EXAMINATION OF THE MENTAL WELL-BEING AND COPING METHODS OF PROFESSIONAL DANCERS DURING THE COVID-19 LOCKDOWN PERIOD

Dorottya Medveczné Atinay, PhD student, Eötvös Loránd University
Faculty of Education and Psychology

László Bernáth PhD, professor, Eötvös Loránd University Faculty of Education and Psychology, Department for Pedagogy and Psychology
Hungarian Dance Academy

Adrien Pigniczkiné Rigó PhD, associate professor, Eötvös Loránd University Faculty of Education and Psychology

Abstract

The paper aims to present how professional dancers (n=163) could cope with the challenges of the lockdown period and how they could be best supported. The study measured mental well-being, resilience, coping strategies of dancers, and specific responses to the lockdown situation. The most influential factor in dancers' mental well-being is their resilience; yet, they can also rely on their skills of coping with adversity, which, ideally, should improve during professional dancing. Of the situation-specific variables, worries and anxiety related to Covid-19, the level of boredom and the use of self-help techniques have proven to be exceptionally important. The conclusion of the research was that besides general worries related to Covid-19, the dancers are also characterized by specific worries (bodyweight control, declineinmovementskills,difficultiesin returningtowork).Itwouldbebeneficialtoput special focus on effective intervention methods for dancers, teach them adequate self-help and coping techniques, and increase their resilience. Although the lockdown period was a special and rare occurrence, similar situations, e.g. injuries, changing company, trips, having children, can frequently arise in dancers' lives.

Keywords: Covid-19, athletes, dancers, lockdown

1. THEORETICAL BACKGROUND

1.1. General impacts of Covid-19 and the lockdown

In response to the Covid-19 pandemic, many governments introduced strict measures to restrict opportunities for outside the home activities (Mattioli, Sciomer, Cocchi, Maffei & Gallina, 2020). The lockdown put tremendous pressure on the general population, and a significant number of papers have been published on how it impacted mental and physical health. The most frequently identified changes caused by Covid-19 have been increased anxiety, depressive moods, reduced physical activity and insufficient diet (Fernández, Crivelli, Guimet, Allegri & Pedreira, 2020; Jaeger, Vidal, Ares, Cheang & Spinellis, 2021; Maaravi & Heller, 2020; Mattioli et al., 2020; Peng, Mo, Liu, Xu, Song, Liu, Fang, Guo, Ye, Yu, Deng & Zhang, 2020).

During the pandemic and the lockdown period, people had to face several stress factors, the most significant of which were the fear of contracting the disease, frustration, the feeling of being restricted, boredom, financial losses and the feeling of being stigmatised (Brooks, Webster, Smith, Wooland, Wesseley, Greenberg & Rubin, 2020). Coping with stressors showed great individual differences, as anxiety, depending on individual functioning, skills and other characteristics, mobilises safety behaviours and psychological adaptation (Chen, Ng, Hui, Au, Wu, Lam, Mak & Liu, 2021). At the same time, just like significant immune challenges in general, the Covid-19 infection itself strongly impacts the functioning of the neuroendocrine system and the immune system, which are related to resilience, stress response and coping strategies (Mehrsafar, Gazerani, Zadeh & Sánchez, 2020).

Studies have tried to identify both the risk factors and the protective factors that were typically present during the Covid-19 pandemic and the lockdown period in relation to adapting to stressful challenges. Results indicate that those who had prior psychiatric diagnoses, had experienced a significant trauma before, had higher scores on the neuroticism variable, and whose fears related to Covid-19 were stronger, were more vulnerable (Fernández et al., 2020). Consequently, the pandemic and the measures taken as a result had a particularly strong effect on the lives of those already struggling with difficulties or with mental ill health. Similarly, more protected against stress and anxiety were the married people, who did sports, had higher levels of income, showed higher resilience and had more adequate coping strategies (Fernández et al., 2020).

