

Self- and Other-Focused Emotional Intelligence, Situational Emotional Understanding, and Experience of Loss

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Abstract: The links between emotional intelligence and loss are under-researched, even though a lot of studies have investigated the psychological outcomes of traumatic experiences. Many people suffered multiple losses during the COVID-19 pandemic, including a loss of job, money, support services, or loved ones. The loss of a loved one might result in severe psychological trauma, and research suggests that early-life trauma relates to numerous forms of emotion dysregulation, including stress-reactivity. The consequences of loss for people with special needs deserve special attention since it often means not only the loss of a loved one but also the usual way of life. Thus, it is essential to analyze various aspects of loss experience, including the impact on emotional regulation, to reduce the harmful consequences of the COVID-19 pandemic. The purpose of this research was to examine emotional intelligence in groups of those who have a recent experience of loss and those who have not and to establish the impact of the experience of loss on the human psyche and mental health. We have analyzed the results of a simple random sample of gymnasium students ($n=362$). We hypothesized that the recent loss of a loved one diminishes the ability to understand self and other focused emotions as well as situational emotions. The survey has revealed that respondents who experienced the loss of a loved one understood better how individuals felt in the presented situations than those who did not have such experience. The premise that people who have experienced the loss of a loved one have a lower understanding of emotions than their peers who did not have such an experience has not been confirmed.

Keywords: Emotional intelligence, loss, COVID-19, pandemic.

INTRODUCTION

Globally, as of 27 October 2020, there have been 1.157.509 deaths due to COVID-19. The world is facing around six thousand deaths, daily reported to World Health Organization (WHO). Many people suffered grief and multiple losses during the COVID-19 pandemic, including job loss, money, support services, or loved ones [1-4]. The loss of a loved one might result in severe psychological trauma [5]. Some research indicates that the younger a person who experiences it is, the worse the consequences [6]. Moreover, research suggests that early-life trauma relates to numerous forms of emotion dysregulation, including stress-reactivity, which is one factor underlying the link between trauma and psychological complaints [4-8]. Thus, it is essential to analyze various aspects of loss experience, including the impact on emotional regulation, to reduce the harmful consequences of the COVID-19 pandemic.

Some decades ago, researchers proposed the concepts of Emotional Intelligence (EI) and Emotional Understanding (EU). The EI can generally be defined as the ability or knowledge to perceive and understand

emotional processes and to regulate them well [9-12]. The EI applies to two comparatively different theoretical constructs: ability EI and trait EI. Ability EI refers to “the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth”, which emphasizes EI as an actual ability [8]. The ability EI model conceptualizes EI as a set of abilities to accurately perceive and express emotions, to use emotions in one’s thinking, to understand emotions, and to consciously regulate emotions. Another widely used model is the trait EI model. Trait EI is defined as an arrangement of emotional perceptions at the lower levels of personality hierarchies [13-17]. Trait EI denotes self-perceived emotionality and emotional efficacy that positions within the personality domain [18].

Furthermore, researchers identified that EI is composed of self-and other-focused dimensions. Other-focused EI dimensions relate to the aim of straight modifying other people’s psychological states, including behavior, mood, or emotions, and can be referred to as other-focused emotional skills. This concept of emotional skills is based on theories of social-information processing [19-23] and social competence [24]. While other-focused EI dimensions

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are directed at social interactions and might be important during communicating with others, self-focused EI dimensions are directed at one's own mood state and may contribute to well-being when engaging in emotionally challenging tasks. This concept relates to theories on stress, coping, and emotion regulation [13-15]. Interestingly, EI is considered to encompass four factors of emotion-related abilities: (1) the accurate perception of emotions (Perception), (2) the ability to generate emotions to facilitate cognitive performance (Facilitation), (3) the ability to understand emotions (EU), (4) the ability to manage one's own and other's emotions intentionally (Management) [8, 15].

Emotional understanding (EU) is one of four abilities proposed as components of emotional intelligence [16]. Mayer and colleagues suggested several areas of reasoning underlying EU, including "differentiate between moods and emotions", "understand how a person might feel in the future or under certain conditions", and "appraise the situations that are likely to elicit emotions" [25-28].

COVID-19 pandemic, especially if it brings losses of the loved ones, is a robust stressor leading to post-traumatic stress responses and may be designated as a powerful intrusion into the self, its organization, integrity, and adaptive functioning. In 1994, Parson proposed the damaged self-syndrome concept: "children with damaged selves appear to be in constant psychological distress, and the sense of powerlessness over the traumatizing event creates within the child a sense of insecurity and an experienced sense of impotence. Chronic feelings of impotence harm the child's sense of self, which turns to a compensatory feeling of omnipotence to cope. With this sense of omnipotence, the child feels and behaves as if nothing can affect it, that the self is impregnable against further hurt and feelings. Moreover, the damaged self often maintains its organization and integrity by managing anxiety by creating defenses to protect inner vulnerability" [29]. Even though Parson applied this concept in a different context than the pandemic experience, it can be assumed that the uncertainty and losses during COVID-19 might result in similar consequences. Having recent researches in the field in mind [5, 6, 17, 19-22], this study intended to contribute to a better understanding of mechanisms underlying loss experience and emotional experience.

