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# When life is no longer a journey: the effect of the COVID-19 pandemic on the metaphorical conceptualization of LIFE among Hungarian adults – a representative survey

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**Abstract:** There is ample research on how metaphors of LIFE vary both crossculturally and within culture, with age emerging as possibly the most significant variable with regard to the latter dimension. However, no representative research has yet been carried on whether variation can also occur across time. Our paper attempts to fill this gap in the literature by exploring whether a major crisis, such as the COVID-19 pandemic, can induce variation in how LIFE is metaphorically conceptualized throughout society. By drawing on the results of a nationwide, representative survey on the metaphorical preferences for LIFE among Hungarian adults carried out during the second wave of the COVID-19 pandemic, we hypothesized that the pandemic would induce a revolutionary change (in the sense of the change being swift, as opposed to gradual) in how Hungarian adults metaphorically conceptualize LIFE, as compared to the metaphorical preferences of the pre-COVID-19 era. We expected this variation to manifest itself in the emergence of novel metaphorical source domains and a realignment in metaphorical preferences. Our results, however, indicate that novel conceptualizations emerged only as one-off metaphors; Hungarians mostly rely on a stock collection of LIFE metaphors even in times of crises, with changes happening mostly in the form of shifts in metaphorical preferences. Our study also found that the choice of preference of the source domains showed less alterations among older adults – implying that the older we get, the more resistant to change our metaphorical conceptualizations become, even under extreme conditions such as COVID-19.

Keywords: life; metaphor; COVID-19 pandemic; Hungarian; metaphor variation

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# **1** Introduction

The COVID-19 pandemic, caused by the SARS-CoV-2 virus, has become the most severe health crisis of modern times. According to the latest statistics of the World Health Organisation (WHO), by the end of November 2023, the cumulative cases of reported infection reached almost 800 million cases globally, with 7 million reported deaths, most of which happened between December 2019 and December 2021.<sup>1</sup> The devastating direct impact of COVID-19, such as the deteriorated health status of individuals who contracted the virus, and especially the death tolls, were straightforwardly evident to anyone following the news. However, the overall effect of the pandemic was even worse. Just a few days after the WHO officially declared the COVID-19 a pandemic in early 2020, the United Nations Development Programme (UNDP), one of the lead agencies of the United Nations, declared that COVID-19 was not merely a health crisis; it trickled down into each sphere of life, generating a fully-fledged social, economic and political crisis worldwide, and triggering potentially deep and highly damaging repercussions in the longer run (UNDP 2020; 2021).

The WHO encouraged governments worldwide to impose severe restrictions on activities such as businesses, travelling and all types of social interactions, including work, schooling, entertainment, etc., considerably altering everyday habits and routines (Allen et al. 2022; Navas-Martín et al. 2021). Social distancing became the norm in most countries in the peak years of the pandemic. While the spread of the virus and especially the high mortality rates generated a general feeling of fear, anger and insecurity (Coelho et al. 2020; Rodríguez-Hidalgo et al. 2020), social distancing resulted in feelings of alienation, depression and loneliness (Khan et al. 2022). Research indicates that at least half of the population in the investigated countries reported on anxiety, depression and post-traumatic stress disorder (Xiong et al. 2020). Apprehension and helplessness due to COVID-19 became commonly reported feelings, which were coupled with an increased level of stress from work and financial matters (Al Dhaheri et al. 2021).

The pandemic also had a direct effect on generations, albeit in diverse ways. Younger generations have been found to suffer disproportionately from COVID-19-related job losses (Bianchi et al. 2023), and from the closures of educational facilities, travelling restrictions and suspension of outdoor activities (Chaturvedi et al. 2021; Odriozola-González et al. 2020). At the other end of the age spectrum, social distancing put an excessively high mental burden on the older population (those above the age of 60), whose life expectancy deteriorated the most (Aburto et al. 2021).

<sup>1</sup> For more details, see the official WHO data at https://covid19.who.int/ (accessed 10 November 2023).

Social isolation, along with the explicit prioritisation of saving younger patients' lives, boosted late-life suicidal behaviour (Sheffler et al. 2021).

Such unprecedented impact on our everyday lives by an absolutely unfamiliar and seemingly uncontrollable entity has brought forth a profusion of research on how the COVID-19 pandemic has been made sense of, i.e., metaphorically conceptualized (see, for example, Semino 2021; Craig 2020; Guliashvili 2022; Kazemian and Hatamzadeh 2022; Kazemian et al. 2022; Musolff 2022 – and many more), as well as how these metaphors affect our reactions to and reasoning about the pandemic itself (e.g., Brugman et al. 2022; Burnette et al. 2022; Sabucedo et al. 2020; Schnepf and Christmann 2022; Zhang et al. 2022). Nevertheless, there has been very little done on how the pandemic itself has impacted our metaphorical conceptualizations (Abdel-Raheem 2021a). Abdel-Raheem (2021b), for example, has demonstrated that in the genre of political cartoons, the pandemic has been used as a source domain for dozens of target domains, including war, countries (e.g., Turkey), organizations (e.g., the European Union), politicians (e.g., Donald Trump), governments (e.g., the Jordanian cabinet), celebrations (e.g., Christmas), flags (e.g., the Union Jack), injustice, corruption, rumours, awareness, social media - and many more.

