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Articles

Being online in the time of COVID-19: Narratives from a sample of young adults and the relationship with well-being

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Abstract

During the COVID-19 pandemic, Internet might influence daily functioning in both positive and negative ways. Within the conceptual framework of the semiotic cultural psycho-social theory, this study examines the meanings of being online during the COVID-19 pandemic based on narratives collected from Italian university students (Mean age = 22.78; SD = 2.70). Computer-assisted content analysis was used to map the main Dimensions of Meaning (DM) characterizing their texts; ANOVA was used to examine (dis)similarities between DM related to sociodemographic characteristics and connotations of Internet use; Pearson's correlations were computed to examine the relationships between DM and well-being. Two DM emerged: (a) being online in daily life ('rupture' versus 'continuity') and (b) Internet functions during the pandemic ('health emergency' versus 'daily activities'). Notably, participants high on the 'daily activities' polarity of Internet functions connoted the Internet as a resource and reported higher levels of well-being, whereas participants high on the opposite polarity of "health emergency" connoted the Internet as a refuge and reported lower levels of well-being. Findings suggest that Internet use and its impact on well-being during the pandemic relates to the personal and social cultural meanings attributed to being online.

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1. Introduction

The sudden COVID-19 outbreak has prompted national governments to introduce infection containment measures, including school and workplace closures, and stay-at-home orders (Deb et al., 2020). Several authors have highlighted how such measures of physical distancing might enhance the risk of psychosocial distress (Brooks et al., 2020; Mazza et al., 2020; Commodari et al., 2021; Metin et al, 2021; Settineri, 2021). At the same time, an increased use of the internet has been recorded worldwide among the general population because of self-isolation measures (Anwar et al., 2020; Boursier et al., 2020; Wiederhold, 2020) and the impact of Internet consumption on people's well-being has been debated in research communities (Boursier et al., 2020; Canale et al., 2021; Garcia-Priego et al., 2020; Giardina et al., 2021). Indeed, some scholars have suggested that for many people the Internet may represent a significant and important resource, for instance to maintain networks of real friendship and to facilitate mutual support (Nabity-Grover et al., 2020), and to collect health information (Canale et al., 2021). On the opposite side, other scholars have argued that the Internet could be experienced as a constraint in interpersonal, scholastic, academic, or working spheres, or even as a danger, since it may exacerbate stress responses, amplify worry and impair psychological functioning (Odaci & Cikrikci, 2017; Ozturk & Ayaz-Alkaya, 2021; Schimmenti et al., 2020; Thompson et al., 2017). For instance, it has been suggested that the Internet gives exposure to misinformation about the disease, which, in turn, can fuel fear and constitutes a risk for health (Cuan-Baltazar et al., 2020; Garcia-Priego et al., 2020; Starcevic et al., 2021). It can also lead to adverse consequences if it is excessively used as a maladaptive coping strategy against anxiety, depression, and loneliness (Kardefelt-Winther, 2014; Király et al., 2020; Radeef & Faisal, 2018; Ruggieri et al., 2020) and to escape from traumatic reality (Dong et al., 2020). Furthermore, the relationship between internet use, technological development and more opportunities to gamble online has been highlighted during the COVID pandemic (Frisone et al., 2020; Yahya & Khawaja, 2020).

In the present paper, we suggest that the study of the relationship between Internet use and well-being in the COVID-19 context requires a complex and dynamic approach, overcoming the dichotomy of Internet as a resource for well-being or as an amplifier of psychological distress (Ferrante & Venuleo, 2021). On the one hand, people's vulnerability to psychological distress is influenced by their relational resources (Marino et al., 2018; Musetti et al., 2020; Scandurra et al., 2021; Venuleo et al., 2020a; Wang et al., 2018): for example, risk factors such as loneliness, lack of psychological and social support, poor sense of connectedness to community were exacerbated in the context of COVID-19 (Boursier et al., 2020; Marinaci et al., 2020; Saltzman

et al., 2020; Tull et al., 2020). On the other hand, the ways of living and interpreting physical distancing and the condition of "being online" is strongly influenced by the symbolic resources (i.e., worldviews, beliefs, modes of thinking and acting) that citizens hold to interpret what is happening and their own role in it (Marinaci et al., 2021; Venuleo et al., 2020c).