It is worth noting that for people with intellectual disabilities, the loss of parents or other loved ones is also related to the loss of someone the most familiar

with their peculiarities, special needs [30-32]. One of the factors that impact dealing with loss for people with special needs is that they may be not told about the death of a loved one and, accordingly, not have a chance to live through grief and be allowed to call it bereavement formally. They even may not know what happened and why a person has disappeared from their lives. It occurs due to stereotyping people with intellectual disabilities and mistaken beliefs about them. Others' will to protect them only complicates the process of living through grief. Also, often the relatives who are grieving themselves are not sure if they may deal with the reaction of a person with special needs [30]. An additional issue of dealing with the death of a parent is when a person has to leave their home. All the changes, including change of guardians or caretakers, meeting new people, and living in a new place, are additional factors that worsen the process of coping with loss and social integration.

Our research aimed to evaluate self- and other-focused emotional intelligence and situational emotional understanding in groups of adolescents (girls and boys) who experienced and did not experience the recent loss of a loved one and determine the impact of the loss of a loved one on the condition of people with special needs. We hypothesized that the recent loss of a loved one diminishes the ability to understand self and other focused emotions as well as situational emotions [33-38]. We have also expected to identify emotional intelligence differences in different gender groups. In this paper, we analyze the results of a simple random sample of gymnasium students.

MATERIALS AND METHODS

In our research, a simple random sample consisted of 362 Lithuanian gymnasium students. Overall, data from seven different schools were collected in the Vilnius and Telšiai regions. The mean age of the respondents was 16.31 years (± 1.00 SD), and 59% were female. Students completed an online-gamified questionnaire at www.kasesu.lt. We informed the participating schools, students, and their parents/guardians about the anonymous and voluntary participation, and the respondents (or their parents/guardians, when necessary) provided their consent. The procedure was administered online at www.kasesu.lt by "Blue Bridge", Ltd., J. Jasinskio g. 16A, LT-03163 Vilnius, Lithuania, and followed the General Data Protection Regulation (GDPR) guidelines. Before data gathering, this study was reviewed and approved by the research ethics board of the Institute of Management and Psychology.

Self-focused and other-focused emotional intelligence. We measured EI with the 28-item Rotterdam Emotional Intelligence Scale (REIS) [39, 40]. The REIS is a self-reported EI instrument based on the ability EI model. The REIS consists of the dimensions of self-focused emotion appraisal (Cronbach alpha in our study was 0.87), self-focused emotion regulation (Cronbach alpha in our study was 0.88), other-focused emotion appraisal (Cronbach alpha in our study was 0.82), and other-focused emotion regulation (Cronbach alpha in our study was 0.88). We asked the participants to indicate the extent to which they agreed with the items on a 5-point scale ranging from 1 (totally disagree) to 5 (totally agree). Example items are “I can distinguish my own emotions well” (self-focused emotion appraisal), “I do not let my emotions take over” (self-focused emotion regulation), “I know which feelings others experience” (other-focused emotion appraisal), and “I am able to calm others down” (other-focused emotion regulation). We used the REIS in the present study because it is one of the few EI questionnaires that separately assess self- and other-focused EI dimensions.

Situational emotional understanding. We applied the situational test of emotional understanding – brief (STEU-B) measure to assess an individual's ability to understand the connections between events and emotions (i.e., the understanding emotions branch) [41]. The content of the items of the STEU was derived from Roseman's [42-44] appraisal theory. The STEU-B consists of scenarios covering the following emotions: sadness, pride, relief, joy, regret, gratitude, distress, hope, contempt, surprise, frustration, anger, fear, and dislike. The scenarios contain ample multiple-choice items [45-48]. In each scenario, an emotional situation is described, and five emotions are presented. Respondents are asked to indicate which emotion is most likely to be generated by that particular situation. The answers of the items are scored as either correct or incorrect based on the appraisal theory. The STEU-B was scored according to the original scoring system. Specifically, the correct answer was scored as “1”, and the other answers were scored as “0” [49-51]. The split-

half reliability Spearman-Brown coefficient (0.71) was used to assess the reliability of this test.

Experience of loss of a loved one. We measured the experience of a loss of a loved one with the question: Have you ever experienced the loss of a loved one? Students had to fill in the answer ranging from “Never” to “x years ago”, “x months ago”, “x weeks ago”, “x days ago”.

We used Statistical Package for the Social Sciences, AMOS 26.0 programs for data analysis. The distribution of variables was statistically significantly different from normal ($p < 0.05$) [52-56]; the visual assessment of the distribution of variables also did not correspond to the normal distribution. Based on these results, we have chosen non-parametric statistical criteria for the data analysis. The Spearman correlation coefficient, the Mann-Whitney criterion, and the Friedman criterion were used to analyze emotional intelligence's peculiarities and the loss of a loved one [57-60].

RESULTS

At first, we aimed at identifying the peculiarities of adolescents' emotional intelligence. Table 1 presents the descriptives, mean estimates, standard deviations, medians of the emotional intelligence scales [61-64].

The Friedman criterion was used to evaluate whether these emotional intelligence estimates differ statistically significantly. Table 2 shows statistically significant differences between the distributions of emotional intelligence scale estimates ($p < 0.001$, Chi-square = 23.55). The most expressed was self-focused emotion appraisal ($M = 3.94$, mean rank = 2.74, $SD = 0.77$), the least expressed was self-focused emotion regulation ($M = 3.75$, average rank = 2.26), $SD = 0.80$) [65-68].

