A multi-variable model for explaining long-term commitment to volunteering among COVID-19 volunteers

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Abstract
The aim of the study was to test variables that explain long-term commitment to volunteering among volunteers in the first wave of the COVID-19 pandemic in Israel. Long-term commitment to volunteering was tested by the participants’ evaluation of the stability, consistency, and intensity of their volunteering over time. Two theoretical frameworks served for explaining commitment to volunteering: the social-structural approach and the psychological characteristics approach. The sample was comprised of 504 Jewish participants: 173 men and 331 women. The data were collected via structured questionnaires distributed by nonprofit volunteer organizations. The most significant contribution to explaining long-term commitment to volunteering, in all its forms, was for psychological characteristics reflected in emotions during the pandemic and in the motives for volunteering, the volunteer’s gender, level of education, and tendency to volunteer during routine times. Volunteer organizations should focus on cultivating a large and motivated population of volunteers to maintain long-term volunteering during emergencies and in routine times.
INTRODUCTION

The aim of the study was to explain long-term commitment to volunteering among volunteers in Israel who volunteered during the first wave of the COVID-19 pandemic. The COVID-19 pandemic represents a state of emergency in several domains, particularly in the health, social and economic fields. It is a unique crisis that poses threat to life, serious illness, and uncertainty regarding the course of the disease and its duration. Diverse variants of the virus are constantly erupting and signal that the pandemic is here to stay. In addition to the severe and immediate consequences of the pandemic, harmful effects on community members may also be evident in routine life after the pandemic, and volunteers’ contribution is essential in both periods. It is therefore of paramount importance to understand the factors that explain the intention to volunteer over time among COVID-19 pandemic volunteers (hereinafter: long-term commitment to volunteering).

Volunteering in emergencies

In emergencies, volunteers make a significant contribution to communities in distress. A state of emergency is defined as an actual event, or an event that is about to occur, which endangers or threatens to endanger human life, or an event that may impair the infrastructure essential to the existence of community members and requires extraordinary organization and responses (Coles & Buckle, 2004). The concept of volunteering in emergencies covers a broad range of events, such as terror attacks (Lowe & Fothergill, 2003), hurricanes (Michel, 2007), severe floods (Harris et al., 2017), earthquakes (Nelan & Grineski, 2013), nuclear accidents (Seley & Wolpert, 1988), fire outbreaks (Addai et al., 2016), military emergencies (Kulik, 2017), and pandemics (Shi et al., 2018). In many cases, the emergency needs exceed the capacity of government agencies and professional rescue bodies, and volunteers often play a critical role across the entire spectrum of rescue efforts (Fernandez et al., 2006).

It should be noted that the nature of volunteering in routine times and during emergencies has changed following developments that took place in major life domains in the present century. These changes are associated with a wide range of processes, such as globalization, the tendency toward individualism, mass media, and the growing access to the internet (Rochester et al., 2010). Moreover, researchers highlight the greater desire for autonomy when volunteering, using existing skills, as well as the tendency to short-term volunteering known as episodic volunteering. In emergencies, differences can be discerned between volunteers according to how they arrived at the volunteering field (Stallings & Quarantelli, 1985). Some volunteers are organized volunteers who come to the field through volunteer organizations, belonging in part to rescue organizations that specialize in emergency operations. Others are spontaneous volunteers who come on their own out of a desire to help (Barraket et al., 2013) and usually undergo field training (Whitehead & Smith, 2013). Volunteers of all types often play a critical role across the entire spectrum of rescue efforts in emergencies (Chambers, 2016). Moreover, in the period following the emergency, communities need rehabilitation and maintenance following the crisis created by the state of emergency. Today, as a result of technological developments in the present century, some newer styles of volunteering, such as virtual or hybrid volunteering (which combines traditional and virtual volunteering), are available alongside traditional face-to-face volunteering, and their frequency has been increasing in recent decades (Cravens, 2000). In this vein, volunteering during the COVID-19 pandemic is an example of emergency volunteering, which was global in nature and took many forms. However, the fear of being infected, the shutdowns and communities’ low morale constituted barriers to long-term commitment among the pandemic volunteers.
Volunteering during the first wave of the COVID-19 pandemic: Obstacles versus accelerators

The COVID-19 pandemic is considered mainly a health emergency situation including a fear of infection and consequently an imminent threat to the lives of the entire population (Bazan et al., 2021). Moreover, the shutdown led many countries to economic crisis (Borio, 2020), and the social distancing fostered a sense of loneliness (Groarke et al., 2020) and had psychological implications (Mazza et al., 2020) for a large part of the world population. Due to restrictions on leaving the home, older residents did not volunteer, and even younger individuals who live with their elderly parents sometimes avoided volunteering in order to safeguard their parents from infection. Moreover, due to the shutdown of the education system, parents were forced to work from home and experienced a permanent and intense role conflict resulting from the pressure to simultaneously meet work and family demands (Kulik and Ramon, 2022).

Alongside these obstacles to volunteering, some accelerating factors were also observed, such as the large amount of free time available to a large part of the population as a result of losing their job or having to take unpaid leave because of a slowing of the economy. For these individuals, volunteering served as a mean for creating social ties and preserving a sense of efficacy and self-esteem. Another accelerating factor for volunteering was the broad range of volunteering possibilities offered by the new reality created by the pandemic. Due to the lockdown, virtual volunteering through digital means evolved, alongside traditional face-to-face volunteering (Kulik, 2021; Lachance, 2020; Trautwein et al., 2020; Pickell et al., 2020).