Can the coronavirus pandemic,<sup>2</sup> however, also impact *everyday* metaphorical conceptualizations, particularly how we metaphorically conceptualize LIFE itself?<sup>3</sup> While we have ample research indicating that the pandemic fundamentally affected and altered people's lives (see above), we do not know whether such an exogenous shock can also cause changes in people's metaphorical conceptualizations *about* LIFE. The present paper is an attempt to fill this gap in the literature by drawing on the results of a nationwide, representative survey on the metaphorical preferences for LIFE among Hungarian adults carried out in February 2021, during the second wave of the COVID-19 pandemic. Our main hypothesis is that the COVID-19 pandemic induced a so-called "revolutionary change" (Burgers 2016) in how Hungarian adults metaphorically conceptualize LIFE, as compared to the metaphorical preferences of the pre-COVID-19 era (and identified by Benczes and Ságvári 2018a). We expect this variation in metaphorical conceptualization to manifest itself in both the emergence of novel metaphorical source domains and a re-alignment in metaphorical preferences. We discuss our results within the framework of metaphor variation, which we complement with a temporal

**<sup>2</sup>** We use the word *pandemic* in the paper to mean both the pandemic itself and people's lived experience of it. In qualitative research, "lived experience" is defined as the "representation and understanding of a researcher or research subject's human experiences, choices, and options and how those factors influence one's perception of knowledge" (Given 2008: 490).

**<sup>3</sup>** As customary in cognitive linguistic literature, we will use small caps in the text for target/source domains and conceptual metaphors.

dimension in order to account for variations in metaphorical conceptualizations induced by sudden events, such as the COVID-19 pandemic.

The structure of the paper is the following: in Section 2, we review the literature on the metaphorical conceptualization of LIFE by focussing on the dimensions of metaphor variation. In Section 3 we describe the methodology and limitations of our research, while in Section 4 we present and discuss the main findings in light of our hypotheses. In the last, Section 5 we sum up the main empirical and theoretical contributions of the paper.

### 2 LIFE metaphors and variation

Life is possibly one of the greatest enigmas of human existence, and making sense of it – finding the meaning of life – is considered in psychology as an essential part of human nature (Frankl 1985; cited in Landau 2018) that profoundly affects our overall well-being. There is a plethora of empirical studies demonstrating that people who consider their lives as meaningful enjoy generally a higher level of physical and mental health (e.g., Schnell 2009; Steger et al. 2006; Mascaro and Rosen 2005) and are less prone to age-related cognitive decline (Boyle et al. 2010). Given the significance of finding meaning in life for overall well-being, the question necessarily arises how we are able to achieve this. Cognitive linguistics offers a key to this question, as one possible cognitive strategy for finding meaning in life is through the use of conceptual metaphor (Landau 2018). In a series of psycholinguistic experiments investigating perceived meaning of life and metaphor usage, Baldwin et al. (2018) have found that metaphors are able to give both structure and significance to life at the same time by making less comprehensible experiences more understandable – with more ease and less effort. This creates a positive effect which might be understood as "meaning in life" (p. 186).

Needless to say, language affords us countless ways to metaphorically talk about – and think about – the concept of LIFE. In a qualitative study based on in-depth interviews with Swiss college students, Moser (2007) identified more than three thousand metaphorical linguistic expressions related to LIFE. However, on closer inspection, it transpired that the interviewees relied on a mostly restricted set of rather conventional source domains (n = 22), such as container, path, struggle, nature, cycle, etc. Within cognitive linguistic literature, Lakoff and Turner (1989) also note that there are a number of basic and relatively stable metaphors for understanding the concept of LIFE (and conversely death), which all focus on different aspects of our experiences, thus resulting in different inferences. These basic conceptualizations of LIFE include the following (based on Lakoff and Turner 1989; Kövecses 2002/2010), in alphabetical order: LIFE IS BONDAGE, LIFE IS A BUILDING, LIFE IS A

BURDEN, LIFE IS A (GAMBLING) GAME, LIFE IS A JOURNEY, LIFE IS A PLAY, LIFE IS A PRECIOUS POSSESSION, LIFE IS A SPORTING GAME, LIFE IS A STORY, LIFE IS FIRE, LIFE IS LIGHT, PEOPLE ARE PLANTS/HUMAN LIFECYCLE IS THE LIFECYCLE OF A PLANT. Indeed, very similar metaphors have emerged over the years in an array of studies focussing on how people metaphorically conceptualize LIFE in e.g., China (Hoffman et al. 2019b), Colombia (Crego et al. 2022), Costa Rica (Hoffman et al. 2019a), Croatia (Schmidt and Brdar 2009), Hungary (Benczes and Ságvári 2018a, b; Kövecses 2015), Poland (Kuczok 2016), Spain (Crego et al. 2022), Turkey (Özçalişkan 2003) and the United States (Kövecses 2015) among others, underlying the widely accepted view in cognitive linguistics according to which some conceptual metaphors – based on universal human experiences – can exhibit universality (Kövecses 2005: 64) and can thus emerge in a wide variety of languages.

