

## Does covid-19 pandemic tell us something about time and space to meet our being, belonging and becoming needs?

Farzaneh Yazdani, Sepideh Nazi, Somaye Kavousipor, Samaneh Karamali Esmaili, Mehdi Rezaee & Mehdi Rassafiani

**To cite this article:** Farzaneh Yazdani, Sepideh Nazi, Somaye Kavousipor, Samaneh Karamali Esmaili, Mehdi Rezaee & Mehdi Rassafiani (2023) Does covid-19 pandemic tell us something about time and space to meet our being, belonging and becoming needs?, *Scandinavian Journal of Occupational Therapy*, 30:7, 1064-1073, DOI: [10.1080/11038128.2021.1994644](https://doi.org/10.1080/11038128.2021.1994644)

**To link to this article:** <https://doi.org/10.1080/11038128.2021.1994644>



© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



Published online: 20 Dec 2021.



[Submit your article to this journal](#)



Article views: 1253



[View related articles](#)



[View Crossmark data](#)

## Does covid-19 pandemic tell us something about time and space to meet our being, belonging and becoming needs?

Farzaneh Yazdani<sup>a</sup>, Sepideh Nazi<sup>b</sup>, Somaye Kavousipor<sup>c</sup> , Samaneh Karamali Esmaili<sup>d</sup>, Mehdi Rezaee<sup>e</sup> and Mehdi Rassafiani<sup>f</sup> 

<sup>a</sup>Occupational Therapy program, Faculty of Health and Life Sciences, Oxford Brookes University, Oxford, UK; <sup>b</sup>Occupational Therapy, Iran University of Medical Sciences, Ali Asghar Hospital, Tehran, Iran; <sup>c</sup>Shiraz University of Medical Sciences, Zand, Iran; <sup>d</sup>Department of Occupational Therapy, School of Rehabilitation Sciences, Iran University of Medical Sciences, Tehran, Iran; <sup>e</sup>Occupational Therapy Department, Shahid Beheshti University of Medical Sciences, Tehran, Iran; <sup>f</sup>Occupational Therapy Department, Faculty of Allied Health Sciences, Kuwait University Kuwait. Peadiatric Neurorehabilitation Research Center, University of Social Welfare and Rehabilitation Sciences, Tehran, Iran

### ABSTRACT

**Background:** People's perceptions of events like a pandemic are shaped by individual experiences within their socio-cultural context. Attributing negative or positive meanings to an experience may influence the sense of Being, Belonging and Becoming.

**Aim and objectives:** To investigate the impact of the isolation/social distancing measures on people's sense of Being, Belonging, Becoming and overall sense of Occupational Wholeness compared to the time before the Covid-19 Pandemic as it is perceived by an Iranian population.

**Methods:** The Model of Occupational Wholeness used to inform the theoretical basis of this study and development of the survey questions. An internet-based survey using a convenient and snowball sampling method was conducted. A self-administered questionnaire was published using a software named Porsline. A sample of 1624 members of the general population in Iran (67% response rate) completed the questionnaire within the first four weeks of the isolation/social distancing period starting on 18 March 2020. The Data was analysed by the SPSS 22.

**Results:** The participants showed a more positive perceived level of Being and Belonging as well as an overall sense of Occupational Wholeness, and no difference in the perceived sense of Becoming during the isolation/social distancing period compared to the time before the Covid 19 pandemic.

**Conclusions:** The findings show that the isolation/social distancing measures were perceived by participants as an opportunity to meet some of their Being, and Belonging needs that contribute to an overall sense of Occupational Wholeness. This highlights the role that Occupational science and Occupational therapy may have in helping people in situations when they need to rethink and replan for what they Do and the way they attribute meaning to their experiences.

### ARTICLE HISTORY

Received 7 July 2020  
Revised 2 November 2020  
Accepted 13 October 2021

### KEYWORDS



Occupational science;  
occupational therapy;  
occupational wholeness;  
general population health;  
covid-19; Iran

## Introduction

The Covid-19 pandemic has presented new and unique challenges to individuals and social groups through the profound effect it has had on social activities and daily routines [1]. Individuals experience disasters and traumatic events in different ways. Differences in the perception of traumatic events depend on the individual's personal and socio-cultural belief system, and the available resources [2].

