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# Living with COVID-19: emotions and health during the pandemic

#### BACKGROUND

COVID-19 has led and still leads all nations to adopt virus containment plans, considering possible strategies that help to live with the virus. The present study aimed to investigate the practical, psychological and emotional aspects of living with COVID-19.

#### PARTICIPANTS AND PROCEDURE

A total of 250 young adults (86% female), who lived in north-western Italy, took part in an online photovoice study, in respect of social distancing. They participated in a group discussion following the method SHOWeD. The researchers analyzed the photographs along with comments and transcripts from the SHOWeD group discussions using the triangulation process of visual and textual data. The collected data were analyzed on the basis of grounded theory, with the support of the NVivo 12 software.

#### RESULTS

From the analysis of the emotions concerning the psychological health of participants, 4 categories were identified. The results reveal benefits and emotional aspects that have stimulated the increase of individual and community empowerment. COVID-19 has led and still leads all nations to adopt virus containment plans, considering possible strategies that help to live with the virus.

#### CONCLUSIONS

From the analysis of the results it emerged how the online photovoice was a tool that allowed on the one hand the sharing of experiences and emotions related to living with COVID-19 and on the other hand to maintain social ties despite physical distance.

#### **KEY WORDS**

online photovoice; young adults; COVID-19; empowerment; Italy

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AUTHORS' CONTRIBUTIONS – A: Study design · B: Data collection · C: Statistical analysis · D: Data interpretation · E: Manuscript preparation · F: Literature search · G: Funds collection

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#### BACKGROUND

In the first months of 2020, the world population was faced with a pandemic event never experienced in recent history, which led people to rethink their relationships and adopt new strategies of coexistence. In recent years, countries have often been affected by natural or man-made disasters, impacting people's minds and conscience, upsetting what in psychology are defined as collective traumatic events (Micieli-Voutsinas, 2017; Rania et al., 2019) but limited to a particular context. COVID-19 instead affected the whole world in equal measure; so we can refer to collective trauma because the emergency was a sudden and explosive event that shocked the whole world at the same time (Crocq et al., 1987), causing invisible internal scars that shape memories of a community and influence each member's daily life (Lopez, 2011). Collective trauma deeply damages the intricate networks of social relations that are the base of a community's existence (Frankenberg et al., 2012). As highlighted by Hirschberger (2018), collective trauma consists of the psychological reactions to a traumatic event experienced by society. The collective memory of the traumatic event, through a narrative reconstruction with the aim of finding a shared meaning, forms a dynamic social psychological process. An effective strategy proposed by action research in community psychology consists in soliciting the participants to reflect on their emotions about what happened, by means of discussion and mutual comparison. Within this perspective, for example, Rania et al. (2019) studied the emotional impact of a traumatic event and had the goal of working on a collective trauma linked to the fall of an important bridge that had destabilized the daily life of the inhabitants of a city from an emotional and organizational point of view. Hirschberger (2018) highlights how the memory of trauma can stimulate growth through the attribution of meaning, which highlights the importance of the group and its resilience capacity, which can lead to change.

Mannarini (2020) underlines how the COVID-19 pandemic can be considered a collective trauma, as it has had repercussions on a psychological, cultural and symbolic level. In addition, the author emphasizes that the work of social memory in this case is a tool that allows one to give meaning to one's experience. In this theoretical framework, the literature developed in the months of the COVID-19 emergency paid little attention to the analysis of emotional aspects from a qualitative point of view, related to the development of participation and collective reflection on the issue. In fact, it focused primarily on medical aspects (Chen et al., 2020a; Kuno et al., 2020; Lu et al., 2020; Rubin et al., 2020; Xu et al., 2020), on psychological repercussions among healthcare workers (Chen et al., 2020b; Greenberg et al., 2020; Joob & Wiwanitkit, 2020), on psychological consequences

such as symptoms of anxiety, sleep disorders, depression, lower mental well-being and psychological distress in the general population (Rania & Coppola, 2021; Wang et al., 2020; Yang & Ma, 2020).

This article aims to focus on how young people cope with COVID-19 and to explore the emotional aspects they experienced and shared and the possible strategies for living with COVID-19.

