data to be measured and analyzed objectively and systematically Gibson et al. (2021).

1324 people had responded to the questionnaire (25% of the total population). After selection of the base made up of these 1324 questionnaires, 813 questionnaires were found to be complete and usable. The results presented here therefore concern 813 questionnaires (out of the 1324 collected).

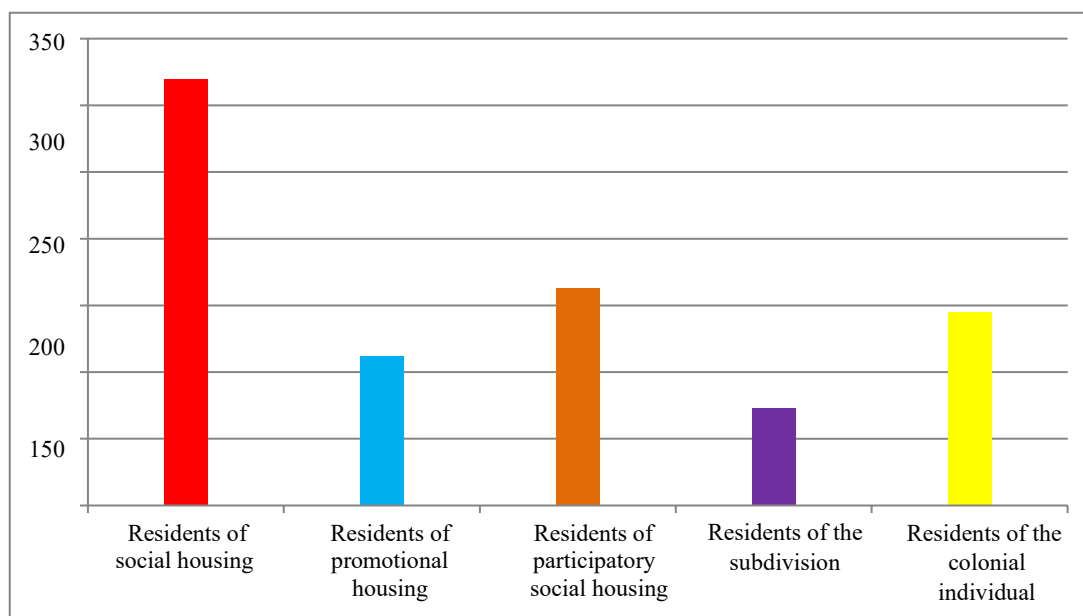


Figure 4: Residents responding to the questionnaire

Participation by residents of social housing was very high, with 320 respondents (39%), followed by residents of participative social housing with 20%, residents of individual colonial dwellings with 18%, people living in promotional housing with 13% and finally residents of housing estates with 10% (Figure 4).

The majority of residents spent their period of confinement in their usual dwelling, with only 4% of respondents absent from their usual dwelling since confinement.

Respondents' family situations differed. The majority of respondents live in a family with at least one child (79%) during the confinement. Only 21% were living with a partner. 56% of respondents are women and 44% men. People aged between 25 and 45 are the most represented in the questionnaire.

61% of respondents are employed, 19% are students, 9% are unemployed and 11% are retired (Figure 5).