The rapid onset of social distancing due to the Covid-19 pandemic, with associated changes in

behavioural patterns, has affected day-to-day occupations and everyday activities of individuals, families, and society [1,3,4]. Humans as occupational beings develop an identity based on what they do and feel competent in doing their activities [5]. As such, the impact of a global pandemic and the measures taken in response to it have affected many people's occupational lives. Today's modern life requires acting and doing different occupations: work, rest, leisure and self-care in order to meet personal, social, and familial needs. A situation such as the Covid-19 pandemic can have an effect not only on people's actual Doing, but

CONTACT Farzaneh Yazdani  [fyazdani@brookes.ac.uk](mailto:fyazdani@brookes.ac.uk)  Occupational Therapy program, Faculty of Health and Life Sciences, Oxford Brookes University, Oxford, UK

© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

also in the way they perceive changes in their Doing. Wilcock states that human Beings have a biological need to do. Doing is seen as a part of Being and people engage in Doing to meet their needs [6]. Therefore, it can be expected that the changes in people's Doing can have an impact on their Being, Belonging and Becoming which Wilcock refers to as dimensions of Doing. The concepts of Being, Belonging, Becoming and Doing have evolved and developed since Wilcock introduced them as the main constructs of Occupational Perspectives of Health [7]. Yazdani has proposed the Model of Occupational Wholeness, within which she examines the concepts of Being, Belonging and Becoming in relation to each other and the notion of Occupational Wholeness [8]. According to the Model of Occupational Wholeness, people feel whole and at peace with themselves and their world if they could define a satisfying 'Doing or not Doing' combination of activities [8]. A sense of Being is formed in two stages, first it is formed by tending to survival and primary needs. The second is exercising autonomy and choice making in self-care. A sense of Being is related to the activities people do to feel well about themselves and the world. The sense of Being is related to the current situation, which means it refers to one's feelings and thinking at present. A sense of Belonging refers to feeling connected, or related to other people, places, and things. The sense of Belonging also refers to Being together with others. A sense of Becoming refers to future prospects and planning [8]. The sense of Being, Belonging, or Becoming is formed through experience in doing of a variety of activities. In a large-scale life event such as the Covid-19 pandemic, with isolation and social distancing, people need to adapt the way they manage their day-to-day life. On the other hand, the way people perceive illness or stressful events and how they respond to it is influenced by their previous experiences of such phenomena [9,10]. What is striking about the Covid-19 pandemic situation is the short period of time within which changes in life-style occurred.

Relatedness or affiliation is considered as one of the basic psychological needs [11]. It is necessary to consider the context of this study; both from a cultural and socio-political perspective. In some cultures, the sense of Belonging might be more prominent than the sense of Becoming. In different cultures people practice rituals that meet their needs for Belonging [12]. In Iran, visiting and spending time together among family and friends in their homes is a significant aspect of Belonging. Visiting family and

friends, group picnics, and travelling during the Iranian New Year holiday (Nowruz) are important traditions. The first isolation/social distancing orders started almost four weeks before the Iranian New Year. Similar to some other cultures in Iran, individuals rely on the support of family and friends and in particular by gathering in each other's homes [13,14]. Social distancing may have limited such gatherings and disrupted the behaviours and rituals that have been used for years as a means of coping with societal crises. Iran has experienced many years of social and political upheaval including imposed economic sanctions as well as natural disasters such as earthquakes, and floods. The economic sanctions in particular, have led to a state of instability and constant insecurity for the general population [15,16]. The Covid-19 pandemic and its consequences is an extra life-changing event in the insecure historical time of current situation in Iran. Considering the enforced changes in the way people manage their Doings and occupation, the researchers of this study developed the following hypothesis: The isolation measures impact on the sense of Being, Belonging and Becoming and overall Occupational Wholeness of the Iranian population.

Also, studies indicate the supportive role grandparents provide for their children's family [17–19]. Therefore, researchers considered investigating the impact of social isolation measures for participants with grandparents at home with the second hypothesis that the presence of grandparents at home may impact the sense of Being, Belonging, Becoming and overall Occupational Wholeness in participants. The living status of the participants including the presence of grandparents at home was considered as a factor to be included in this study. On the other hand, a devaluing of older people that seems to be overtly expressed in the media may likely contribute to feelings of worthlessness in older people, a sense of Being burdensome and having no value [3]. Therefore, the researchers consider age as a demographic factor to this study. The third demographic factor considered in this study is gender as there is evidence showing differences in the way different genders may perceive and respond to an event such as Covid-19 pandemic [20].

### ***Aim and objective***

The current study aimed to investigate the impact of the isolation/social distancing measures on people's sense of Being, Belonging, Becoming and overall sense of Occupational Wholeness compared to the time

before the Covid-19 Pandemic as it is perceived by the Iranian population.