Within the general framework of the social constructionist epistemology embedded in the Semiotic Cultural Psycho-social Theory (SCPT; Salvatore, 2018; Salvatore &Venuleo, 2017; Picione & Lozzi, 2021; Shweder & Sullivan, 1990; Venuleo et al., 2020b), we will argue that the meaning of Internet use and its impact on well-being depend on the personal and social cultural meanings through which people interpret their being online in a given historical circumstance, that is, the pandemic situation (e.g., a resource to maintain social contact, the reaction to unjustified limits to freedom, and so on). From this perspective, the question is what kind of semiotic resources people possessed to represent the crisis and to use the Internet in a healthy manner. Accordingly, the current study aimed to examine the interpretative categories that underpin people's ways of representing their being online during the COVID-19 pandemic and their relationships with well-being. Since the restrictions related to the health emergency have changed over time, depending on the community infection, death rates and political decisions, we further specify the context of analysis of the present study, which aims to examine the meaning of Internet use during the lockdown period that characterized Italy, the context of the present study, as well many other countries, during the first wave of the pandemic.

The study focused on university students, who likely were not exposed to a public health risk before, and who were identified as a group having a high risk of developing psychological distress during the pandemic. For instance, Rossi and colleagues (2020) found younger Italians associated with symptoms of post-traumatic stress, depression, and anxiety during the COVID-19 pandemic. A similar result was found by Ozamiz-Etxebarriaet and colleagues (2020) among young Spanish adults in the 18–30 age range, and by Huang and Zhao (2020) for Chinese people aged < 35 years. The higher distress might be due to several factors, such as (i) the shift to online learning; (ii) social isolation and financial constraints (Akdeniz et al., 2020; Husky et al., 2020); and (iii) the large amount of information received from social media (Huang & Zao, 2020; Ozamiz-Etxebarria et al., 2020). However, only a little variance (almost 30%) of distress is explained by socio-demographic and personality characteristics (Mazza et al., 2020). To our knowledge, no study has examined the role of meanings by which people make sense of their being online during the COVID-19 pandemic to understand their well-being or psychological distress.

2. The theoretical frame

According to social constructionism epistemology, any event is always a socially-constructed event, deriving from shared meanings placed within the sphere of social discourse that organizes the way people feel and act (Gergen, 1985; Sugiman et al., 2008). Social and political processes (e.g., media, scientists, health and economic policies, social stigma), as the here-and-now of the systems of activities in which people experience their life, influence how individuals make sense of their outer and inner realities. Framed within this epistemic position, SPCT merges two main lines of thought: cultural psychology (Bruner, 1991; Cole, 1998; Shweder & Sullivan, 1990), which has developed Vygotsky's seminal recognition of the mediational function played by meaning between mind and world, and semiotic psychodynamic theory which recognized the affective side of sensemaking processes and conceived affect as a particular way of categorizing the experience. In previous works, the term "Symbolic Universe" was used to indicate a system of implicit, only partially conscious, embodied, generalised assumptions or patterns of affect-laden meanings that foster and constrain the way the sense-maker interprets any specific event, object and state of their life (Salvatore et al., 2018).

In the epistemological framework of SCPT, individuals interpret what happens in their life in terms of specific affect-laden meanings that are consistent with the Symbolic Universe in which their self and their being-in-the-world are grounded (Salvatore et al., 2018; Venuleo et al., 2020d). There are two main features of affective meaning-making that distinguish it from the cognitive, rational-based way of thinking (Salvatore & Venuleo, 2010).

First, affective meaning-making is inherently holistic – that is, it concerns the entire relation between the subject and the world as a whole (e.g., the sense that "nothing changes in my life" does not refer to a discrete object of experience but connotes the entire field of experience as a single totality). Accordingly, what people do during the pandemic and the meaning that they give to what they do has to be understood in light of the generalized meaning that they assign to the crisis scenario. A recent study by Guarino and colleagues (2021) offers indirect support to this assumption. These authors highlight the relationship between low levels of trust in medicine, government and, broadly, the society in the Italian context, and the news shared on social media, where conspiracy theories and negationist discourses about the artificial or chemical nature of the virus proliferate. This kind of discourse seems understandable as a reflection of a strong distrust toward institutions that is more likely to pre-exist the pandemic crisis than follow it.