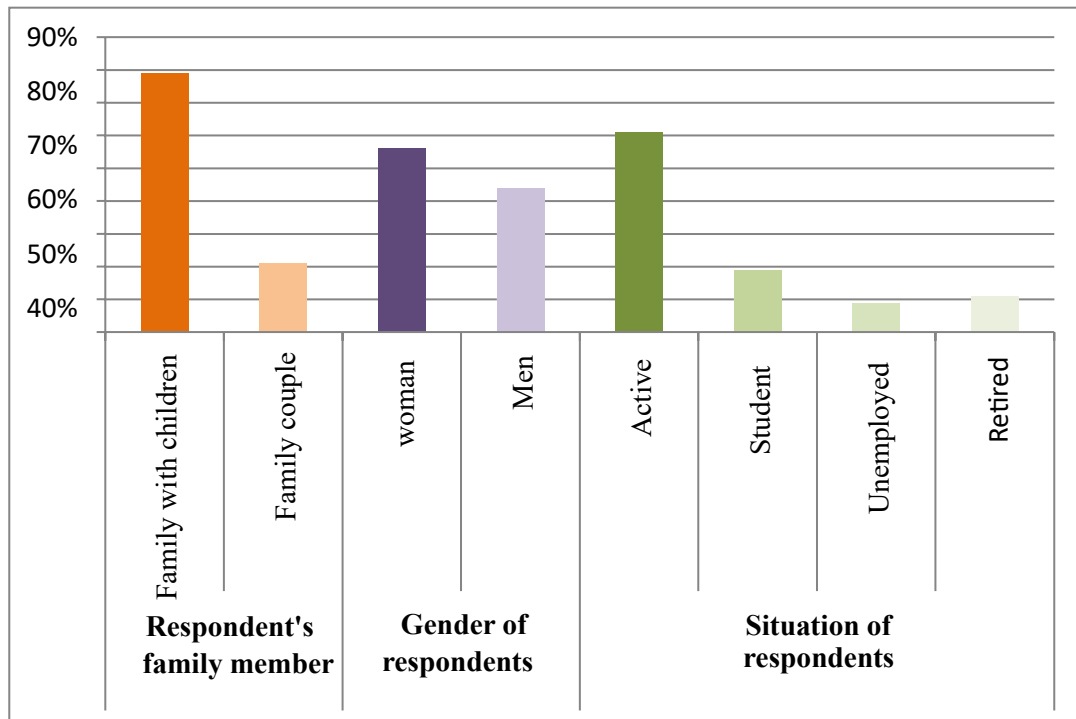


Figure 5: Social characteristics of survey respondents between March 24 and 29, 2022

4. Results:

As presented in the previous chapters, the elaboration of our research question, the problematic we have developed, as well as our theoretical and analytical framework, are the result of a reflection nourished by bibliographical contributions, personal experiences in terms of relations with local residents, and the fact that I live in this district. Our presentation of the results follows the general structure of the research problem, as follows:

4.1. Modifications and changes brought about by confinement to the pace of life and habits of local residents

First and foremost, it is important to understand what changes Covid-19 and confinement have brought to local residents' habits and pace of life. First of all, it is necessary to see the level of satisfaction of the inhabitants of the different types of housing before and during the period of confinement, to this end: before confinement, the majority of inhabitants 54% were very satisfied with their life together, living together for a while outside, 33% of inhabitants were satisfied, 9% were not very satisfied, and only 4% of inhabitants were not satisfied.

During the period of confinement, the pace of life is totally transformed for the residents, of whom 46% are not satisfied with this situation, 34% are not very satisfied, and finally 17% and 3% of residents are satisfied and very satisfied with the pace of confinement (Figure 6).

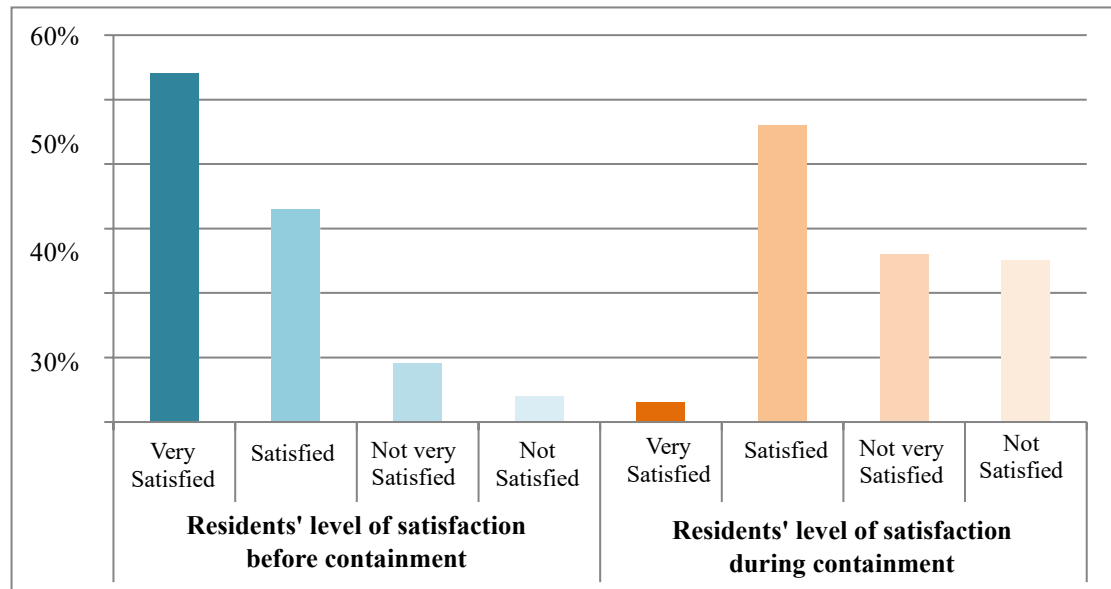


Figure 6: Level of satisfaction of people surveyed before and during the containment period

Housing typology is also important for residents in this period, as it has added meaning to the rhythm of their lives, and to living together through the intermediate space linked to housing typology. People living in individual dwellings (housing estates) and colonial dwellings with a garden or outdoor space are the highest proportion to be satisfied with their lives, with a level of 6/10 at 55%, followed by those living in collective housing with a balcony or terrace at 29%, and residents of social housing, social participative housing and promotional housing at 3/10. Finally, 16% of people living in housing with no view (no building in front of them from which the inhabitant can see into the distance, so to speak) are those who are not at all satisfied with this period, with a level of 1/10 (Figure 7).