## PHOTOVOICE AS A TOOL TO BRING OUT FEELINGS

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In the early 1990s the photovoice technique was developed by Wang and Burris (1994). Subsequently, researchers used this technique mainly to engage communities in projects targeting disadvantaged or struggling groups as protagonists of change in their community (Rania et al., 2015a, 2017, 2019; Saita & Tramontano, 2018). The photovoice method is based on participatory action research (PAR) and uses arts-based methods (Coemans et al., 2015) to promote social change (Chevalier & Buckles, 2013). Photovoice is based on three theories: Freire's education for critical consciousness theory (Freire, 1973), feminist theory (Smith, 1987), and documentary photography (Spence, 1995). This technique involves four phases: the photovoice workshop, individual photographic activity, the SHOWeD group discussion with an analysis of participants' pictures, the final event, and suggestions for social action. During the SHOWeD group discussion, participants look at all participants' photographs and answer the following questions: What do you see here? What is really happening here? How does this relate to our lives? Why does this problem or this benefit exist? What can we do about this?

The photovoice strategy is a visual method that uses photographs that participants take to allow them to think about their community's strengths and weaknesses, to promote introspection and critical dialogue about personal and community issues, and to reach local stakeholders and bring about change in the community. Furthermore, several studies have emphasized photovoice's potential to generate knowledge because it allows the exploration of participants' views, emotions, feelings, and practices as well as their problem solving ideas (Keremane & McKay, 2011). By using images, not only does photovoice allow participants to represent their own experiences and express feelings that are otherwise difficult to express, but also the images arouse emotions by representing real or symbolic situations (Rania et al., 2015a) that verbal language sometimes may not be able to grasp (Liebenberg, 2018; Saita & Tramontano, 2018). As Keremane and McKay (2011) noted, "a picture is worth a thousand words", the photovoice technique, by using photographs, allows stories, ideas, and emotions to emerge. All photographs have

different interpretations and arouse different feelings and emotions, depending on the person who looks at and interprets the photograph. This aspect of comparison, of different positions, emerges during the group discussion phase that distinguishes the photovoice technique (Rania et al., 2015b). Researchers choose to use photovoice because it allows participants to express and defend issues that they consider important in their context (Simmonds et al., 2015), stimulating first individual reflection, when participants decide to take a specific photograph, and subsequent reflection in groups, when participants compare themselves starting from the photographs taken and answer the SHOWeD questions. Photovoice is therefore also a relational methodology (Manasia, 2017), and its value is linked to the development of the relationship between participants and researchers, which is defined in the literature as PAR.

#### AIMS

The aim of this research is to solicit a discussion of the experiences and emotions by young adults in a moment of the COVID-19 health emergency through the photovoice technique. As a matter of fact, even if working activities restarted their routine, it is necessary to continue to undertake individual and collective behaviors to continue living the new normal. A further objective is to explore whether the discussion of the participants' experiences and emotions referred to above helps individuals overcome a collective traumatic dimension, experienced during the COVID-19 lockdown and in the following months of the resumption of normality. The aim of this technique is to promote social change, useful to overcome collective traumas, through a dialogue in a small group, reflection and confrontation about the emotions experienced.

#### METHODOLOGY

In order to achieve the aims, it was decided to use the photovoice method, starting from the idea of "participant autonomy" (Morgan et al., 2020, p. 103). The choice to use the photovoice method was based on the fact that this technique can be used as an instrument to explore the life experiences of participants, or they become a medium through which participants share thoughts and emotions without the limitation of verbal language (Saita & Tramontano, 2018; Uhrig et al., 2016).

Photovoice implies that participants are invited by the researcher to take photographs and accompany them with an explanatory capture, to then share the reflections and emotions aroused by the shot with the group. In the photovoice method, participants become "researcher partners" and collectors of their own experience and so, as stated by Numans et al. (2019), participation and its complex process represent a value regardless of what emerges from the research.

With photovoice, photographs are the tool that participants use to share their daily life together with the narratives associated with them (Morgan et al., 2020). As reported by Morgan et al. (2020), the meaning attributed to an image is given by its content, the situation and how the image itself is interpreted according to who looks at it. The authors also underline that in the literature this is a central theme to ensure that during the analysis phase the voices remain intact, in particular when the analyst is not the one who shared and gave voice to the photographs. To this end, the approach that connects photographs and text can prevent the voices of the participants from being disconnected from the images.

## PARTICIPANTS AND PROCEDURE

#### PARTICIPANTS

The project involved 250 young Italian adult students (86% females and 14% males). They lived in northwestern Italy and had a mean age of 27.5 years (22-56 years, SD = 7.52). Participants were recruited, on a voluntary basis, in northwestern university various degree courses (social service, psychology, pedagogy, planning and educational research), in which the participants were enrolled.

