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Everyday Heroes: Graphical Life Stories and Self-Defining Memories in COVID-19

Medical Volunteers

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Abstract

Objective: This study aimed to explore the autobiographical foundations of specific narrative identities, which made it possible to choose medical volunteering in the time of the pandemic, resist highly hazardous conditions of working in COVID-19 "red zones," and emerge from this work with a sense of meaning and optimism.

Method: In this study, we focused on the graphical life stories, self-defining memories (SDMs), and self-defining future projections (SDFPs) of four individuals who worked at COVID-19 "red zone" hospitals as medical volunteers.

Results: The analysis revealed that all participants incorporated their volunteering experiences as meaningful and satisfying into their general narrative identity. They scored high on standard scales assessing subjective well-being and reported autonomous regulation of volunteer motivation. We identified narrative trunk lines and metaphors across autobiographical data, which differentiated the participants into four types of general identities extensively manifesting in volunteering identity: faith-based, influence-based, help-based, and success-based. The participants' graphical life stories, SDMs, and SDFPs showed similar patterns consisting of adult-oriented childhood, focus on mid-life events, and a redemption sequence in narration.

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Conclusion: These findings could be taken as touchstones to highlight the essentiality of self-continuity and persistence of self in active coping with global challenges.

Keywords: narrative identity, autobiographical memory, self-defining memories, self-defining future projections, volunteer's value identity, autonomous motivation, COVID-19, medical volunteerism

1 INTRODUCTION

The first few months of the COVID-19 pandemic saw a shortage of health professionals even in high-income countries with well-developed public healthcare systems (van Dorn, Cooney, & Sabin, 2020). As hospitals scrambled to find enough personnel to face a surge of coronavirus infections, they called for people with various professional backgrounds who were willing to volunteer. The high challenge associated with medical volunteering in "red zones" was not limited to the fear of being infected, but also consisted of constantly wearing uncomfortable personal protective equipment (PPE), high workload, constant exposure to death, and separation from families for preventive reasons. While the conventional pre-pandemic wisdom should not allow volunteering to take over lives because of the involvement, this was not the case for COVID-19 medical volunteers. With the new global threat, medical volunteering undoubtedly became the most demanding form of civic activism.

The unprecedented demand for medical volunteers inspired us to answer the central questions of this study: what leads individuals with non-medical backgrounds to volunteer in the extremely hazardous and demanding conditions of "red zones"? Which biographical factors are helpful for surviving this work with a sense of meaning and optimism? Does a specific narrative identity exist that triggers volunteerism as a means of resistance to the power of anxiety, apathy, and pessimism (Huebner & Arya, 2020)? Searching to answer these complex questions, we approached four female volunteers who went through COVID-19 "red zones" during both the first (May-June 2020) and second (October-November

2020) waves of the pandemic in Moscow, Russia. On both tours, they worked as auxiliary nurses in the state hospitals.

At the outset of this study, it was understood that although two given individuals may make the same decision in the face of COVID-19, do the same volunteer work, and resist the same obstacles, they may have different motivations and interpretations of their experiences. Therefore, we chose a multiple-case design for this study. According to Isaacson (2005), “multiple-case psychobiography” is recommended if the study aims to compare several people who have something important in common (such as volunteering), which enables the researcher to verify the theory in a parallel iteration of several cases. It is worth emphasizing that a multiple-case study model is widely appreciated as an essential contemporary trend in the field of psychobiography (Elms, 2007; Plessis, 2017).

1.1 Theoretical Framework

The main theoretical framework adopted for this study is the Narrative Identity Theory (McAdams, 2018; Singer et al., 2013). This theory views humans as unique creatures driven by stories about themselves. Storytelling establishes a multilevel narrative identity, which is an integrative autobiographical project (McAdams, 2018) that provides meaning and motivational strength to distant causes and goals on a long-term scale. A well-developed narrative identity offers the opportunity to rely on a lifelong project instead of being engrossed in momentary demands, allowing a person to be a long-game player. It becomes possible through self-coherence, that is, a sense of “inner sameness and continuity” (Erikson, 1963, p. 261) achieved by selective reconstruction of the past and imagination of the future united in the life-story schemata of one’s entire life (Singer et al., 2013).

1.1.1 The narrative identity and the Self-Memory-System

Narrative identity is thought to be a product of the Self-Memory-System (SMS) (Conway et al., 2004; Conway et al., 2019; Singer et al., 2013). It presumably depends on the “long-term self,” which is a permanent store of abstract and remembered knowledge about oneself within the SMS. Specifically, narrative identity results from a joint coalition between two substructures of the “long-term self”: the “conceptual self” includes values and other semantic personal knowledge, and the “autobiographical

knowledge base” comprises autobiographical memories ranging from specific episodic-like to general, lifetime periods, themes, and entire life stories (Conway et al., 2019). The most elaborate autobiographical memories connected to the core of the “conceptual self,” termed, “self-defining memories (SDMs),” serve as a matrix for narrative identity. SDMs are attested as “a momentary expression of identity and a person’s psychological functioning” (Lardi et al., 2010, p.303). These memories are crystallized metaphors of important life concerns (Singer, 2006; Wood & Conway, 2006) and provide a window into the current state of personality for both the researcher and the narrator (Grysmen & Mansfield, 2017).

A recent version of the SMS model (Conway et al., 2019) implies that “representations of present and past selves influence and constrain what is judged possible for the self in the future, and reciprocally, representations of future selves provide a context for interpreting current and past selves” (Conway et al., 2019, pp. 43-44). Similarly, self-defining future projection (SDFP), that is, imaginative acts of projecting oneself into meaningful future events (D’Argembeau et al., 2012), in conjunction with prospective parts of the life story (Thomsen et al., 2016), are essential building blocks for the entire narrative identity.

1.1.2 The content and quality of volunteer’s motivation

Drawing from the theoretical framework, we sought to explore the possible narrative trajectories that enabled the accommodation of medical volunteerism in the COVID-19 context both in terms of the antecedents of choice to work in the “red zones” and the consequences of such a challenging job. Being mindful of how multifaceted narrative identity is, we limited our curiosity to a specific domain in narrative identity. Specifically, we looked for a convergence of diverse narrative tendencies around the act of volunteering. Therefore, three important issues need to be addressed.

First, there is no doubt that such a risky and exhausting form of volunteering, which includes months of daily service to the seriously ill or are on the verge of death, should involve the engagement of value-based reasons. It has been confirmed that moral values are most strongly endorsed by AIDS (Akintola, 2011; Omoto & Snyder, 1993) and Ebola volunteers (Kpanake et al., 2019), and volunteers in

tuberculosis control programs in South Africa (Kironde & Klaasen, 2002). Accordingly, recent studies on COVID-19 have revealed moral values as the most frequent self-reported motive for volunteering in hospitals among medical students around the globe (for example: Saudi Arabia, AlOmar et al., 2021; Indonesia, Lazarus et al., 2021; Brazil, Tempiski et al., 2021).

The content of values supporting volunteering certainly matters, since each value may promote different expectations of the psychological rewards of this work. Altruism may be one of these values, but so may solidarity, reciprocity, moral obligation, social justice, and religious beliefs (Dekker & Halman, 2003; Jiranek et al., 2013). For instance, being motivated by a value of reciprocity, one might be highly sensitive to gratitude and feel disappointed without it. By contrast, moral obligation, as a dominant value behind volunteering, keeps a person immune to thanklessness.

Second, value-based activities vary with regard to the regime in which moral values determine one's behavior. Deci and Ryan (2000) built the Self-Determination Theory (SDT) on the premise that satisfaction of three basic psychological needs (autonomy, competence, and relatedness) through engagement in activities evokes the internalization of values behind these activities. This theory posits that each initial extrinsic motivation develops through a continuum, starting from external regulation (social punishments and rewards) via introjected regulation (internalized expectations of what an individual "should do") to identified regulation (internalized values perceived as a moral obligation), and in the end, to integrated regulation (completely internalized values are perceived as an integral part of identity). The first two forms of regulation are denoted as controlled and the last two as autonomous. There is empirical evidence that controlled motivation is likely to generate intrapersonal conflict and anxiety, whereas autonomous motivation is associated with the capacity to resist various unfavorable circumstances by drawing on volitional resources (Koestner, et al., 2008). The SDT model predicts that individuals whose conceptual self includes values relevant to volunteering would be more productive in freely chosen helping activities if these values achieve autonomous regulation. Furthermore, the more autonomous the regulation of volunteering, the more psychological rewards they would receive during and after completing work.