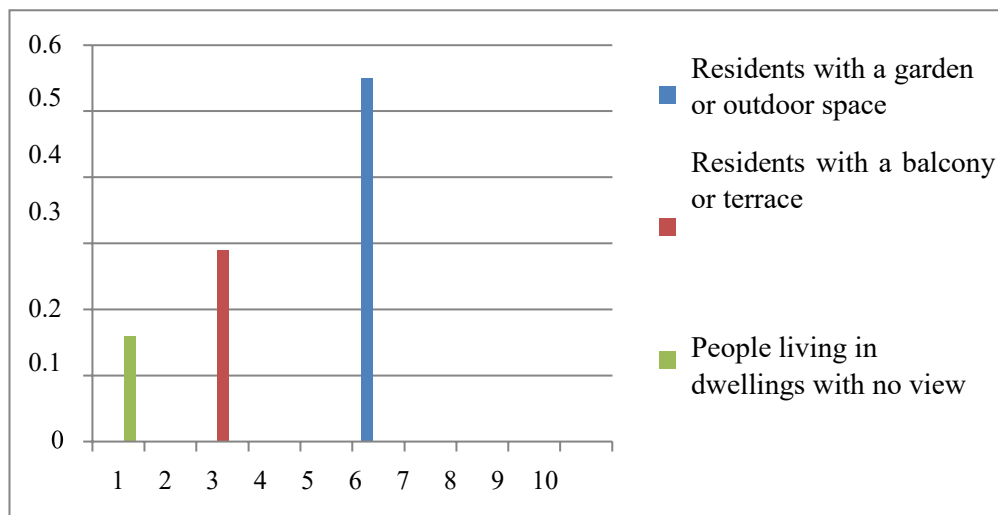


Figure 7: Level of satisfaction among residents of different housing types during the confinement period

4.2.Confinement: social or family isolation?

According to our survey, a feeling of social isolation did indeed affect many people during confinement. More than half of people never reported feeling socially isolated before confinement (82%), and 18% of people reported feeling socially isolated often. Since confinement, 28% of people report never feeling socially isolated, while 72% report often feeling socially isolated.

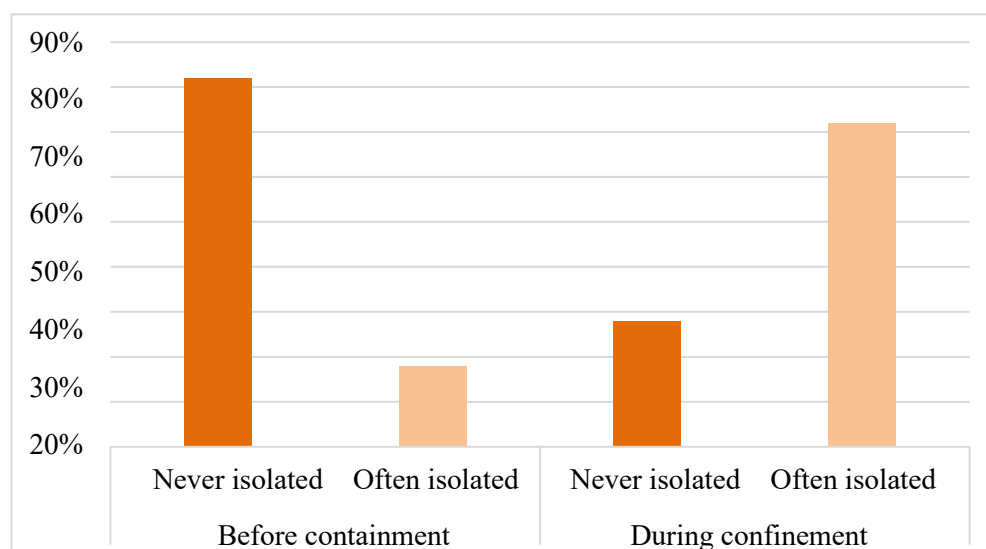


Figure 8: Frequency of feeling socially isolated before and during the confinement

To this end, we also observed in our study area that friends who had lost touch with each other were reconnecting and getting closer. We weren't allowed to touch each other, but the bonds were growing stronger.

In addition, a number of issues were also raised by those surveyed, namely.