#### PROCEDURE

In this research, participants took part in an online photovoice activity on the platform Teams in four online meetings. To reach the largest possible number of subjects and to allow them active participation, each meeting was reserved for a maximum of 60 people. In total, 250 participants took part in the research. Subsequently participants were randomly divided into small groups and each group consisted of about 4-9 participants, for a total of 40 groups.

During these initial meetings (Phase 1), in which there were 60 participants at a time, the researcher introduced the purpose and basics of the photographic technique. Moreover, the participants received information on using photovoice images and sent written informed consent to the researcher, in which they declared that their participation was voluntary. The data collection procedure fully complied with the Research Ethical Code of the Italian Association of Psychology. This study was carried out in accordance with the ethical recommendations of the Declaration of Helsinki and in compliance with the American Psychological Association (APA) standards for the

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treatment of human volunteers. After the introduction of photovoice, the participants were asked to think about the situation we are experiencing, caused by COVID-19, and to think about the practical and emotional aspects connected to living together with COVID-19; in particular, they were asked to reflect on what changes had occurred in their life and how that made them feel. Later, it was explained to them that Phase 2 consisted in capturing, through photographs, the most significant moments connected to living with COVID-19, from a practical and emotional perspective. Among these photographs, they would then have to choose the ones most significant to them (2 or 3) and comment on them individually and then share them with the rest of the small group during Phase 3.

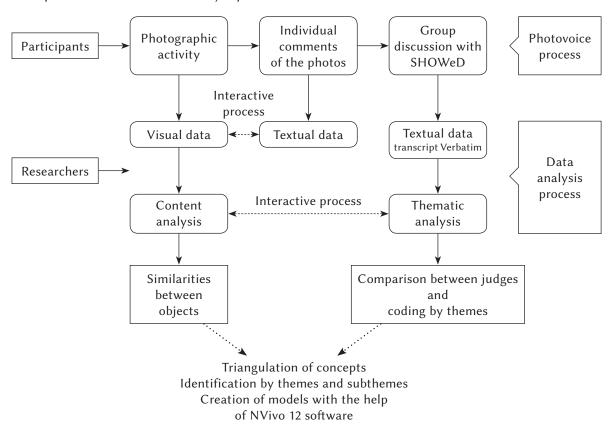
In the Phase 3, each small group (4-9 participants) met on the Teams platform, and each participant presented his/her photographs and explained the meanings of the photographs and his/her feelings related to taking the picture. A group discussion followed using the SHOWeD method (Wang, 2006) and each group meeting was videotaped. From a community psychology perspective, it was decided to share the work with those interested and the presence of stakeholders and students was a function of sharing reflections on a topic that involves everyone personally. Therefore, in a following meeting (Phase 4), each group produced a billboard or PowerPoint presentation, which was presented in an online initiative with local stakeholders, who included a local psychologist, doctors, university managers, university teachers, families, student participating in the photovoice activity, but also other students who had not taken part in the activity, who were deemed as personally interested and involved in this issue.

#### DATA ANALYSIS

Researchers analyzed photographs along with comments and transcripts of SHOWeD group discussions using the visual and textual data triangulation process; in particular, they focused on the data that emerged from Phase 3 of the photovoice: on the photographs shared by the individual participants and the group discussion that emerged. Researchers assigned an individual code to each participant (participant 1 – P1, participant 2 – P2, etc.). In Figure 1, we can note the procedure that researchers and participants followed to categorize the recurrent themes (Rania et al., 2019). Two independent researchers

#### Figure 1

Participants' and researchers' data analysis process



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analyzed and classified the data, using the NVivo 12 software to identify the main common themes that emerged from the analysis of the discussions that took place in the various groups and from the analysis of the photographs of the individual participants with the relative captions and shared with the group; in particular, from the analysis of the group discussions, based on the photographs taken by the individual participants, the common themes were identified and the most illustrative verbalizations were chosen; the photographs, on the other hand, were grouped according to the meaning given to them by the participants and the most representative ones were then chosen. The software allowed the creation of graphical representations based on the grounded theory (Glaser & Strauss, 1967) consisting of defined maps that contained themes and sub-themes.

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#### RESULTS

The results are presented in subparagraphs according to the categories that emerged from the triangulation of visual and textual data. From the analysis of the emotions concerning the psychological health of participants related to living with COVID-19, 4 categories were identified, represented in Figure 2: social factors, relational and family factors, factors connected to the pandemic, and factors connected to institutions and information. For each category, the emotions that emerged, some photographs and significant verbalizations are presented.