These contradictory volunteering trends during the first wave of the pandemic (obstacles vs. accelerators) impacted volunteering rates all over the world. For example, the proportion of adult Australians doing voluntary work has fallen very substantially since COVID-19. In April 2021, 24.2% of Australians had performed voluntary work in the previous 12-months, down from 36.0% in late 2019 (Biddle & Gray, 2021). In Israel, the context in which the present study was conducted, volunteering rates during the pandemic (20.3%) were similar to those in routine times (Almog-Bar & Bar, 2020). The COVID-19 pandemic is still raging, and the volunteers make a significant contribution to their communities. It is thus important to identify variables that explain long-term commitment to volunteering.

Conceptual framework: Long-term commitment to volunteering

Long-term commitment to volunteering refers to the tendency to volunteer over time (Taylor & Pancer, 2007; Trautwein et al., 2020) and includes several distinct aspects (Yanay & Yanay, 2008). Based on this definition and following Kulik’s (2017) study on volunteering during a military emergency (Operation Protective Edge) in Israel, the long-term commitment to volunteering was assessed from three aspects that provide an overall view of the construct: expected long-term tendency to volunteer (stability of volunteering), expected long-term tendency to volunteer frequently (intensity of volunteering), and expected long-term tendency to volunteer in a similar domain (consistency of volunteering).

Two of the most popular theoretical approaches for explaining long-term commitment to volunteering are the social-structural (Wilson, 2012) and the psychological characteristics (Matsuba et al., 2007) approaches. The social-structural approach emphasizes the contribution of the volunteer’s objective characteristics (for a summary, see Wilson, 2012). One of the assumptions
underlying this approach is that background characteristics reflected in master statuses, such as level of income (Celdrán & Villar, 2007), gender (Vázquez-Parra et al., 2020), education (Mykletun & Himanen, 2016), and immigration status (Kazemipur, 2011), impact their tendency to volunteer.

On the other hand, the psychological characteristics approach emphasizes the subjective perspective as an umbrella term that covers a wide range of concepts (such as personality traits, motives, attitudes, norms, and values) (Matsuba et al., 2007). In this vein, a number of studies have linked personality traits to volunteering. The trait most often associated with doing volunteer work is extraversion, followed by agreeableness (Omoto et al., 2010). Moreover, the psychological characteristics approach emphasizes motives for volunteering. For example, solidarity as a disposition to volunteer might be considered to be a trigger for helping others and therefore strengthen commitment to volunteering (Ward & McKillop, 2011). The emotional state of the volunteer that fosters commitment to assist others is also included in this approach (Boezeman & Ellemers, 2007).

Although the experience of volunteering itself was not listed among the factors that explain commitment to volunteering in either of these approaches, its contribution was found to be significant. For example, intrinsic satisfaction from volunteering (reflecting the volunteering experience) was found to be related to the long-term tendency to volunteer (Jacobson et al., 2012). Therefore, in the hypothesized model, intrinsic satisfaction from volunteering is included as an explanatory variable along with the variables of the two above-mentioned theoretical approaches.

The main contribution of the study is in examination of the unique and combined impact of the variables derived from the two above-mentioned approaches and of intrinsic satisfaction from volunteering to explaining long-term commitment to volunteering in the three above-mentioned dimensions of the construct (stability, intensity, consistency) among the volunteers of the first wave of the COVID-19 pandemic.

**The research model for explaining long-term commitment to volunteering**

The above-mentioned approaches for explaining long-term commitment to volunteering served as a platform for including the variables in the hypothesized research model. However, in the absence of broad empirical knowledge on this issue in times of emergencies, the hypotheses regarding relationships between the explanatory variables and the outcome variable (commitment to volunteering in its three aspects) were based mainly on the body of knowledge accumulated in the field of volunteering during routine times, and on a limited body of knowledge related to other emergency situations. Based on the social-structural approach, in the hypothesized research model the background variables were positioned first in the hierarchy of the explanatory variables (see Figure 1 – the hypothesized research model).

**Background variables (reflecting the social-structural approach)**

Based on previous research findings, the background variables tested for their contribution to explaining commitment to volunteering were gender, education, age, work status, parenting status and type of volunteer.
**Gender**

According to the gender role theory (Eagly & Wood, 2016), since women have a greater tendency to exhibit caregiving and proactive behavior than men, they were also expected to exhibit greater long-term commitment to volunteering. However, studies on gender differences in commitment to volunteering indicated a rather complex picture. Differences between men and women in the rate of volunteering were found to be dependent on the volunteering domain and on the cultural context (for a summary, see Wilson, 2012). In Israel, men tend to volunteer in routine times more than women. In a study performed during a military emergency situation, men expressed greater long-term commitment to volunteering than women (Kulik et al., 2016). The above-mentioned survey performed in Israel during the COVID-19 pandemic also found that men tend to volunteer more than women (Almog-Bar & Bar, 2020). This research knowledge led to the following hypothesis:

Hypothesis 1a: Long-term commitment to volunteering during the first wave of the COVID-19 pandemic will be higher among men than among women.

**Education**

Education is considered to be one of the most influential variables in explaining the tendency to volunteer because of its association with qualities and skills, including broad vision and high cognitive ability, that stimulate volunteering. Indeed, a large body of studies revealed a relationship between education and tendency to volunteer during routine times (e.g., Proulx et al., 2018; Son
and Wilson, 2012) as well as during emergencies. In this vein, Kulik et al. (2016) found a relationship between education and volunteering among both genders during the above-mentioned military emergency in Israel, although in different aspects of commitment: among men, higher education was associated with consistency of volunteering; among women, it was associated with intensity of volunteering. Education also predicted the tendency to volunteer during the September and October 2014 earthquakes in China (Shi et al., 2018), and in the United States after the events of September 11, 2001 (Penner et al., 2005). This finding led to the following hypothesis:

Hypothesis 1b: The higher the volunteers’ education level, the higher their long-term commitment to volunteering.