Variations, however, in what metaphor is selected to account for LIFE also occur, and cognitive linguistic literature to date has focused on two such dimensions: cross-cultural variation and within-culture variation. Cross-cultural variation concerns culture-specific metaphorical conceptualizations, as exemplified by Chinese, where LIFE is predominantly conceptualized through the LIFE IS AN OPERA metaphor (referring to specifically Chinese opera – see Yu and Jia 2016). As Yu (2017: 83) explains, the metaphor emerges through an interaction of bodily and cultural experience: everyday Chinese culture is steeped in traditional opera, and people access this "cultural icon" on an everyday basis, as part of their cultural and physical environment. Certain elements of this metaphor, such as "people", "performance" and "venue", nevertheless, also appear in its "Western" counterpart, in the LIFE IS A PLAY metaphor, which has developed in American English into a more general metaphor, LIFE IS A SHOW OF ENTERTAINMENT (KÖVECSES 2005: 186), on the basis of which various aspects of LIFE began to possess features associated with entertainment. In Kövecses' view, this process was motivated by characteristic aspects of American cultural and social history, such as technological development (the invention of filmmaking, radio and television, for example), the popularity of spectator sports, or the availability of mass communication.

While it is clear that languages can exhibit differences in how LIFE is metaphorically conceptualized across cultures, there is much less research on the degree to which metaphor can vary *within* culture. To our best knowledge, the most comprehensive empirical study to date has been carried out by Benczes and Ságvári (2018a) in the pre-COVID-19 era, in the form of a large-scale, nationwide and representative investigation on how Hungarian adults metaphorically conceptualize LIFE. The results of the study have indicated that among all the investigated major explanatory variables, such as gender, age, location and education, it was age that emerged as a determining factor when it came to metaphorical preferences concerning LIFE. Accordingly, the GAME metaphor was overrepresented among the youngest age group (the 18 to 24 age group) and

particularly among young adults (the 25 to 39 age group), while it was underrepresented among those above the age of 40. Similarly, the struggle/war metaphor was basically non-existent in the youngest age group (among the 18- to 24-year-olds) and was underrepresented among young adults (the 25 to 39 age group), while it was the most frequently verbalized metaphor for those aged over 60. Life conceptualized as a JOURNEY or an ADVENTURE was articulated in the youngest age group (the 18 to 24 age group) by an above-average probability, and in parallel, these metaphors were less likely to appear among those above the age of 60. These investigations have thus foregrounded the significance of within-culture variation, motivated by age-determined effects, in metaphorically conceptualizing LIFE.

Variation in the metaphorical conceptualization of LIFE thus exists both across cultures and within culture as well. Yet there is a further, *temporal* dimension of variation in the metaphorical conceptualization of LIFE that needs to be introduced at this point, and which is well illustrated by the gradual development of the LIFE IS A PLAY metaphor into the LIFE IS A SHOW OF ENTERTAINMENT metaphor in American English (see above and Kövecses 2005: 186). Burgers (2016) identifies such a change in metaphorical conceptualization as "evolutionary", in the sense that it occurs slowly and continuously over time. Yet metaphor variation can also happen at a so-called "revolutionary" pace, when shifts in metaphorical conceptualization are swift and discontinuous, as a reaction to sudden events and developments.

While there is some research on how sudden events induce revolutionary changes in metaphor usage, these studies are rather varied with respect to the event that induced the change in conceptualization *and* the impact it had on metaphor change – ranging from a personal crisis, such as being suddenly diagnosed with an illness, and how patients make sense metaphorically of their changed conditions (see Gibbs and Franks 2002), through the initiation of a strategic change at an academic organization via relabelling and how it impacts issue interpretations (e.g., Gioia and Thomas 1996), all the way to society-wide political events, such as the introduction of the "War on terror" metaframe by the Bush administration in the wake of the 9/11 terrorist attacks and the impact it had on creating an "institutionalized" world view (Lewis and Reece 2009: 85).

Can, however, a major crisis induce a revolutionary change in metaphorical conceptualization across all segments of society, impacting within-culture variation? The present paper is an attempt to fill this gap in the literature by drawing on the results of a nationwide, representative survey on the metaphorical preferences for LIFE among Hungarian adults carried out in February 2021, during the second wave of the COVID-19 pandemic, when general curfew and strict travel restrictions were in full force in Hungary (besides a number of other actions promoting social distancing – e.g., secondary schools and universities had to switch to online education, sports facilities had to close, etc.; Uzzoli et al. 2021).

Our main hypothesis is that the COVID-19 pandemic induced a revolutionary change in how Hungarian adults metaphorically conceptualize LIFE, as compared to the metaphorical preferences of the pre-COVID-19 era (and identified by Benczes and Ságvári 2018a). We expect this variation in metaphorical conceptualization to manifest itself in two forms: the emergence of novel metaphorical source domains and a re-alignment in metaphorical preferences. Regarding the latter point, we expect the prominence of source domains highlighting hardship and uncertainty, such as struggle/war and rollercoaster; and a decrease in source domains related to physical movement and mobility, such as JOURNEY and ADVENTURE.