Furthermore, we calculated situational emotional understanding evaluations. Table 3 presents the descriptives – mean, standard deviation, and median of the situational emotional understanding test [69, 70].

Table 1: Descriptive of Emotional Intelligence Subscales

	Min.	Max.	Mean	SD	Median
Self-focused emotion appraisal	1.57	5	3.94	0.77	3.9
Other-focused emotion appraisal	1.14	5	3.92	0.75	4.0
Self-focused emotion regulation	1.00	5	3.75	0.80	3.7
Other-focused emotion regulation	1.00	5	3.79	0.78	3.9

Table 2: Emotional Intelligence Subscales: Statistically Significant Differences

	Mean rank	Chi-square	p ($p < 0,001$)
Self-focused emotion appraisal	2.74	23.55	0.000*
Other-focused emotion appraisal	2.60		
Self-focused emotion regulation	2.26		
Other-focused emotion regulation	2.41		

Table 3: Situational Emotional Understanding Test Estimates

	Min.	Max.	Mean	SD	Median
Situational emotional understanding	1.00	16.00	8.34	3.41	9

Furthermore, we have evaluated adolescents' experiences of the loss of a loved one. Of the 362 adolescents, 57% indicated that they had recently suffered the loss of a loved one. Respondents were also asked how long ago they had lost a loved one: how many days, weeks, months, or years ago [71-74]. Of the 206 adolescents who reported losing a loved one, 33 study participants indicated the exact time when this occurred. Due to the small number of respondents, it was decided to summarize the experience time and convert it into weeks. The results are presented in Table 4.

As can be seen from the data obtained, the subjects experienced the loss of a loved one for a period on

average 22 weeks ago [75]. We hypothesized that adolescents who have experienced the loss of a loved one have a lower understanding of emotions than their peers who did not have such an experience. Table 5 presents the results obtained by comparing the estimates of emotional intelligence subscales with study participants with or without loss experience using the Mann-Whitney criterion [76-80].

The results show a statistically significant difference when comparing emotional intelligence in groups of those who experienced loss and those who did not experience [81-84]. Respondents who experienced the loss of a loved one (mean rank = 129.12) understood better how individuals felt in the presented situations

Table 4: Experience of Loss: How Many Weeks Ago?

	Min.	Max.	Mean	SD	Median
How many weeks ago was experienced the loss of a loved one	2.00	55.71	22.13	14.66	21.43

Table 5: Mann Whitney (U) Test Comparisons Based on Emotional Intelligence and Experience of Loss of a Loved One

Emotional Intelligence	Experience	N	Median	Mean ranks	Mann-Whitney U	Z	p	Effect size
Self-focused emotion appraisal	Loss	143	3.9	120.05	6871	-1.022	0.307	0.06
	No loss	104	4	129.43				
Other-focused emotion appraisal	Loss	142	4	121.01	7030	-0.644	0.520	0.04
	No loss	104	4	126.90				
Self-focused emotion regulation	Loss	141	3.7	119.73	6871.5	-0.842	0.400	0.05
	No loss	104	3.9	127.43				
Other-focused emotion regulation	Loss	141	3.9	122.33	7237	-0.174	0.862	0.01
	No loss	104	3.9	123.91				
Situational emotional understanding	Loss	137	9	129.12	5874	-2.228	0.026	0.14
	No loss	103	8	109.03				

Table 6: Mann Whitney (U) Test Comparisons Based on Emotional Intelligence and Gender

Emotional Intelligence	Gender	N	Median	Mean ranks	Mann-Whitney U	Z	p	Effect size
Self-focused emotion appraisal	Male	106	4	131.31	6698.5	-1.398	0.162	0.09
	Female	141	3.9	118.51				
Other-focused emotion appraisal	Male	105	4	127.60	6972	-0.782	0.434	0.05
	Female	141	4	120.45				
Self-focused emotion regulation	Male	104	4	136.93	5883	-2.649	0.008	0.17
	Female	141	3.6	112.72				
Other-focused emotion regulation	Male	104	3.9	126.33	6985.5	-0.634	0.526	0.04
	Female	141	3.9	120.54				
Situational emotional understanding	Male	100	6	91.95	4144.5	-5.408	0.000	0.35
	Female	140	10	140.90				

than adolescents who did not have such experience (mean rank = 109.03), $U = 5874$, $p = 0.026$. The premise that adolescents who have experienced the loss of a loved one have a lower understanding of emotions than their peers who did not have such an experience has not been confirmed. It has also been found that the experience of loss significantly affects an individual's overall well-being and mental health. Moreover, we have also assumed that females' understanding of emotions is higher than males' one. The research indicated that 48.60% of males and 62.60% of females reported the experience of the loss of a loved one. Therefore, it was decided to perform an analysis to find out whether there is a difference in the understanding of emotions between different gender groups [85]. Table 6 presents the results obtained by comparing the estimates of emotional intelligence scales by gender, using the Mann-Whitney criterion.

Comparing the estimates of emotional intelligence scales and gender, it was found that males (mean rank = 136.93) have a statistically significant higher score on their emotion regulation scale than females (mean rank = 112.72), $U = 5883$, $p = 0.008$. Meanwhile, females (mean rank = 140.90) had a statistically significant higher score of situational emotional understanding than males (mean rank = 91.95), $U = 4144.5$, $p = 0.000$. To sum up, males are better able to regulate their emotions than females. Meanwhile, females demonstrated a higher situational emotional understanding. Females were better at recognizing emotions, even though they had experienced the loss of a loved one.