Second, affective meaning-making is non-semantic, namely it tends to be only weakly constrained by semantic and functional norms.

Instead, it leads experience to be interpreted by making pertinent only those facets of the reality that – according to the affective meaning involved – are relevant for the subject (e.g., a person who sees him- or herself as powerless will feel and shape beliefs about the world as an ongoing sequence of threatening, powerful elements too difficult to deal with).

According to SPCT, the cultural context works as the ground and the source of different Symbolic Universes, resulting from the foregrounding of a certain set of meanings of the cultural context compared to others which are left in the background. This process of foregrounding is the output of a continuous intersubjective negotiation among the life contexts of people in their communities, mediated by the symbolic resource provided by the wider cultural context (Linell, 1999; Shweder & Sullivan, 1990). Thus, in a certain socio-cultural context, a set of meanings emerges as probable, other patterns as less probable, still others as highly improbable. A recent study by Venuleo et al. (2020c) shows that the subjective, social, and political meanings that people give to the pandemic crisis vary within and across social groups: "e.g.," whereas some people represent the pandemic as a health emergency with a strong impact on their daily life, others see the pandemic as a chance for a personal or social turning point, which can lead to a rethinking of values and priorities and can thus generate new meaning for experience.

Previous studies have shown the essential role of interpretation of social experience in grounding and motivating social and individual attitudes and behaviours (Rochira et al., 2019; Salvatore et al., 2019a). For example, a view of the social environment as an anomic and untruthful place was found recurrently associated to a low evaluation of the risks associated to at-risk behaviours and to play a role in differentiating problem and control group with respect to pathological gambling, alcohol and Internet use (Marinaci et al., 2019; 2021a; Venuleo et al., 2015; 2018).

3. Aims and hypotheses

On the basis of the theoretical assumptions discussed above, the current study aims to explore the semiotic lens – that is, the "Symbolic Universes"– through which university students interpreted their being online during the lockdown, and their relationship with well-being. The following hypotheses guided the study:

(a) based on the theoretical frame of SCPT, stating the dependence of the Symbolic Universes on the cultural and psychosocial contexts people belong to, we expect that a plurality of

representations of being online would be active in the cultural milieu, reflecting people's variability in the categorization of the experience (Barrett et al., 2001; Salvatore et al., 2018), as well as the variability of the media and social media discourses.

(b) based on previous studies highlighting the capacity of the Symbolic Universe to fed different ways of experiencing and attending life' circumstances and challenges, we expect that different views of being online relate to different connotations of the Internet during the pandemic and different levels of well-being.

4. Method

An anonymous online survey was available online from 1st April to 19th May 2020, the period when the Italian government imposed self-isolation. An open question – *Being online in the time of COVID-19...* – was chosen to gain access to the people's subjective experience and to capture their ways of making sense of the state of being online. The choice not to provide further specification or examples of 'being online' was made in order to allow respondents to choose what to write about (for example whether to report thoughts and emotions related to specific online activities or more generally to the condition of being able to interact with the world mainly via the internet due to isolation measures). With this in mind, the open text was constructed to work as a "projective stimulus". As such, it is a precious chance to make the participants' semiotic-cultural codes explicit, and to detect in an unconditioned way feelings, beliefs, attitudes and motivation about Internet use (Donoghue, 2000). Participants were encouraged to writing down everything that came to mind with respect to the situation and responding in the manner that is deemed most appropriate, taking into account that the objective of the investigation was to collect people's subjective experience. Furthermore, participants were asked to choose a connotation of their Internet use during the health emergency between "refuge", "danger", "resource", in accordance to literature suggestions (e.g., for Internet as refuge: Schimmenti & Caretti, 2010; Tzavela et al., 2015; for Internet as resource or danger: Guan & Subrahmanyam, 2009). It is worth highlighting that the alternative categories are not designed to cover the highest representative meanings associable with the objects-stimuli concerned, but to work as 'bait' for a corresponding generalized connotation of the object.