### 3 Materials and methods

In order to acquire as comparable data as possible, we followed exactly the same data collection method and metaphor identification procedure that we applied in our pre-COVID-19 investigations on how Hungarians conceptualize LIFE (Benczes and Ságvári 2018a, b). Accordingly, we have collaborated with a nationwide (quarterly omnibus) survey focussing on current affairs and general political issues, carried out in February 2021, and administered by the same company (TÁRKI Social Research Institute) that was responsible for the previous data collection. For both fieldwork, probability sampling with 1,000 adults (18 years and older, non-institutional households; 2016: n = 995, 2021: n = 1,019) was applied. Participants were selected by random walk sampling, according to which interviewers follow a given route and attempt to accomplish an interview with every *n*th household. The sample was representative of the Hungarian adult population in terms of gender, age, educational level, and type of residence. The same weighting algorithm was used for both datasets. The method of data collection was CAPI (computer aided personal interview), so interviewers used a laptop computer both to read aloud the questions and to record the responses. Completion of the questionnaire was on a voluntary basis and respondents did not receive any financial incentive or other reward for their participation. To minimize distractions and other contextual biases during the interviews, upon our request, the questions on which our research was based were placed at the beginning of the questionnaire. This way, we were able to avoid the potential influence of other, additional topics in the questionnaire on how people responded to our questions. In line with our previous study, the survey contained the following open-ended question: "People think about life in very different ways. What would you compare life with and why? Please complete the following sentence. Life is like..." Right after this question we also asked for a short explanation: "Please give us a short explanation for your answer." The responses were not limited in terms of content

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and length, and everything that was mentioned by the respondent was recorded real-time by the interviewer.

As reflected in our methodology, the survey aimed to reveal the metaphorical conceptualization of LIFE through language use in a communicative situation in which respondents were *explicitly* asked to provide the source domain through which they interpret LIFE by means of a simile, in line with Benczes and Ságvári (2018a, b). Although recent psycholinguistic research confirms that metaphors and similes are processed differently (Roncero et al. 2021), simile resembles metaphor conceptually (as it compares two different domains), while formally it draws on comparison (due to the presence of *like*). The formal property of simile makes it an "overtly marked" strategy (Cuenca and Romano 2022: 272) that can be used as an effective tool for eliciting conceptual content (i.e., the figurative interpretation of LIFE from respondents in our survey). The conceptual similarity between simile and metaphor is also underlined by Deliberate Metaphor Theory (Steen 2017, 2023a, b), which considers all similes as "deliberate metaphors" on the basis that simile makes language users aware of the source domain functioning as a separate domain of reference (and this awareness was further buttressed by the explanation that we asked the respondents to give). Yet, awareness of metaphor (which is a characteristic of deliberate metaphors) does not necessarily entail conscious metaphor use (which is a characteristic of so-called "deliberative metaphors"). As explained by Steen (2017: 15), "conscious metaphorical cognition is not needed for deliberate metaphor use". It is outside of the scope and aims of the present research to reflect in earnest on the nature of consciousness involved in the responses we received.

As a first step in the data analysis, we filtered out those responses where the question concerning the conceptualization of LIFE was left blank (i.e., no text was provided) or where the participant did provide an answer, but this did not bore any information on the source domain (e.g., adjectives such as "difficult" or "bearable"; or even complete sentences, such as "Life is what we want it to be"). Responses that could be identified as legitimate source domains (and accordingly metaphors) for LIFE were vastly nouns (e.g., "rollercoaster", "treadwheel", "challenge") and noun phrases (e.g., "a great journey"). There were also a few similes in the data (n = 17), such as "like a dream" or "like a rollercoaster", which we also considered as valid responses. Thus, any response that contained an identifiable concept ("rollercoaster", "treadwheel", "challenge", "journey", "dream", etc.) was coded as a source domain for LIFE. We adopted the same categories and categorizational principles that we used in our previous study on LIFE metaphors of Hungarian adults (Benczes and Ságvári 2018a).

Needless to say, we are aware of the limitations that this particular method entails. The questionnaires elicited from the participants only a single concept (as an analogy for LIFE), and only a short elaboration was further required from them. For some respondents, a question requiring such level of abstraction might have been unexpected as part of a general survey focussing on more practical issues. Furthermore, a face-to-face interview situation is not "intimate" enough to deliberate on such a complex question, and there was an obvious time pressure on the respondents to come forward with an answer. Such an approach implies that some of the answers might be spontaneous, spur-of-the-moment responses, and not the result of a conscious, deliberated reflection (in the form of deliberative metaphors, see Steen 2017 and above) on what LIFE is and how it is understood. We believe these limitations are nevertheless counterbalanced by the relatively large amount of data – such large-scale, nationwide and representative analyses of metaphorical conceptualizations are, as far as we know, still extremely rare in the literature.