Age

The relationship between age and volunteering is not linear. Volunteering apparently peaks in midlife (for a review, see Wilson, 2012). This is explained by a sense of establishment in the areas of work and family among individuals during this life stage, leaving more time and energy for volunteering. However, recent knowledge accumulated in the field indicates a more complex relationship between age and commitment to volunteering that depends on volunteering type, culture, and cohort. In the above-mentioned study conducted in Israel during the military emergency, Kulik (2017) showed that two main age groups exhibited differences in the volunteering experience: the young group up to age 35, and the older group aged 35 and over. The former showed a lower commitment to volunteering and dropped their volunteering activities at the end of the emergency situation. These findings led to differentiation between the two age groups (older and younger volunteers) and the hypothesis that:

Hypothesis 1c: Long-term commitment to volunteering of older volunteers will be higher than that of younger volunteers.

Parenting

Findings on the relationship between parenting and volunteering are inconsistent. On one hand, parenting may reduce commitment to volunteering because of the burden of raising children (Nesbit, 2012). On the other hand, it creates more opportunities for volunteering because of parents’ connection to children’s education institutions (Ehrhardt, 2011) which often require parental involvement to advance various educational goals. In the absence of an extensive and consistent research on this issue, the contribution of parenting to explaining the commitment to volunteering was tested in an exploratory manner, without formulating a specific hypothesis.

Work status

The employment status of the person (employed / unemployed) is considered to be a master status that determines his social position. Two competing approaches dominate the literature that explains the relationship between work status and volunteering. The time constraint approach posits a negative relationship between time devoted to paid work and volunteering, because people can only allocate as much time to volunteering as their work responsibilities permit (Robinson et al., 2016). In contradistinction, the social integration theory emphasizes that time devoted to paid work plays a key role in people’s social integration (Musick & Wilson, 2008). According to this approach, paid work may encourage volunteering due to the fact that some employees volunteer through workplaces and because the employed acquire social connections, thus expanding employees’ opportunities to volunteer. However, research evidence on this issue is inconsistent.
Some studies showed that many work hours are negatively related to volunteering (Qvist, 2021), while others found that individuals who were not employed were less likely to volunteer (Nazroo, 2015). In light of these inconsistent findings, the relationship between work status and volunteering was examined without proposing a specific hypothesis.

Volunteer type
The volunteers were differentiated into two types: organized volunteers who volunteer routinely and belong to nonprofit organizations, and spontaneous volunteers who volunteered during the COVID-19 pandemic but did not volunteer before the outbreak of the pandemic. According to the volunteering identity approach (Grube & Piliavin, 2000), people who volunteer routinely and frequently feel that their activity helps enhance their self-identity as volunteers and express great commitment to volunteering, as evidenced by studies on volunteering in emergencies during pandemics (Rosychuk et al., 2008), as in other types of emergencies (Kulik et al., 2016). This led to the following hypothesis:

Hypothesis 1d: Long-term commitment to volunteering of routine volunteers will be greater than that of spontaneous volunteers.

In addition to the above-mentioned variables reflecting the social-structural approach to explaining commitment to volunteering (Matsuba et al., 2007), some hypotheses were derived from the psychological characteristics approach. These hypotheses are related to the emotional state during the pandemic and on motives for volunteering.

Psychological constructs (reflecting the psychological characteristics approach)

Emotional state
The emotional state during the volunteering activity may affect the volunteers’ commitment to help others (Erez et al., 2008). In the present study we examined how two aspects of the volunteers’ emotional state contributed to explaining their long-term commitment to volunteering: the anxiety level and the morale level.

Anxiety
Emergencies in which there is a risk of injury, such as pandemics, may evoke various degrees of anxiety in the exposed population (for a meta-analysis, see Pfefferbaum et al., 2019). Researchers agree that at low anxiety levels, the tendency to be aware of the needs of others is relatively high (Eisenberg et al., 2007), whereas high levels of anxiety reduce the tendency to reach out to others. According to one explanation, a high level of anxiety is associated with self-preoccupation and attempts to fulfill personal needs, leading to selective attention (Schmeichel & Baumeister, 2010) and consequently to ignoring others’ distress (Batson et al., 1991). Handy and Cnaan (2007) demonstrated that those experiencing moderate to high levels of social anxiety avoid interacting with unknown people, or experience fear of exposure to new environments, and will tend to avoid volunteering. This led to the following hypothesis:

Hypothesis 2a: The higher the level of anxiety, the lower the long-term commitment to volunteering.
Morale

Morale is defined as a general feeling with a positive or negative nature that persists over a certain period of time (Gross, 2015). An emergency situation that threatens the function of the individual may be a crucial factor in shaping the national and personal morale (Karlin et al., 2012). Early studies (Forgas, 1998) and more recent ones (Aknin et al., 2012; Huppert, 2009) revealed that high morale increases the tendency to help others. According to one explanation, high morale is accompanied by an increase in the sense of efficacy and control over occurrences in the environment. These in turn encourage taking initiative to help the other who is in distress, whose expression may be volunteering. These findings led to the following hypothesis:

Hypothesis 2b: The higher the morale level, the higher the long-term commitment to volunteering.