## Materials and methods

### Method

A cross-sectional design using a web-based questionnaire was conducted. Due to the time sensitivity of the study and the importance of gathering information while people are in the isolation/social distancing period of the Covid-19 pandemic, the survey study seemed to be an appropriate design. This design allows gathering information from individuals through their responses to questions. In this kind of research, qualitative and quantitative information can be collected [21]. The current survey consisted of three sections: one section for demographic questions, one questionnaire that was developed by the researchers and one open-ended questionnaire to gather quantitative data [22–24]. This paper reports the results of the quantitative data. The authors adapted the guideline that was advised by Artino and colleagues in developing and reporting a survey-based research [25]. The guideline indicates a good quality survey-based research report needs to address the rationale for the survey, study design, the background of the questions, and the survey development tool. The rationale for this study has been explained earlier in this paper and the other elements of the guideline will be explained below.

### Sampling and data collection

The anonymous self-report questionnaire was designed online using Porsline software (<https://porsline.ir/>). Using a combination of methods for survey administration can aid in ensuring a better sample coverage (i.e. all individuals in the population have a chance of inclusion in the sample) and reduce coverage error [26,27]. The online questionnaire administration is relatively low cost and practical for a large sample [21], can increase the representativeness of the sample size, and avoids duplication of cases [28]. However, relying only on internet-based data collection increases the risk of coverage bias [29]. Each questionnaire started with the information page and participants would be given access to the actual questionnaire in ticking the box that confirms reading and consenting for participating in the study. The information page included advice to contact the help services if needed.

The first step of recruitment was through identifying Occupational therapy students and practitioners in 26 out of 31 counties in Iran as stakeholders for circulating the online survey in virtual social networks (WhatsApp, Telegram, LinkedIn, and Facebook). Through these stakeholders tried to reach the public (family, friends, clients and their connections) in the public. Researchers could not identify an Occupational therapist in five of the counties in Iran. However, the populations of these 5 counties were using Occupational Therapy services in other counties and therefore within the list of people that would have received the invitation for participating in the study. The snowball sampling method helped with recruiting from the remaining five counties in which no stakeholders were identified in the first step of recruiting. Combining convenient and snowball sampling methods was appropriate due to the time sensitivity of the requirement for being under isolation/social distancing measures at the time of participation. Through identifying a systematic way for recruitment within the identified population, the researchers hoped to reduce the coverage and sampling error [25]. As comparison between the counties was not the aim of this study, cluster and stratified sampling were not considered.

The survey polls were closed after a week of not receiving any further attempt to use the link.

### Survey questionnaire

The survey questions were informed by the items in the Occupational Wholeness Questionnaire [30]. The questionnaire was developed to be 27 statements based on the theoretical concepts defined in the Model of Occupational Wholeness and informed by the Occupational Wholeness Questionnaire [30]. According to the Model of Occupational Wholeness, people 'Do' things in order to meet their needs for Being, Belonging and Becoming. Therefore, the statements are designed to ask about people's sense of Being, Becoming and Belonging in relation to what they do. While Doing is not a separate component in the questionnaire, it explicitly and/or implicitly forms the statements. For instance, item 25 (I have more opportunities to play my social roles and do volunteer activities) explicitly indicates Doing in the statement. An example of implicit indication of what people do in meeting their needs to satisfy their sense of Belonging can be seen in item 1: (I am pleased with the time I spend with my family).

Participants were asked to respond to a five-point Likert scale and compare their current situation to the time before the isolation/social distancing period. For example: 'I am happy with the time I spend with my family'. The responses were '0=It has not changed compared to the time before the isolation/social distancing period', '1=absolutely disagree', '2=disagree', '3=agree', and '4=absolutely agree'. This means the higher the score in responses, the higher the level of satisfaction with that item is. Questions had two directions and so for the negative questions the Likert scale needed to be calculated the other way round, for example: 'Life has no meaning for me'; this was a negative question and 'absolutely disagree' should be given a score as '4', disagree '3', agree '2' and absolutely agree '1'. The sum calculated for the 27 items therefore represents the Occupational Wholeness score. The sum can be also calculated for each component (Being, Belonging, and Becoming subscales) to indicate the score for that. Overall, 27 items were identified with eleven items related to the sense of Being (Items 2, 3, 8, 9,10,11,15,16,18,19, and 21), eight items related to the sense of Belonging (Items 1, 6, 13, 14, 20, 23, 25, and 27), eight items for the sense of Becoming (Items 4, 5, 7, 12, 17, 22, 24, and 26). To see the overall 27 items of the online tool, see [Appendix 1](#).

A group of four experts in Occupational therapy conducted an internet-based panel to discuss the relevance and necessity of the items. After that, five experts evaluated the fluency and clarity of the items and confirmed the face validity of the questions [24].