The overall well-being of participants was detected through the Flourishing Scale (FS; Diener et al., 2010) in the Italian version by Di Fabio (2016). Its eight items investigate human flourishing in relevant areas such as purpose in life, relationships, self-esteem, feelings of competence, and optimism on a 6-point Likert scale ranging from 1 (Strongly disagree) to 6 (Strongly agree). This instrument is widely used in research to investigate socio-psychological

well-being in non-clinical samples (e.g., Checa et al., 2018; Howell & Buro, 2015), and for prevention and resources promotion (e.g., Kenny & Hage, 2009; Di Fabio & Kenny, 2015). A sample item is: "My social relationships are supportive and rewarding". The FS showed a good consistency in the present study (α = .88). Finally, the sociodemographic characteristics of respondents (i.e., sex, age, people with whom they live with) were collected.

4.1 Participants and procedure

A total of 345 questionnaires were collected among university students; 323 were completed and were used for the study (Mean age = 22.78, SD = 2.70; 77.3% women; 81.9% living with their parents).

All procedures performed in the study were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Participants were informed about the general aim of the research, the anonymity of responses and the voluntary nature of participation and signed an informed consent form. No incentive was given.

4.2 Data analysis

An automatic procedure for content analysis (ACASM; Salvatore et al., 2012; Salvatore et al., 2017) – performed by T-LAB software (version T-Lab Plus 2020; Lancia, 2020) – was applied to the whole corpus of narrative texts collected to map the main *dimensions of meanings* (DM) underpinning the set of contents. The method is grounded on the general assumption that the meanings are shaped in terms of lexical variability. Accordingly, the method aims at detecting the ways the words combine with each other (that is, co-occur) within utterances, somewhat independently of the referentiality of the sentence (Lebart et al., 1998). ACASM procedure followed two steps.

Firstly, the textual corpus of narratives was split into units of analysis, called Elementary Context Units (ECUs) and the lexical forms present in the ECUs categorized according to the "lemma" they belong to. A lemma is the citation form (namely, the headword) used in a language dictionary: for example, word forms such as "child" and "children" have "child" as their lemma. A digital matrix of the corpus was defined, having as rows the ECU, as columns the lemmas and in the cell x_{ij} the value '1' if the *j*th lemma was contained in the *i*th ECU, otherwise the x_{ij} cell received the value '0'.

Table 1. describes the characteristics of the dataset

Table 1. – Dataset

	N
Texts in the corpus	323
Elementary contexts (EC)	546
Types	3720
Lemmas	465
Occurrences (Tokens)	19551
Threshold of lemma selection	4
Lemmas in analysis	550

Note – *Texts in the corpus:* number of answers to the open question (corresponding to the number of participants) inserted in the text analysis; *Elementary context:* sections of text (e.g., sentences, paragraphs or short texts) characterized by the same keyword patterns; *Types*: total number of words (i.e., including all linguistic forms) contained in the general corpus; *Lemmas:* words transformed in headword; *Occurrences (Tokens*): frequencies of a single lexical unit; *Threshold of lemma selection:* the value selected to include the lemma in the analysis; *Lemmas in analysis:* number of headwords inserted in analysis.

Secondly, a Lexical Correspondence Analysis (LCA) – a factor analysis procedure for nominal data (Benzécri, 1973) – was carried out on the matrix obtained, to retrieve the factors describing lemmas with higher degrees of association, i.e., occurring together many times. Each factorial dimension describes the juxtaposition of two patterns of strongly associated (co-occurring) lemmas and can be interpreted as a marker of a latent dimension of meanings underpinning dis/similarities in the respondents' discourses (Gennaro et al., 2019; Salvatore et al., 2017). The interpretation of the factorial dimensions is carried out in terms of inferential reconstruction of the global meaning envisaged by the set of co-occurring lemmas associated with each polarity. The first two factors extracted from LCA were selected as the ones explaining the broader part of the data matrix's inertia, and labelled by three experienced researchers, in double-blind procedure. Disagreement among researchers was overcome using a consensus procedure (Stiles, 2006). The LCA provides a measure of the degree of association of any respondent with every factorial dimension, expressed in terms of the respondent's position (coordinate) on the factorial dimension.

Once the coordinates of each subject were identified – as the third step – an ANOVA with post-hoc analysis based on the Bonferroni test was computed to examine (dis)similarities related to sociodemographic characteristics as well as the Internet connotations, that is in terms of resource, danger or refuge. Pearson's correlations were computed to examine the relationships between the dimensions of meanings and the levels of well-being.