Motives for volunteering

According to the functional theory, the motives for volunteering are the accelerating force for realizing unfulfilled needs (Clary & Snyder, 1999). Following the classic two-dimensional model for organizing the motives for volunteering, these motives can be grouped into two main categories: self-directed motivational categories intended to fulfill personal needs (also known as egoistic motives) and other-directed motivational categories intended to fulfill needs related to the other (also known as altruistic motives) (Frisch & Gerrard, 1981).

In this study, the motivational aspect of volunteering was examined via several motives that fall into these two categories: instrumental motives and motives of escape from reality through volunteering (representing the self-directed motivational category) and social solidarity motives (representing the other-directed motivational category). Although researchers agree that the intensity of volunteering motives contributes greatly to explaining long-term commitment to volunteering (Stukas et al., 2016), there is no consistent knowledge on differences between the contribution of the different types of motives. In this vein, other-directed motives were found to predict the commitment to help others better than self-directed motives (Batson, 2010).

However, it was also found that self-directed motives predict helping others better than other-directed motives (Jimenez et al., 2010). To add to this complexity, other studies found no differences in predicting the commitment to volunteering by other-directed and by self-directed motives (Veludo-de-Oliveira et al., 2015). In the absence of consistency in the body of knowledge on this issue, a general hypothesis was posited, without distinguishing between the volunteering motive types:

Hypothesis 3: The higher the intensity of a the motives for volunteering, the higher the long-term commitment to volunteering.

Intrinsic satisfaction from volunteering and commitment to volunteering

Intrinsic satisfaction from volunteering refers to the evaluation of the content of volunteering manifested in the experience of high levels of challenge, diversity, and accomplishment in the volunteering activity (Oostlander et al., 2014). As indicated, the experience of volunteering does
not appear in the two main theoretical approaches that explain commitment to volunteering. However, based on researchers who pointed to a relationship between intrinsic satisfaction from volunteering and commitment to volunteering (for example, Farrell et al., 1998; Hyde et al., 2016), the construct was added to the hypothesized research model. The following hypothesis was put forth:

Hypothesis 4: The higher the intrinsic satisfaction from volunteering, the higher is the long-term commitment to volunteering.

Relationships between the explanatory variables

Several interrelationships between the explanatory variables were hypothesized, in addition to the relationship between the explanatory variables and the outcome variable (the three measures of commitment to volunteering) (see Figure 1), such as between the emotional state of the volunteers and their motives for volunteering. These hypotheses are based on Gillath et al.’s (2005) findings of a positive relationship between anxiety and self-directed motives in volunteering in three different countries:

Hypothesis 5: The higher the level of anxiety, the higher the self-directed motives (instrumental motives and escape from reality through volunteering).

It was further found that positive emotions are related to prosocial volunteering motives (Carlo et al., 2005). This finding led to the following hypothesis:

Hypothesis 6: The higher the level of morale, the higher the social solidarity motives.

METHOD

The research sample and procedure

Calculation of the required sample size was based on Hoogland and Boomsma’s (1998) recommendation for minimum sample size when conducting a covariance structure analysis. The current research sample exceeded the required ratio of observations over a variable by far (45:1 >> 20:1). The sample included 504 Jewish participants who volunteered in three main volunteering fields: health (Israel’s national emergency services, hospitals), help to the needy (disabled and elderly) and education. The distribution of the background characteristics of the sample is presented in Table 1. The frequency of volunteering was: 82 participants (16.2%) volunteered just once; 64 (12.7%) volunteered up to 2 h weekly; 100 (19.8%) volunteered between 2 and 4 h weekly; 73 (14.4%) volunteered between 4 and 8 h weekly; and 185 participants (36.9%) volunteered more than 8 h weekly. Of the survey respondents, 202 (40.0%) were employed, 147 (31.8%) were unemployed or on unpaid leave from work due to reductions in places of work during the pandemic, 143 (25.6%) were students and 12 (2.6%) were retired. The rate of retired volunteers was extremely small, due to fear of infection. The data were collected during the first wave of the pandemic in March 2021, via an electronic link distributed by heads of nonprofit volunteer organizations by the National Council
TABLE 1  Distribution of main background characteristics (N = 504)

| Background characteristic | n (%)      |
|----------------------------|-----------|
| **Gender**                 |           |
| Men                        | 173 (34.3%) |
| Women                      | 331 (65.7%) |
| **Education**              |           |
| Partial high school        | 40 (7.9%)  |
| High school                | 234 (46.4%) |
| Post-secondary             | 230 (45.8%) |
| **Marital status**         |           |
| Never married              | 322 (63.9%) |
| Married                    | 144 (28.6%) |
| Other                      | 38 (7.5%)  |
| **Religiosity**            |           |
| Secular                    | 274 (54.4%) |
| Traditional                | 93 (18.5%)  |
| Religious                  | 104 (14.8%) |
| Atheist                    | 33 (6.5%)   |
| **Parenthood**             |           |
| Have children              | 167 (33.1%) |
| No children                | 337 (66.9%) |
| **Work status**            |           |
| Working                    | 202 (40%)   |
| Studying                   | 143 (28.4%) |
| Unemployed                 | 147 (25.6%) |
| Pensioners                 | 12 (2.6%)   |
| **Type of volunteer**      |           |
| Organized                  | 256 (50.8%) |
| Spontaneous                | 248 (49.2%) |

for Volunteering in Israel as well as via different volunteering sites in order to reach spontaneous volunteers who are not connected to nonprofit volunteer organizations.