During the Covid period, residents are more worried than usual about their loved ones, which is presented by them on a scale of 1 to 10. The field survey shows that 80% of respondents are worried about their loved ones at a level of 9/10, 6% of respondents at a level of 7/10, and finally a worry level of 5 on a scale of 10 is marked by 4% of residents.

A great deal of stress is marked by residents during this period in relation to following their studies at home, with 48% of residents being moderately stressed, 25% of residents being not stressed, followed by residents with little stress at 21% and very stressed residents at 6%.

Similarly for access to the various stores, the inhabitants make trade a main necessity for them, during the confinement and by the closing of the stores especially in the period of the great confinement, 92% of the inhabitants are more affected with that while 8% which remain do not find any problem with the closing of the various stores, it finds that the strategy of the delivery at residence by orders by telephones, through the various advertisements of sale on Internet,

Facebook pages. etc., is a good solution to have all the needs (Figure 9).

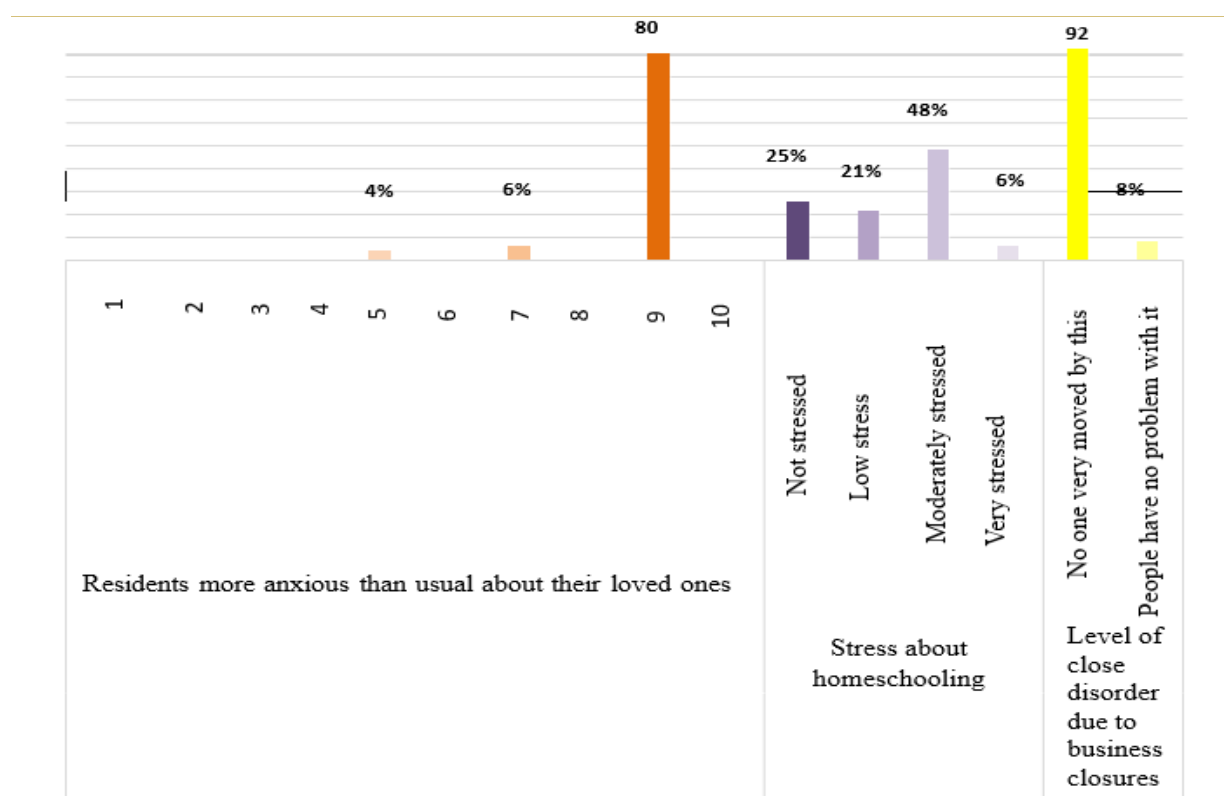


Figure 9: Concerns expressed by residents during the containment period

4.3.Confinement of quality of life, rhythm and lifestyle habits

During the period of confinement, changes in the living environment were well noticed by residents. 71% of residents experienced less noise nuisance during the period of confinement, so fewer nuisances were recorded (street noise because there were set times for traffic to stop, noise from closed shops and facilities, less noise from neighbors and children, etc.), 63% saw that they were closer and spent more time with their family, and 42% of residents considered the period of confinement to be a time when they spent more time resting at home (Figure 10).