The questionnaire was piloted among eight people with a variety of ages, and from different socio-economic backgrounds for further tests of validity. This was done through an in-depth cognitive interview to probe the understanding of the items from participants' point of view [31]. In depth interviewing is a method to explore what the interviewee understands about the question and the way they think they need to respond to the question. Through this method researchers can identify issues related to the way items are worded and conceptualised in order to change, modify or delete the item if needed. An analysis was conducted of the interviewee's perception of each item and their response to it and the items were modified accordingly [31].

When using Likert-type scales, it is imperative to calculate and report Cronbach's alpha coefficient for internal consistency reliability. The reliability of the tool used for this study tested by Cronbach's alpha was overall  $\alpha=0.909$  that is considered as excellent.

The Cronbach's alpha for the three subscales; were measured as; sense of Being  $\alpha=.815$  (good), sense of Belonging  $\alpha=.727$  (acceptable), sense of Becoming  $\alpha=.734$  (acceptable) [27]. The final instrument was a self-administered questionnaire with 27 items and demographic questions related to age, gender and living status.

### **Ethics**

The ethics approval was granted for different steps of the study from Oxford Brookes University in the UK and Shahid Beheshti University in Iran.

### **Data analysis**

SPSS version 22 was employed to analyse the results by using One Sample T-test, Student T-Test, and ANOVA.

### **Results**

The results of the study are presented into two sections. Demographic of the participants are explained in the first section and the results of the statistical analysis are described in the second section.

A sample of 1624, with 67% response rate, mean age of 37.4 (SD = 12.40) were recruited using convenience and snowball sampling techniques. A sample of 1624 appears to be a reliable sample size for survey studies [32]. Majority of the participants were Female (71.9%), and living with someone (95.3%). Six percent of participants reported a presumed or diagnosed case of Covid-19 within their household. This was divided in two groups, three percent were those who had presumed or diagnosed Covid-19 themselves. The other three percent were those living with someone who had presumed or diagnosed Covid-19 (Table 1).

### ***Perceived positive/negative attribution to the sense of being, becoming and belonging during the isolation period compared to the time before this period***

The one-sample t-test was used to compare the means of the sense of Being, Belonging and Becoming to the hypothesised expected value (the expected average score for each variable based on their total score) to determine if the sample mean is significantly greater or less than that value (Table 2). The results show that the p-values for Being, Belonging and total scores are significantly smaller than .05. As the observed

**Table 1.** Demographic characteristics of the participants.

Variables	n (%)	n (%)
<b>Gender</b>		
Female	1168 (71.9)	
Male	456 (28.1)	
<b>Age</b>		
<25	318 (19.6)	
25-35	444 (27.3)	
35-45	417 (25.7)	
>45	445 (27.4)	
<b>Elders in Family</b>		
Yes	322 (27.6)	
No	846 (72.4)	
<b>Living Status</b>		
Alone	77 (4.7)	
With Spouse & Children	557 (34.3)	
With Spouse & Children & others	721 (44.4)	
With Spouse & Children & Loved one	47 (2.9)	
Single with Family	222 (13.7)	
<b>Number of Children</b>		
None	613 (37.7)	
One	363 (22.4)	
Two	456 (28.1)	
>Three	192 (10.8)	
		<b>Covid19. myself</b>
		Yes
		22 (1.4)
		No
		1571 (96.7)
		Suspicion
		31 (1.9)
		<b>Covid19. Family</b>
		Yes
		29 (1.8)
		No
		1576 (97.0)
		Suspicion
		19 (1.2)
		<b>Person with disability at home</b>
		Yes
		124 (7.6)
		<b>Job</b>
		Professor
		81 (5.0)
		Retired
		95 (5.8)
		Unemployed
		49 (3.0)
		Housewife
		296 (18.2)
		Student
		275 (16.9)
		Employee
		410 (25.2)
		Teacher
		209 (12.9)
		<b>Persons</b>
		1
		329 (20.3)
		2
		451 (27.8)
		3
		540 (33.0)
		4
		304 (18.7)

**Table 2.** Summary of one sample t-test for comparing Being, Belonging and Becoming.

Variable	Expected value	Observed Mean	SD	T
Being	22	24.9	8.6	14.1**
Belonging	14	15.9	15.9	11.3**
Becoming	16	15.9	6.0	.494
Total	54	56.8	19.6	5.93**

\*\*  $p < .01$ .

mean (the mean score of participants in the related items in this study) are greater than the expected values (the statistical average score for each variable based on their total score), this suggests the participants reported a more positive attribution to their experience of isolation during the early period of Covid-19 pandemic compared to the time before. However, the p-value for Becoming does not differ significantly from the expected value.

### ***Perceived positive/negative attribution to the sense of being, belonging and becoming during the isolation period based on the demographic characteristics of the participants***

In order to compare perceived sense of Being, Belonging and Becoming during the isolation period based on the demographic characteristics of the participants, two statistical models were used, t-test and ANOVA. The results related to the mean differences based on gender and living with elders which are shown in Table 2 and the results of living status and number of children are shown in Table 3.