**Instruments**

**Long-term commitment to volunteering questionnaire**

The questionnaire was developed by Kulik et al. (2016) and assesses intention to long-term commitment to volunteering in an emergency situation. It includes three questions that test different aspects of the construct on a dichotomous answers scale. Stability in volunteering was tested by the question: “Do you plan long-term volunteering?” (answer: yes/no). The intensity of volunteering
was tested by the question: “What is your expected long-term frequency of volunteering?” (answer: high/low). The consistency in volunteering was tested by the question: “Do you plan long-term volunteering in the same field as today?” (answer: yes, in the same field/no, in a different field). The instrument was validated in an emergency and it was found that long-term commitment to volunteering is explained by volunteering in routine times and by satisfaction with the volunteering activity (Kulik et al., 2016).

Motives for volunteering questionnaire

Motives for volunteering were examined using an abbreviated version of Clary et al.’s (1992) questionnaire (used by Kulik, 2006), which included 12 motives. Participants were asked to indicate the intensity of volunteering motives on a 5-point scale, ranging from 1 (not at all) to 5 (a great extent). Varimax factor analysis revealed three factors that explained 65% of the variance (Eigenvalue > 1) and presented three distinct contents: instrumental motives, items indicating a personal benefit derived from volunteering, for example, “I volunteer because it allows me to acquire and improve social skills”; motives of escape from reality through volunteering, items describing coping with distress through volunteering, for example, “I volunteer because it is a good escape from my troubles”; and motives of social solidarity describing a desire to help the community, for example, “I volunteer because the well-being of community members is important to me”. One score was derived for each factor by averaging its items. Cronbach’s alpha internal reliability for the three factors was satisfactory: .87 for instrumental motives; .83 for escape from reality motives; and .86 for social solidarity motives.

Intrinsic satisfaction with volunteering questionnaire

Intrinsic satisfaction was assessed using a 25-item questionnaire (Kulik, 2006), scored on a 5-point scale ranging from 1 (not at all) to 5 (to a great extent). An example item is: “How satisfied are you with the sense of meaning provided by volunteering?” The total score was calculated by averaging all items, with higher scores reflecting higher intrinsic satisfaction. Cronbach’s internal reliability for the questionnaire was high ($\alpha = .90$).

Anxiety

Anxiety was tested using one question asking participants to rate their level of anxiety during the pandemic on a 10-point scale, ranging from 1 (very low) to 10 (very high). Davey et al. (2007) found a significant correlation between this question and a comprehensive questionnaire that examined situational anxiety.

Morale

Following Rhew et al. (2010), the morale variable was tested by one question in which the participants were asked to rank the level of their morale during the pandemic on a 5-point scale, from 1 (low level) to 5 (high level).
Background questionnaire

The participants were asked about their gender, age, education, degree of religiosity, marital status, parenting, employment status, place of residence, place of volunteering, and type of volunteering (spontaneous, routine).

Data processing

We examined the research hypotheses using a path analysis model. For this purpose, we used the Mplus V.8.3 statistical package for structural equation modeling. The sample size met the requirement of over 20 observations per variable (actually, over 40) to ensure the modeling power (Hoogland and Boomsma, 1998). However, we ensure the model power by using the RMSEA power analysis (MacCallum et al., 1996) codes written by Timo Gnambs at: https://timo.gnambs.at/research/power-for-sem (2008). Results showed that a sample of over 500 observations and a model composed of 11 variables generated perfect power. Model input: n = 500, alpha = .05, k = 11, df = 66, rmsea0 = .005, rmsea1 = .06, maxloops = 1000 Given the model inputs, the required sample size to achieve threshold power was 220.

FINDINGS

The research hypotheses were examined by the paths between the explanatory variables and the three measures of long-term commitment to volunteering. Table 2 presents the non-standardized coefficients of the correlations between the research variables, and Figure 2 (the empirical model) presents the standardized measures. The empirical model presents linear regressions for the continuous variables (the explanatory variables) and logistic regressions for the dichotomous variables (the outcome variable, the three commitment to volunteering measures). It should be noted that in presenting the contribution of the independent variables to explaining the outcome variable in a logistic regression, it is customary to report the probability (and not the correlation coefficient between the variables as in a linear regression).

Direct effects

Background variables and long-term commitment to volunteering

Variables that reflect master status of the individual were entered in the analysis: gender, education, age, parental status (0 = no children; 1 = have children) and employment status (0 = unemployed; 1 = employed). Employed volunteers comprised about 40% of the sample. Unemployed volunteers, who included unemployed individuals, students and a small number of retirees, comprised about 60% of the sample. Type of volunteer was entered as a background variable (0 = organized volunteer; 1 = spontaneous volunteer).