1.1.3 The volunteer's value identity

The third critical point is the congruence of volunteer identity with the general narrative identity and the extent of its thematic coherence with a life story. According to Habermas and Bluck (2000), flaws in thematic coherence (which is the inability to tie together meanings from repeated sequences across memories) hinder the integrity of the self. Grönlund (2011) discerned five volunteer's value identities: (1) the influencer—fighting injustice and wanting to make the world a better place; (2) the helper—benevolent, compassionate, bringing comfort, and understanding; (3) faith-based—feeling of doing God's work, a calling, expressing spirituality; (4) community—focusing on in-group communality, solidarity, and extended family; and (5) success—occupying positions of leadership, making something out of oneself, prospering, and active. Therefore, we can assume that repeated manifestations of the same identity roles across various life events, both inside and outside the volunteering context, indicate thematic coherence to the life story and a healthy narrative identity.

Finally, for the participants, volunteering was a challenging milestone. We speculated that such a novel and extraordinary experience had not been fully integrated and articulated in their identities. Hence, well-developed stories about their experiences as medical volunteers in the “red zones” did not exist before narration to the authors of this study. If so, their acts of storytelling could at a minimum help shape their emotional attitudes toward the event or at a maximum foster a sense of self-continuity and contribute to the current dominant dynamics in their personality (Pasupathi & Adler, 2021).

1.2 The Present Study

This study focuses on the autobiographical foundation of medical volunteerism in response to the COVID-19 pandemic. The narrative identity of four medical volunteers who went through COVID-19 “red zones” was examined using two methods: addressing verbal narration and creating a graphical sketch of life story schemata.

1.2.1 Justification of the graphical lifeline technique

Since psychobiographers often work with texts, the oral narrations of SDMs and SDFPs do not require additional clarification. On the contrary, the graphical approach is less common in the context of psychobiographical studies; therefore, we briefly reviewed this technique, its origins, and its applications.

Although Coleman (1998) argued that the authorship of the idea to transpose verbal life story into schematic drawing is unknown, the idea has been frequently employed to explore how individuals organize their significant past and future experiences into coherent sequences. The set of tools bringing together graphic techniques aimed at visualizing life stories share the terms “timelines” or “lifelines” often used synonymously. The basic timeline procedure implies the placement of events on a horizontal arrow representing time (Cottle & Pleck, 1969; Rappaport, Enrich, & Wilson, 1985). However, beyond that line, a vertical axis may enhance the timeline to capture the emotional valence and subjective importance of each autobiographical event included in the drawing (DeVries & Watt, 1996; Goldman 1990; Gramling & Carr, 2004; Assink & Schroots, 2010). In this case, the distances above and below the lifeline indicate the extent to which one considers an encountered experience productive or destructive for personal development.

While the timeline/lifeline methodology described above aim to facilitate structured retrieval of consciously accessible experiences, more projective drawings attempt to reveal rejected or partly unconscious events. For instance, Cox and McAdams (2013) asked Nicaraguan female sex workers who participated in their study to draw a single curve that represented their general well-being from birth to present. They performed the task on an XY-coordinate plane, where the y-axis ran from "good" to "bad." This “life mapping” procedure was accompanied by an interview to specify the events associated with the highs and lows and summarize this group's prototypical narrative identity.

In the recent boom of visual methods in psychology and other social sciences, the timeline/lifeline methodology is gaining popularity (Monico et al., 2020). There are two advantages of this methodology in addition to the trivial reason of overcoming communication barriers caused by cultural, social, demographic, and health-related discourse differences (see for review, Gutiérrez-García et al., 2021).

First, in contrast to successive oral narration, the simultaneous lifeline sketch provides a momentary holistic impression of the life story identity that is sparingly presented on one piece of paper. It depicts an overall emotional profile, periods of subjective fullness and emptiness, and the relative importance of events. Second, performing a lifeline task enables a person to reflect on their identity in a novel way. The valuable outcomes of this process may consist of increasing self-concept clarity, realizing untold self-event connections, and improving one's expertise in autobiographical reasoning (Habermas, 2011; Holm & Thomsen, 2018). For the reasons given above, the graphical lifeline approach appeared to provide a scaffold for generating internally coherent narrative identity that ties together temporally and thematically distant components.

Merging with theoretical arguments, our personal experiences as scientists could also partially account for the choice of methodology (Kuhn, 2011). The first author of this study was inspired by the lifeline method in the nineties. Since her master's dissertation in 1995, she published more than 50 articles (mainly in Russian) that employed this methodology. For instance, inspecting the lifelines of individuals who unexpectedly ended up in prison on charges of a fatal car accident, we found that they reflected their childhood as an empty space, assigning their first memory to an older age than the age-matched controls (Nourkova & Vasilevskaya, 2003). Similarly, these participants assigned fewer events to their future. Notably, the same participants spontaneously shifted to earlier memories during follow-up sessions and enhanced their future drawings with new events after receiving the court verdict on their cases. We speculated that the elongation of retrospection and propection indicated a repair of self-coherence damaged by uncertainty before the court verdict.

In another study, subgroups of individuals who had undergone gender-affirming surgery significantly differed in the length of timeline segments assigned to the past, valence of childhood memories, and presence of gendered events (Nourkova & Ivanova, 2017). Participants with a low level of acquisition of gender-stereotyped traits gave less space to their past, produced more negative childhood memories, and rarely mentioned gender-related events compared to their peers with highly gendered self-descriptions.

In another study, we performed cross-cultural comparisons of lifeline visualizations of childhood (Nourkova, 2020). Chinese, Russian, and Uzbekistani young adults produced unique clusters of correlated variables for each cultural background. The conjunction of achievement and vicarious memories, that is, memories representing events that happened to other people, was typical for the Chinese participants.

We believe that pairing the use of lifelines with an interview allowing extensive communication with participants would help achieve a deep understanding of their personalities.

1.2.2 Questions to be Addressed

Based on the theoretical framework, methodological issues, and the literature discussed above, we formulated the following research questions:

1. Did the exhausting experience of medical volunteering during the pandemic, when narrated in retrospect, contain the potential to be transferred into a meaningful component of narrative identity, accompanied by positive feelings and contributing to overall self-unity?
2. Could graphical life stories and self-defining narratives provide sufficient data to indicate volunteers' value identities as identified by Grönlund (2011) and detect autonomy of motivation as proposed by Deci and Ryan (2000)? Could we get results that were concordant with the scores on appropriate scales typically used in volunteer studies?
3. Was there a uniform path to becoming a medical volunteer in the "red zones"? Did the participants report similar repeated themes in their verbal and graphical data relevant to volunteering? If those themes could be revealed, did they refer to readiness to help others, psychological maturity, and coping with life challenges?

2 METHOD

2.1. Author positionality

We briefly describe our positionality, acknowledging that this may influence the interpretations. We matched our participants in terms of sex (female), ethnicity (Russian), native language (Russian), and

geographical place of residence (Moscow). The first author, who interviewed the participants face-to-face, was a middle-aged (47) married university professor with counselling experience, which was considered helpful in providing comfortable sharing of personal data. The second author was an early career researcher from the same university involved in autobiographical memory studies (29), married. Since both authors contributed to the data interpretation, the similar backgrounds may have helped in understanding the appropriate meaning of the stories. Similar to all people in the world, the authors were affected by the COVID-19 pandemic. However, we were fully vaccinated by January 2021, and therefore felt pretty safe during the study. We should acknowledge that none of the authors was and were not engaged in medical volunteering themselves. The deep respect and admiration for the courageous actions of the participants inspired them to perform this study.

The study was preregistered at Open Science: <https://osf.io/saqz8/>. The preregistration has enabled us to clarify a protocol for data collection, conduct an extensive literature search, and formulate research questions in advance. It influenced the structure of autobiographical interviews making communication more focused. It also helped to separate confirmatory and exploratory aspects of the study.

2.2. Participants

The potential participants were contacted through the Moscow Clinical Scientific Center of Narcology, which was repurposed to treat coronavirus patients during the pandemic. We sent a letter consisting of information about the project to the volunteer office of the hospital. After approval from the head of the office, the letter was disseminated among members of the volunteer database. The participants were recruited on a first respond, first accepted basis. No selection was made except for readiness to give three interviews in person without any material reward and sign a consent form for publication.