The results demonstrated no significant difference in positive or negative attribution to the experience of isolation. However, the only significant difference in Table 3 is related to the sense of belonging based on the living status (Table3). Participants 'living with children but no others at home' showed higher negative attribution of a sense of belonging compared to those whose living status was 'living with spouses, children, and loved ones'. There was no significant difference between the other groups.

## **Discussion**

The current study aimed to investigate the impact of the isolation/social distancing period on people's sense of Being, Belonging and Becoming as it is perceived by the Iranian population. Researchers also aimed to investigate if there is any difference in participants' perceived impact of the isolation/social distancing based on gender, age and living status.

At first, the authors discussed the findings related to the sense of Being, Belonging and overall Occupational Wholeness that have been perceived to be a positive change by participants compared to the time before the Covid-19 pandemic measures. Then, the comparisons of the findings of the sense of Being, Belonging and overall Wholeness across the demographic factors of age, gender and living status will be discussed. The results which were related to the sense of Becoming across the different demographics are discussed in the final section as they show a different

**Table 3.** The comparison of the perceived sense of Being, Belonging and Becoming based on the participants' demographic characteristics.

Variables	Sense of Being			Sense of Becoming			Sense of Belonging		
	M	SD	t/F	M	SD	t/F	M	SD	t/F
<b>Gender:</b>									
Male	24.6	8.7	1.29	16.1	6.0	-.44	16.1	6.5	-.34
Female	25.3	8.6		15.9	6.0		16.0	6.6	
<b>Living Status:</b>									
Alone	24.8	9.6	1.14	15.2	6.7	.42	15.3	6.6	4.4*
With Spouse & Children	24.7	8.1		16.1	5.7		15.0	6.4	
With Spouse, Children & Loved one	27.9	7.1		16.9	6.5		18.7	6.3	
Single with Family	25.8	9.0		16.1	6.0		16.2	6.7	
<b>Number of Children:</b>									
None	25.0	8.2	.24	16.0	5.8	.08	15.4	6.4	2.04
One	25.1	8.7		15.8	5.8		16.2	6.6	
Two	24.7	8.8		15.9	6.2		16.2	6.8	
>Three	25.2	8.8		15.8	6.4		16.3	6.8	

\* $p < .05$ .

pattern compared to the sense of Being and Belonging.

The results indicated that participants perceived a higher level of positive attribution to their experience of Covid-19 isolation/social distancing period compared to the time before. Participants showed an overall higher score in their sense of Occupational Wholeness, and in components presenting the sense of Being and Belonging. The hypothesis that researchers had was proven right and the Covid-19 isolation was perceived as making changes in one's sense of Being, Belonging and overall Occupational Wholeness. However, unlike other studies that indicate negative impacts of this situation on people's mental health and wellbeing, positively evaluating the changes during the isolation measures compared to the time before may come as a surprise to readers. Further scrutinising on the individual items may help explain the findings. Items addressing the sense of Being refer to the time and opportunities one may have to spend on their health and wellbeing, reflecting on the meaning of life and the value of health. Items related to Belonging refer to the time spent with the family, in the home environment and connection with significant people. Items related to the above matters were given higher scores during the isolation/social distancing period compared to the time before it. The time that people found to deal with some of their own Being and Belonging issues may have been the key to this positive evaluation of their situation during the isolation period compared to the time before. There are other evidence that the Covid-19 pandemic provided some people with time and space to reflect on their life, personal or professional experience [33–35].

In relation to the sense of Being, however, there were items related to multitasking and limited time

for people who had to continue working from home. In relation to the sense of Belonging, Being away from nature, public space, and social gatherings were a limitation identified by participants as negative aspects of their experience. Despite this, the overall sense of Being and Belonging was reported significantly more positive compared to the time before the isolation/social distancing period. This may be explained by the significance of the attribution of meaning to events. As Park states, appraising the meaning for stressful experiences is related to health and well-being, this may be the case in the way participants attributed meaning to their experience of the covid-19 isolation measure [36]. The perceived positive experience that participants showed in their sense of Being and Belonging may be related to attribution of positive meaning to the pandemic situation. The pandemic measures and isolation situation may have been considered as an opportunity or challenge. Participants may have considered the pandemic situation an opportunity to reflect on life and spend time on some aspects of their Being and Belonging needs or looking for a better solution for hardships and problems to improve capabilities [2,33].

According to the Model of Occupational Wholeness, the overall sense of Wholeness is dependent on the sense of Being, Belonging and Becoming. It is no surprise that the overall sense of Occupational Wholeness shows a higher score when the two components (sense of Being and Belonging) scored as significantly higher during the isolation measure compared to the time before.