#### SOCIAL FACTORS

For the social factors, the emotions that participants brought out with respect to living with COVID were linked to isolation and the impossibility of having a regular social life. Among the main emotions, we found the following: "loneliness", "obstacle to the expression of feelings", "sadness", "panic and despair", "boredom", "concern" and "fear of being infected".

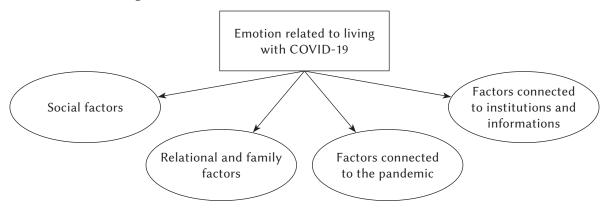
Among the photographs taken, some conveyed the emotions that participants experienced related to living with COVID and its repercussions on psychological and social health. Here are reported some of the most representative of the emotions of "loneliness" (photo 1) and "obstacle to the expression of feelings" (photo 2). In fact, loneliness has a significant impact on the health of all segments of the population, especially among the elderly as it emerges in photo 1 and from some verbalizations: "While lunch in a nursing home is usually a time of sharing, joy and carefree feelings, the elderly now have to have lunch spaced out, in solitude. Even the operators cannot interact with the elderly for their safety" (P9). Furthermore, COVID-19 has changed the way people live and relate by creating panic, frustration, and concern as well as creating an "obstacle to the expression of feeling", as shown in photo 2 and expressed by some participants: "Our habits have been upset or changed: to go out and be together, it is now necessary to wear a mask. Hugging and shaking hands as soon as you meet are strongly discouraged. However, these gestures are so inherent in our way of doing, that we have had to find alternatives, such as greeting each other with our elbows" (P6).

Loneliness caused by COVID was also represented in the working context: "We find ourselves working alone, without contact with colleagues with whom we had established relationships or even friends" (P201).

Another emotion that emerged from the analysis of the data was the "sadness" caused by the distrust accentuated by the rules imposed for the containment of the pandemic, with effects not only on physical but also on psychological health: "All this saddens me because [...] we tend to stay away from others due to COVID, which is seriously damaging

#### Figure 2

Emotions related to living with COVID-19



people's physical and mental health, increasing their distance" (P53).

#### Photo 1

Participants represented the emotions of "panic and despair" in living with COVID caused by the change in everyday life and the inability to go out and live their routine: "Currently we can only remember parties together, concerts, dinners, cinema, theatre, travel, indoor sports and hugs and kisses between friends. It is a thrilling scenario that immediately throws us into panic and despair" (P33).

"Boredom" were highlighted as additional emotions experienced, in particular during lockdown: "Finding ourselves living in the house as a cage for so long has been difficult; at first, I was bored, I watched TV, I did those things I did before to relax but which then became everyday life" (P1). Others highlighted the "concern" of adults caused by living with COVID-19: "We feel the concern, combined with the sadness of not being able to share even a hug with the people they love" (P146).

Finally, others highlighted how moments that were previously experienced simply as idleness are now experienced as moments of tension due to anxiety and the "fear of being infected": "The pleasure of going to have an aperitif or eat a pizza with friends, the simplest types of fun and entertainment, are now less carefree moments due to the fear of contagion" (P42).

### RELATIONAL AND FAMILY FACTORS

Regarding the category "relational and family factors" from the triangulation of textual and visual data, emotions emerged that represent living with COVID among family or within human relationships, such as "desire for communication", "serenity", "family stress", "fear for family members" and "lack of serenity". The photographs 3 and 4 represent two often recurring emotions observed in the data: the "desire for communication" and "serenity". In fact, the participants underline the "desire for communication" despite the use of protections that represent an obstacle (photo 3): "The masks filter germs but not people's affection. It will not be the virus that will stop relationships, communication and love between people. COVID-19 has taught us to dedicate more time to the people we love and to make every moment precious" (P10). Furthermore, the participants also highlighted how the possibility of using the video call arouses "serenity" as it allows one to face the distance imposed by living with COVID-19 (photo 4): "The video call can never replace a hug and a kiss, but it is the only momentary solution to be together. Emotionally, it is exhausting to be away from those you love, but knowing that I can hear them helps me to continue the week with serenity" (P120).