The pandemic and the measures and restrictions it brought about also affected somatic well-being. Changes were mainly recorded in eating habits, sleep rhythm, screen time and physical activity (Mattioli et al., 2020; Wong, Tsai, Jonas, Ohno-Matsui, Chen, Ang & Weiting, 2021; Eyimaya & Irmak, 2021; Roitblat, Burger, Vaiman, Neuhiliaieva & Buchris, 2021). During a lockdown, sufficient physical activity at home is extremely important, as physical exercise is an effective method for treating anxiety and building self-regulation. Covid-19 limited opportunities for exercising for all age groups (Shahidi, Williams & Hassani, 2020), which led to changed sports habits in a significant proportion of the population. In order to slow down the spread of coronavirus, authorities in many countries implemented

restrictions, which included restricting access to sports and fitness clubs as well as to outdoor exercise (Mutz & Gerke, 2020). As a result of these measures, people exercised less in the 'stay at home' period than they did before or after the restrictions. The fact that exercise could not be a community experience anymore as well as the limited opportunities for sports proved to be critical (Schnitzer, Schöttl, Kopp & Barth, 2020). The forms of exercise also changed to a considerable degree, as in many cases high intensity sports had to be replaced with low-intensity ones (Schnitzer et al., 2020). Health organisations encouraged people to replace sports activities with home exercise, since being locked in and not doing enough exercise increases the risk of several diseases in all age groups (Mattioli et al., 2020; Schnitzer et al., 2020; Shahidi et al., 2020). Although exercising was a priority issue during the pandemic, a surprisingly low number of studies have been conducted on sports activities during the 'stay at home' period (Schnitzer et al., 2020).

For professional athletes or people with a strong attachment to sports, the lockdown posed further challenges. Competitions, and performances were cancelled; continuing the sports activities was often not possible, and even if it was, the prevention and control rules had to be strictly observed. It was more difficult to keep contact with coaches and fellow athletes, while the social connection to peers was known to be crucial for one's identity as an athlete during the Covid-19 period as well. Among athlete students, physical isolation, which was introduced to contain the spread of the virus, proved to be a significant challenge in mental health and well-being (Graupensperger, Benson, Kilmer & Evans, 2020). Those sports students who had a supporting social network and were able to keep contact with their teammates during the pandemic could remain in better mental health and could preserve their identity to a greater degree (Graupensperger et al., 2020). From a mental health perspective, it proved to be crucial whether athletes had sufficient coping strategies that they could rely on. Lacking these, many of them experienced high levels of anxiety and short or long-term depression. In difficult times several athletes prepared motivational videos and alternative training plans to support each other (Mehrsafar et al., 2020).

During the lockdown period, not only professional athletes but also professional dancers were facing serious challenges. They were unable to do their daily practice as usual, which is crucial for preserving technical skills or for maintaining the ideal body weight. These are serious stress factors in a period already full of uncertainties. Unlike with athletes, there are no research data available on professional dancers during the lockdown period. Therefore, we found it important to examine this specific population in this study and investigate how the isolation caused by the Covid-19 pandemic affected them. Due to the lack of literature on this specific population, our hypotheses were based on general information published on the relationship between the Covid-19 pandemic and professional sports.

1.2. Hypotheses and questions to be examined

We hypothesized that the more adaptive coping methods dancers have, the higher their well-being is. In other words, the more they are able to cope with adversity,

the better they perform in high-stake situations and the less anxious they feel (higher level of freedom from worry), the higher well-being they have.

We also examined what the most typical responses to the lockdown situation were among dancers, and whether they can be organized in factors. We hypothesized that lockdown-specific responses were related to well-being: that is, those who are characterised by more adaptive lockdown-specific responses will show a higher level of well-being. Finally, we examined what the most important explanatory variables of well-being were among dancers during the lockdown.

2. THE STUDY

2.1. Procedure

A cross-sectional analysis was performed to examine the first lockdown period in Hungary among 18 adult dancers. The ethical permission was issued by The Research Ethics Committee of Eötvös Loránd University. No. of permission: 2020/145. The study was conducted in compliance with the ethical guidelines. Respondents participated in the survey anonymously, on a voluntary basis. The link to the survey was made available to dancers through company and university mailing lists on *Qualtrics*. The data recorded were processed in line with the ethical guidelines. Informed consent was provided online, prior to filling out the questionnaire. Participation in the survey did not have any financial benefits. Data were processed from respondents who completed at least 80% of the questionnaire.