5. Results

5.1 Dimensions of meaning

Two dimensions of meaning emerged from the computer-assisted analysis of the text. The first factorial dimension was named BEING ONLINE IN THE DAILY LIFE CONTEXT and was interpreted as characterized by the dialectic of *rupture* versus *continuity*. This dimension opposes two patterns of lemma which we interpret as the markers of two ways of representing the relationship between being online and the daily life context (see Table 2a). The interpretations of the polarities were as follows:

(-) Rupture: On this polarity, being online is recounted as something which reflects the rules and restrictive measures imposed on the citizens during the health emergency to ensure health security (*city, citizen, service, rule, restriction, security, reason*). Lemmas such as *power, impose, immediately* evoke a sense of imposition and passivity felt in the regulatory relationship established by the government with the citizens and that brings to mind the human, relational and social condition (*condition, relationship, social, human, isolation*). On this polarity, no specific online activities are mentioned. This that can be interpreted as a further marker of the idea that the very condition of being online is experienced as a rupture. Examples of discourses are:

"I think the current situation leads us more to seek refuge on the Internet. It becomes a need to escape while staying at home and thus respecting the rules imposed by the government. If this need was felt before, I have the impression that the current emergency pushes even more, and the Internet becomes the only possible window on relationships and on the world."

"*Being online in the time of COVID-19 means realizing loneliness and hiding behind a screen, as well as the need for physicality, which has never been denied before."*

"The condition of isolation we are experiencing in this period is undoubtedly something unprecedented (...) the global pandemic is accustoming us to something which is completely different from our everyday life before the middle of February."

"After weeks of use and abuse (both intentional and imposed) of the Internet, I realized that affections, bodies and true social life are irreplaceable."

(+) Continuity: On this polarity, being online is associated with specific activities, platforms and applications (e.g., *YouTube, Facebook, Instagram*) and emerges as a state that makes it possible to continue academic commitments (*online lessons, professor, degree*), leisure activities (*leisure, pastime, recipe, cooking, TV series, music, movies*), and relationships (*friend*). Examples of discourses are:

"It allows you to always be connected to loved ones and gives you the opportunity not to limit some things that characterize normality (online classes, training courses, shopping...)."

"Being online at the time of COVID-19 means having the opportunity to always remain in contact with loved ones, still being able to feel part of something even while staying at home. It helps us to understand that we are not alone, even if at times we may feel that we are unable to physically relate to anyone."

"I think being online right now is a great luck. Although the world has stopped, we can still continue to keep everyone in contact. We can continue our studies."

"At this moment, I believe that being online is a great opportunity, it allows us to be with friends, to continue the university, and to get free information. If everything has not stopped today it is only thanks to being online."

Table 2a. Lexical Correspondence Analysis of texts. Lemmas in the first factorial dimension

BEING ONLINE IN DAILY LIFE CONTEXT			
Rupture (-)		*Continuity* (+)	
Lemmas	Test value*	Lemmas	Test value*
City	-13.800	YouTube	7.916
Restriction	-12.073	Photo	5.837
Channel	-10.770	Online lesson	5.625
Motive	-10.547	Research	5.614
To demonstrate	-7.844	Recipe	5.484
Immediately	-5.600	Facebook	5.101
To cause	-5.120	Tv Series	5.059
Relation	-5.067	Easy	4.726
Power	-4.852	Music	4.674
Citizen	-4.794	Eye	4.622
Grocery shopping	-4.679	To see	4.601
Rules	-4.598	Professor	4.554
Security	-4.357	Kitchen	4.420
To impose	-4.060	To distract	4.289
To reveal	-3.978	Friend	4.256
Social	-3.898	Film	4.046

To write	-3.783	WhatsApp	4.012
To observe	-3.728	To follow	3.898
Importance	-3.663	Diversion	3.648
Virtual	-3.567	Quarantine	3.483
Condition	-3.565	Fast	3.378
To stop	-3.553	Anxiety	3.367
Change	-3.520	To prefer	3.300
Human	-3.486	To inform	3.129
Isolation	-3.457	Instagram	3.123

* Highest Levels of association standard scores (V-Test)

The second dimension was named INTERNET FUNCTIONS DURING THE PANDEMIC. It was interpreted as characterized by the polarities of *health emergency* versus *daily activities*. This dimension opposes two patterns of lemma which we interpret as the markers of two ways of representing the Internet functions (see table 2b). The interpretations of the two opposite polarities were as follows:

(-) Health emergency: On this polarity, being online is recounted in its two-sided nature of being at the same time a source of entertainment and distraction (*beautiful, pleasant*) during the lockdown (*restriction, quarantine*), and as a source of danger and unpleasant experiences (*source, dangerous, panic, distressing*), due to disinformation and media alarmism (*fake news, alarmism*). Examples of discourses are:

"I think there are two aspects of being online right now. On the one hand a positive aspect that keeps you constantly in contact with everyone for anything, so it allows you to be distract and think as little as possible about what is happening; the negative aspect, on the other hand, is unfortunately always being informed about everything that happens outside and it's very often distressing and you want to disconnect to lighten all the media pressure that is making us crazy."

"It means being bombarded with both truthful and falsified news. As soon as you pick up the phone (because it is mainly through this medium that we consult social networks) you cannot miss the posts, comments and waste more time than necessary. Anguish rises, anger rises and at the end it almost seems natural to let yourself be influenced by all this information and emotions."

"(Being online) is very important for following all the news regarding this pandemic."

"Being online helps us to understand what is happening in the world."

(+) Daily activities: On this polarity, the Internet is interpreted as a means of carrying on (*continue, participate, go forward, as opposed to stop*) study activities (*university, lesson, online lesson,*

university, exam, student), work (*working, worker*), consumer activities (*shopping*) and free time (*YouTube, recipe*). Examples of discourses are:

"Thanks to technology and the Internet young people can continue to study and have contacts with our classmates and professors."

"We realize that we are immersed in a digital age and that digital tools are now more useful than ever".

"It is beyond doubt that this state of forced isolation would have been much more difficult to bear without the Internet for our daily life activities: shopping, information, social relations, friends and work."

"In this period, I take lessons from home, I study at the university, so I spend a good part of the day in front of the screen. I often use the PC to study and look for information and insights. I use the smartphone a lot, especially to access to Facebook and Instagram applications. Now I make fewer calls and more video-calls to talk to friends and family."

Table 2b. Lexical Correspondence Analysis of texts. Lemmas in the second factorial dimension

INTERNET FUNCTIONS DURING THE PANDEMIC			
Health emergency (-)		*Daily activities (+)*	
Lemmas	Test value*	Lemmas	Test value*
To inform	-8.761	University student	5.801
Alarmism	-7.561	Lesson	5.610
Distraction	-7.062	Motive	5.453
Fake News	-6.975	To follow	5.180
Conduit	-6.823	Student	5.163
To create	-6.585	Grocery shopping	4.971
Power	-6.580	Recipe	4.970
Restriction	-5.926	Material	4.674
People	-5.886	YouTube	4.592
Panic	-5.680	Online lesson	4.486
To demonstrate	-5.294	University	4.063
Dangerous	-5.223	Work	3.901
To express	-4.880	Activity	3.868
Widespread	-4.868	Worker	3.865
Source	-4.690	Change	3.846
To stay	-4.675	Photo	3.823
Easy	-4.422	To continue	3.740
Considerable	-4.364	To partecipate	3.700

Diversion	-4.282	Exam	3.633
Fast	-4.058	Indispensable	3.531
To help	-3.984	To stop	3.486
Quarantine	-3.975	To carry on	3.344
Web	-3.948	Work	3.329
Distressing	-3.940	Immediately	3.302
To speak	-3.916	Video-Call	3.299
Person	-3.827	Music	3.065
Discussion	-3.788	To conduct	2.987

* Highest Levels of association standard scores (V-Test)

5.2 Relation between dimensions of meaning and connotation of the Internet

Regarding participants' Internet connotation (resource, danger or refuge), significant differences were found (see Table 4) on the second dimension extracted, that is "Internet function during the pandemic" ($F_{2,298} = 5.14$; $p < .01$). Post-hoc analyses by the Bonferroni test showed that the differences concerned the connotations of the Internet as "Resource" and "Refuge" (Mean Difference $_{I-J} = .28$; $p < .01$): participants with higher factor scores (positive polarity: Daily activities) connoted the Internet as a resource, whereas participants with lower factor score (negative polarity: Health emergency) connoted the Internet as a refuge.