The living status of participants were included: 1 = living alone, 2 = living with a spouse, 3 = living with spouse, children and loved one, 4 = living with spouse, children, and others, 5 = living with others. Participants living with children, spouse, but no

others showed more negative experience in relation to the sense of Belonging compared to the other groups. Many families were isolating themselves with their grandparents to be able to support them and receive support during the isolation. This was specifically the case due to the initiation of isolation/social distancing measures at the time of the Iranian New Year which traditionally families celebrate together. Even if grandparents did not live with their children originally, they would have stayed with them during the isolation/social distancing period. Grandparents have a greater impact on managing childcare and supporting women's social presence in Iran. The families with no one else except their spouse and children would have been unable to receive support for their childcare either from the nursery or grandparents. This may explain why the experience of Belonging has been perceived as negative in this group (living with spouse and children only). In addition, during the New Year holiday where the custom is to visit others and specifically spend time with grandparents, this may have been perceived as a negative experience for families who were not able to see them. Keeping children at home, having no one else around to entertain them can be difficult for some families, especially if they need to continue working.

The presence of the grandparents may have been perceived as a positive factor in the sense of Belonging for families with children. However, it doesn't seem that the sense of Belonging among participants with one or two over 60 parents at home to be significantly different from people with no parents of the age 60 and over at home if they don't have their children around. In other words, the presence of grandparents had a significant impact on the participants with children living with them at home and their sense of Belonging. The issue of grandparents living with or separate from their children, the roles they play in childcare and potentially house chores, their health status and physical and mental capacities and the way they may impact people's sense of Belonging need further investigation.

The results of this study also indicate that the sense of Becoming was not perceived by participants to be different; positively or negatively, from the time before. To explain this finding, it is important to consider the long-term socio-economic distress imposed in the country of Iran due to sanctions and other continuing natural disasters such as earthquakes and floods during the last decade in particular. Members of the general population have been under long-term distress and this has enhanced the level of

resilience in people that otherwise would have not been able to manage their day-to-day life under extreme economic conditions. Participants reported a negative experience with the uncertainty of the situation, negative future prospects and in particular financial worries in response to some of the related questions. However, there was no significant difference between this period and the time before. The chronic and deteriorating nature of the uncertainty may explain participants' response of 'no difference' in relation to the questions that formed the subscale of the sense of Becoming. A sense of Becoming formed by one's goals, plans, and prospects for the future and vagueness seems to have had an impact on people's perspective of the future that is not limited to the isolation/social distancing period. One of the mechanisms for dealing with long-term stress is withdrawal from being engaged with it [37]. This may have been the case here as participants showed a higher level of sense of Being and Belonging (what they could plan for at the time with more control) but not Becoming (what they felt no control over).

Evidence indicates that uncertainty stress is higher in the state of lower family income [38]. People with low economic status may have not been represented in the sample of the current study as they likely have no access to the internet and social media in Iran.

Unlike other studies that showed differences in the way different genders perceived and behaved in response to the Covid-19 pandemic [38], the results of the current study did not show any difference based on age and gender of participants.

### ***Limitation of the study***

This online survey study recruited a particular group of the general population with access to devices that allow use of internet and social platforms. This may exclude some people from lower economic backgrounds, and also lead to inequality in the number of male and female participants. The findings of this study, therefore, is not generalisable to the entire population of Iran. However, the findings are valuable in relation to highlighting the significance that time and context play in people's perceived experience of an event even when it is a global issue. The lack of a longitudinal follow-up element in this study may also be considered as a limitation. A comparison could have been useful to investigate the perceptions of the same group of participants in a longer period of time during Covid-19 pandemic particularly since the Covid-19 figures such as incidence, hospitalisation



and death rates show that Iran has not managed the Covid-19 pandemic effectively due to delays in vaccination [39]. The limited resources provided to the public due to ongoing sanctions and their dramatic impact on people's access to medication, hospitalisation etc. would have shown different findings in the long term.

### Recommendations for future studies

An in-depth investigation on the effects of the last few decades of socio-political and economic strains on people of Iran, the process of attributing meaning to events and the way they respond to them may be useful for building knowledge from an Occupational science perspective. Through such studies researchers may help with further explanation as to why the sense of Becoming in this population during the Covid-19 isolation measure does not show a difference compared to the time before in spite of uncertainties of future prospects. These findings may emphasise the value of peoples' meanings for their difficulties and an area for further investigation into the process of meaning making.