2.2. Sample

The study was conducted with the participation of 163 Hungarian adults. The participants were aged 18 to 56 (M=28,86; SD=8.87). The demographic and dance related indicators of the sample are presented in *Table 1.*

Gender Distribution		
female	male	other
69.9%	29.4%	0.6%
Highest Qualification		
university (Masters level)	university (Bachelors level)	secondary school diploma
16%	42.3%	35%
Level of Professionalism		
professional dancers		amateur dancers
86.5%		135%
Permanent Address		
capital city	other city	village
55.8%	35%	9.2%

Dance Style				
classical ballet	modern ballet	folk dance	competitive dance	other
19%	16.6%	18.4%	12.9%	33.1%

Table 1. Demographic and dance related indicators of the sample

Before the coronavirus lockdown, participants were dancing maximum 60 hours on an average week (N=162; M=21,33; SD=13,7). Although the initial plan was to include only professional dancers in the study, in the end, amateur dancers were not excluded. (The reason for this decision is that professional and amateur dancing are not easy to separate, and the respondents were presumably people whose lives were strongly determined by dancing even if they did not classify themselves as professional dancers.)

2.3. Methods

2.3.1. Examining mental well-being

For examining mental well-being, the Hungarian version of the *WHO's short well-being questionnaire* (WBI-5) was used. Validation of the measure took place based on the 2002 national health survey by Hungarostudy. The internal reliability of the *WHO Five Well-Being Index* is excellent (Cronbach-alfa: 0.85). The Hungarian version of the questionnaire is a reliable and valid measure when examining positive quality of life (Susánszky, Konkoly Thege, Stauder & Kopp, 2006). The answers had to be

indicated on a five-point Likert scale, where lower points indicate lower scores of well-being. Calculations were based on the mean of the answers given to the items. The internal reliability on our own sample is (Cronbach-alfa: 0.725), which means that the questionnaire proved to be reliable.

2.3.2. Examining the coping method of dancers

For exploring dancers' coping methods the Hungarian version of the *Athletic Coping Skills Inventory* (ACSI) (Smith, Schutz, Smoll & Ptacek, 1995) was used (Sportolói Megküzdési Kérdőív) (Géczi, Tóth, Sipos, Fügedi, Dancs & Bognár, 2009). The validation of the measure took place on a sample of 95 elite Hungarian ice-hockey players. ACSI-28 consists of 28 items and seven subscales. Participants responded on a 4-point Likert scale, where low points show that they never or hardly ever experience the given statement, while high points indicate that they often or always experience them (the questionnaire also includes reversed items). The internal reliability of the Hungarian version is between 0.59 and 0.84, which is not different from the psychometric data of the original English questionnaire.

In the survey for dancers, certain terms in the items like 'athlete', 'coach', ' competition' were changed to terms like 'dancer', 'master', 'performance'.

2.3.3. Examining the resilience of dancers

Resilience is a dynamic process that maintains positive adaptation and effective coping methods when facing difficulties (Luthar, Cicchetti & Becker, 2000). Dancers' resilience was investigated using the 10-item *Connor-Davidson Resilience Scale* (Járai, Vajda, Hargitai, Nagy, Csókási & Kiss, 2015). The Cronbach-alfa value of the Hungarian questionnaire is 0.85, which is identical to the internal reliability of the original scale. Respondents indicated how true the given statement was to them on a 5-point Likert scale. Low points indicate never or rarely, while high points mean often or almost always.

2.3.4. Examining lockdown-specific coping methods

For exploring responses to the lockdown, a lockdown-specific questionnaire was developed (KK). The survey included questions focusing on the main concerns and coping strategies related to the lockdown introduced in March 2020 as a response to Covid-19. The questions were worded based on dancers' reports. Respondents answered on a 5-point Likert scale, where lower points indicated that the given statement was not typical at all, while higher points showed that it was very typical of the participant. The analysis of the structure of the questionnaire is available in the Results section.

3. RESULTS

The distribution of the variables examined was tested with the Shapiro-wilk Test. In the majority of the variables the result was significant ($p < 0.05$), which means that the variables cannot be considered to have normal distribution. This was taken into consideration when selecting the statistical tests. Basic statistics on the variables used are summarised in *Table 2*.