Table 3. Positioning on the dimensions of meanings as a function of Internet connotation among participants

Internet connotation		First Dimension BEING ONLINE IN DAILY LIFE CONTEXT				Second Dimension INTERNET FUNCTIONS DURING THE PANDEMIC			
	N (%)	Mean	SD	F	*P*	Mean	SD	F	*p*
Internet as…									
Resource	223 (74.0)	.06	.54			.03	.52		
Danger	23 (7.6)	.23	.56	2.65	.073	-.08	.68	5.14	.006
Refuge	55 (18.0)	.22	.58			-.25	.80		

5.3 Relationships between dimensions of meanings and well-being

A significant relationship was found between the subject's positioning on the second dimension (i.e., Internet functions) and well-being levels ($r = .12$; $p < .01$): higher scores on the second dimension (Daily activities) related to higher levels of well-being; lower scores (Health emergency) to lower levels of well-being.

6. Discussion

In line with the hypothesis, different interpretations emerged about the meaning attributed to being online during the COVID-19 outbreak. The analysis of the narratives based on the ACASM procedure led to the identification of two main dimensions which foreground two very basic issues: being online in the daily life context (rupture *versus* continuity) and the functions of Internet use during the pandemic (health emergency *versus* daily activities).

Notably, the meaning variability in this research cannot be interpreted as a by-product of the method and approach to data analysis: the distribution of the lemmas within the factorial space defined by the two meaning dimensions indicates the polarity of semiotic representations, and thus captures the specific ways of interpreting the experience of being online among participants.

With respect to the first dimension, two polarities emerged. For those in the "Continuity" polarity, being online is valorised as a means to carry on the life one had before the pandemic crisis – to maintain their relationships, to carry out study and work activities, and to pass the time. This position is consistent with the suggestion of some scholars (Pan et al., 2020; Roy et al., 2020) that the Internet may have played an important role in supporting the response to the crisis. On the opposite side, for those in the "Rupture" polarity, being online seems to be experienced as an amplifier of the changes occurring in the social life and of the state of "forced" isolation related to the lockdown measures (e.g., returning to living with parents, the distance from peers, the shift in the mode of teaching-learning; see Gruber et al., 2020; Ranieri et al., 2021). The fact that ruptures and forced isolation are emphasized on one polarity and differentiated with respect to the other one suggests that the semiotic lens of the respondents fuels the interpretation of the pandemic crisis as a rupture, not the opposite – the rupture as the ineluctable effect of the changes imposed by the pandemic. In our view, this means that the meaning of 'rupture' and the related feelings and perceived costs must not be understood as a linear effect of lockdown but as the result of a way of interpreting the crisis and their own part in it. For instance, it has been observed that the sense and value given to being in this crisis "together" may increase resilience (Luchetti et al., 2020) and the commitment to the common

good (Marinaci et al., 2021b; Venuleo et al., 2020b). By contrast, if the private interest acts as a salient regulator of one's way of feeling, thinking and acting, the prevalent feeling is that the emergency is a problem that "does not concern me" (but older and vulnerable people, for instance) and any restriction on movement is felt to be a rupture and an intolerable privation of one's freedom. A further compatible hypothesis is that the psychosocial conditions and unique challenges imposed by the pandemic crisis (e.g., necessity to conciliate study and family commitments, job loss, and need to return to parents' home due to financial difficulties) may have favoured a different interpretation of being online.

The analyses show that the position on the first dimension does not present specific association with the connotation given to the Internet and the levels of well-being. It is likely that continuity may be felt as distressing in some cases — for instance when associated with the pressure to maintain the same standard of productivity and efficiency in a changed scenario (e.g., different educational setting, reduced contacts with teachers and peers) — and as an advantage in other cases—for instance, if the sense of maintaining meaningful objectives (e.g., to take exams, to obtain a degree) is in the foreground. Similarly, rupture can acquire the meaning of having lost or of lacking what existed before or also the meaning of an opportunity to reflect on previous choices and their critical impact and to make the future better. A recent study on the Italian population (Venuleo et al., 2020c) shows that part of the respondents interpreted the pandemic crisis as a turning point where the rupture opens to a new way of being-in-the-world, at the individual level (new way of managing time, clearer consideration of what matters) or at a social one (more awareness of the interdependence among people and countries).