Loneliness



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#### Photo 2

Obstacle to the expression of feelings



The participants also highlighted the repercussions on psychological health and, in particular, "family stress": the lockdown, in fact, led to difficulties and discomfort in families and especially in children, forced them to use electronic devices at an early age to fill up their time: "The feeling of discomfort and stress of the family is completely reflected in the children; they are no longer carefree and they soon turn to electronic devices" (P2).

"Fear for family members" is a very present emotion, which leads to reducing or redefining meeting methods: "The fear of infecting our grandparents constantly accompanies us and does not allow us

#### Photo 3

#### Desire for communication



#### Photo 4

Serenity



even to enter their home but may lead us to leave shopping at the door" (P235).

Finally, others highlighted the "lack of serenity" caused by distance from loved ones: "A very sad and dark moment - having the closest person far away did not allow us to be peaceful" (P198).

#### FACTORS CONNECTED TO THE PANDEMIC

With regard to the category "factors connected to the pandemic", the emotions that emerged from the analysis of the visual and textual data showed the difficulties and repercussions that living with COVID-19 had for the psychological health of the participants: "anxiety", "hope", "anger", "depression", "anguish", "sense of helplessness and desolation", "suffering", "fatigue", "gratitude", "happiness", and a "mix of emotions".

The participants took many photographs with the aim of transmitting the emotions experienced and related to the difficulties that living with COVID-19 entailed for physical and psychological health. The following are the most illustrative emotions that the participants experienced. Photo 5 recalls the emotions linked to "anxiety". Some participants, in fact, underline how: "This sign at the entrance reminds me that there is always danger in places where a certain number of people are concentrated. This is a discomfort and creates anxiety during an activity that was previously part of the normal daily routine" (P138). Photo 6, instead, recalls a message more akin to "hope": "There is the hope that all of these problems will end soon !!! We await vaccines and antiviral medicines" (text in the photograph: EVERYTHING WILL BE OK) (P79).

Furthermore, some participants expressed "anger" related to the situation we are experiencing in its complexity, which causes discomfort in psychological health: "The feeling I have now is a lot of anger -I don't even know what for - but it is a situation that makes me feel bad" (P99).

A feeling of "depression" is often linked to the lockdown: "Being forced to stay at home has led many people to suffer from depression or panic attacks, mood swings and many other ailments" (P86). Another emotion that emerged is the "anguish" caused by using tests to detect COVID-19: the plastic stick used is seen as a symbol that represents different emotions, sensations and fears: "It's actually more of the emotional burden [the test] leaves you, because it's not simply a gadget [...] that plastic stick contains emotions, feelings, fears and anxieties" (P245).

Furthermore, many participants expressed a "sense of helplessness and desolation" towards a disease that has completely disrupted the routine and relationships of everyone as well as of the community, compromising their physical and psychological health: "We are left with a feeling of helplessness in a histori-

cal period that we never expected" (P123). "A deserted city, devastated and emptied by the lockout; this desolation affects me so much" (P32).

"Suffering" emerged as a necessary emotion "not to forget" the cause of the living conditions imposed by COVID-19: "In my opinion, it is useful to see this change in everyday life precisely in order not to forget what we are going through and what we have passed through. We must not forget the suffering of children, the elderly, animals, shopkeepers, and all people who now live in such a situation from economic, physical, personal and psychological points of view" (P149).

The analyzed data also show the "fatigue" resulting from having to give up some things due to living with COVID-19 that were previously taken for granted and that were fundamental to psychological health: "If we think about what we have to give up, such as physical contact, that we take for granted in times of no pandemic but are absolutely necessary to make us feel good. A hug is something that gives us energy, that helps us to cope with situations and difficulties" (P50).

However, alongside these emotions, some participants also wanted to bring out the sense of "gratitude" in having learned to appreciate the smallest things: "The lockdown has led me to be grateful for even the smallest things, not to take anything for granted because even the strongest person can suffer" (P19).

There were participants who described a feeling of "happiness" when leaving the house and forgetting the protective devices, as they realized that there was still a semblance of normality: "I leave the house in a hurry and I realize that I do not have a mask. I'm almost glad I forgot because I think there is still some semblance of normality" (P123).

Finally, there is also a "mix of emotions" due to living with COVID-19: "Thinking about COVID-19 leads to feelings such as fear, bewilderment, amazement in an obviously negative sense, isolation, the impossibility of social contact" (P38).