	Mean	Distri-bution	Minimum	Maximum	Shapiro-Wilk	p-value	cronbach-α
WBI-5_total	1.581	0.522	0.00	3.00	0.985	0.071	0.724
ACSI_coping with adversity	2.707	0.576	1.00	4.00	0.974	0.004	0.602
ACSI_pea-king under pressure	2.822	0.658	1.00	4.00	0.974	0.003	0.661
ACSI_goal setting	2.812	0.530	1.00	4.00	0.970	0.001	0.718
ACSI_concentration	3.196	0.457	1.00	4.00	0.931	0.000	0.637
ACSI_freedom from worry	2.797	0.700	1.00	4.00	0.963	0.000	0.708
ACSI_confidence	3.056	0.517	1.00	4.00	0.962	0.000	0.640
ACSI_coachability	3.268	0.558	1.25	4.00	0.924	0.000	0.694
KK_worries	3.631	0.901	1.00	5.00	0.948	0.000	0.883
KK_self-help	2.723	1.055	1.00	5.00	0.955	0.000	0.669
KK_boredom	2.891	1.062	1.00	5.00	0.968	0.001	0.730

Table 2. Basic statistics

3.1. Testing the hypotheses, answering questions

Our first hypothesis was partly confirmed: the subscale *ACSI_coping* with adversity shows a positive relationship with mental well-being in dancers ($r = 0.36$; $p < 0.00$), and the subscale *ACSI_freedom* from worry ($r = 0,24$; $p < 0,00$) also shows a significant, positive relationship with mental well-being. At the same time, there was no significant relationship found between the subscale *ACSI peaking under pressure* and mental well-being ($r = 0,119$; $p < 0,13$).

On the lockdown-specific questions a principal component analysis was performed with oblimin rotation; this was the pattern matrix that was considered. The items that belonged to more than one factor were removed. An item was removed if it did not load on a factor twice as high as on any other one, or if it loaded higher than 0.3 on 2 factors. After removing the items, the value of the KMO test was 0.792 and the result of the Bartlett test was significant ($p < 0,001$). Therefore, our variables proved to be suitable for Factor Analysis. 3 principal components were received, which explain 64.7% of the variance; they were named *KK_Worries*, *KK_Self-help* and *KK_Boredom.* In order to increase the reliability of the subscale Self-help, one more low loading item was removed; this way the reliability of the subscales became sufficient. (Cronbach-alfa: 0.883 0.669 0.730). Data on the principal component analysis are shown in *Table 3.*

	Worries	Self-help	Boredom
3. I am worried that I will lose some of my technical skills in this period	0.878		
4. I am worried that it will be difficult to return to work	0.864		
I am worried that I will not be able to practice sufficiently in this period	0.834		
9. I am worried that I will not be able to exercise enough in this period	0.765		0.205
1. I am worried that I will not be able to maintain my weight	0.720		
11. I can apply some self-help techniques when I feel anxious		0.840	
10. I can easily calm myself with meditation/relaxation		0.811	
13. I try new things while I cannot dance		0.427	
6. I often feel bored at home			0.883
8. I find it difficult to keep busy now that I cannot dance			0.844
7. I miss the company/my fellow students			0.576

Table 3. Principal component analysis of the items of the lockdown specific questionnaire (The values show the factor loads)

During examining the questions, it was revealed that the responses to the lockdown given by dancers formed factors, which were: *KK_Worries, KK_Self-help* and *KK_Boredom* The reliability of *KK_Self-help* was low (Cronbach-alfa: 0.669).

Our third hypothesis, namely that dancers characterised by more adaptive lockdown-specific responses show a higher level of well-being, was also retained. In the case of WBI-5 and subscale *KK_Worries* a negative significant correlation ($r = -0.38$; $p < 0.00$) was found; between WBI-5 and subscale *KK_Self-help* a positive significant correlation ($r = 0.27$; $p < 0.00$), and between WBI-5 and subscale *KK_Boredom* a negative significant correlation ($r = - 0.34$; $p < 0.00$) was shown.

As the fourth question to be examined we investigated what the most important explanatory variables of well-being were among dancers during the lockdown. First, demographic indicators and indicators related to dancing were entered in the model. As a second step, they were followed by the subscales of the KK questionnaire. In the third step, we added the coping scales which showed a significant correlation with well-being, and in the fourth step, the resilience indicators were added.

Our results show that subscales *KK_Worries* and *KK_Boredom* and resilience indicators have a significant effect on the mental well-being of dancers. The model explains 42.9% of the variance of mental well-being (WBI-5).

Its residual distribution did not differ significantly from the standard one. Based on the above, the model can be considered valid. The regression analysis is presented in *Table 4*.