### 4 Results and discussion

With regard to our first question ("What would you compare life with?"), the majority of the respondents (n = 778; 76.3 %) provided a valid response that could be coded as a metaphorical source domain. As for the second question, which required a brief explanation of the selected source concept, the response rate was somewhat lower: 72.2 % (n = 736) of the respondents provided an answer. Interestingly, both of these figures are significantly higher than the response rates of our previous, pre-COVID-19 investigation carried out in 2016, when 65.2 % of the respondents provided a valid metaphorical response and 53.6% offered also an explanation for their choice. Reasons for this discrepancy are outside of the scope of this research, but two possible explanations arise. First, higher response rates in the current study might be linked to an increase in self-reflective inclinations observed during the pandemic, such as contemplative behaviours (Lekhak et al. 2022) and spirituality (Lucchetti et al. 2021), which might have thus prompted a larger number of respondents to reflect upon how they conceptualize LIFE and what might be their motives for their preferred conceptualization. Second, empirical evidence from psychological investigations indicates that when confronted with their own mortality or when facing serious threats, people are more inclined to "seek simple, well-structured interpretations of social stimuli" (Landau 2018: 68; see also Baldwin et al. 2018); this inclination might have trickled down into our study as well, with respondents showing a greater aptitude for interpreting LIFE in the form of a succinct analogy.

#### 4.1 Metaphor types: 2021 data

As a first step, we examined what were the major metaphorical conceptualizations of LIFE in the responses. In sum, we identified 137 metaphor types. While such a number might indicate that the availability of source domains to conceptualize LIFE in Hungarian is substantial, it needs to be highlighted that more than half (n = 72; 52.5%) of the metaphor types in our data occurred only once, and included a rather vast array of sources ranging from everyday objects through natural phenomena all the way to more abstract entities (e.g., APPLE, ARROW, BUCKET, BULLET, BICYCLE RIDE, CARPET, DISASTER, DOOR, ELEVATOR, FOOTBALL, GRAPE, JOKE, LABYRINTH, LIGHTNING, MIRACLE, MUD, PICKLES, RAINBOW, SCISSORS, WORRY). It is outside the scope of the paper to account for all the metaphorical source domains in our data; thus, in the following we will restrict ourselves to those metaphor types that had a minimum occurrence of 2 per cent in the overall data (i.e., an occurrence of minimum sixteen tokens). Results are presented in Table 1, indicating the frequency of the metaphor types in descending order.

As can be seen from Table 1, the most common metaphorical source domain in the overall data was struggle/war, accounting to more than 11%. This was followed by ROLLERCOASTER, GAME, TREADWHEEL and ADVENTURE, as the top five metaphorical conceptualizations. JOURNEY was the eighth most common source domain, accounting for 2.5% of the overall data. Very generally speaking, the top twelve source domains of 2021 mostly converge with those that have been identified in previous studies on LIFE metaphors across languages (Benczes and Ságvári 2018a, b;

Rank	Metaphor	Token number	% (out of total sample, <i>n</i> = 778)	
1	STRUGGLE/WAR	88	11.3	
2	ROLLERCOASTER	67	8.6	
3	GAME	46	5.9	
4	TREADWHEEL	44	5.6	
5	ADVENTURE	36	4.6	
6–7	CHALLENGE	33	4.2	
6–7	OPPORTUNITY	33	4.2	
8	GIFT	25	3.2	
9	JOURNEY	20	2.5	
10	THEATRE	19	2.4	
11–12	DREAM	17	2.1	
11–12	WEATHER	17	2.1	

Table 1: Major metaphor types: 2021 data.

Crego et al. 2022; Hoffman and Acosta-Orozco 2015; Hoffman et al. 2019a, b; Kövecses 2015; Kuczok 2016; Schmidt and Brdar 2009). In this regard, the metaphorical sources of 2021 fit in with the general trends of how LIFE is metaphorically conceptualized.

The data in Table 1 become more intriguing if we compare the results to those obtained in the pre-COVID-19 era of 2016 (Benczes and Ságvári 2018a). Interestingly, the number of metaphor types in 2021 was exactly identical to the number of metaphor types we found in 2016 (*n* = 137), with the proportion of one-off metaphorical source domains also being very similar (n = 65; 47.4 %). Metaphors that occurred with a single token in either 2016 or 2021 very seldom appeared on both data sheets (with, for example, STRUDEL being an exception, as it showed up once in the data both in 2016 and in 2021). These results indicate that the one-off metaphorical conceptualizations of 2016 did not take hold and were basically replaced by a completely new set of one-off metaphors in 2021. Such an extensive replacement of metaphors is remarkable, even if it concerns one-off metaphors; we believe that this change can be certainly attributed to the pandemic by driving respondents to find an adequately apt (and novel) metaphor that could best capture their personal experiences in an altered life situation, thus prompting a revolutionary change in metaphorical conceptualization on the personal level. Future investigations (in the form of a follow-up survey for example) will need to be carried out in order to determine whether these one-off metaphors will undergo conventionalization to become more available for larger segments of the population. The data also demonstrated remarkable similarities in the choice of the major metaphorical conceptualizations, which we present in the Section 4.2.