#### FACTORS CONNECTED TO INSTITUTIONS AND INFORMATION

Finally, some of the emotions that the participants felt while experiencing COVID-19 were linked to factors connected to institutions and information; in particular, from the analysis of photographs and group discussion, the main emotions that emerged reflect the repercussions that COVID-19 has brought for their psychological health: "interconnectedness", "fear", "a sense of abandonment", "concern for children", "panic and terror". The participants photographed many situations that reflected both the emotions related to their relationship with institutions, and those aroused by the information they received daily; with photo 7, for example, the participants manifest a feelPhoto 5

#### Anxiety



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#### Photo 6

Hope



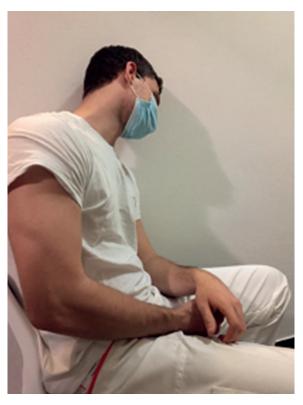
ing of "interconnectedness", expressing in particular concern for those who were engaged on the front line: "Despite the need to hire new health personnel, many operators have precarious contracts. In this period of health emergency, health workers are subject to psychological distress and physical fatigue" (P3).

In photo 8, instead, they want to share the "fear" caused by the constantly information received: "TV news, radio and newspapers have created alarmism, often exaggerated, towards the pandemic; the daily bulletins, in particular, have fueled growing fear in the community" (text in the photograph: Emergency COVID-19: limit movements) (P210). Others, how-

#### Photo 7

#### Stress

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#### Photo 8

Fear



ever, refer to "fear" as a state experienced by those, especially women, for whom living at home during COVID-19 is not safe and affects their psychological health: "They initially provided advice through the slogan 'stay at home', assuming that the house was a safe place for everyone, when in reality it is not; women can find themselves in a situation that does not provide security" (P50). Furthermore, from the analysis of the data, it emerged that many participants perceived a "sense of abandonment" by institutions and, in particular, by public health entities, which, due to bad organization, left people alone: "In my situation, I feel totally abandoned by health facilities, which leave you in a circle that never ends" (P45).

Particular attention was paid to the "concern for children", who most of all suffer from the lack of socialization and human contact within school contexts. The teacher, who is the person who should reassure them in their moments of crisis, visually communicates another message, transmitting the fear of contact: "Keeping them at a distance, as if we had to defend ourselves from them and not defend them. COVID has changed proxemics within the educational relationship by creating an invisible bubble around people that we always carry with us but which weighs on us like a stone in our stomach" (P69).

Furthermore, from the analysis of the data, it emerged that often, incorrect information contributes to fueling "stress" in a particularly complex time for people and their psychological health: "The management of the unexpected events resulting from COVID-19 is complex, and it is equally difficult to navigate among the endless stream of chaotic information, interpretable protocols and ever-changing decrees. This leads to high levels of widespread stress and general malaise, panic and terror that are not really necessary, since people are already living with fear" (P120).

#### DISCUSSION

From the analysis of the data, some emotions related to living with COVID-19 emerged, which returned to various factors, even if they declined in different ways. Instead, some emotions are found only in one of the identified factors. If there were many negative emotions, associated with living with COVID-19, on the other hand, the analysis of the results shows that there were also positive emotions, experienced by the participants. They identified effective strategies to live with COVID-19 and not give up social ties, despite the restrictions imposed to protect everyone's safety.

In discussing the results and the emotions that emerged in the various factors identified will be presented first and then the specific emotions of each factor.

Fear was the feeling that recurred most among the various factors. Regarding the social factor, it emerged that the "fear of being infected" creates tension rather than light-heartedness in moments of fun or leisure or, as emerged in the literature, this fear can worsen psychological distress (Al-Dwaikat et al., 2020) by affecting psychological health; in relational and family factor, the "fear of family members" emerged as an emotion that limits or redefines contacts, especially with the elderly.

The feeling of "fear" is experienced as an emotion linked to factors connected to institutions and information: the amount of conflicting information feeds fear and general psychological malaise.

Furthermore, living with COVID has an additional impact on the psychological health of some women: in fact, restrictive measures imposed to counteract the spread of COVID-19, such as staying at home, have increased (particularly during lockdown) the risk of domestic violence against women and children (Bourgault et al., 2021). During the lockdown, in fact, the risk of family conflict increased, which affects the perception of happiness (Rania et al., 2020) and, therefore, general well-being.