The researchers got seven e-mail responses at the first day of recruiting. Four potential participants met inclusion criteria while three persons were excluded since one person asked for financial reward and two persons rejected to be interviewed in person. Consequently, four participants were involved in the study.

There were a few shared attributes among the participating volunteers. First, all the participants were women. Second, they were all well-educated residents of Moscow. Third, and most importantly, they were all among those who did not panic at the onset of the pandemic and did not “cross their arms” but chose to work as orderlies in the "red zones" of COVID-19 hospitals, putting themselves at the frontline of the fight against coronavirus infection. Wearing PPEs consisting of goggles, masks, gloves, coveralls, head covers, and rubber boots these women did one of the most taxing jobs of the time. Their duties included assisting patients in a wide range of situations, such as feeding patients who were unable to feed themselves, dressing and bathing them, monitoring their vital signs, changing diapers, cleaning rooms, and changing bedsheets. Their duties also included washing the deceased and accompanying their bodies to the morgue. Half a year later, they returned to the hospitals to perform their duties again acting on behalf of bravery and compassion.

However, their backgrounds prior to entering the "red zones" were completely different.

Antonida, aged 47 years, was an assistant director and art seller, who grew up as the only child in the bohemian family of a dancer and a screenwriter. She earned her master’s degree in creative writing and got married for the first time in 2020.

Elena, aged 60 years, was a chef at a school cafeteria, grew up as the youngest of three in a village 650km southeast of Moscow in the family of a teacher and a military man. She made a career in retailing, had a lifelong marriage, and had an only daughter and three grandchildren.

Maria, aged 47 years, was a small tourism business owner, and grew up as the daughter of a divorced mother in a small private estate near Moscow. She received her master's degree in engineering, divorced in 2012, and raised her son, now independent.

Vasilisa, aged 41 years, was a homemaker, who grew up as the only child to parents who were ambulance doctors and graduated as a paramedic. She never worked outside her home, and raised two sons until she was separated from them after a traumatic divorce in 2017.

2.3 Materials

For the lifeline task, participants received a blank piece of paper (A4 landscape format) on which an arrow (280 mm) was printed horizontally in the middle. They performed this task three times, with slightly different instructions, which requested that the participants consider the paper space representing their childhood, adult life, and future. For each lifeline, they were asked to place marks concerning the timeline for “events or experiences that have been significant and important” (for the childhood and adult life) or “events or experiences that will be significant and important” (for the future). They were also encouraged to provide brief titles of events and indicate the intensity of emotions associated with each event by the distance from the arrow to the top (if positive) or to the bottom (if negative).

The corresponding self-defining memory (SDM) task (Blagov & Singer, 2004) followed each lifeline task. They consisted of SDM narration addressed either to childhood (after the childhood lifeline task) or adulthood (after the adulthood lifeline task). The most focused instructions addressed creating SDMs for volunteer experience in the "red zones." The future lifeline task followed D'Armentano et al.'s (2012) adaptation of the standard SDM task for self-defining future projections (SDFPs). Participants were prompted to generate a description of a concrete episode that best represented their personality and illustrated the kind of person they are.

The qualitative methodology of the study was accompanied by the revised Multidimensional Work Motivation Scale (MWMS-R) (Van den Broeck et al., 2010) developed within the Self-Determination Theory (SDT). The MWMS-R 20-items questionnaire was previously applied to volunteer samples to assess autonomous and controlled modes of volunteer's motivation functioning. Consistent with the SDT predictions (Deci & Ryan, 2008), the higher scores on the MWMS-R subscales of autonomous motivation (identified, integrated, and intrinsic motivation) linked positively to the work effort of volunteers (Bidee et al., 2013) and mediated between the reported values behind volunteerism and outcomes such as work satisfaction, work engagement, burnout, and overall life satisfaction (Haivas et al., 2012). On this scale, participants were asked to rate the reasons for engaging in volunteer work according to the different forms of autonomous and controlled motivations. The sample items were: “because others will respect me more” (external regulation); “because otherwise I will feel bad about

myself” (introjected regulation); “because I personally consider it important to put efforts in this activity” (identified regulation); “because I am made for this type of work” (integrated regulation); and “because I enjoy this work very much” (intrinsic regulation).

Two short scales assessing subjective well-being, the Subjective Happiness Scale (SHS) (Lyubomirsky & Lepper, 1999) and the Satisfaction with Life Scale (SWLS) (Diener et al., 1985), complemented the primary methodology of the study. The Russian-language versions of both scales had high internal and external validity and high reliability (Osin & Leontiev, 2020). These scales were included to ensure that participants did not suffer from negative emotional health outcomes commonly associated with front-line work at COVID-19 hospitals (Fang et al., 2020).

It is worth noting, that self-report scales were included to characterize participants more objectively and verify autobiographical data interpretations, not as outcome variables.

2.4 Procedure

All tasks were administered and analyzed in Russian. Each participant attended three meetings with the first author. Each interview lasted approximately 1.5 hours and focused on childhood (session 1), adult life (session 2), and the future and volunteer experience (session 3). At the outset of the first interview, all subjects provided informed consent to use and publish their autobiographical data. The interviews, including all oral communications between the participants and the researcher, were audio-recorded and transcribed. The materials were translated into English as required for manuscript preparation.

2.5 Coding

The SDM and SDFP transcripts, lifeline sketches, and oral comments used to perform the lifeline tasks were analyzed qualitatively by combining deductive and inductive approaches. Using the notion of sensitizing concepts as a starting point for a grounded theory formation (Charmaz, 2014), we treated the data in respect to a list of categories hypothetically associated with demanding volunteering. These sensitizing concepts were derived from the literature on “volunteerability”, that is, an individual’s ability to perform volunteer activity (Meijs et al., 2006). According to Haski-Leventhal et al. (2018), the

potential to volunteer effectively addresses the three components of volunteerability - willingness (motivation to help), capability (the skills required for volunteering), and availability (mobility, amount of free time, etc.). The concepts of readiness to help others; psychological maturity, including responsibility; tolerance to negative experiences; caregiving skills; and tendency to cope actively with life challenges seemed to underpin the unprecedented level of requirements for medical volunteering in the “red zones” in domains of willingness and capability. Consequently, we expected direct indications of the selected sensitizing concepts in the data. It was assumed that these concepts contained “initial ideas to pursue” (Zaidi, 2022) that would contribute to setting the context and direction for the research.

The coders also sought for participant’s direct expressions of their value identity and autonomous-controlled mode of motivation in the form of spontaneous addressing “Who am I?” and “Why did I do that?” questions.

At the next step of analysis, the coders sought to extract more abstract plots from participants' graphical stories, SDMs, and SDFPs. The attempt to fulfil this goal consisted of multiple answers to the question, "what is this story about?" in terms of cross-cutting themes. In this analysis we referred to the concept of “narrative scripts”, that is, “schematized repetitive action-outcome-emotional response sequences” (Singer et al., 2013). It is worth noting, that, in contrast to consciously constructed SDMs and SDFPs, narrative scripts are implicit and resulted from researcher’s speculation. Therefore, these speculations may be either accepted or rejected by the interviewee and, consequently, may become or not consciousness mediator between life story and autobiographical memories withing narrative identity. Special attention was paid to the narrative scripts relevant to volunteers’ value identities as identified by Grönlund (2011).

All the materials concerning the sensitizing concepts and narrative scripts mentioned above were read separately. Subsequently, the authors felt free to identify additional themes in the transcripts and lifelines. All the materials were re-read and any disagreements were discussed. Special attention was

paid to similarities and differences between participants' data. All verbatim quotations in the manuscript kept the original wording but were shortened because of the word limit.

Quantitative characteristics of the lifelines were also observed, such as the proportion of positive events and the time distribution of events (specifically focusing on the phenomena of 'reminiscence bump') (Berntsen & Rubin, 2004).

The scores on questionnaires were calculated and compared to the population norms if available.