Model		standard Beta	t-value	Significance
1	Constant variable		5.164	0,000
	Age	-0.223	0.250	0.250
	Period of dancing	0.477	2.509	0.013
	Professional	0.029	0.370	0.013
	Gender	-0.036	-0.454	0.651
2	Constant variable		7.384	0.000
	Age	-0.336	1.978	0.050
	Period of dancing	0.410	2.466	0.015*
	Professional	0.034	0.488	0.626
	Gender	0.005	-0.069	0.945
	KK_boredom	-0.281	-3.679	0,000*
	KK_self-help	0.212	3.121	0.002*
	KK_Worries	-0.265	-3.504	0.001*
3	Constant variable		4.954	0.000*
	Age	-0.315	-1.890	0.061
	Period of dancing	0.341	2.076	0.040*
	Professional	0.015	0.221	0.825
	Gender	0.010	0.144	0.886

Model		standard Beta	t-value	Significance
	KK_boredom	-0.285	-3.807	0.000*
	KK_self-help	0.165	2.419	0.017*
	KK_worries	0.237	-3.141	0.002*
	Acsi_coping with adversity	0.207	2.609	0.010*
	Acsi_freedom from worry	-0.002	-0.024	0.981
4	Constant variable		2.496	0.014
	Age	-0.178	-1.107	0.270
	Period of dancing	0.203	1.278	0.203
	Professional	0.053	0.817	0.415
	Gender	0.015	0.217	0.828
	KK_boredom	-0.202	-2.769	0.006*
	KK_self-help	0.115	1.760	0.081
	KK_worries	-0.284	-3.937	0.000*
	Acsi_coping with adversity	0.126	1.625	0.106
	Acsi_freedom from worry	-0.033	-0.443	0.658
	Resilience	0.316	4.375	0.000*

Table 4. Regression analysis: factors influencing mental well-being
(Dependent variable WBI-5_total)

4. CONCLUSION AND OUTLOOK

4.1. Discussion

The present study examines explanatory variables of the coping strategies and well-being during the first wave of the Covid-19 pandemic. Results suggest that the more adaptive general and situation-specific coping style a dancer has, and the more competent they are in using self-help techniques, the better mental state they are in. At the same time, based on our final model, besides dancing-related worries and feeling bored, the most important influencing factor of well-being was general resilience. In this sample, demographic indicators and indicators related to dancing did not prove to be explanatory variables of well-being.

During the first wave of the pandemic, the lockdown created a new situation for everyone; most people faced fundamental changes in their lives. The representatives of different age groups and professions were facing specific challenges, and how to cope effectively with the new and complex stress situation became a central question.

With our questionnaire specifically developed for dancers (KK), we attempted to discover what experiences the people involved had and what coping methods they tried to use. After analysing our questionnaire prepared on the basis of preliminary interviews, three factors emerged: *Self-help, Boredom* and *Worries* related to the effects of Covid. Of these, the first component measured adaptive thoughts and coping techniques, while the other two measured non-adaptive ones.

An important benefit of the questionnaire developed is that it revealed what the main worries of dancers were during that period. Findings show that worries about technical skills and returning to dancing were cardinal issues. Worries related to losing technical skills came first on the list. 60.1% of the respondents reported that this is very typical of them. 55.5% answered they were considerably worried about not being able to practice properly. Similarly, 54% of the respondents reported strong anxiety about returning to work.

Although restricted training may lead to a decline in certain psychological and physical skills, many times, athletes and dancers return to work after enforced breaks in a positive state. During the time off, various techniques may help to minimise losses, such as exercise with a low load, plyometric training or fast running for training the thigh muscles and diet interventions. Nevertheless, the risk of injuries still increases (Stokes, Jones, Benett, Close, Jill, Hull, Kasper, Kemp, Mellalieu, Peirce, Stewart, Wall, West & Cross, 2020). Gender, age, professional knowledge, and the person's condition before the lockdown might play a crucial role in anxiety during the time off and in worries about returning. One study revealed that women, younger athletes and athletes competing at higher levels had higher levels of anxiety. Athletes often reported an external pressure to return to their field of sport. Those who could continue their training programme during the lockdown reported lower levels of anxiety and turned out to be more determined about returning (Ruffault, Bernier, Fournier & Hauw, 2020).