Of the tested background variables, a correlation was found between gender and the stability in volunteering measure, such that men report a higher tendency to long-term commitment to volunteering in this dimension compared to women (partial support for hypothesis 1a). Education
| TABLE 2 | Path analysis: Direct effects, standardized coefficients |
|---------|--------------------------------------------------------|
|         | Morale | Anxiety | Instrumental motives | Escape from reality motives | Social solidarity motives | Intrinsic satisfaction | Stability of volunteering | Intensity of volunteering | Consistency of volunteering |
| Gender  |        |         |                     |                           |                        |                       |                           |                         |                             |
| β       | −.19*** | .07     | −.14***             | .04                       | −.06                    | .05                    | .50*                        | .94                       | .82                          |
|         | (.04)   | (.05)   | (.04)              | (.05)                     | (.04)                  | (.04)                  | (.22)                      | (.25)                     | (.20)                        |
| Age group | .15 | −.22** | .06              | −.04                       | −.01                    | −.03                    | 1.26                       | .75                       | 1.20                        |
|         | (.10)   | (.07)   | (.07)             | (.09)                     | (.07)                  | (.06)                  | (.95)                      | (.33)                     | (.45)                        |
| Education | −.03 | .04     | −.12*             | −.03                       | −.08                    | −.003                   | .54**                       | .70*                      | .81                          |
|         | (.05)   | (.05)   | (.05)              | (.06)                     | (.05)                  | (.03)                  | (.18)                      | (.13)                     | (.15)                        |
| Parenthood | −.05 | .07     | −.12             | −.003                      | −.20**                  | −.002                   | .78                        | 1.13                      | 1.70                        |
|         | (.10)   | (.08)   | (.07)              | (.09)                     | (.08)                  | (.06)                  | (.58)                      | (.50)                     | (.69)                        |
| Type of volunteer | .01 | .02     | .17***             | .08~                       | .11*                    | .09*                    | 18.14**                     | 4.73*                     | 3.23*                        |
|         | (.05)   | (.04)   | (.05)              | (.05)                     | (.05)                  | (.04)                  | (7.10)                     | (1.46)                    | (.89)                        |
| Work status | .11* | .06     | .06               | .03                        | −.02                    | −.02                    | 2.14                       | 1.23                      | 1.47                        |
|         | (.05)   | (.05)   | (.05)              | (.05)                     | (.04)                  | (.05)                  | (.86)                      | (.25)                     | (.33)                        |
| Morale | .09~    | .15**   | −.07              | .31***                    | 1.10                    | 1.09                    | 1.00                       | 1.00                      | 1.00                        |
|         | (.05)   | (.06)   | (.05)              | (.05)                     | (.05)                  | (.05)                  | (.11)                      | (.13)                     | (.05)                        |
| Anxiety | .21***  | .09*    | .20**             | .13**                     | .99                     | .98                     | 1.00                       | 1.00                      | 1.00                        |
|         | (.05)   | (.05)   | (.05)              | (.05)                     | (.04)                  | (.06)                  | (.05)                      | (.05)                     |                             |
| Instrumental motives |        |         |                   |                           |                        |                       |                           |                         |                             |
|         | .34***  |        | 1.45              | 1.08                       | 1.56*                   | 1.08                    | 1.56*                      | 1.08                      | 1.56*                        |
|         | (.04)   | (.34)   | (.13)             | (.26)                     |                         |                      |                           |                         |                             |
| Escape from reality motives |        |         |                   |                           |                        |                       |                           |                         |                             |
|         | .07~    |        | 1.05              | 1.00                       | 1.00                    | 1.00                    | 1.00                       | 1.00                      | 1.00                        |
|         | (.04)   | (.17)   | (.09)             | (.09)                     |                         |                      |                           |                         |                             |
| Social solidarity motives |        |         |                   |                           |                        |                       |                           |                         |                             |
|         | .09*    |        | 1.51              | 1.04                       | 1.04                    | 1.04                    | 1.04                       | 1.04                      | 1.04                        |
|         | (.04)   | (.34)   | (.15)             | (.12)                     |                         |                      |                           |                         |                             |
| Intrinsic satisfaction |        |         |                   |                           |                        |                       |                           |                         |                             |
|         | .32***  |        | .46**             | .18***                    | 2.00**                  | 2.00**                  | 2.00**                     | 2.00**                    | 2.00**                      |
|         | (.03)   | (.05)   | (.05)             | (.05)                     |                         |                      |                           |                         |                             |
| R²      | .06*    | .03*    | .14***            | .14***                    | .04*                    | .32***                  | .46**                      | .18***                    | .26***                      |
|         | (.03)   | (.02)   | (.03)             | (.03)                     | (.02)                  | (.03)                  | (.05)                      | (.05)                     | (.05)                        |

*** P < .001, ** P < .01, * P < .05, ~ P < .10.
is correlated with two measures of long-term commitment to volunteering (partial support for hypothesis 1b). Participants who volunteer in routine times (organized volunteers) tend to exhibit more long-term commitment to volunteering in the three measures of the commitment construct than spontaneous volunteers (support for hypothesis 1d). No correlation was found between age group and long-term commitment to volunteering in any of the construct’s measures (rejection of hypothesis 1c). The work status variable did not make a significant contribution to explaining the long-term commitment to volunteering measures. However, it was related to the morale values. Employed volunteers enjoyed a higher level of morale than volunteers who did not work during the pandemic, but did not differ on other research measures. Parenting status was not related to any of the long-term commitment to volunteering measures. However, a negative relationship was found between parenting status and social solidarity motives indicating that among parents, social solidarity motives are lower than among non-parents.

The emotional state and long-term commitment to volunteering

The emotional state of the volunteers during the pandemic (anxiety and morale levels) were not found to be directly correlated with any of the long-term commitment to volunteering measures. However, indirect relations were found between the emotional state variables and the long-term
commitment to volunteering dimensions. In this vein, the level of anxiety was indirectly related to the measure of consistency in volunteering: intrinsic satisfaction from volunteering mediates between the level of anxiety and the measure of consistency in volunteering: the higher the level of anxiety, the higher the level of intrinsic satisfaction, and the higher the level of intrinsic satisfaction, the higher the probability for consistency in volunteering (see Table 3), (partial support for hypothesis 2a). An indirect relation was also found between the morale level and the measure of consistency in long-term commitment to volunteering. The higher the morale, the greater is the intrinsic satisfaction from volunteering, and the higher the intrinsic satisfaction, the higher the probability for consistency in volunteering (partial support for hypothesis 2b).