3 RESULTS

3.1 Self-report Scales

According to Osin and Leontiev (2020), scores above five on SHS and above 4.25 on SWLS indicate a high level of subjective well-being in the Russian population. None of the participants reported a decrease in subjective well-being scores below these norms. Regarding the data obtained by the MWMS, Bidee et al. (2013) reported that, in comparison with paid workers (for whom the scale was initially developed), volunteers scored higher on autonomous motivation (approximately 4-5 on average) and lower on controlled motivation (approximately 1-3.5 on average). Based on these results, we placed all participants in the upper quartile (> six) regarding the identified regulation of motivation for volunteering. By contrast, all participants unequivocally rejected any form of external regulation scoring one on this sub-scale. Since identified regulation refers to activity almost entirely integrated into the self, thereby producing a sense of free choice and meaningfulness, we assumed that the participants had the opportunity for psychological needs satisfaction during their volunteer service. High scores on introjected regulation were detected only in Elena. Introjected regulation refers to activities perceived as being controlled by internal representations of significant others (introjects). Vasilisa and Maria scored high on both integrated and intrinsic regulation. Integrated regulation of volunteering implies the internalization of volunteer activities into a stable and long-lasting personal identity. When intrinsically

motivated, people volunteer because they enjoy the feeling of being volunteers and experience inherent satisfaction from their work (Ryan & Deci, 2000).

3.2 Participants' autobiographical data

The childhood lifelines, covering the period from debut memory to the subjective end of childhood; the adulthood lifelines, covering all life stories from the end of childhood to the day of the interview; and the future lifelines, covering anticipated future are presented in Figures 1, 2, 3, and 4 for each participant respectively.

1. Antonida

Looking at Antonida's childhood graphical life story, we speculated that her parents represented perfect and elusive figures that were both tempting and relieved tension. Antonina narrated herself waiting for her mother at the airport (2), rejecting to shoot a duck as an answer to the temptation from her father (3), and suffering from uncertainty when her parents were in the intensive care unit after a car incident (4). The relationship with the parents, as Antonida graphically told, left an impression of ambiguity of suffering and relief that could not be achieved independently but granted in response to proper efforts. This type of event included: "dying grandfather removes my tooth, doesn't hurt any more" (1) and "my mom has cancer, but she could be saved" (6). In support of Antonida's ambiguity, we took the fact that she gave diverging assessments of five out of eight childhood events, saying, "almost every event has both a dark and a bright side." Accordingly, the motives for hoping for rescue from uncertainty and loneliness are the plot of Antonida's childhood SDM:

"When I was about four years old, I lived with my grandparents in a village near Moscow.

Parents visited us once every two weeks because they were working hard. I remember standing on a snow-covered pile of sand, and looking into the distance over the hillock, and waiting for headlights from their car. It was the highest emotion of longing, but longing with hope, longing for parents. I could stand like this for many hours. I remember my emotions very well. This is all very alive and vivid, although more than 40 years have passed."

Antonida included at least eight references to spiritual life in the adulthood graphical story, which were as follows: “freedom” (1); “I want to create beauty” (3); “hugging the whole world” (4); “searching for a new self” (6); “creativity” (7); “I am ready for love” (9); “an attempt at humility” (12); “absolute belief in a miracle” (13). The focus on spirituality allowed to classify Antonida's identity as a faith-based identity. This assumption was congruent with idea of a religious obligation to pay back the debt for God’s help as reflected in her adulthood SDM:

“It happened on July 1, 2010. I was walking down the street when a window frame fell out of a 6th-floor window. I somehow took a step to the left a second before. I don't know why I did it. You can call it whatever you like: intuition, or guardian angel. If I had not jumped, it would have hit me precisely on the top of my head. It was only in the evening that I realized what had happened. I felt the presence of otherworldly forces, which allowed me to jump to the left for some reason. Some force rescued me, and I realized that ‘God entered into me.’ I finally accepted that there is another world that sees us, hears us, saves us.”

Antonida included volunteering in the “red zones” as essential and highly positive events in her graphical life story. It finalized the adulthood lifeline as representing the border of the present.

Antonida’s volunteer’s value identity was congruent with her orientation toward spirituality. Describing her transformation resulted from volunteering, she directly used the Holy Communion metaphor and described symbolically receiving the body and blood of Christ. Being part of the medical volunteer team meant her unity with the spiritual world. She understood the pandemic as a collective test for humanity initiated by supernatural forces.

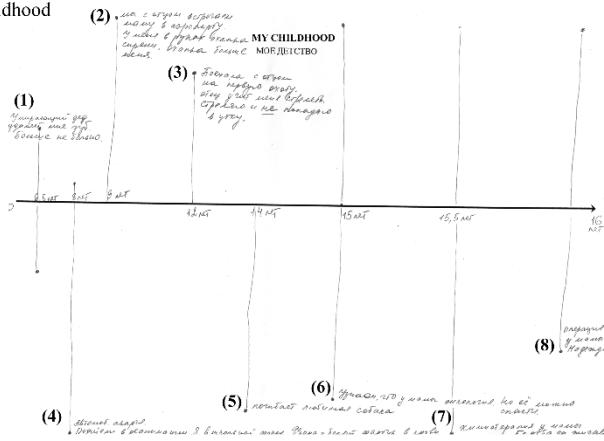
“You leave the COVID hospital as a completely different person. It was commensurate with the sacrament of Holy Communion, the feeling of purification, moral satisfaction. There is a feeling of a completely different parallel world. . . It seems that astronauts experience a similar sense of a completely different space. There comes a moment of absolute calm, absolute stillness. No anxiety, not scary. All the fear stays in the locker room while you put on PPE. Some calm seas. I

had a complete feeling that some test had been given to the planet since many things were happening that defied logic.”

Antonida produced very short-term future lifeline covering only two years. Notably, Antonida did not anticipate any specific episodes, focusing on mental states such as "attempting to come to terms with the given situation" (1) and "a liberation of consciousness" (2). Accordingly, Antonida's SDFP depicted the desired psychological states, emphasizing the notion of "light," which may be viewed as a spirituality metaphor.

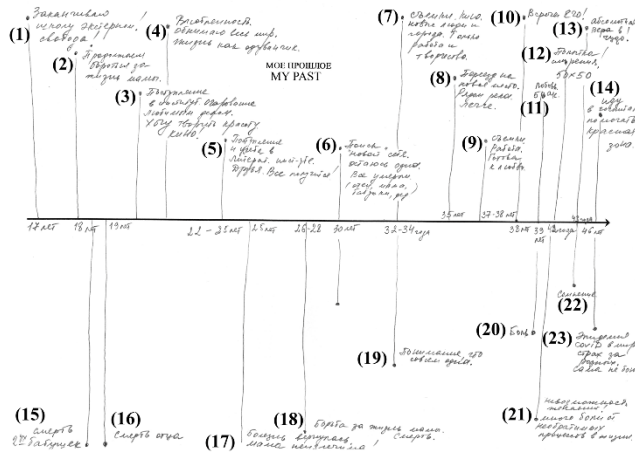
“I do not see myself after 50. However, I would like to live in a house in a large forest area. I want solitude. I can write something and do business there. I could simply live there. I see this house illuminated by a golden evening light. Light is critical in life. I say this: light is invincible because sunrise will come anyway. It is just that the sunrise in life comes every time. However, this cannot be cancelled.”

Antonida
My childhood



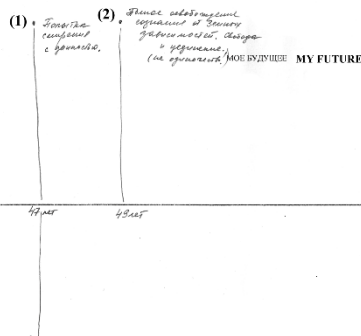
- 1 - dying grandfather removes my tooth. Doesn't hurt anymore;
- 2 - my father and I are meeting mom at the airport. I have an armful of lilacs in my hands. It's bigger than me; 3 - I went on first hunt with my father. My father teaches me to shoot. I am firing a shot and not hitting the duck on purpose; 4 - the car accident. My parents are in the intensive care unit. I'm in a school uniform. The uniform and a white apron are covered in blood; 5 - beloved dog dies;
- 6 - I found out that my mother has cancer, but she could be saved; 7 - mom goes through chemotherapy. Fight for life;
- 8 - mom is having surgery. Hope;

My past



- 1 - fast tracked through high school, graduated early! Freedom!;
- 2 - we continue to fight for mom's life; 3 - admitted to university. I am charmed by my favorite job. I want to create beauty. Cinema!;
- 4 - I'm in love, hugging the whole world. Life is like a dandelion;
- 5 - admission and studing at the literary institute. Friends. Everything will work out!; 6 - searching for a "new" self. I am left alone, everyone is dead (father, mother, grandmother, grandfather); 7 - filming a movie. New people and cities. Only work and creativity; 8 - moving to a new location. Near the river. It's easier; 9 - shooting, work. I'm ready for love; 10 - I've met him!;
- 11 - love. Marriage; 12 - an attempt at humility. It's fifty fifty;
- 13 - absolute belief in a miracle; 14 - I'm going to the hospital to help. Red zone; 15 - death of 2 grandmothers; 16 - father's death; 17 - the disease is back, mom is incurable!; 18 - struggle for mom's life. Death; 19 - understanding that I am all alone; 20 - pain; 21 - impossibility of desires! A lot of pain from irreversible processes in life; 22 - doubt; 23 - eridemic of covid in the world. Fear for relatives. I'm not afraid for myself

My future



- 1 - an attempt to accept the reality; 2 - complete liberation of consciousness from earthly dependencies. Freedom and solitude (not loneliness);

Figure 1. Antonida's childhood lifeline, adulthood lifeline and future lifeline.