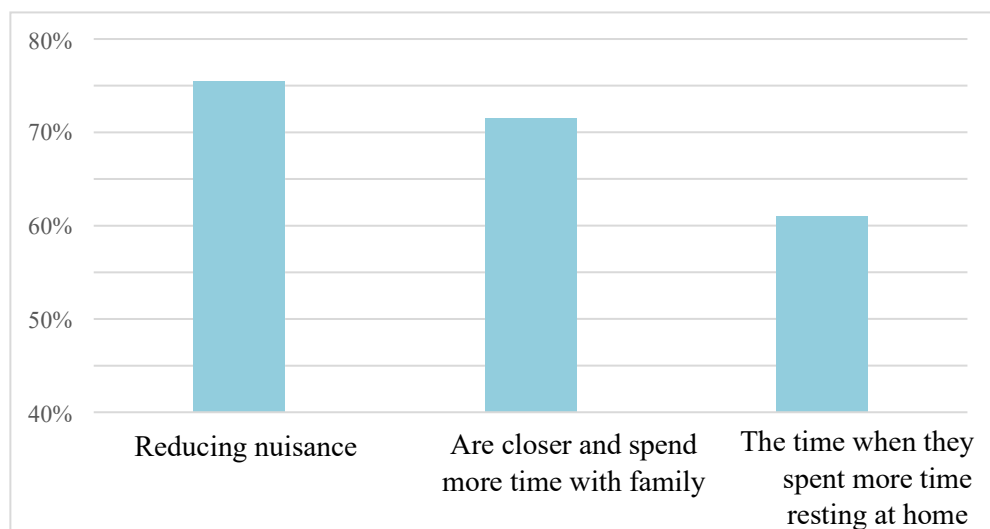


Figure 10: Changes in residents' living environment during the containment period

Similarly, the rhythm of life for residents was totally different during this period, and the absence of a specific timetable for residents generated disorder in the rhythm of life, contact between them, etc. This change can be seen in the level of contact between residents, which really changed. This change can be seen in the level of contact between residents, in which 3% of residents recorded less contact with family, 38% less contact with neighbors, 49% less time spent outdoors, and 51% less frequentation of specific public spaces (Figure 11).

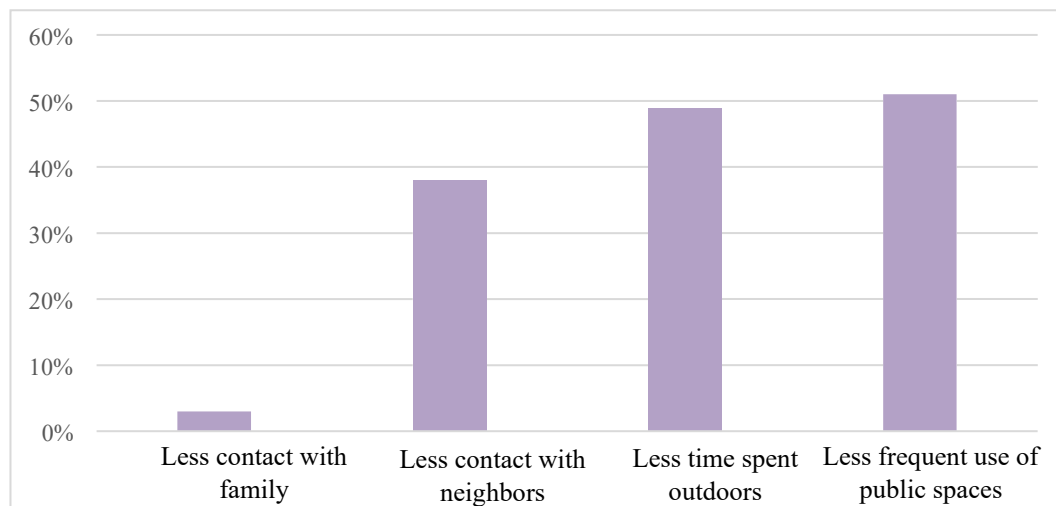


Figure 11: Change in the rhythm of life of residents during the confinement period

According to Figure 12, changes in the lifestyle of residents have also changed, namely: the absence of sports in sports areas, the absence of prayer at the mosque, distance learning, teleworking and also the decrease in the attendance of department stores.