Motives for volunteering and long-term commitment to volunteering

Of the motives for volunteering, only instrumental motives were correlated with the measure of consistency in volunteering (partial support for hypothesis 3). However, several indirect relations were found between motives for volunteering and long-term commitment to volunteering. Intrinsic satisfaction mediates the relation between motives of escape from reality and the measure of consistency in volunteering: the higher the motives of escape from reality, the greater the intrinsic satisfaction from volunteering, and when it increases, the probability for consistency in volunteering increases as well. Intrinsic satisfaction also mediates the relation between instrumental motives and the measure of intensity of volunteering: the higher the level of these motives, the greater the intrinsic satisfaction, and this in turn increases the probability for a high intensity of volunteering.

Intrinsic satisfaction from volunteering and long-term commitment to volunteering

Intrinsic satisfaction from volunteering was positively correlated with two measures of long-term commitment to volunteering: intensity and consistency of volunteering (partial support for hypothesis 4).

Correlation between the emotional state and motives for volunteering

The anxiety level was positively correlated with the three motives for volunteering. However, it was correlated to a greater extent with instrumental and escape from reality motives than with solidarity motives (support for hypothesis 5). The morale level was correlated only with social solidarity motives (support of hypothesis 6).

DISCUSSION

There are those who claim that the pandemic is here to stay, since different variants constantly emerge around the world. Due to the multi-dimensional distress caused by the pandemic, a large body of volunteers who are motivated and committed is of utmost importance. One of the prominent conclusions of the present study is that volunteering during an emergency situation, such as
### Table 3  Path analysis: Indirect effects

| Independent variable | Mediator variable | Dependent variable | Independent → Mediator | Mediator → Dependent | Independent ← Dependent | Indirect effect | 95% CI | Total effect |
|----------------------|-------------------|--------------------|-----------------------|----------------------|-------------------------|----------------|-------|-------------|
| Morale               | Intrinsic         | Consistency of volunteering | .31***               | 2.00***              | 1.00                    | .10***         | [.06,.15] | .15**       |
| Anxiety              | Instrumental      | Consistency of volunteering | .21***               | 1.56**               | 1.00                    | .04**          | [.02,.09] | .09         |
| Anxiety              | Intrinsic         | Consistency of volunteering | .13**               | 2.00***              | 1.00                    | .04*           | [.01,.06] | .09         |
| Instrumental         | Intrinsic         | Consistency of volunteering | .34***               | 2.00***              | 1.56**                  | .11***         | [.08,.15] | .29***      |
| Escape from reality  | Intrinsic         | Consistency of volunteering | .07~                 | 2.00***              | .90                     | .03*           | [.01,.06] | -.05        |
| Morale               | Intrinsic         | Intensity of volunteering | .31***               | 1.27*                | 1.09                    | .04*           | [.00,.07] | .15**       |
| Instrumental         | Intrinsic         | Intensity of volunteering | .34***               | 1.27*                | 1.08                    | .04*           | [.00,.08] | .10~        |

Note: When the dependent variables are dichotomous, the common goodness-of-fit measures cannot be calculated, and instead of the β value, the OR (ODD ratio) is presented, which expresses the correlation between the probability of choosing the target value and the probability of choosing the complementary value.

*** P<.001, ** P<.01, * P<.05, ~ P<.10.
The COVID-19 pandemic, dictates a unique set of variables that explains long-term commitment to volunteering, which is sometimes comparable to volunteering during routine times (as reflected in the research literature) and sometimes differs from it. A discussion on the research hypotheses according to the theoretical approaches on which the study was based is presented below.

The social-structural approach to explaining long-term commitment to volunteering

The findings indicate that the social-structural approach, which attributes long-term commitment to volunteering to the background characteristics of the volunteers, was partially supported. Three of the tested background characteristics (gender, education, and volunteering during routine times) contribute (partially) to explaining the different measures of the long-term commitment to volunteering. Based on the finding of the research and following Wilson (2012) who stressed the contribution of education to volunteering during routine times, it can be concluded that also during an emergency situation, resources imparted by higher education increase the tendency for long-term commitment to volunteering in all three dimensions (support for hypothesis 1b).

A significant contribution was also found for volunteering during routine times (organized volunteers) (support for hypothesis 1d). It can be assumed that volunteering during routine times contributes to the development of a volunteering identity (Finkelstein et al., 2005). Once this identity is formed, it helps organized volunteers during an emergency to develop strength and cope with difficulties or disappointments when their expectations from volunteering are not met, thus increasing their tendency to declare long-term commitment to volunteering.

It was further found that gender contributes to explaining only one of the commitment to volunteering measures: men exhibit greater stability in volunteering than women (partial support for hypothesis 1a). This finding is in line with data on volunteers during routine times in Israel (Israeli Central Bureau of Statistics, 2018) and studies on volunteering during emergency situations (Kulik et al., 2016). Apparently, in spite of advancing an agenda of gender equality, particularly in a family-oriented society like Israel, the main burden of caring for the household still falls on women’s shoulders, and the overload experienced by women who worked from home during the pandemic and simultaneously cared for children when the education system was shut down, may have made it difficult for them and harmed their tendency to declare long-term commitment to volunteering.