Instead, in the factors connected to the pandemic, fear does not emerge among emotions, but rather emotions are highlighted that express the mood both negatively and positively when placed along a continuum.

The participants highlighted a sense of "panic", particularly linked to social factors and factors connected to institutions and information. From a social point of view, panic is accompanied by the discouragement of a total change of one's life; in factors connected to institutions and information, panic risks turning into terror due to the sometimes erroneous and chaotic information transmitted by the mass media and government in this particular period (Giri & Maurya, 2021). In fact, it was highlighted how the mass media during the lockdown have had a negative impact on people's emotions and resilience, which decreased as the negative news transmitted increased.

With respect to "sadness", this feeling falls within social and relational/family factors, and it is linked to the distrust that the pandemic has caused in social relations, increasing closure as well as physical and psychological problems.

"Stress" is another emotion represented by the participants in relation of various factors: in relational and family factors "stress" in the family is closely connected to the situation that families experienced during the lockdown. Stress also emerged in the literature (Riegler et al., 2020), especially in relation to children, who are no longer carefree but are forced to precociously use electronic devices, while in the workplace, "stress" was dealt with through colleagues' support. Furthermore, "stress" is seen as emotion connected to factors related to institutions and information. In fact, government information and provisions were experienced as chaotic, which created disorientation regarding the future.

"Concern" is an emotion highlighted in social factors and factors connected to institutions and information: in social factors it emerges as an emotion that affects all age groups, from newborns to older people. "Concern for children" was also highlighted in the factors linked to institutions and information, as children experience changes and socialization difficulties around them, especially in school. Teachers, instead of reassuring the children, send messages of fear of contagion through their protective measures. Also in the literature, Viola and Nunes (2022) report how COVID-19 has had many consequences for children's health, such as increased anxiety and depression and delays in language and motor development caused by the closure of schools and the limitation of social relationships.

Some emotions, on the other hand, emerged only in the individual factors identified; in social factors we identified "loneliness"; the perceived "loneliness" among the elderly, who have a unique susceptibility to loneliness as aging is associated with many losses that can both cause and amplify such feelings. This has detrimental effects on the physical and mental health of older adults, including increased rates of depression, cognitive impairment, and mortality (Bhutani & Greenwald, 2021). This research confirms the expected increase in "loneliness" in the elderly population during COVID-19. Many members of the scientific community predict an increase in "loneliness" in the elderly population during COVID-19 and the restrictions imposed (Heidinger & Richter, 2020). Furthermore, "loneliness" is experienced at work, where due to smart working, one finds oneself working in solitude. Some authors have highlighted how restrictive measures, used during the lockdown, but which still remain in our lives, increased the perception of loneliness, psychological stress and anxiety (Palgi et al., 2020; Tull et al., 2020).

In relational and family factors an emotion is underlined in opposite terms: in fact, on the one hand, "serenity" emerges, given by the possibility of maintaining social relationships even at a distance thanks to the use of video calls, while on the other hand the "lack of serenity" is due to the distance imposed during this period of the pandemic. The use of new technologies has been highlighted in the literature as a coping tool and reduces loneliness and increases mental health levels (Garfin, 2020).

Among the factors connected to the pandemic, "anxiety" is connected to taking the test for COVID research, seen as a symbol of the pandemic and all that it represents, while "anger" is connected to the severity of the situation experienced and the loss of the importance of things that were fundamental before. During the lockdown, anxiety related to COVID-19 increased mental distress and psychological tension (Bendau et al., 2021), which seems to be maintained even in the following months of coexistence with COVID-19.

"Hope" emerged among the factors connected to the pandemic; "hope" helps people to survive. Studies have emerged in the literature that highlight the roles of hope and self-efficacy in relation to insecurity and Living with COVID-19 stress during COVID-19 (Wen et al., 2021), stimulating individual and community empowerment. However, alongside hope, some participants also wanted to note a sense of "gratitude" linked to the pandemic, which made it possible to appreciate even the small things previously taken for granted.

The feeling of "depression" is another emotion highlighted in the factors connected to the pandemic. The lack of commitments and being closed in at home can promote depression. Psychological distress, such as depression, can also affect those who run their own businesses because of the difficulties they experience in running their business. In fact, research carried out by Aguiar-Quintana et al. (2021) in the tourism sector highlighted how job insecurity can lead to anxiety and depression.