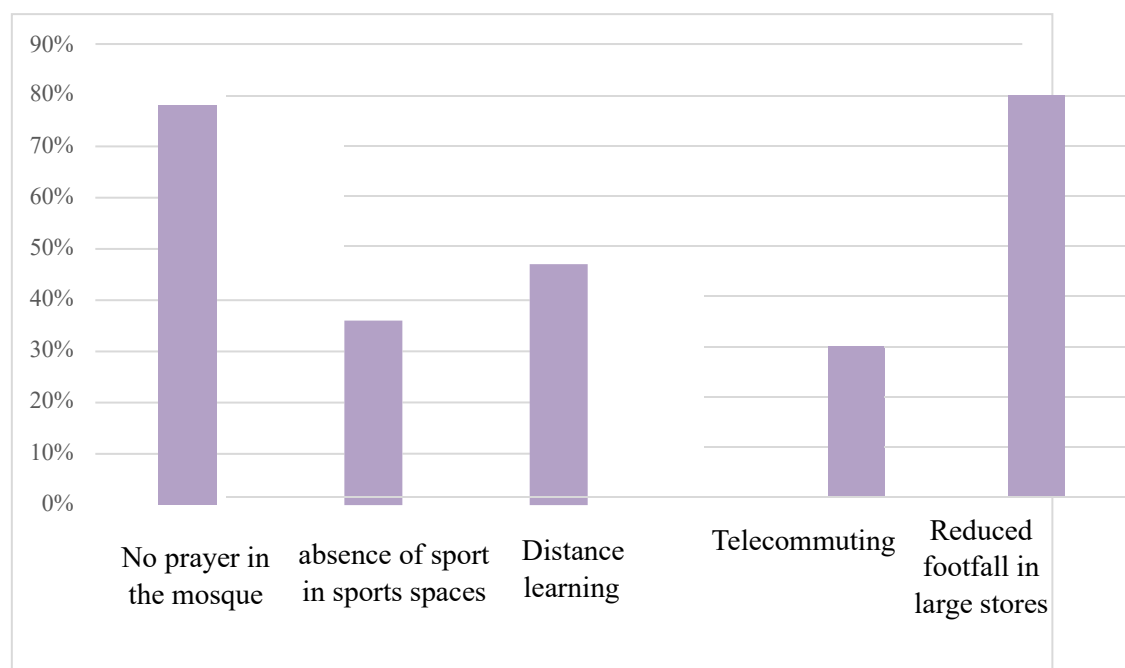


Figure 12: Changes in lifestyle during the containment period

4.4.Social relations and internet use during the confinement period

During the period of severe confinement, there was a significant loss of face-to-face contacts, with respondents in daily contact with far fewer people than before

confinement, which explains why they lost some of their social ties. The use of new information and communication technologies is more intense. Thus, 84% of residents said that during the period of confinement, they used the telephone and internet more than before, and 16% answered no, their use of internet and telephone being the same as before confinement (Figure 13).

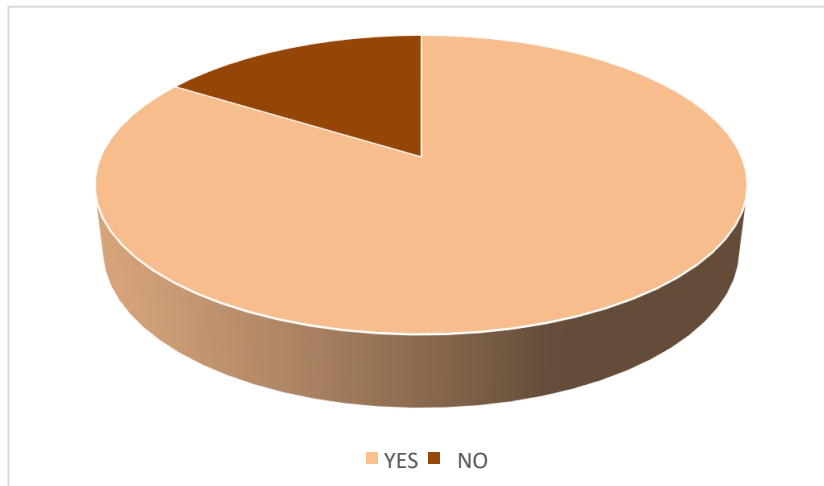


Figure 13: Residents' responses if telephone and internet use is more than before the containment period

Multiple reasons for using the phone and internet were mentioned by respondents, namely: 78% use the phone and internet for multiple purchases, 23% for watching films and series, 41% of residents use them for various social networks, 53% for obtaining information, 81% and 92% use them for chatting and talking respectively (Figure 14).