No correlation was found between age group and any of the long-term commitment to volunteering measures (rejection of hypothesis 1c). As mentioned, there were very few elderly volunteers in the research sample, due to the fact that the elderly were considered to be an at-risk population in the first wave of the pandemic. The sample was therefore comprised of a rather homogeneous age group of relatively young volunteers, with a small age range. This sample characteristic may explain the absence of a relationship between age and long-term commitment to volunteering.

The psychological characteristics approach to explaining commitment to volunteering

The research findings indicate that the most significant contribution to explaining long-term commitment to volunteering, in all its forms, was for psychological characteristics reflected
in emotions during the pandemic and in the motives for volunteering. However, the emotional state of the volunteers contributes only indirectly to explaining long-term commitment to volunteering. High levels of anxiety and morale are positively correlated with intrinsic satisfaction from volunteering, and in turn intrinsic satisfaction from volunteering is related to the consistency dimension (partial support for hypothesis 2a and 2b). In spite of the similar relationship found between the two measures of the emotional state (anxiety and morale) and the measure of consistency in volunteering, it is possible that because of the opposite nature of these emotional factors, the explanation for this finding lies elsewhere. According to Fredrickson’s (2004) broaden-and-build theory, when people experience high morale, they dare experiment with new doing and expand the diversity and depth of their activities. In contradistinction, in a state of anxiety, people look for an anchor in their social environment to alleviate this uncomfortable feeling. A good experience, as reflected in satisfaction with the intrinsic aspects of their activity, may comprise such an anchor for anxious individuals. This in turn increases their intention to long-term commitment to volunteering, as reflected in the declaration on consistency in volunteering.

It was found that anxiety is a powerful lever motivating processes in volunteering, as expressed in the relationship found mainly (as expected) between anxiety and motives with an egotistic nature (support for hypothesis 5), and unexpectedly also to a lesser extent with motives of social solidarity. Volunteers who experience high levels of anxiety during the pandemic apparently search for different ways to reduce this emotion. Thus, in addition to the satisfaction of egotistic motives through volunteering, they search to reduce anxiety in other ways, such as by contributing to others who encounter similar difficulties in the pandemic, reflecting the motives of social solidarity. However, the morale level was found to be correlated solely with social solidarity motives (support for hypothesis 6). It can be concluded that in the COVID-19 pandemic, that represents a unique emergency situation involving diverse threats and deficits, the distinction between the motivating force that stems from a positive or a negative emotion is blurred, and a high intensity of both a positive and a negative emotion (high levels of anxiety or morale) lead to motivation to volunteer, albeit for a different emotional state.

Regarding the contribution of the motives for volunteering to explaining long-term commitment to volunteering, the findings show that the strength of the direct effects is very low, and only the self-directed motives were related (directly and indirectly) to the measure of consistency in volunteering. However, this relationship was not found for the social solidarity motives (partial support for hypothesis 3). This finding could also be attributed to the uncertainty felt by the population regarding the duration of the pandemic. In this situation, the motives of helping the needy community members were weakened, and their contribution as an accelerator for long-term commitment to volunteering decreased.

**Intrinsic satisfaction and commitment to volunteering**

The experience of the volunteer as reflected in the intrinsic satisfaction with volunteering was found to be a key variable in the empirical research model that explains the different dimensions of the long-term commitment to volunteering. As expected, intrinsic satisfaction from volunteering was correlated with the three dimensions of the long-term commitment to volunteering (support for hypothesis 4). Moreover, the intrinsic satisfaction with volunteering mediates the relation between the instrumental and escape from reality motives and consistency in volunteering. The direct contribution of the intrinsic satisfaction from volunteering variable, as well as it being a mediating variable for indirect effects of additional variables for explaining long-term
commitment to volunteering, emphasizes the importance of this construct to explaining the different measures of a long-term commitment to volunteering.

Research limitations

One of the research limitations is related to its cross-sectional nature, and to the fact that the research variables were collected at one time point. Therefore, even though the hypothesized research model was based on previous empirical studies, it cannot be claimed with certainty that a causal relation exists between the explanatory variables and the outcome variable. Moreover, because the volunteers of the first wave of the pandemic were relatively young, generalization of the findings to the entire volunteer population is limited. Another limitation concerns the sample representativeness. Although the study sample was large, it was a convenience sample, and only the Jewish population was included, while Israeli Arabs were not. Finally, data were collected during the first wave of the COVID-19 pandemic, and it is possible that during the pandemic routine, as a result of the volunteers’ fatigue and burnout, different patterns of relationships between the explanatory variables and the dimensions that explain long-term commitment to volunteering will be found. Due to these limitations, it is recommended to continue to study this issue in longitudinal research designs in the different stages of the pandemic.

Practical recommendations

According to the common perception, the beneficiary’s satisfaction is at the heart of the volunteering work. However, the research findings turn the spotlight to the volunteers, as reflected in the powerful impact of their intrinsic satisfaction with the volunteering process for explaining the long-term commitment to volunteering and emphasizes the need to ensure a positive experience in their activities for helping the needy. The findings which indicate that volunteering in routine times (organized volunteers), tends to express a willingness to volunteer over time even during a challenging emergency, leads to the recommendation that volunteer organizations should cultivate a solid population of regular and consistent volunteers in routine times. Finally, due to the potential embedded in anxiety as motivating volunteering, counselors for individuals who are seeking professional help to overcome their anxieties during the pandemic should refer them to volunteering activity that may serve as an effective channel that will help all involved in the volunteering process: the volunteers, the beneficiaries, as well as the community as a whole.

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DATA AVAILABILITY STATEMENT

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