#### 4.2 Comparison of metaphor types: 2021 and 2016 data

Figure 1 presents the top twelve metaphor types of 2021 beside the top twelve metaphor types of 2016 (as based on Benczes and Ságvári 2018a). What can be seen immediately is that a) both lists contain the same number of metaphorical sources (n = 12) that reached the threshold of 2 %; and b) the two lists are vastly similar in the choice of metaphorical sources. While the first correlation is merely curious and rather coincidental, the second one suggests a surprising stability of the most prominent metaphorical concepts about LIFE among Hungarian adults. Thus, STRUGGLE/WAR, ROLLERCOASTER, GAME, TREADWHEEL, ADVENTURE, CHALLENGE, GIFT, JOURNEY, THEATRE and WEATHER (of the 2021 list) also show up among the top twelve metaphorical sources of 2016. Only two metaphorical sources of 2021, namely opportunity and DREAM, do not appear on the 2016 list – but note that according to Benczes and Ságvári (2018a), opportunity in 2016 was the thirteenth most frequent source domain,



Figure 1: Comparison of top twelve metaphor types: 2021 and 2016 data.

accounting to 1.7 % of the overall data. DREAM, in 2016, did not even reach 1 % in the overall data. The embeddedness of the top twelve metaphors in 2021 increased significantly, amounting to 53.6 % of the full set of identified metaphors, as compared to 34.2 % of the top twelve metaphors in 2016.

What the data thus demonstrate is that the *range* of the target concept of LIFE among Hungarian adults is relatively stable, with a restricted set of major metaphor types – including struggle/war, rollercoaster, game, treadwheel, adventure, CHALLENGE, GIFT, JOURNEY, THEATRE, WEATHER – dominating metaphorical conceptualization, complemented with a very large pool of more minor metaphor types (see Section 4.1 above on one-off metaphors). Such results evidently do not support our

hypothesis that the pandemic would invite the emergence of novel metaphorical conceptualizations: there is nothing new under the sun in any of the most preferred source domains of 2021 as compared to those of 2016.

However, looking at the pairwise comparisons of the two surveys, there is a visible and also statistically significant difference for three source concepts: struggle/war and opportunity have become more common in 2021, while journey has lost its "popularity". These data do lend support to our hypothesis with regard to a preference for struggle/war, which can be considered as a "classic" source domain for Hungarians (as also manifested in Hungarian public discourse surrounding the pandemic itself; see Schirm 2021; Szabó 2020; Szabó and Béni 2021; Szabó and Farkas 2022), and which at the same time highlights extreme hardship and difficulty, as evidenced in the recurring explanations that the respondents gave in the survey for choosing struggle/war.<sup>4</sup> Note that the element of hardship and difficulty emerged in the responses given for the **CHALLENGE** source domain as well, but in such cases the encountered difficulties were not seen as a burden, but rather as a test or a task. placing these difficulties into a more positive perspective.<sup>5</sup> Hardship and difficulty were also emphasized in responses provided for TREADWHEEL, but in these examples the main meaning focus was monotony, caused by constant and never-ending work.6

The source domain ROLLERCOASTER emerged as the second most preferred metaphorical source domain in 2021, lending support to our initial expectation for the prominence of source domains associated with hardship and uncertainty – though its overall proportion in the data was basically similar to that of 2016 (accounting for 9% of the metaphorical source domains in both investigated years). Crego et al. (2022) consider ROLLERCOASTER to belong among the so-called "uncertainty" metaphors for life, which "emphasize the uncertain side of existence" (p. 4132). Our data certainly corroborate this view, as all the respondents stressed the changeability of their life circumstances, with good times and bad times constantly alternating with one another. Interestingly, the responses also implied a fatalistic attitude to life (see also Schmidt and Brdar 2009; Kövecses 2005), in the sense that this changeability was seen as an inherent property of life that often happened suddenly (e.g., "things change very quickly, especially now, under COVID...") and that one had to accommodate to (e.g., "because sometimes things go

**<sup>4</sup>** Typical and recurring responses included "you have to fight for everything", "we fight until we die", "never-ending struggle", "because fighting is hard", "everything is difficult", "each day presents a new difficulty", etc. All translations are by the Authors (RB, IB, BS, LPSz).

**<sup>5</sup>** E.g., "there are always problems to be solved", "getting to know new things", "it challenges us", "because there are new tasks waiting for me every day".

**<sup>6</sup>** E.g., "we just work and work", "there's always something to do", "constant monotony", "constant work", "there's no stopping".

well, but there are periods when things just bump along, despite our best efforts"). This unpredictability was also echoed in the responses given for the wEATHER source domain (though this metaphor did not show any particular increase in the 2021 data as compared to the 2016 data).

One of the most noteworthy shifts in the data is the increase in GIFT and DREAM in the overall number of metaphorical responses (both accounting for 2% of the overall data). GIFT is a very positive metaphor for life – possibly the most positive from our top twelve list –, and the responses emphasized the significance of appreciating life as a precious commodity (e.g., "life has to be appreciated", "we have to appreciate life, because we live only once", "every day is a gift, in which we have to seek out what is beautiful and good, and rejoice that we exist, we live, and we enjoy life"), which might have been exacerbated by the experience of being confronted by our own mortality during the coronavirus pandemic and thus being appreciative of surviving against all odds. The source domain of DREAM – as far as the responses are concerned - shows less consistency with respect to its main meaning focus. Some of the respondents underlined the unanticipated aspect of their circumstances (e.g., "it has lots of unexpected twists", "every day is a surprise"), while others highlighted their satisfaction with life (e.g., "everything is just getting better", "I have a beautiful and wonderful wife and a fantastic daughter; I have a job, we can live well") - suggesting that this metaphorical conceptualization for life can carry both positive and negative evaluations (in the form of life satisfaction and unpredictability/uncertainty, respectively).