3.2.2. Elena

Elena began describing her childhood as a chain of achievements, which consisted of taking leading positions in various children's communist organizations (2, 4), sports teams (8), and art and science contests (7, 9). Notably, she placed all events on the top part of the scheme. Being explicitly asked about

a negative experience, she paused and said that her parents were "ruthless with their children".

Consequently, the category "severity, spanking" (11) appeared. However, she stressed that since they only beat the children at home and none of the neighbors knew about it, she did not feel any resentment. Probably to disguise this side of her childhood, Elena added another winning event ("second place in the Mathematic Olympiad" [12]) on the negative part of the lifeline.

Elena found it difficult to retrieve childhood SDM at first. However, she narrated a specific episode that impressively contradicted the achievement story depicted by her childhood lifeline.

"I was forbidden from going out after 9 pm. One day, I pretended to go to bed and climbed out the window to go to a party with my friends. When I came back, my shoes fell off my feet and remained on the ground in the garden. In the morning, my father went out into the garden and noticed my shoes. He guessed that I had been absent, got very angry, rushed into the room, and beat me while I was sleeping with those shoes."

We read this memory narrative as a manifestation of experiencing injustice and resistance, where helplessness and the inability to defend oneself were intertwined with the desire to act in her own way despite the pressure.

An explicit achievement motive was impressively pronounced in Elena's adulthood lifeline. Continuing the story of achievements, she focused on good performance in domain of work (5, 9, 10, 15, 16). In support the assumption of her dominant influencer identity, Elena capaciously stated one of the top nodes of her adulthood lifeline as "a commander" (7).

Elena's influencer identity relied on believing that she could turn things from wrong to right if she tried hard and had sufficient patience. This idea was purely expressed in her adulthood SDM, a story about justice worth waiting for decades.

"My parents never discussed their cruelty toward me when I was a child. On their deathbed, they apologized to me for their actions. At the end of her life, my mother lived with me. I looked after her, carried her on my shoulders outside to breathe the air, to see the cherry blossoms. I was

trying to alleviate her condition somehow. And on May 9, she asked for forgiveness. And my father, on his last day, I remember, I was feeding him, holding out the last spoonful, and as I lifted him, he was already falling headlong toward me to die, and he said to me, "I'm sorry for everything." That's what he managed to say, "I'm sorry for everything." Although he hadn't spoken for a week, I guess."

Elena conjoined two events that happened ten years apart into one SDM. Notably, she entitled these events on the adulthood lifeline as "care for mom" (8) and "care for dad" (11), with no mention of parental deaths. Considering that Elena was the only participant who scored high on introjected motivation, we proposed her parents as the target introjects to whom she wanted to prove her superiority.

Elena did not include volunteering in the "red zones" in her graphical life story of adulthood. However, we speculated that it was perceived as part of the present. Elena's influencer identity was clearly detected, as she declared in the volunteer SDM that her mission was to improve the world and put things straight.

"I am, by nature, a fan of winning. I am a leader. I've always loved helping. I have always tried to 'sort out' any wrong situations. In the spring of 2020, the school where I worked was closed for quarantine. My friend and I decided to go to the 'red zone.' I cannot sit idle. Of course, I was scared. Not of being infected, but of what we had to do. But since you have already come, do what you must. The worst thing was that people were dying. But I believe that one must be able to endure. I don't regret going to the 'red zone' twice. I have always loved to help if it is valid. It doesn't matter where and to whom. I helped everyone when I had the opportunity."

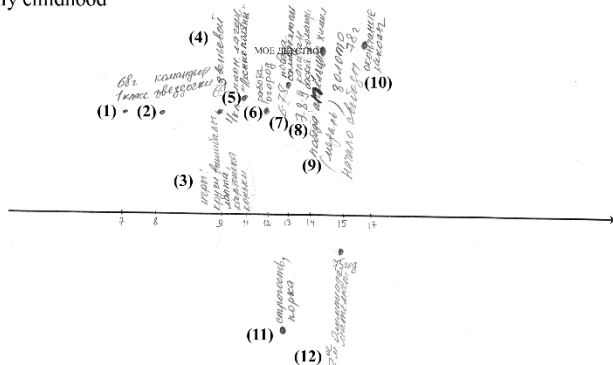
Performing a future lifeline task appeared to be of high difficulty for Elena. At first, Elena stated that she did not think much about the future. Then she produced short-term future lifeline forecasting for the nearest future.

Elena mentioned two specific events in the near future, which she expected would happen to her grandchildren. Therefore, thinking about the future, she reformulated her identity in terms of her

descendants' lives (1, 2). Moreover, Elena made the future non-personal, finalizing this lifeline with the global notion of a “healthy society” not accompanied by a specific date (3). Elena failed to produce a specific SDFP, repeating the same events that she had already mentioned on the future lifeline.

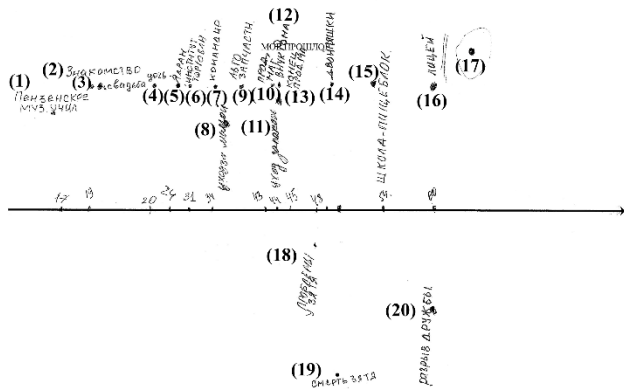
Elena

My childhood



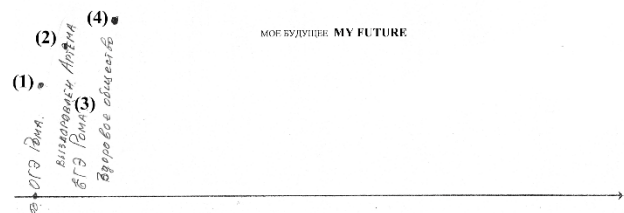
1 - starting a school; 2 - leader of small pioneer subgroup called little stars (for children 7-9 years old); 3 - games! Circles, bouncers, rounders, potatoes, skates; 4 - pioneer leader; 5 - pioneer camp "Forest Glades"; 6 - work, garden; 7 - winner of the extracurricular activities; 8 - basketball team captain; 9 - victory, appealing chemistry exam (medal); 10 - the beginning of freedom, graduating high school; 11 - severity, spanking; 12 - the 2nd place in the Mathematics Olympiad.

My past



1 - Penza School of Music; 2 - meeting; 3 - wedding; 4 - daughter; 5 - working in Jadran (legendary Soviet shopping mall); 6 - institute of trade; 7 - commander; 8 - taking care of mom; 9 - auto parts; 10 - owning a grocery store; 11 - taking care of dad; 12 - grandson Roman; 13 - closure of the grocery store; 14 - twins; 15 - catering at school; 16 - lyceum; 17 - nowadays; 18 - son-in-law has problems; 19 - death of son-in-law; 20 - friendship breakup.

My future



1 - Roman's main state examination; 2 - Artem's recovery; 3 - Roman's Unified State Examination; 4 - healthy society.

Figure 2. Elena's childhood lifeline, adulthood lifeline and future lifeline.

3.2.3. Maria

Maria's graphical story of childhood may be conceptualized in terms of a “lost paradise” of carelessness when, after three years of living at the seaside (1), she returned with her divorced mother to her

grandparents' family of "military rules" (4). Living in this family was associated with duties without psychological rewards. The contradiction of the desire to be appreciated and the futility of efforts to achieve this goal appeared in Maria's childhood SDM. Maria internalized the readiness to help as a norm but was looking for moral compensation.