DISCUSSION

This research investigated whether adolescents who experienced the loss of a loved one have a lower

understanding of emotions than peers who did not have such an experience. This study also demonstrated the correlation between gender and the ability to regulate emotions.

Surviving the death of one or both parents or relatives/friends in adolescence has long-term consequences for adolescent development and psychological well-being. Higher risk of suicide attempts, depression, decreased self-esteem, increased crime, aggressive behavior, drug, and alcohol abuse, and decreased academic achievement are some of the costs [86, 87]. The death of loved ones among teenagers is a common experience. And regardless of the cause of death or kinship with the deceased, the adolescent experiences long-term difficulties like grief, mental health problems, academic difficulties, relationship problems, self-harm. The loss of a loved one experiences causes strong feelings of anger and injustice, suicide, and guilt [88].

Berg, Rostila, Saarela, and Hjern [30] clarified the links between experienced parental deaths in childhood and academic achievement. The results show that poorer learning outcomes and school failures characterize those who have experienced losses at this age. Adolescents with sudden parental loss have lower academic attainment, problems in concentrating and learning, and they drop out of school, are convinced that teachers mistreat them or their peers [89]. Marcussen, Hounsgaard, O'Connor, Moller, Wilson, and Thuen [32] conducted a study explaining mental health problems such as complicated and prolonged grief. The results obtained confirm the consequences of the loss on young adults' mental health after the death of their parents, but a higher risk of prolonged and complicated grief, alcohol abuse, and the loss of the death of divorced parents.

Berg, Rostila, and Hjern [30] explained the relationship between parental death due to natural and external causes (suicides, accidents, or homicides) before 18 and the risk of developing depression in adulthood. This study suggests that parents' loss due to natural causes is associated with a small increase in the risk of long-term consequences for psychological well-being and health. Meanwhile, children who lose their parents due to external causes of death, such as accidents, or homicides, are at a much higher risk of long-term consequences and at a high risk of developing depression (more severe forms are likely). Surprisingly, results showed that adolescents who experienced the loss of a loved one had a better understanding of how individuals felt in the situations presented than their peers who did not have such an experience. It could be presumed that the adolescents who experienced the loss are able better understand situational emotions because they had to experience intense emotions themselves.

Furthermore, based on previous research, we assumed that there might exist some emotional intelligence differences based on gender. Salguero, Extremera, and Fernandez-Berrocol [32] found that females better perceive and recognize emotions in themselves and others, are able to use emotions for focus and creative thinking. Thus, research demonstrated females' ability to analyze, understand, regulate emotions, moods in oneself and others better than males [90, 91].

Loss and grief are phenomena that are difficult to cope with for most people. Individuals with intellectual disabilities, though, are more perceptive to the negative outcomes of these phenomena since, along with the deaths of significant ones, they have to cope with relocations, loss of friends, jobs, surroundings. Individuals who understand that they are treated differently may experience intensive grief. The researchers [32, 56] emphasize that during the conversation about the death of a parent, individuals with intellectual disabilities should be addressed directly, not by referring to another person. Also, euphemisms shouldn't be used since they are useless and confusing.

This study's results are partly consistent with previous studies, as females were found to perform a situational emotional comprehension test better than males. They better recognized and named how the individuals would feel in the situations presented. Males, meanwhile, have better regulation of their

emotions. Some studies show that females are more dissatisfied with themselves, have difficulties in everyday life, do not have clear goals and direction in life, and experience more negative emotions [34]. Thus, our results are consistent with the works of other authors.

The limitation of the current study firstly consists of location because the study was conducted in Lithuania, and the results might reflect the specifics of this area. Furthermore, we have analyzed the results of the adolescents' sample, which was random, not a representative sample. It would be desirable to analyze a representative sample of adolescents and to compare the groups of adults and adolescents in the future. Moreover, based on the data obtained, it is possible to conclude only the existence of variations of the examined variables. One of the implications for future research is creating an experimental or longitudinal design.

CONCLUSIONS

This study intended to contribute to a better understanding of mechanisms underlying loss experience and emotional experience. We considered that it is essential to investigate the relationship between loss experience and emotional intelligence. The purpose of our research was to evaluate self- and other-focused emotional intelligence and situational emotional understanding in groups of adolescents (girls and boys) who experienced and did not experience the recent loss of a loved one.

We hypothesized that the recent loss of a loved one diminishes the ability to understand self and other focused emotions as well as situational emotions. In this paper, we analyze the results of a simple random sample of gymnasium students. The hypothesis that adolescents who have experienced the loss of a loved one have a lower understanding of emotions than their peers who did not have such experiences has not been confirmed. According to the results obtained, the participants of the study who experienced the loss of a loved one had a better understanding of how individuals felt in the presented situations than their peers who did not have such experience. Attention was paid to the specifics of the mental state of people who experienced loss. Mental and somatic health problems may arise. Life satisfaction, social engagement, and overall mental health were found to be significantly impaired. Also, people with special needs experience loss much more painfully. Among other things, this is

due to the fact that loss often leads to significant changes in their lives.