The findings of our study show that 46% of the dancers asked experienced a great deal of anxiety about maintaining their body weight during the lockdown. In a cross-sectional study, Herrera-Valenzuela et al. (2020) examined martial artists and found that their body weight increased during the lockdown. In the case of dancers, even with normal training, bodyweight is a cardinal issue. The body weight and body fat of younger ballet students are lower; they care more about their body weight and often find it difficult to control it. The pressure on dancers to maintain their body weight below the normal impacts their eating habits and their habits of maintaining their body weight. Dancers often take laxatives or suffer from eating disorders (Abraham, 1996). The lockdown period proved to be particularly difficult in terms of eating habits as well. In a cross-sectional study on a general sample, Kriaucioniene, Bagdonaviciene, Rodríguez-Pérez and Petkeviciene (2020) found that half of the respondents ate more than normally, had more snacks, drank more alcohol and had a lower level of physical activity. Strong feelings such as anxiety, anger, and sadness, which are inevitably present during a pandemic and in lockdown, might induce strong changes in eating habits; they increase the motivation for eating, the amount of food consumed, and shift food choices to unhealthier foods. Weight gain during the lockdown was often accompanied by an inclination to eat more and with eating junk food at home (Barcin-Güzeldere & Devrim-Lanpir, 2021).

Among children and adolescents training to be dancers, body attitude is often linked to depriving themselves of food, maintaining body weight and consequently a high level of anxiety (Szászi & Szabó, 2021). Dancers often do more exercise than instructed in order to burn more calories (Robbeson, Kruger & Wright, 2013). This was not always possible during the lockdown; as a result, the risk to gain weight particularly increased. Other contributors to difficulties with body weight control are insufficient amount of sleep and emotional eating (Zachary, Forbes, Lopez, Pedersen, Welty, Deyo & Kerekes, 2020).

During the lockdown period, dancers had to face various kinds of losses. They could not exercise enough, practice enough, their performances were cancelled and consequently they did not receive any feedback. In other words, the pandemic and the restrictions affected almost all aspects of their lives. This made them one of the higher risk groups. Although no comprehensive studies on dancers are known from this period, their experiences might have been similar to those of athletes. Psychologists also reported that the need for psychological consultations among athletes increased during the pandemic. Based on athletes' reports, the main stress factors were isolation, inactivity, distance from the team, less quality interaction with their coaches and not enough social support. Athletes also missed their fans, sport events and the media as well (Mehrsafar et al, 2020).

For many professional dancers, the company they dance in accounts for a considerable part of their social connections; thus, their social lives also reduced significantly. Those who could not find a suitable alternative had to face boredom as well. The results of the lockdown-specific questionnaire (KK) revealed a negative relationship between feeling bored and the well-being of dancers. The presence of boredom shows a link with dysfunctional behavioural and mental problems, as boredom is not only unpleasant but also leads to anxiety. A negative relationship can be observed between the tendency to be bored and self-control. It was also revealed that people more prone to boredom had a higher tendency to break the rules of social isolation. Tendency to boredom, therefore, mediates the relationship between self-control and breaking the rules (Boylan, Seli, Scoler & Danckert, 2020). Feeling bored often goes hand in hand with increased energy intake (Muscogiuri, Barrea, Savastano & Colao, 2020), which, as pointed out above, is a serious stress factor for dancers since maintaining the ideal body weight is of high importance to them.

Besides identifying the most important Covid- and lockdown-specific worries, our other objective was to discover which coping skills dancers can rely on to achieve a higher level of well-being. Self-help, that is, using different meditation techniques and other anxiety-reducing methods during the pandemic was useful and supportive for everyone. This was confirmed by our study as well. 20.8% of our sample applied meditation, relaxation techniques, and an additional 35% used other self-help techniques. Based on a systematic review, Behan (2020) also emphasises that regular meditation practice resulted in the improvement in the indicators of anxiety, depression and pain. Introducing mindfulness and mediation exercises during the pandemic would complement treatments and interventions well; this would be a cheap yet extremely beneficial method for reducing anxiety. Sharma & Sharma (2020) also point out that practicing meditation and yoga regularly is the best way to maintain a good physical and mental condition, as these activities

enable people to control basic cognitive processes, to stabilise their own state and to integrate their health condition. According to the WHO's recommendation, during lockdown it is important to do physical exercise and practice relaxation activities, to read and to introduce some kind of entertainment. Similarly helpful are recreation, applying some active coping methods and seeking social and emotional relationships (Park, Russel, Fendrich, Finkelstein-Fox, Hutchison & Becker, 2020).