"My mother and grandmother never praised me. No matter how hard I tried. I received straight As in school. They had a vegetable garden and I managed everything. I cried, 'I do so many things, but you don't appreciate me at all!' I had no doubts about helping. They hammered into my head that 'you must.' My mother gave birth to my brother when I was 11, and while all the girls were going for walks, I was sitting with him. That is, I am a child who grew up at 11. I did not have a childhood as such. I was not a rebel. Well, it is needed, so it is necessary. This motto, 'need means necessary' has remained so to this day."

Maria fulfilled her lifelines with many events highlighting her readiness to help others. Remarkably, relevant events were marked as highly damaging when addressed to the childhood and teenage years, which Maria attested as premature adulthood, such as "a lot of household duties" (5), "my responsibilities have increased, now I have to take care of my little brother" (11). In contrast, when addressed to youth and maturity similar events had obtained an optimistic estimation; for example, "caring for my beloved great-grandmother, it's not a burden" (4) and "accepted my husband's eldest son from his first marriage into our family" (7).

The focus on performing a role of caregiver allowed to classify Maria's identity as a helper identity. Maria's helper identity may be seen as more nuanced if the awareness of the unsatisfied need for competence is taken into account, as stated in her adulthood SDM.

"As I divorced, my life changed dramatically. I went to work. I could not succeed as I would like. I know that. It was because I had a child with me, whose dad, unfortunately, did not help. I'm like that—I should keep up, and it is hard to keep up with everything. My life began from scratch at the age of 36. I was left alone. I had no family, but I had a son. It was not clear what I had to do. Now everything is okay. Now, I regret that I am getting old, that I could not organize my life

earlier in such a way that I could go to work earlier, probably it would be more interesting than being just a wife, married.”

Examining Maria’s adulthood lifeline, we noticed that the period of marriage, which lasted for 15 years, appeared graphically compressed. A year of marriage occupied 0.3 cm of timeline and a year of the rest of her adult life occupied 0.7 cm. This double compression may reflect psychological distancing toward the period of life, which Maria perceived as traumatizing in retrospect.

Considering this feature together with regrets about the lost time for a proper life in her adulthood SDM, it can be argued that timeliness is extremely important for Maria. If this is the case, then the positivity of volunteering for Maria may be partly due to the fact that it occurred exactly at the time when she was ready for it.

Maria did not include volunteering in the “red zones” in her graphical life stories. However, she expressed **a helper identity** in volunteer SDM by the metaphor of donating extra energy to those in need.

“I had a lot of energy that I could give. Since I have been living alone for many years, I had had no one to share. I took care of them, like caring for children. I had so much accumulated that I could give, and I gave directly. I liked it. These were people who needed help. When I comforted them, combed them, they were so grateful. My body returned to normal; it was my need to donate energy. This summer was good, despite the pandemic. We met each other there and became friends. It was hard physically, but emotionally, it was not. There was even some upswing in that we were doing necessary work; people were sick, we helped them, we were not afraid. It was our common cause, a just one. We really helped people.”

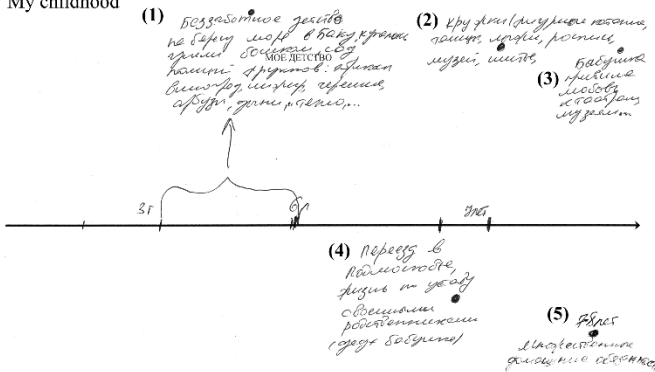
In her future lifeline Maria forecasted for an extended period covering more than 50 years. Maria extensively fulfilled a future perspective up to age of 55. For the rest of future lifeline, she commented that she would not look so far. There were two negative future events equal in emotional intensity - her dog’s death (7) and her mother’ death (8). Maria ended future lifeline by own death at the age of 105.

Although Maria generated dream-like SDFPs, Maria attested it as realistic. Maria anticipated her SDFP to occur in the observable future, and referred to her helper identity and the need for relatedness:

“I want to move closer to the sea to live and work there. It is vital for me to always apply myself so as not to sit idle, and to benefit people. There, I could work in a large resort. I love making people feel good. I need to get into a good team to join people with a warm heart. It is my dream.”

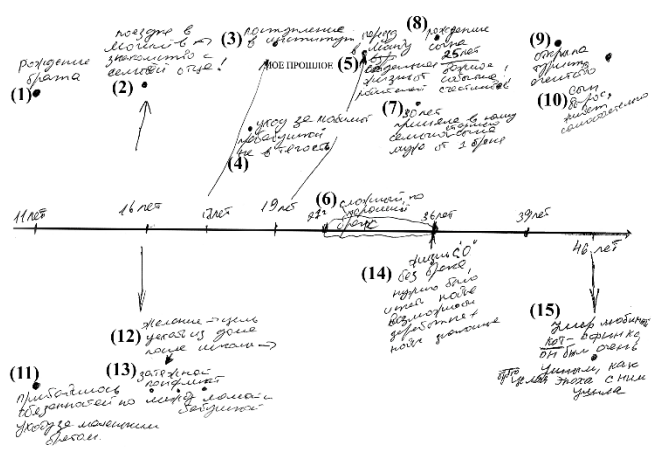
Maria

My childhood



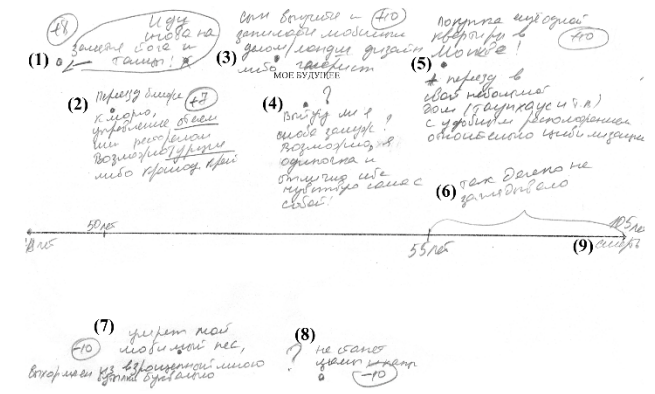
- 1 - Carefree childhood on the seashore in Baku, swimming, walking barefoot, a garden full of fruits, apricots, grapes, figs, cherries, watermelons, melons. It's warm;
- 2 - creative extracurricular activities (figure skating, dancing, skiing, painting, museum, sewing);
- 3 - grandmother instilled a love of theaters and museums;
- 4 - moving to the suburbs, living by the strict rules of military relatives (grandfather, grandmother); 5 - a lot of household duties.

My past



- 1 - brother's birth; 2 - trip to Mogilev, meeting my father's family for the first time!; 3 - admitted to University;
- 4 - caring for my beloved great-grandmother. It's not a burden; 5 - moving to Moscow. Life away from parents;
- 6 - Complicated, but good marriage; 7 - accepted my husband's eldest son from his first marriage into our family; 8 - Son's birth. It's an important and happy event!; 9 - opened a travel agency; 10 - son has grown up and lives on his own; 11 - My responsibilities have increased, now I have to take care of my little brother as well; 12 - desire and a goal to leave home after school; 13 - long lasting conflict between mom and grandmother; 14 - life from scratch without marriage, I had to look for new income opportunities; 15 - my beloved sphynx cat has died. He was very intelligent. The era is gone with him.

My future



- 1 - I'm going to yoga and dance classes again; 2 - moving closer to the sea, managing a hotel or restaurant, possibly in Turkey or in Krasnodar Territory; 3 - son is finishing education and is doing what he loves: landscape design or running a gallery; 4 - will I get married again? Maybe I'm a loner and I feel great just being with myself; 5 - buying one more apartment in Moscow + moving to a small house (townhouse, etc.) with a convenient location close to civilization; 6 - I don't look that far ahead; 7 - my beloved dog will die, he is literally fed from a bottle and raised by me; 8 - mom and dad will pass away; 9 - death.