With respect to the second dimension (Internet functions during the pandemic), on one hand (in the "Health emergency" polarity) the use of the Internet to acquire information about the COVID-19 pandemic is in the foreground; on the other hand ("Daily activities" polarity), the possibility of carrying on with daily activities and goals has a relevant meaning. Interestingly, the different ways of interpreting the Internet functions were related to the different connotations of the Internet and the different levels of well-being, although the last association is quite small. Specifically, the respondents that foregrounded the possibility of carrying on their daily activities online tended to see the Internet as a resource and to show higher levels of well-being, offering support for a compensatory social interaction model in a novel at-risk condition (Canale et al., 2020). The respondents that foregrounded the Internet functions related to the health emergency (e.g., to get information on the infection trend) tended to connote the Internet as a refuge – probably because it was experienced as a means to understand what is happening and, thus, to reduce uncertainty – and to show lower levels of well-being. These findings are

consistent with recent research (Gómez-Salgado et al., 2020; Thompson et al., 2017), and also with the idea that cyberchondria – the excessive or repeated online searches for health information – is associated with increasing levels of health anxiety or distress. Starcevic et al. (2021) observed indeed that during public health crises (such as the COVID-19 pandemic) different factors contribute to cyberchondria, including fear of a newly identified and poorly understood disease, difficulty in coping with uncertainty, lack of authoritative and trustworthy sources of health information large amount of information (often confusing, conflicting, and constantly updated), and inability of online health information to provide reassurance. These factors may contribute to fuelling a quick alternation of a need to know (fear of not knowing) and a need not to know (fear of knowing) which is likely to interfere with decision making and related actions during the pandemic (Schimmenti et al., 2020). In this case too, social aspects which pre-exist the pandemic, like the distrust toward the government and feeling of alienation from politics which may fuel the tendency to believe in conspiracy theories, may be implicated in the search for information through the social media (Ahmad & Murad, 2020; van Prooijen & Douglas, 2017).

7. Limitations and further directions of research

The results of the present study should be considered in light of several methodological limitations. First, our case study is based on an Italian convenience sample, thus the results cannot be generalised. Since Symbolic Universes depend in their working on socio-historical conditions and are placed within the sphere of social discourses, further studies are needed in order to examine the variations of meanings related to the specificities of the cultural context in which people live.

Second, it has to be noted that, based on SCPT and previous studies which have shown the role of Symbolic Universes in grounding people ways to relate to critical events and their association with people's well-being (Marinaci et al., 2021a; Rochira et al., 2019; Venuleo et al., 2020b; 2020c), we have proposed to interpret the levels of well-being as a by-product of the semiotic lenses though which people interpret their being online in the historical circumstance of the pandemic crisis, drawing on and strengthening pre-existing worldviews and convictions. However, the cross-sectional nature of the study does not allow us to rule out the opposite direction, namely, to establish whether people's levels of well-being or reasons for their being online foreground a certain set of meanings and fuel a certain way of living and interpreting resources. Accordingly, anxious people may use the Internet as a way to acquire information about the pandemic, reduce uncertainty and acquire a sense of control over the event; however,

the alarmism, lack of clarity and the sometimes contradictory character of the media communication might produce the opposite effect, serving as a further source of fear and distress. Further studies should longitudinally examine the impact of Symbolic Universe on psychological well-being.

Finally, further studies should consider the role of psychosocial factors – such as specific life challenges, health, social and economic concerns, perceived social support, trust in institutions, sense of belonging to the community – in influencing the ways of interpreting 'being online' and in mediating or moderating the relationships between dimensions of sense and well-being.

8. Conclusion

The current study showed the variations in the experience related to the sense-making process underlying the way people interpret their being online and use of the Internet. How people conceive their role in addressing the health emergency, whether they interpret the lockdown measure as a necessary action or an intolerable restriction of their freedom, whether or not they see their compliance as a civic duty may represent crucial factors in determining how they use the Internet and how they experience their online state. Further studies are needed in order to examine the variations of meanings related to the specificities of the cultural context in which people live, as well as the role of psychosocial aspects, such as the relational resources people possess, different life situations and the related challenges imposed by the pandemic in mediating the effect of the state of being online on people's well-being.

Conflict of Interest Statement

The authors declare that the research was conducted in the absence of any potential conflict of interest.

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