In our study we also wanted to investigate what are the coping mechanisms not specific to the lockdown but more related to sports and dancing that could facilitate dancers' adaptation and well-being. Among the subscales of the *Athletic Coping Skills Inventory*, *Coping with adversity* stood out as an explanatory variable of well-being (besides the control of lockdown-specific features). Being an athlete or a professional dancer comes with a number of challenges. In order to address these, it is important to develop and improve specific skills. In the lockdown period examined, among the coping methods specific to sports/dancing, coping with adversity seems to have been the most effective one. The lockdown period had an impact on a great number of basic functions in the lives of athletes and dancers, similarly to events called 'adversities' in sport and dancing. (These adversities in dancers' lives can be sudden injuries, illnesses, losing a part, a technical error, falling, blackout.). More resilient athletes can adapt better to challenges, can regulate their negative emotions better, can overcome adversities and difficulties occurring in sports more effectively, and can use positive emotions, thus increasing the chance of success (Belem, Nascimento, Vieira & Vieira, 2014; Nezhad & Besharat, 2014; Nezhad & Besharat, 2010). Those who were able to develop adaptive coping strategies through their professional carrier have better chances to experience well-being as well. The ability to cope with unfavourable situations seems to be linked to the increased resilience of the individual (Hammermeister, Ickering, McGraw & Ohlson, 2012).

In our study, the strongest explanatory variable proved to be resilience. So much so that when entered into the model, the significant explanatory force of self-help and coping with adversity disappeared. All these suggest that even though situation-specific and sport-specific coping skills could contribute to increased well-being, it is still resilience, a more general characteristic hidden in the background, that proved to be of prime importance for well-being. In a study by Hosseini and Besharat (2010), resilience had a positive correlation, while anxiety had a negative correlation with sport results. Resilience, therefore, also plays a crucial role in sport success, as it is also linked to sport results. Our findings show that general resilience provides a good basis for becoming more adaptive to different, situation-specific stress situations (related either to sports or to the lockdown).

The results of the present study demonstrate that in the general training and development of professional dancers, technical training should be complemented with developing skills and self-help techniques which could help reduce anxiety and facilitate returning to work in 'passive periods' such as a lockdown, an injury or other enforced breaks. Our recommendation is to increase dancers' resilience and to teach them relaxation techniques. Earlier empirical studies have also confirmed that teaching autogenic training and coping skills result in higher levels of self-confidence, motivation and the ability to focus among dancers (Noh, Morris & Andersen, 2006). These coping skills could prove to be beneficial both in general and

in specific difficult situations (e.g. lockdown, injuries). During these breaks, it is also crucial whether dancers have the necessary and adequate methods for body weight control and how effectively they can fill their extra free time with useful activities.

4.1. Limits

The present study is a cross-sectional study, and consequently, the data are not suitable for drawing cause and effect conclusions. Since the data come from self-reporting questionnaires, it needs to be taken into account that the participants' answers were subjective. In the demographic part, the term professional dancer should have had a more accurate definition so that respondents have a clear understanding of which category they fall into. That would have allowed a better separation of amateur and professional dancers, which, in the present study, was not possible.

It is important to highlight that data were collected in a unique period, and the questions also focused on that same period. Therefore, it would require further research to decide to what extent the findings can be generalised.

4.2. Conclusion

The crisis situation caused by Covid-19 was unique for dancers. They might experience high levels of stress and anxiety about their future during their carrier due to injuries, or there might be periods in their lives when they are not given opportunities to demonstrate their talent or when they feel neglected, but rarely do they face stress factors in as much concentration as they did during the lockdown period caused by the Covid-19 pandemic. The present study mostly confirmed our hypotheses that in a global crisis situation, for dancers, coping methods and knowing and using appropriate self-help techniques are critical for their mental well-being. At the same time, the most important explanatory variable was found to be the ability to develop flexible adaptation skills. It is important how dancers interpret a given situation, whether they are able to adapt quickly and see the situation as a challenge or an obstacle to be overcome.

Since flexibility can also be improved, special emphasis should be put on the sufficient training of athletes or dancers. They should be able to increase their flexibility with self-help methods such as mindfulness techniques.

For this purpose, developing intervention programmes are recommended. Ideally, such programmes should be made available for dance students already at university, as the length of the period spent with dancing was also found to be critical for well-being, and younger dancers presumably do not yet have sufficient coping and self-help techniques. It is important to further examine this very special population, as they are often under permanent and extreme pressure both physically and mentally. In order to reduce their fragility, it is important to have as much and as detailed information as possible on their difficulties, challenges and coping methods.

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