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Figure 3. Maria's childhood lifeline, adulthood lifeline and future lifeline.

3.2.4. Vasilisa

Vasilisa's childhood lifeline had nothing to do with enhancing and developing oneself through activities and achievements. Instead, she generated an emotionally balanced lifeline of childhood with a central plot of the unconditional love she received from her Ukrainian grandparents during annual holidays in a rural village (1) and her Moscow grandmother during weekends (2). This theme continued even after they passed away, covering the entire childhood period. Vasilisa's childhood SDM seemed to be a kind of flashback and a mental time travel to the distant past.

"I run into my grandmother's little house. The house is very fresh. Everything on the wooden table is antique. On the table, there is a mug with fresh milk and a palyanitsa, this Ukrainian bread with herbs. I put the bread in my mouth and lie down on the stove. The oven is already cool because grandmother always baked early in the morning, when the cock crowed. It is my warmest memory. And if we talk about feelings, then this is a natural state, the most alive. There was not much physical contact. I was not particularly stroked, but I felt that love from a distance."

We speculated that this SDM possessed a function of emotional regulation, reminding the owner that the inner state is more important than the outer circumstances. This SDM, together with the positive part of the childhood lifeline, explains the Vasilisa's success in the new chapter of her life. It is the success of happiness rather than that of formal achievements.

The current focus on achievements of desirable mental states made possible to consider Vasilisa's identity as a success identity.

Vasilisa included volunteering in the "red zones" as the most positive event in her adulthood lifeline. The complex event "red zone, learning, finding the meaning of my life" (7) was fully integrated into the narrative identity giving rise to the next complex state: "learning, freedom, process" (8). Therefore, we assumed that volunteering in the "red zone" was the top node of Vasilisa's narrative identity. Although

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this identity was probed in previous steps into the same direction ("volunteering on the Solovetsky Islands" [6]), the "red zone" experience evoked a purely new chapter of Vasilisa's identity.

Vasilisa's coherence of volunteerism to her general identity corresponded well with her adulthood SDM. Moreover, she was the only person who had conceptualized the "red zone" experience as a starting point for her future life direction.

"At the age of 40, I had a substantial transformational internal leap. I suddenly entered a change and received a colossal experience, an authentic experience, in its purest form. If we talk about experience, this is probably my first real experience, which I wanted, initiated, and went through. A turning point, because I chose my specialization thanks to the 'red zone' and the acquaintance with the mentally ill, and my interest only grows and grows."

Vasilisa's volunteer identity seemed congruent with her general identity. It was attributed to a success identity because in volunteer SDM she focused on self-growth and choosing a new direction of life as the core message taken from volunteering.

"Working in the 'red zone' is the most fabulous event that ever happened to me. Even before the pandemic, I felt that I needed to rebuild my life as much as possible by voluntarily taking a regime of discipline and self-restraint. During this work, I felt like passing an existential test played an important role. My patients were mentally ill, drug addicts and suicide attempters. After about a week of working there, I realized that there is nothing more exciting than the human psyche, and this is it, my destiny, my direction. Although it was terrifying and complicated at times, I left the hospital with burning tears. And then, of course, I returned."

Vasilisa performed future lifeline task with specific accent on the next seven years, then she left about a decade paused, and continued with events addressing to the old age. Therefore, she forecasted for an extended period, although distributing prospects unevenly. Vasilisa fulfilled a prolonged future perspective with numerous positive events. The most positive future event was birth of grandchildren, while the most negative - her mother's death. The latter event simultaneously implied that her mother was alive at the time of the study. This fact could have impacted her attitude toward COVID-19 since

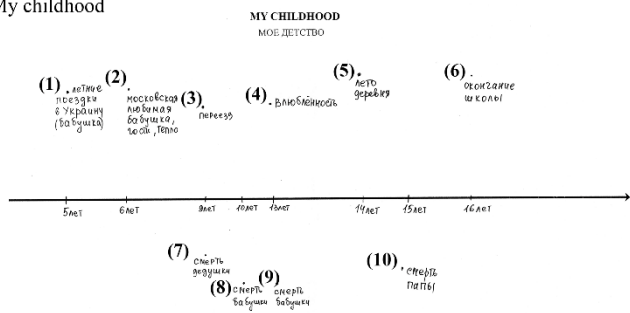
older people are the most vulnerable to infection. However, filial responsibility for frail elderly parents may activate readiness to help and enhance the acceptance of volunteer identity. Vasilisa finalized future lifelines with own death, assessing it as neutral and natural.

Vasilisa assessed her SDFP as less plausible, without a specific reference to the time of occurrence:

“My dream is to visit New York City. I want to travel to America with my husband, whom I do not have now, but I want to share my impressions, emotions, and experiences with him. This dream came to me completely unexpectedly four years ago. It is an entirely unknown and incomprehensible world for me. It is expensive, and I do not speak English, or have a visa. I have never been anywhere in Europe, let alone in America. If I succeed, I will get rid of many of my complexes.”

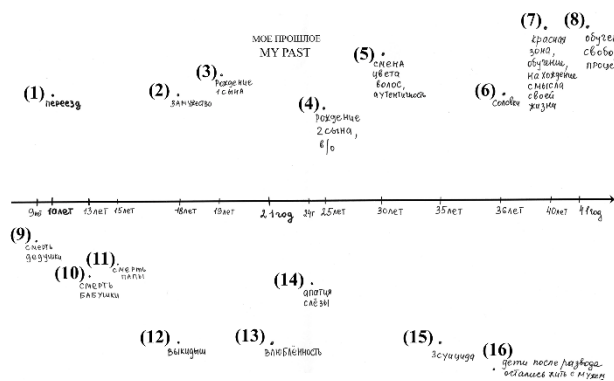
Vasilisa

My childhood



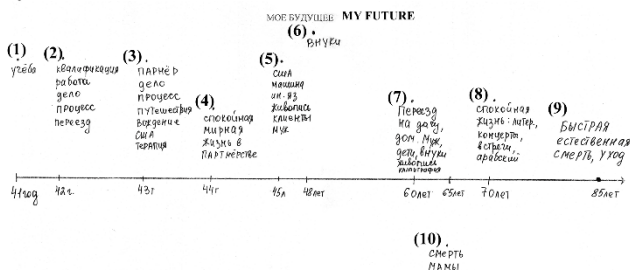
- 1 - summer trips to Ukraine (to see grandmother);
- 2 - beloved grandmother from Moscow, guests. It's heartwarming; 3 - move;
- 4 - falling in love; 5 - summer, countryside; 6 - graduating high school; 7 - grandfather's death; 8 - grandmother's death;
- 9 - grandmother's death;
- 10 - father's death.

My past



- 1 - move; 2 - marriage; 3 - birth of the first son; 4 - birth of the second son, university; 5 - hair color change, authenticity;
- 6 - Solovki (volunteering on the Solovetsky Islands); 7 - red zone, learning, finding the meaning of my life; 8 - learning, freedom, process; 9 - grandfather's death;
- 10 - grandmother's death; 11 - father's death; 12 - miscarriage; 13 - falling in love; 14 - apathy, tears; 15 - 3 suicides (around); 16 - after the divorce kids stayed with my ex-husband.

My future



- 1 - education; 2 - qualification, work, business, process, moving; 3 - partner, business, process, travel, driving, USA, therapy; 4 - calm and peaceful life in a partnership; 5 - USA, car, foreign language, painting, clients, husband;
- 6 - grandchildren; 7 - moving to the country house, home, husband, children, grandchildren, painting, calligraphy;
- 8 - quiet life: literature, concerts, meetings, Arabic; 9 - quick natural death, leaving; 10 - mother's death.

Figure 4. Vasilisa’s childhood lifeline, adulthood lifeline and future lifeline.

3.5 Complementary findings common for all participants

Despite the diversity of the data, we noticed two commonalities which appeared to be specific for the participants.

First, the inner dynamics of all adulthood SDMs in our participants followed a redemption script (a narrative form with a disadvantaged situation at the outset leading to a positive outcome). Through the lens of redemption sequences, Antonida turned from being scared of losing her life by an incident to

believing in heavenly protection; Elena transformed resentment at parental cruelty to forgiveness; Maria converted a forced necessity to begin everything from scratch to building her own business; and Vasilisa translated an abstract need for personal growth into a real job at a nursing home for mentally disabled people. Accordingly, all adulthood lifelines ended with events situated above the timeline indicating a redemption sequence.