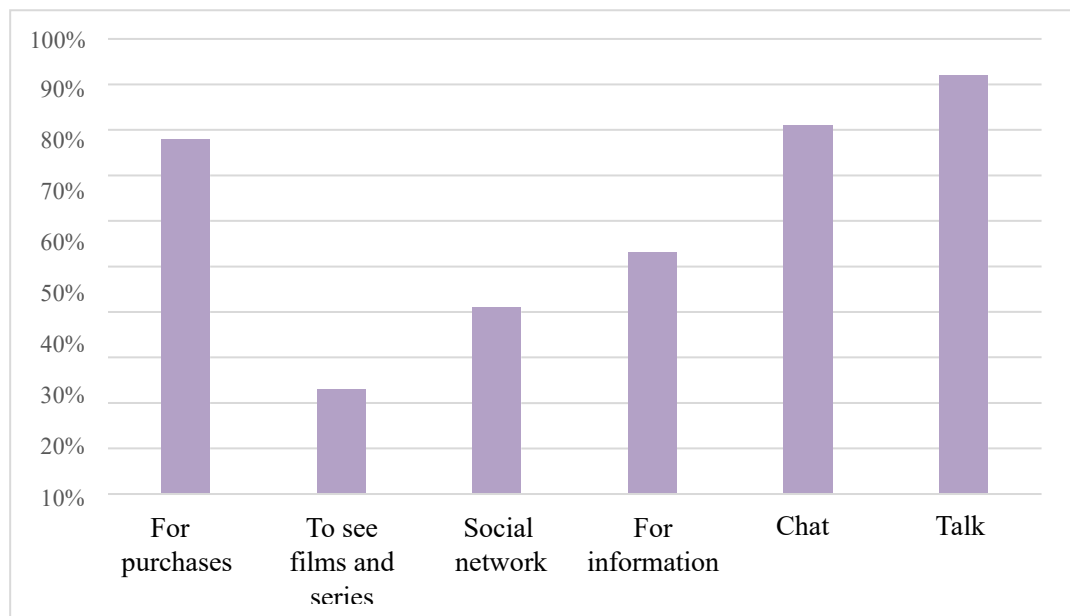


Figure 14: Reasons for telephone and internet use by residents during the confinement period

To conclude this section, we can say that covid-19 and confinement have had a major impact on living together and social mixing in the Frères Fisli neighborhood and in all Algerian cities. Communication is now by telephone and screen. The elderly, confined to their homes, have particularly suffered from this lack of contact with their loved ones. These phenomena have also had a negative impact on various activities, which have almost completely ceased, leading to professional problems such as unemployment, various conflicts and violence within the family, family breakdowns (with the death of family members due to the pandemic), increased social isolation and distance, the breakdown of social relations between inhabitants and the sharing of public spaces...

It is also agreed that these phenomena are best suited to reinforcing social proximity between people. It is by strengthening social ties, developing cohesion and cooperation within the population, that this virus can be combated, and they have also strengthened the bond of trust and family affection between family members.

5. Conclusion

Well-being is an essential aspect of human life that has been severely affected by the COVID-19 pandemic. The impact on mental health underscores the importance of an integrated approach to supporting individual well-being. Governments and organizations must continue to promote initiatives that foster a better balance between physical, mental and social health to improve the overall well-being of populations.

Social well-being, defined by the quality of interpersonal relationships and social support, was also severely disrupted during the pandemic. Confinement, social restrictions and physical distancing restricted social interaction and exacerbated feelings of loneliness and social isolation.

Well-being and living together in the face of the Covid 19 health crisis has been a social problem, and one that has necessitated considerable geographic distancing. This ultimately altered the rhythm of life for the inhabitants. Many people felt socially isolated during the period of confinement. As a result, people were more worried than usual about their loved ones, they were very stressed about having to study at home, and very upset about the closure of shops.

In conclusion, the Covid 19 pandemic was, according to the residents of the Frères Fisli neighborhood, an immediate health emergency, it had a direct impact on their shared social life, it had a profound effect on all aspects of their daily lives, a disruption of their rhythm of life, a narrowing of the environment and social exchanges.

In the end the COVID-19 pandemic has had a profound and complex impact on the well-being of people around the world. The effects have been particularly marked on the psychological, social and economic fronts, with a sharp rise in symptoms of depression and anxiety, increased social isolation, and economic hardship. However, it has also highlighted the importance of support mechanisms, resilience practices and social adaptations that have enabled many people to maintain their well-being, even under extreme conditions. The lessons learned from this crisis can guide public health policies and mental health interventions to better support collective well-being in the future.

6. Acknowledgments: I am grateful to my supervisor Professor Lise BOURDEAU-LEPAGE for her help and support in my doctoral thesis, as well as throughout my internship period at Jean Moulin University, Lyon 3. To all my work colleagues at the environmental research center in Annaba, Algeria.