This study also demonstrated that males are better able to regulate their emotions than females. Meanwhile, females demonstrated a higher situational emotional understanding: they were better at recognizing emotions, even after losing a loved one. Our research modestly contributed to the previous research in the field. This research implies that loss experience might affect emotional intelligence in a particular way, even though our findings need further investigation. We hope that this research provided empirical evidence on gender differences in emotional intelligence, but it is necessary to explore these results thoroughly.

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REFERENCES

- [1] Dirk VD, Garssen B, Visser A. Burnout prevention through personal growth. *International Journal of Stress Management* 2005; 12(1): 62-77. <https://doi.org/10.1037/1072-5245.12.1.62>
- [2] Stuart C, Meyer I. International perspectives during the time of COVID-19. *International Perspectives in Psychology: Research, Practice, Consultation* 2020; 9(3): 145-146. <https://doi.org/10.1037/ipp0000142>
- [3] Lissoni B, Del Negro S, Brioschi P, Casella G, Fontana I, Bruni C, Lamiani G. Promoting resilience in the acute phase of the COVID-19 Pandemic: Psychological interventions for Intensive care unit (ICU) clinicians and family members. *Psychological Trauma: Theory, Research, Practice, and Policy* 2020; 12: 105-107. <https://doi.org/10.1037/tra0000802>
- [4] Kristen W. Grief and COVID-19: Mourning our bygone lives. *American Psychological Association* [cited 2020 17 December]. Available from: <https://www.apa.org/news/apa/2020/04/grief-covid-19>
- [5] Edward P. Understanding children with war-zone traumatic stress exposed to the world's violent environments. *Journal of Contemporary Psychotherapy* 2000; 30(4): 325-340. <https://doi.org/10.1023/A:1010281818958>
- [6] Ank R, Pauline J, Steenweg-de Graaff J, Measelle J, Ende J, Raat H, Jaddoe V, Hofman A, Verhulst F, Tiemeier H. Young children's self-reported emotional, behavioral, and peer problems: The Berkeley puppet interview. *Psychological Assessment* 2013; 25(4): 1273-1285. <https://doi.org/10.1037/a0033976>
- [7] Petrides KV. Ability and trait emotional intelligence. In: Chamorro-Premuzic T, Furnham S (Eds.). *The Blackwell-Wiley handbook of personality and individual differences*. New York: Wiley 2011.
- [8] Mayer J, Salovey P. What is emotional intelligence? In: Salovey P, Sluyter DJ (Eds.). *Emotional Development and Emotional Intelligence: Educational Implications*. New York: Harper Collins 1997.
- [9] Petrides KV, Pita R, Kokkinaki F. The location of trait emotional intelligence in personality factor space. *British Journal of Psychology* 2007; 98: 273-289. <https://doi.org/10.1348/000712606X120618>
- [10] Kafetsios K, Zampetakis L. Emotional intelligence and job satisfaction: Testing the mediatory role of positive and negative affect at work. *Personality and Individual Differences* 2008; 44: 712-722. <https://doi.org/10.1016/j.paid.2007.10.004>
- [11] Lemerise E, Arsenio W. An integrated model of emotion processes and cognition in social information processing. *Child Development* 2000; 71: 107-118. <https://doi.org/10.1111/1467-8624.00124>
- [12] Rose-Krasnor L. The nature of social competence: A theoretical review. *Social Development* 1997; 6: 111-135. <https://doi.org/10.1111/j.1467-9507.1997.tb00097.x>
- [13] Lazarus R, Folkman S. *Stress, appraisal, and coping*. New York, NY: Springer 1984.
- [14] Lazarus R. From psychological stress to the emotions: A history of changing outlooks. *Annual Review of Psychology* 1993; 44: 1-22. <https://doi.org/10.1146/annurev.ps.44.020193.000245>
- [15] Grandey A, Melloy R. The state of the heart: Emotional labor as emotion regulation reviewed and revised. *Journal of Occupational Health Psychology* 2017; 22: 407-422. <https://doi.org/10.1037/ocp0000067>
- [16] Mayer J, Caruso D, Salovey P. The ability model of emotional intelligence: Principles and updates. *Emotion Review* 2016; 8: 290-300. <https://doi.org/10.1177/1754073916639667>
- [17] Edward P. Inner-city children of trauma: Urban violence traumatic stress response syndrome (U-VTS) and therapists' responses. In: Lindy J, Wilson J (Eds.). *Countertransference in the Treatment of PTSD*. New York: Guilford Publications, Inc. 1994.
- [18] MacAulay C, Angus L. The narrative-emotion process model: an integrative approach to working with complex post-traumatic stress. *Journal of Psychotherapy Integration* 2019; 29(1): 42-53. <https://doi.org/10.1037/int0000118>
- [19] Jenna B, O'Connor C, Protopopescu A, Jetly R, Ruth L, McKinnon M. The contributions of emotion regulation difficulties and dissociative symptoms to functional impairment among civilian in patients with post-traumatic stress symptoms. *Psychological Trauma: Theory, Research, Practice, and Policy* 2020; 12(7): 739-749. <https://doi.org/10.1037/tra0000576>
- [20] Hellwig S, Roberts R, Schulze R. A new approach to assessing emotional understanding. *Psychological Assessment* 2020; 32(7): 649-662. <https://doi.org/10.1037/pas0000822>
- [21] Pekaar K, Bakker A, Born M, Van Der Linden D. The consequences of self-and other-focused emotional intelligence: Not all sunshine and roses. *Journal of Occupational Health Psychology* 2019; 24(4): 450-466. <https://doi.org/10.1037/ocp0000134>
- [22] Ainat R, Loomis AM, Hamlin ED, Hodgdon H, Spinazzola J, Bessel K. The impact of neurofeedback training on children with developmental trauma: a randomized controlled study. *Psychological Trauma: Theory, Research, Practice, and Policy* 2020; 12(8): 918-929. <https://doi.org/10.1037/tra0000648>
- [23] MacCann C, Richard R. New paradigms for assessing emotional intelligence: theory and data. *Emotion* 2008; 8: 540-551. <https://doi.org/10.1037/a0012746>
- [24] Roseman I. A model of appraisal in the emotion system: Integrating theory, research, and applications. In: KR Scherer, A Schorr and T Johnstone (Eds.), *Appraisal Processes in Emotion: Theory, Methods, Research*. New York: Oxford University Press 2001.
- [25] Berg L, Rostila M, Anders H. Parental death during childhood and depression in young adults – A national cohort study.