Second, the temporal distribution of events in adulthood lifelines did not follow the typical "reminiscence bump," which is a tendency for middle-aged and elderly people to retrieve more personal memories from youth (see for review: Munawar et al., 2018). Splitting the timeline into equal intervals of 15-30, 30-45, and 45-60 years of age revealed an almost uniform distribution of memories: Anonida (11 vs. 14), Elena (5 vs. 7 vs. 8), Maria (7 vs. 5), and Vasilisa (7 vs. 6). Therefore, our participants paid equal attention to youth and midlife events, perceiving midlife experiences as having a significant impact on their narrative identity.

4 DISCUSSION

Three central research questions guided the immersion in the inner worlds of the four women who went through the "red zones" as medical volunteers during the COVID-19 pandemic. First, we wondered whereas volunteering during the pandemic had become a meaningful component of general narrative identity, accompanied by a positive sense of overall self-unity. Second, we sought narrative indicators of role identities presented in both volunteerism-relevant and irrelevant autobiographical data. Third, we were looking for repeated themes of responsibility and readiness to help others, signs of early psychological maturity, and a specific focus on actively coping with life challenges. All of these questions were clarified by empirical findings.

In accordance with our theoretical speculation, all participants reported their volunteer experiences as positive and satisfying. Their scores on the scale designed to measure determinants of volunteer behavior, as proposed in the SDT, suggested at least identified motivation. The authors posited that "in identified regulation, the person consciously identifies with, or personally endorses, the value of an

activity, and thus experiences a relatively high degree of volition or willingness to act” (Ryan & Deci, 2020, p. 3). The high scores on scales assessing subjective well-being confirmed safe coping with potential harm caused by volunteer work during the pandemic.

In reference to the second question, participants demonstrated strong volunteers’ value identities while reflecting their volunteer experiences. These identities were integrated into their general narrative identities in the broader life context, as confirmed by the rest of the data. Inspecting the SDMs narrated about volunteer experience in “red zones”, we identified four of five types of identities proposed by Grönlund (2011). The following value-related patterns were identified: striving for connectedness to God (Antonida, faith-based identity); a need for willfully turning things from wrong to right (Elena, influencer identity); a need for competence and relatedness satisfied through caring for those who are in need (Maria, helper identity); and seeking self-development and personal growth (Vasilisa, success identity). Two participants (Antonida and Vasilisa) included volunteering in the “red zones” as essential and highly positive events in their graphical life stories, while the other two participants (Elena and Maria) did not. There are two possible explanations for this observation. First, although the participants were not informed about the sequence of tasks, they may have expected volunteering to be a separate topic for discussion. Alternatively, Elena and Maria could have considered this experience as a lasting part of the present and, hence, did not realize it as pure past.

However, all participants generated SDMs and adulthood lifelines which indicated the continuity between general narrative identity and specific volunteers’ identity in accordance with the previous assumptions.

In regard to the third question, all participants conceptualized their childhood experiences in light of relationships with adults and how they were treated by the adult caregivers in their lives. It seems curious that the participants did not mention childhood events that were among the most common in previous studies that employed the same methodology (Nourkova, 2020). There were no events typical of a child's life, such as "kindergarten," "siblings," "friends," and "pets." On the contrary, all participants

configured their childhood stories in the space of relationships with the adult world, either harmonious or conflicting, or demanding or granting unconditional love.

We speculated, that children who understand themselves as part of the adult world may be more prone to internalizing the values of duty and altruism instead of joy and carelessness. Undoubtedly, the former is essential for hard and prolonged volunteer work in the hospital realm. Similarly, all participants expressed early readiness to possess adult responsibilities and take care of others.

The analysis of the temporal distribution of events on lifelines indicated a total absence of distinct preference for events from the later adolescent and young adult years. Since this “reminiscence bump” phenomenon is routinely replicated in autobiographical memory research (Scherman, 2013), the absence of this bump was considered to be significant. According to the cultural life script account, the tendency to recall youth events more often than others results from internalizing the cultural “schedule” of normative life events (Berntsen & Rubin, 2004). There is ample evidence that normative events condense around the third decade of life. From this perspective, the equivalence of memory recall in the young adult and mid-life period as a sign of relative independence from social stereotypes and normative expectations may be considered. The fact that three out of the four participants nominated a “sense of freedom” as a unique and highly positive event in their lives supports this speculation. The recollective shift from youth to later life may also indicate sensitivity to personal dynamics in midlife. If this is the case, the participants tended to be open to new experiences and ready for external and internal changes. Together with a period of ambivalent turbulence before starting volunteering, this focus on mid-life events may be relevant to passing through the developmental crisis of generativity versus stagnation (Erikson & Erikson, 1998). This crisis consists of a fork between an agentic desire to establish a positive legacy that would make the world a better place and failure to find a way to contribute that leads to a feeling of purposelessness (McAdams, 2011). Care for others and meaning-making are central to generativity (Slater, 2003). Both manifest massively in terms of medical volunteerism. It has been shown that stable self-reported generativity is the strongest predictor of hours volunteered per month ten years later when controlled for religion and education (Son & Wilson, 2011). Thus, it seems highly plausible that volunteering has a reciprocal effect on generativity. By engaging in

volunteerism, people become more committed to caring for others, which makes them more generative. For these reasons, volunteering could be understood as a behavioral tool to resolve the mid-life crisis in favor of generativity.

Additionally, after inspecting the future lifelines, two contrasting types of perspectives were revealed: short-term (Antonida and Elena) and long-term (Maria and Vasilisa). Both types were highly positive, surpassing the entire life and childhood. Since the extent of the anticipated future differentiated the participants, we sought a possible rationale behind these differences. Correspondence between the extended/shortened future and quantitative measures of autonomous and controlled modes of volunteer motivation functioning was detected. The extended future lifelines conjoined with belonging to the top quartile (according to the statistics obtained in other studies) on the integrated and intrinsic regulation of volunteer motivation. Not insisting on causality, we proposed that narrative identity with an articulated past, present, and future implied more autonomous motivation than if the life story was shortened either in the past or in the future. This result seems to be of high importance since medical volunteering is not likely to induce intrinsic motivation in the context of the pandemic. It is unlikely that somebody may experience this dangerous and painful work in hedonistic terms. Prolonged forecasting may accommodate the tendency to put volunteer experience into a comprehensive time perspective, which helps to look at its potential harm relativistically.

Finally, we noticed that participants performed all tasks following a redemption script. Previous studies have reported positive correlations between redemption sequence and high scores on life satisfaction, self-esteem, and sense of coherence (McAdams et al., 2001). Since the participants were interviewed after completion of extremely demanding volunteer activities in “red zones,” their redemption scripts were considered to be indicators of successful resistance against psychological burnout, depression, and other negative states.

5 CONCLUSIONS

A hallmark of this study is that it dealt with ordinary individuals who became everyday heroes in the extraordinary circumstances of the COVID-19 pandemic. The authors were not driven by the hope to find a universal pattern of either biographical or autobiographical factors predicting the choice to volunteer in the “red zones” and the ability to withstand this ordeal. Instead, they attempted to explore the ways in which general narrative identities manifested themselves in volunteer activities, providing a sense of self-coherence and strengthening personal generativity. This search relied on visualizing life stories accompanied by personal comments, self-defining memories, and self-defining future projections.

Each volunteer who participated in this study provided a unique dataset. However, narrative trunk lines and metaphors across autobiographical data were identified which referred to four types of general identities extensively manifesting in volunteer identity: faith-based, influence-based, help-based, and success-based.

The participants' graphical life stories, SDMs, and SDFPs showed similar patterns, consisting of adult-oriented childhood and a focus on mid-life events. The participants narrated their stories following a redemption script, indicating high levels of generativity and motivation to help others, as confirmed in previous research.

These findings cannot be generalized yet. However, they could be a step in understanding the role of narrative identity as foundation of self-continuity and persistence in active coping with global challenges.

One might argue that although these four individuals had very different motivational reasons, their choice and actions provided a greater sense of meaning in their lives. Medical volunteering in hazardous conditions is an expression of commitment to a larger community that models how individuals are connected to each other through a social order that goes beyond self-interest or even familial interest. These "everyday heroes" such as those described in the study are social change agents in the sense that their actions express an ethos of communal concern that needs to be practiced by people all over the

world, even if these acts occur at different levels of intensity. Their example lifts the larger society to a more engaged expectation that all of us will contribute and make sacrifices for the greater good.

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