In factors connected to the pandemic, the feeling of "happiness" is experienced when one finds oneself forgetting the mandatory devices, such as the mask, and feels a sense of normality. "Happiness" in relation to COVID-19 has been analyzed in several studies, where it emerged that this issue has decreased with the pandemic's progress (Greyling et al., 2021) both in women and men (Rania & Coppola, 2021).

The "sense of abandonment", in factors connected to institutions and information, is perceived, above all, by public health with respect to the disorganization of those in quarantine.

In factors connected to institutions and information, the "interconnectedness" experienced towards health personnel was highlighted by the participants, particularly due to being understaffed and the precarious work situation of this category of worker. Some authors point to the increased stress of medical and nursing staff that manifests in insomnia and somatic and post-traumatic symptoms (Chen et al., 2020b; Wanigasooriya et al., 2020).

In particular, some studies on burnout have shown that healthcare professionals show high levels of emotional exhaustion and depersonalization and a reduction in personal fulfilment, which could represent a protective factor (Barello et al., 2020; Giusti et al., 2020; Matsuo et al., 2020).

Then there is a series of emotions that are related to a single factor that can conflict with each other as an "obstacle to the expression of feelings" among social factors, which presupposes that individuals limit their physical expressions of affection to "touching the elbows" and the "desire for communication" among relational/family factors. In this regard, the research showed how the physical distance and the protective devices imposed did not slow down the desire to communicate felt by the participants, who do not want to give up relationships and community life, which COVID-19 has put to a severe test.

Negative emotions emerge, such as "boredom", among social factors; in the literature, it was found that bored people were more likely to break the rules of social isolation (Boylan et al., 2021). Other emotions emerged as "a sense of helplessness, anguish, suffering, and fatigue" among the factors connected to the pandemic. Also, the participants highlighted a "mix of emotions" among the factors connected to the pandemic.

Finally, a broader reflection must be made on the continuous reference to the lockdown period, which emerged from the analysis of the data, despite the research being carried out in a subsequent period: this fact highlights how the lockdown period, with the relative restrictions imposed, has marked the experience of the participants, affecting their psychological well-being.

#### CONCLUSIONS

The use of the photovoice method can help transform negative experiences and situations of great uncertainty, such as that of the COVID-19 pandemic, with a certain degree of reflection through the narratives of the participants, giving meaning to experiences and strengthening social bonds. Relationships within groups and community activity can mitigate the emotional impact that the situation of uncertainty has had on people. In fact, the collective reflection, despite the particularly difficult and complex period, led the participants to reflect on the emotions experienced, thus allowing both negative and positive emotions to emerge and be shared; moreover, from the reflection on emotions functional strategies emerged to be able to maintain and consolidate social bonds, despite the restrictions imposed on safety.

It can therefore be stated that the use of visual methods helps participants to express their point of view, their needs and emotional states with respect to the topic under discussion (Ciolan & Manasia, 2017; Rania et al., 2019). Moreover, through a process of co-learning participants, policymakers and researchers learn from each other and, through a shared reflective process, the participants themselves develop critical thinking (Rania et al., 2014, 2017). Even though this kind of approach could be considered very delicate, there are a lot of ethical reasons that make it important to choose. For example, engaging participants helps them to better know the research process and not to feel excluded (Frisby et al., 2005) as well as stimulating them in depth, which emerged from literature research (Eden & Ackermann, 2018).

Through the photovoice created, voice was given to the collective memory of a traumatic event such as that of the COVID-19 pandemic which is a psychosocial process of elaboration of meaning that allows the sense of connection between oneself, others and the environment (Mannarini, 2020).

Participants were able to express and give meaning to the emotions experienced during this complex

Nadia Rania, Laura Pinna, Ilaria Coppola period developing social resilience, defined as the ability of social processes to respond to and recover from disasters (Saja et al., 2018), in adopting new behaviors and new ways of dealing with daily life through the discussion of their emotions. Resilient communities respond to and recover from disasters better than other communities (Ashmawy, 2021). Beyond the commitment of the participants, stakeholders' work to collaborate toward self-empowerment and to foster solid relationships is fundamental to enhance community resilience (Saja et al., 2018).

In fact, they highlighted how the lockdown period and the following months were dealt with, not giving up one's life, but building alternatives to maintain one's relationships, live with "serenity" and "hope" and "express one's feelings" while respecting social distancing.

Implementing intervention programs that focus on people's awareness could become a tool for active participation aimed at changing people and the community, with a focus on individual and collective well-being and health.

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#### DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author, upon reasonable request.

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