- Journal of Child Psychology and Psychiatry 2016; 57(9): 1092-1098.
<https://doi.org/10.1111/jcpp.12560>
- [26] Feigelman W, Rosen Z, Joiner T, Silva C, Mueller A. Examining longer-term effects of parental death in adolescents and young adults: Evidence from the national longitudinal survey of adolescent to adult health. *Death Studies* 2017; 41(3): 133-143.
<https://doi.org/10.1080/07481187.2016.1226990>
- [27] Andriessen K, Mowl ELJ, Dudley M, Draper B, Mitchell PB. Help-seeking experiences of bereaved adolescents: A qualitative study. *Death Studies* 2018; 43(1): 1-8.
<https://doi.org/10.1080/07481187.2018.1426657>
- [28] Andriessen K, Lobb E, Mowl J, Dudley M, Draper B, Mitchell PB. Don't bother about me. The grief and mental health of bereaved adolescents. *Death Studies* 2018; 42(10): 607-615.
<https://doi.org/10.1080/07481187.2017.1415393>
- [29] Burns M, Brook G, Samuel K, Ayelet T. Childhood bereavement: Understanding prevalence and related adversity in the United States. *American Journal of Orthopsychiatry* 2020; 90(4): 391-405.
<https://doi.org/10.1037/ort0000442>
- [30] Berg L, Rostila M, Anders H. Parental death during childhood and subsequent school performance. *Pediatrics* 2014; 133(4): 682-689.
<https://doi.org/10.1542/peds.2013-2771>
- [31] Oosterhoff B, Kaplow J, Layne C. Links between bereavement due to sudden death and academic functioning: Results from a nationally representative sample of adolescents. *School Psychology Quarterly* 2018; 33(3): 372-380.
<https://doi.org/10.1037/spq0000254>
- [32] Jette M, Hounsgaard L, O'Connor M, Moller S, Wilson R, Thuen F. Parental death in young adults with divorced grief and mental health. *Death Studies* 2019; 44(11): 1-14.
<https://doi.org/10.1080/07481187.2019.1648337>
- [33] Salguero J, Extremera N, Fernández-Berrocal P. Emotional intelligence and depression: The moderator role of gender. *Personality and Individual Differences* 2012; 53: 29-32.
<https://doi.org/10.1016/j.paid.2012.02.006>
- [34] Uyan-Semerci P, Erdogan E, Akkan B, Muderrisoglu S, Karatay A. Contextualizing subjective well-being of children in different domains: Does higher safety provide higher subjective well-being for child citizens? *Children and Youth Services Review* 2017; 80: 52-62.
<https://doi.org/10.1016/j.childyouth.2017.06.050>
- [35] Tokareva N, Zykova S, Talismanov V. The relationship of psychological, clinical and biological components in epilepsy. *E3S Web of Conferences* 2020; 217: 08006.
<https://doi.org/10.1051/e3sconf/202021708006>
- [36] Maslak K, Favara-Scacco C, Barchitta M, Agodi A, Astuto M, Scalisi R, Italia S, Bellia F, Bertuna G, D'Amico S, La Spina M, Licciardello M, Lo Nigro L, Samperi P, Miraglia V, Cannata E, Meli M, Puglisi F, Parisi GF, Russo G, Di Cataldo A. General anesthesia, conscious sedation, or nothing: Decision-making by children during painful procedures. *Pediatric Blood and Cancer* 2019; 66(5): e27600.
<https://doi.org/10.1002/pbc.27600>
- [37] Bongiovanni A, Parisi GF, Scuderi MG, Licari A, Brambilla I, Marseglia GL, Leonardi S. Gastroesophageal reflux and respiratory diseases: Does a real link exist? *Minerva Pediatrica* 2019; 71(6): 515-523.
<https://doi.org/10.23736/S0026-4946.19.05531-2>
- [38] Shulyak A, Gorpynchenko I, Drannik G, Poroshina T, Savchenko V, Nurimanov K. The effectiveness of the combination of rectal electrostimulation and an antidepressant in the treatment of chronic abacterial prostatitis. *Central European Journal of Urology* 2019; 72(1): 66-70.