### Conclusion

The findings indicate the significance of ocio political and cultural context of Iran in the way the experience of Covid-19 isolation measures was perceived by the population in this study. The findings show that the isolation/social distancing measures were perceived by participants as an opportunity to meet some of their Being, and Belonging needs that contribute in an overall sense of Occupational Wholeness. These findings signify the value of attributing meaning to difficult experiences when responding to that. The finding of this study may raise an important question about the lifestyle prior to the isolation and the need for time and space to meet the needs for Being and Belonging. This highlights the role that Occupational science and Occupational therapy may have in helping people in situations when they need to rethink and replan for what they Do and the way they attribute meaning to their experiences.

### Acknowledgment

The authors acknowledge all colleagues who helped in the distribution of the questionnaire and present a heartfelt gratitude to all participants who gave their precious time to this research.

### Disclosure statement

The authors report no conflict of interest.

### Funding

This work was not supported by any agency and was self-funded.

### ORCID

Somaye Kavousipor  <http://orcid.org/0000-0002-6124-1030>

Mehdi Rassafiani  <http://orcid.org/0000-0003-4093-6113>

### References

- [1] Haleem A, Javaid M, Vaishya R. Effects of COVID 19 pandemic in daily life. *Curr Med Res Pract.* 2020; 10(2):78–79.
- [2] Rushford N, Thomas K. *Disaster and development: an occupational perspective.* Elsevier Health Sciences; 2015.
- [3] Brooke J, Jackson D. Older people and COVID-19 isolation, risk and ageism. *J Clin Nurs.* 2020;29(13-14):2044–2046.
- [4] Kamalakannan S, Chakraborty S. Occupational therapy: the key to unlocking locked-up occupations during the COVID-19 pandemic. *Wellcome Open Res.* 2020;5:153.
- [5] Kielhofner G. Introduction to the model of human occupation. In: *Model of Human Occupation, Theory and Application.* Philadelphia: Lippincott Williams & Wilkins; 2008, p. 1–9.
- [6] Wilcock AA. *Occupational science: Bridging occupation and health.* Los Angeles (CA): SAGE Publications Sage CA; 2005.
- [7] Hitch D, Pépin G, Stagnitti K. In the footsteps of wilcock, part two: the interdependent nature of doing, being, becoming, and belonging. *Occup Ther Health Care.* 2014;28(3):247–263.
- [8] Yazdani F, Bonsaksen T. Introduction to the model of occupational wholeness. *ErgoScience.* 2017;12(1): 32–36.
- [9] Alhurani AS, Dekker R, Ahmad M, et al. Stress, cognitive appraisal, coping, and event free survival in patients with heart failure. *Heart Lung.* 2018;47(3): 205–210.
- [10] Taylor SE, Armor DA. Positive illusions and coping with adversity. *J Pers.* 1996;64(4):873–898.
- [11] Ryan RM, Deci EL. Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *Am Psychol.* 2000;55(1): 68–78.
- [12] Hammell KRW. Belonging, occupation, and human well-being: an exploration: Appartenance, occupation et bien-être humain: Une étude exploratoire. *Can J Occup Ther.* 2014;81(1):39–50.