The statistically significant drop in JOURNEY (complemented with the slight decrease in ADVENTURE) also corroborated our expectations, resting on the assumption that the travel restrictions and social distancing measures introduced during the second wave of the pandemic might have backgrounded the availability of JOURNEY as a potential source domain for LIFE, possibly similarly affecting the availability of adventure, which also showed a (statistically non-significant) decrease from 2016 to 2021. The statistically significant increase in OPPORTUNITY is, nevertheless, a remarkable and unexpected outcome, which can be mainly attributable to its prominence among young adults, which we will return to in more detail in the following Section 4.3.

#### 4.3 Comparison of metaphor types: age groups

Figure 2 presents the changes in frequency of the top twelve metaphors for four age groups: 18 to 24 years, 25 to 39 years, 40 to 59 years, and those above the age of 60. When defining the age groups, we distinguished between four cohorts, taking into account the limitations of the sample size. Separate groups were defined for



**Figure 2:** The top twelve metaphor types for each age group: share in %, 2016 and 2021 data. (Note: Metaphors in dashed rectangles show statistically significant changes from 2016 to 2021.)

adolescence (18–24 years), young adulthood (25–39), middle adulthood (40–59) and late adulthood (60+) – these groups are identical to the ones that were used in the pre-COVID-19 survey. The vertical axis represents the frequency of the source domains in 2016, while the horizontal axis shows the frequency of the source domains in 2021. Each coloured dot represents a single source domain. Thus, dots appearing above the diagonal indicate a decrease in frequency as compared to the 2016 data, while dots that are below the diagonal indicate an increase in the respective source domain, as compared to the 2016 data. Dots that are situated on or very close to the diagonal indicate source domains that did not show much change. Metaphors in dashed rectangles show statistically significant changes from 2016 to 2021. The numerical data can be found in Table 2.

Age category	18–24 y		25–39 y		40–59 y		60+ y	
Year of the survey	2016 A	2021 B	2016 A	2021 B	2016 A	2021 B	2016 A	2021 B
ADVENTURE	10.8	6.2	5.6	4.8	5.4	5.2	1.5	3.5
CHALLENGE	5.4	3.1	4.5	5.3	5.7	4.9	1.5	2.2
DREAM	2.7		1.1	3.2	1	2.1		1.7
GAME	5.4 > B	15.6 < A	7.9	6.4	4.7	6.4	2.2	3.5
GIFT			1.1	2.7	3	3.6	4.4	3.5
JOURNEY	10.8 > B	3.1 < A	3.9 > B	0.5 < A	4.4	4.3	2.2	1.7
OPPORTUNITY			1.1 < B	7.5 > A	2.7	3.6	1.5	3
ROLLERCOASTER	2.7	6.2	8.4	6.4	10.7	10.9	9.6	7.4
STRUGGLE/WAR	2.7	3.1	5.6	9.1	9.7	10.9	11.8	14.8
THEATRE	2.7	3.1	2.2	2.7	4.4	2.4	2.9	2.2
TREADWHEEL	5.4	9.4	3.9	4.8	5.4	4.9	2.9	7
WEATHER	2.7		3.4	1.6	1.7	1.8	2.9	3.5
OTHER	48.6	50	51.1	44.9	41.3	38.9	56.6	46.1
#Total cases (n)	37	32	178	187	298	329	136	230

Table 2: The top twelve metaphor types for each age group: share in %, 2016 and 2021 data.

Note: Numbers in bold show statistically significant changes from 2016 to 2021.

What can be seen from the data is that a number of major shifts occurred in some – though not all – of the age groups. Changes in metaphorical preferences were more likely to occur in the younger age groups, i.e., the 18 to 24 and the 25 to 39 age groups, while the metaphorical choices of the older age groups, i.e., the 40 to 59 years and those above 60, showed more stability. This can be seen from the distribution of the dots in Figure 2: the source domains are more dispersed in the top two figures as compared to the two bottom figures, where the source domains are more-or-less on or around the diagonal. Thus, JOURNEY decreased and GAME increased (both significantly, though the limited number of responses within this age group make any conclusion very tentative) in the 18 to 24 age group. Note that both JOURNEY and ADVENTURE were the most prominent source domains in 2016 for this age group, and their evident drop in 2021 might be attributed to the strict travel restrictions that were introduced during the second wave of the pandemic. The significant increase in GAME was not anticipated, yet it is not overall unexpected, as video gaming showed massive increase worldwide during lockdown (Vuorre et al. 2021), and young Hungarian adults might have been especially susceptible to increased gaming time (as compared to the other age groups in this study) - possibly effecting metaphorical preferences in their conceptualization of LIFE.