- [39] Giallongo A, Parisi GF, Licari A, Pulvirenti G, Cuppari C, Salpietro C, Marseglia GL, Leonardi S. Novel therapeutic targets for allergic airway disease in children. *Drugs in Context* 2019; 8: 212590.
<https://doi.org/10.7573/dic.212590>
- [40] Parisi GF, Leonardi S, Ciprandi G, Corsico A, Licari A, Miraglia Del Giudice M, Peroni D, Salpietro C, Marseglia GL. Cetirizine use in childhood: An update of a friendly 30-year drug. *Clinical and Molecular Allergy* 2020; 18(1): 1-6.
<https://doi.org/10.1186/s12948-020-00118-5>
- [41] Koneva ES. The effectiveness of gait rehabilitation in the patients following endoprosthetic hip replacement by means of the biofeedback-based hardware video reconstruction of the walking stereotype. *Voprosy Kurortologii, Fizioterapii, i Lechebnoi Fizicheskoi Kultury* 2015; 92(6): 23-29.
<https://doi.org/10.17116/kurort2015623-29>
- [42] Lyadov KV, Koneva ES, Polushkin VG, Sultanov EYu, Lukashin MA. Randomized controlled study on pulmonary rehabilitation in COVID-19 patients with pneumonia. *Pulmonologiya* 2020; 30(5): 569-576.
<https://doi.org/10.18093/0869-0189-2020-30-5-569-576>
- [43] Banyra OB, Ivanenko O, Shulyak A. Mental status in patients with chronic bacterial prostatitis. *Central European Journal of Urology* 2013; 66(1): 93-100.
<https://doi.org/10.5173/cej.2013.01.art29>
- [44] Koneva ES. The experience with the comprehensive rehabilitation of the elderly patients presenting with a concurrent pathology following the surgical intervention for the total endoprosthetics of the knee joint. *Voprosy Kurortologii, Fizioterapii, i Lechebnoi Fizicheskoi Kultury* 2014; 3: 45-53.
- [45] Mullen A, Butrous G, Abzaliev K. Retrospective efficacy analysis of acute vasoreactivity test as a criterion for surgery in children with inborn left-to-right blood shunting and pulmonary arterial hypertension. *Russian Journal of Cardiology* 2018; 23(7): 41-46.
<https://doi.org/10.15829/1560-4071-2018-7-41-46>
- [46] Yumashev AV, Koneva ES, Borodina MA, Lipson DU, Nedosugova AB. Electronic apps in assessing risk and monitoring of patients with arterial hypertension. *Prensa Medica Argentina* 2019; 105(4): 235-245.
- [47] Banyra O, Sheremeta R, Shulyak A. Strangulation of the penis: Two case reports. *Central European Journal of Urology* 2013; 66(2): 242-245.
<https://doi.org/10.5173/cej.2013.04.art2>
- [48] Parisi GF, Leonardi S, Ciprandi G, Corsico A, Licari A, Miraglia del Giudice M, Peroni D, Salpietro C, Marseglia GL. Antihistamines in children and adolescents: A practical update. *Allergologia et Immunopathologia* 2020; 48(6): 753-762.
<https://doi.org/10.1016/j.aller.2020.02.005>
- [49] Pappalardo MG, Parisi GF, Tardino L, Savasta S, Brambilla I, Marseglia GL, Licari A, Leonardi S. Measurement of nitric oxide and assessment of airway diseases in children: An update. *Minerva Pediatrica* 2019; 71(6): 524-532.
<https://doi.org/10.23736/S0026-4946.19.05513-0>
- [50] Koneva ES, Lyadov KV, Shapovalenko TV, Zhukova EV, Polushkin VG. The hardware techniques for the restoration of the gait stereotype in the patients following total hip replacement: The personalized approach. *Voprosy Kurortologii, Fizioterapii, i Lechebnoi Fizicheskoi Kultury* 2018; 95(1): 26-34.
<https://doi.org/10.17116/kurort201895126-34>
- [51] Tuleutaev R, Oshakbayev A, Abzaliev K, Rakishev B, Abzaliev S. Results of the thoracoscopic radiofrequency epicardial ablation with a bipolar electrode during longstanding persistent form of atrial fibrillation. *E3S Web of Conferences* 2020; 159: 08007.
<https://doi.org/10.1051/e3sconf/202015908007>