- [13] Buchanan TM, McConnell AR. Family as a source of support under stress: Benefits of greater breadth of family inclusion. *Self Identity*. 2017;16(1):97–122.
- [14] Azadarmaki T, Bahar M. Families in Iran: Changes, challenges and future. *J Comp Fam Stud*. 2006;37(4):589–608.
- [15] Kokabisaghi F. Assessment of the effects of economic sanctions on Iranians' Right to Health by Using Human Rights Impact Assessment Tool: A Systematic Review. *Int J Health Policy Manag*. 2018;7(5):374–393.
- [16] Setayesh S, Mackey TK. Addressing the impact of economic sanctions on Iranian drug shortages in the joint comprehensive plan of action: promoting access to medicines and health diplomacy. *Global Health*. 2016;12(1):1–14.
- [17] Ng HY, Griva K, Lim HA, et al. The burden of filial piety: a qualitative study on caregiving motivations amongst family caregivers of patients with cancer in Singapore. *Psychol Health*. 2016;31(11):1293–1310.
- [18] Quinn C, Clare L, Woods RT. What predicts whether caregivers of people with dementia find meaning in their role? *Int J Geriatr Psychiatry*. 2012;27(11):1195–1202.
- [19] Kuşçu M, Dural U, Yaşa Y, et al. Decision pathways and individual motives in informal caregiving during cancer treatment in Turkey. *Eur J Cancer Care (Engl)*. 2009;18(6):569–576.
- [20] Galasso V, Pons V, Profeta P, et al. Gender differences in COVID-19 attitudes and behavior: Panel evidence from eight countries. *Proc Natl Acad Sci U S A*. 2020;117(44):27285–27291.
- [21] Check J, Schutt RK. *Research methods in education*. Thousand Oaks: Sage Publications; 2011.
- [22] Ponto JA, Ellington L, Mellon S, et al. Predictors of adjustment and growth in women with recurrent ovarian cancer. *Oncol Nurs Forum*. 2010;37(3):357–364.
- [23] Costanzo ES, Stawski RS, Ryff CD, et al. Cancer survivors' responses to daily stressors: Implications for quality of life. *Health Psychol*. 2012;31(3):360–370.
- [24] DuBenske LL, Gustafson DH, Namkoong K, et al. CHES improves cancer caregivers' burden and mood: results of an eHealth RCT. *Health Psychol*. 2014;33(10):1261–1272.
- [25] Artino AR, Jr Durning SJ, Sklar DP. Guidelines for reporting survey-based research submitted to academic medicine. *Acad Med*. 2018;93(3):337–340.
- [26] Dillman DA, Smyth JD, Christian LM. *Internet, phone, mail, and mixed-mode surveys: the tailored design method*. Toronto: John Wiley & Sons; 2014.
- [27] Singleton Jr R, Straits B, Straits M. *Approaches to social research*. 2nd and 5th ed. Oxford: Oxford University Press; 2009.
- [28] Baltar F, Brunet I. Social research 2.0: virtual snowball sampling method using Facebook. *Internet Res*. 2012.
- [29] Ponto J. Understanding and evaluating survey research. *J Adv Pract Oncol*. 2015;6(2):168–171.
- [30] Bonsaksen T, Yazdani F. The norwegian occupational wholeness questionnaire (N-OWQ): scale development and psychometric properties. *Scand J Occup Ther*. 2020;27(1):4–13.
- [31] Peterson CH, Peterson NA, Powell KG. Cognitive interviewing for item development: Validity evidence based on content and response processes. *Meas Eval Couns Dev*. 2017;50(4):217–223.
- [32] Straits BC. *Approaches to social research*. Oxford: Oxford University Press; 2005.
- [33] Gayatri M, Irawaty DK. Family resilience during COVID-19 pandemic: a literature review. *Fam J*. 2021;29(3):1–7.
- [34] Westgarth D. The irony of it all. *BDJ pract*. 2020. DOI:10.1038/s41404-019-0272-4.
- [35] Mischenko EV, Fabrikov MS, Martynenko EV, et al. Young people leisure activities transformation during quarantine Self-Isolation: Characteristics and regulation problem. *Cuest Pol*. 2020;37(65):457–469.
- [36] Park JA, Lee EK. Influence of ego-resilience and stress coping styles on college adaptation in nursing students. *J Korean Acad Nurs Adm*. 2011;17(3):267–276.
- [37] Valgarðsson VO. Differential turnout decline in Norway and Sweden: a generation of apathy or alienation? *Scand Political Stud*. 2019;42(3-4):270–295.
- [38] Yang T, Yang XY, Yu L, et al. Individual and regional association between socioeconomic status and uncertainty stress, and life stress: a representative nationwide study of China. *Int J Equity Health*. 2017;16(1):118.
- [39] World Health Organization. [cited 20 August 2021]. 2020. <http://covid19.who.int/region/emro/country/ir>

## Appendix 1. Survey questions

Participants were asked to Read each statement carefully and decide which of the choices of the questionnaire applied to the way they think and describe them in the situation of isolation/social distancing/quarantine compared to time before isolation.

1. I am pleased with the time I spend with my family
2. I have more opportunities to do what I like
3. I have a chance to review the meaning of my life
4. I have an opportunity to learn new skills to help me develop more job and career related skills
5. I have an opportunity to grow spiritually
6. There is an opportunity for me to learn new ways to communicate with others like using mobile apps
7. I have opportunities to increase my knowledge in areas I like
8. I can do things I never had time and space for before
9. I have discovered some new characteristics about myself
10. I have the opportunity to reflect on the value of my health
11. I have the opportunity to take care of my health
12. There are issues that have worried me about my future (financial, job or family related, ...)

13. I have opportunities to do things to help others
14. My family relationships have become strained
15. I have less opportunities to do things I like
16. Life has lost its meaning for me
17. There is no opportunity to educate myself for further development
18. I have a lot in my to do list but with less chance to do them
19. I have less time and space to think about myself
20. My ways of communication lead to conflicts at home
21. There is no time to spend on my own mental health and well being
22. I worry less for my future
23. There are less opportunities to be useful to others
24. I have less motivation to put effort to achieve what I want for my life
25. I have more opportunities to play my social roles and do volunteer activities
26. I have more motivation to build my future
27. I use my home space and furniture in a positively new way to meet my needs