Realignment in the source domains can also be observed in the 25 to 39 age group, where JOURNEY also decreased significantly (possibly for same reasons as in the 18 to 24 age group discussed above), and OPPORTUNITY increased significantly. Reasons for this shift are unclear; one probable explanation might be sought in the opportunities provided by the pandemic for people to change their career direction. While the pandemic can be considered as a "negative career shock", which incurred sudden changes in employment (leading possibly to unemployment), such largescale transformations can be "interpreted by some people as epiphanies causing them to re-evaluate either their career trajectories or broader life aspirations" (Akkermans et al. 2020: 3) – in other words, even a negative shock as COVID-19 can result in a "positive outcome" (ibid.), in the form of novel career paths and opportunities.

With regard to the two older age groups in our survey, i.e., the 40 to 59 age group and those above 60, shifts in metaphorical preferences concerning the target domain LIFE are much less visible – both of these groups show relative stability with regard to the frequencies of the source domains. Nevertheless, two source domains - rollercoaster and struggle/war - show distinct prominence, accounting for the top two conceptualizations in these age groups. Source domains highlighting uncertainty, such as rollercoaster, and hardship, such as struggle/war, can be considered as leitmotifs of the Hungarian middle-aged and older adults' conceptualizations of LIFE, if the results of quality of life surveys are considered. According to Eurofound's Quality of Life Survey, Hungarian people above 35 are substantially less satisfied with their lives in comparison to both younger adults in Hungary and 35+ people in other countries of the EU (Eurofound 2017). UNECE's Active Ageing Indicator also shows that the Hungarian elderly feel strongly alienated and lonely, as this generation's social integration and participation was not only one of the worst in the EU, but it actually showed the largest degree of deterioration between 2006 and 2018 (UNECE 2019).

### **5** Conclusions

In the cognitive linguistic literature, there is a rich tradition of research on how metaphors of LIFE vary from culture to culture; studies have also been undertaken on how the metaphorical conceptualization of LIFE varies within culture, with age emerging as possibly the most significant variable. However, no representative research has yet been carried on whether within-culture variation can also occur across time. Our paper attempted to fill this gap in the literature by exploring whether a sudden and major crisis, such as the coronavirus pandemic, can induce variation in how LIFE is metaphorically conceptualized throughout society. We have

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initially hypothesized that the COVID-19 pandemic would induce a revolutionary change (in the sense of the change being swift, as opposed to gradual) in how Hungarian adults metaphorically conceptualize LIFE, as compared to the metaphorical preferences of the pre-COVID-19 era. We expected this variation in metaphorical conceptualization to manifest itself in two forms: the emergence of novel metaphorical source domains and a re-alignment in metaphorical preferences.

The data, however, have not fully borne out our first expectation. First of all, the top metaphorical source domains (which reached the benchmark of 2 % in the overall data) - i.e., struggle/war, rollercoaster, game, treadwheel, adventure, challenge, GIFT, JOURNEY, THEATRE, WEATHER, DREAM, OPPORTUNITY - were run-of-the-mill conceptualizations that have been already attested in the academic literature. Furthermore, the embeddedness of the top twelve metaphors increased as compared to pre-COVID-19 figures, suggesting that the pandemic drove Hungarian adults toward more familiar and conventional metaphors. Second, the range of the most frequent metaphorical source domains in 2021 was remarkably similar to those of 2016, with a highly restricted set of major metaphor types – including struggle/war, roll-ERCOASTER, GAME, TREADWHEEL, ADVENTURE, CHALLENGE, GIFT, JOURNEY, THEATRE, WEATHER dominating metaphorical conceptualization across all age groups. Replacement of old metaphors with new ones did, however, occur in the case of one-off metaphors, in which case the full set of the 2016 one-off metaphors was replaced by a new set of one-off metaphors in 2021. We believe that this change can be certainly attributed to the pandemic by driving respondents to finding an adequately apt (and novel) metaphor that could best capture their personal experiences in an altered life situation, thus prompting a revolutionary change on a personal level.

Realignment regarding metaphorical preferences was observable, however, throughout society. We hypothesized that source domains highlighting hardship and uncertainty, such as struggle/war and ROLLERCOASTER, respectively, would increase, and source domains related to physical movement, such as JOURNEY and ADVENTURE, would decrease, and both of these expectations were borne out in *all four* investigated age groups. Such results imply that the lived experience of the pandemic – and the physical, mental and social effect it has had on people's lives – did have an effect on what source concepts people chose to conceptualize LIFE with, necessarily complementing the basic cognitive linguistic tenet that metaphors are motivated by an experiential basis (see, for example, Lakoff and Johnson 1999; Kövecses 2005, 2015; Gibbs 2006; Casasanto 2014; among many others). Our results also underline the significance of the temporal dimension as a further potential factor in accounting for variation in metaphor.

The impact of the coronavirus pandemic on metaphorical conceptualization, nevertheless, needs to be treated with caution. What our results suggest is that the

choice of preference of the source domains showed less alterations among the older age groups, with significant shifts happening in the younger age groups. A major crisis such as the COVID-19 pandemic can thus certainly mitigate within-culture variation as manifested in generational preferences, but it cannot diminish them: the older we get, the more resistant to change our metaphorical conceptualizations become, even under extreme conditions such as COVID-19.

# Data availability statement

The data file that includes the identified metaphors and the age category of the respondents for both surveys are available at the following URL: https://osf.io/u6ct9/? view\_only=91425df13c8e4d48a49442cd741e53b0.

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