References

1. Alizadeh H, Sharifi A, Damanbagh S, Nazarnia H, Nazarnia M, 2023, Impacts of the COVID-19 pandemic on the social sphere and lessons for crisis management: a literature review, springer Nature, p 1-26, doi: 10.1007/s11069-023-05959-2
2. Amaral-Prado HM, Borghi F, Freire Mello T, Grassi-Kassisse DM, 2020, The impact of confinement in the psychosocial behaviour due COVID-19 among members of a Brazilian university, 720-727. Doi: 10.1177/0020764020971318.
3. Bourdeau-Lepage L & Chasles V, 2014, Nature, santé et bien-être en ville, revue géocarrefour.
4. Bourdeau-Lepage L, 2020, Le confinement et ses effets sur le quotidien, HAL Id : halshs-02650456 <https://shs.hal.science/halshs-02650456v1>
5. Bourdeau-Lepage L, 2020, Le confinement, révélateur de l'attrait de la nature en ville, DOI : 10.13140/RG.2.2.33692.31360
6. Bourdeau-Lepage L, Schmitt G, 2022, Les territoires au temps de la pandémie : entre urgence sanitaire et impacts sociétaux, revue développement durable et territoires, Vol 13, N°2, <https://doi.org/10.4000/developpementdurable.20682>
7. Clément M.E, Kishchuk N, Guinard P-A, 2002, Facteurs susceptibles d'influencer le bien-être des familles d'enfants d'âge préscolaire et scolaire en milieu rural, , DOI : <https://doi.org/10.7202/006879ar>
8. Diener, E., Suh, E.M., Lucas, R.E. & Smith, H. (1999). Subjective Well-being: Three decades of Progress psychological Bulletin, 125, 2, 276-302.
9. Faulkner J, O'Brien W.J, & Al, 2021, Physical activity, mental health and well-being of adults during initial COVID-19 containment strategies: A multi-country cross-sectional analysis, Journal of Science and Medicine in Sport, volume 24, <https://doi.org/10.1016/j.jsams.2020.11.016>

10. Francesco Ficetola G, Rubolini D, 2021, Containment measures limit environmental effects on COVID-19 early outbreak dynamics, *Science of The Total Environment*, Volume 761,
<https://doi.org/10.1016/j.scitotenv.2020.144432>
11. Gibson, B., Schneider, J., Talamonti, D., & Forshaw, M. (2021). The impact of inequality on mental health outcomes during the COVID-19 pandemic: A systematic review. *Canadian Psychology*, 62, 101-126.
<https://doi.org/10.1037/CAP0000272>.
12. Lebreton D, 2020, Le lien social et santé : analyse d'une relation complexe en période et en contexte de pandémie, *Courtage en connaissances scientifiques Observatoire de la Santé du Hainaut*.
13. Morin J.F, Olsson C, and Atikcan O.E, 2021, *Research Methods in the Social Sciences: An A-Z of key concepts* (1st edn),
<https://doi.org/10.1093/hepl/9780198850298.001.0001>
14. Mirzakhmedova, N., Kiesel, J., Alshomary, M., Heinrich, M., Handke, N., Cai, X., ... & Stein, B. (2023). The Touché23-ValueEval Dataset for Identifying Human Values behind Arguments. *ArXiv preprint arXiv :2301.13771*.
<https://doi.org/10.48550/arXiv.2301.13771>
15. Monteaux C, 2023, Bien-être & santé, <https://blog.lpgmedical.com/fr/bien-etre-sante>
16. OECD (2021), *COVID-19 and Well-being: Life in the Pandemic*, OECD Publishing, Paris, <https://doi.org/10.1787/1e1ecb53-en>.
17. Parizot, I. (2012). L'enquête par questionnaire. *L'enquête sociologique*, 93-113.
18. Romeyer H & Fox S, 2021, Crises sanitaires et communication : enjeux sociétaux et organisationnels, *revue de communication sociale et publique*, p 1-12, <https://doi.org/10.4000/communiquer.8423>
19. Ruggeri, K., Garcia-Garzon, E., Maguire, Á. *et al*, 2020, Well-being is more than happiness and life satisfaction: a multidimensional analysis of 21 countries. *Health Qual Life Outcomes* 18, 192.
<https://doi.org/10.1186/s12955-020-01423-y>

20. Ryff C.D., Singer B.H, 2008, Know Thyself and Become What You Are: A Eudaimonic Approach to Psychological Well-Being. *J Happiness Stud* **9**, 13–39. <https://doi.org/10.1007/s10902-006-9019-0>
21. Wang C, Pan R, Wan X, Tan Y, Xu L, McIntyre R.S, N. Choo F, Tran B, Ho R, Sharma V.K, Ho C, 2020, A longitudinal study on the mental health of general population during the COVID-19 epidemic in China, *Brain, Behavior, and Immunity*, Volume 87, Pages 40-48, <https://doi.org/10.1016/j.bbi.2020.04.028>
22. Yi, Y., & Chiu, D. K. W. (2023). Public information needs during the COVID-19 outbreak: a qualitative study in mainland China. <http://dx.doi.org/10.1108/LHT-08-2022-0398>.