- [52] Koneva ES, Omelchuk NN, Kuzmenko L, Kosova I, Afanasyeva NV. Introduction of electronic cancer patient registries. *Prensa Medica Argentina* 2019; 105(9): 546-555.
- [53] Romashin OV, Liadov KV, Makarova MR, Koneva ES, Preobrazhenskii VI, Chudimov VF. The development of physical education as a basic instrument of rehabilitative treatment, remedial medicine, and goal-oriented health promotion for the benefit of man. *Voprosy kurortologii, fizioterapii, i lechebnoi fizicheskoi kultury* 2013; 1: 39-43.
- [54] Koneva ES. The effectiveness of gait rehabilitation in the patients following endoprosthetic hip replacement by means of the biofeedback-based hardware video reconstruction of the walking stereotype. *Voprosy kurortologii, fizioterapii, i lechebnoi fizicheskoi kultury* 2015; 92(6): 23-29. <https://doi.org/10.17116/kurort2015623-29>
- [55] Koneva ES, Lyadov KV, Shapovalenko TV, Zhukova EV, Polushkin VG. The hardware techniques for the restoration of the gait stereotype in the patients following total hip replacement: the personalized approach. *Voprosy kurortologii, fizioterapii, i lechebnoi fizicheskoi kultury* 2018; 95(1): 26-34. <https://doi.org/10.17116/kurort201895126-34>
- [56] Atabekova A. University discourse to foster youth's sustainability in society amidst COVID19: International and Russian Features. *Sustainability (Switzerland)* 2020; 12(18): 2463. <https://doi.org/10.3390/su12187336>
- [57] Portnova T. Information technologies in art monuments educational management and the new cultural environment for art historian. *TEM Journal* 2019; 8(1): 189-194.
- [58] Baimbetov AK, Bizhanov KA, Abzaliev KB, Bairamov BA, Yakupova I. Prediction of arrhythmia recurrence after atrial fibrillation ablation in patients with normal anatomy of the left atrium. *International Journal of Clinical Practice* 2021; 75(6): e14083. <https://doi.org/10.1111/ijcp.14083>
- [59] Shulyak A, Banyra O. Radical or simple nephrectomy in localized renal cell carcinoma: What is a choice? *Central European Journal of Urology* 2011; 64(3): 152-155. <https://doi.org/10.5173/cej.u.2011.03.art12>
- [60] Parisi GF, Cutello S, Di Dio G, Rotolo N, La Rosa M, Leonardi S. Phenotypic expression of the p.Leu1077Pro CFTR mutation in Sicilian cystic fibrosis patients. *BMC Research Notes* 2013; 6(1): 461. <https://doi.org/10.1186/1756-0500-6-461>
- [61] Baimyshev ES, Abzaliev KB. A rare form of internal hernia. *Vestnik khirurgii imeni I. I. Grekova* 1986; 137(9): 81-82.
- [62] Atabekova A. Language representation of youth health concept in international institutional discourse. *Systematic Reviews in Pharmacy* 2020; 11(12): 1417-1427.
- [63] Portnova TV. Art technologization in the context of theatrical science development. *Astra Salvensis* 2020; 1: 701-729.
- [64] Baimbetov AK, Abzaliev KB, Jukenova AM, Bizhanov KA, Bairamov BA, Ualiyeva AY. The efficacy and safety of cryoballoon catheter ablation in patients with paroxysmal atrial fibrillation. *Irish Journal of Medical Science* 2021 [cited 2021 17 January]. <https://doi.org/10.1007/s11845-021-02560-z>
- [65] Koneva ES, Liadov KV, Shapovalenko TV. Comprehensive programs and evaluation of the efficacy of early postoperative rehabilitation in the patients following total endoprosthetics of the lower extremity joints. *Voprosy Kurortologii, Fizioterapii, i Lechebnoi Fizicheskoi Kultury* 2013; 4: 31-34.
- [66] Oliynyk OV, Perviznyk BO, Yemiashev OV, Shlifirchuk A. The effectiveness of corticosteroid usage in complex therapy for severe sepsis and acute respiratory distress syndrome in cases of severe traumatic brain injury. *Advances in Clinical and Experimental Medicine* 2016; 25(6): 1223-1226. <https://doi.org/10.17219/acem/61013>
- [67] Atabekova A. Technology-facilitated harm to individuals and society: Cases of minor's self-produced sexual content in Russia. *Journal of Critical Reviews* 2019; 6(6): 410-415.
- [68] Oliynyk O, Barg W, Slifirczyk A, Oliynyk Y, Gurianov V, Rorat M. Efficacy of tocilizumab therapy in different subtypes of covid-19 cytokine storm syndrome. *Viruses* 2021; 13(6): 1067. <https://doi.org/10.3390/v13061067>
- [69] Atabekova A, Belenkova N, Lutskovskaia L, Shoustikova T, Udina N. Shaping methodology to explore language use in discourse on child and youth rights. *Xlinguae* 2019; 12(4): 18-29. <https://doi.org/10.18355/XL.2019.12.04.02>
- [70] Portnova TV. Structural features of theatrical excursions (Methodology based on theatre museum expositions). *Mathematics Education* 2016; 11(8): 2963-2973.
- [71] Lyadov KV, Koneva ES, Polushkin VG, Sultanov EYu, Lukashin MA. Randomized controlled study on pulmonary rehabilitation in COVID-19 patients with pneumonia. *Pulmonologiya* 2020; 30(5): 569-576. <https://doi.org/10.18093/0869-0189-2020-30-5-569-576>
- [72] Oliynyk OV, Rorat M, Barg W. Oxygen metabolism markers as predictors of mortality in severe COVID-19. *International Journal of Infectious Diseases* 2021; 103: 452-456. <https://doi.org/10.1016/j.ijid.2020.12.012>
- [73] Baimbetov AK, Abzaliev KB, Jukenova AM, Bizhanov KA, Bairamov BA, Ualiyeva AY. The efficacy and safety of cryoballoon catheter ablation in patients with paroxysmal atrial fibrillation. *Irish Journal of Medical Science* 2021; 1: 1-10. <https://doi.org/10.1007/s11845-021-02560-z>
- [74] Galyaveeva AR, Vasileva US, Khaerzamanova AI, Rasin AN, Kislyy P, Allanina LM, Koneva ES. The problem of increasing number of myocardial infarction deaths in densely populated cities. *International Journal of Pharmaceutical Research* 2020; 12(4): 806-813. <https://doi.org/10.31838/ijpr/2020.12.04.139>
- [75] Portnova T. Genre and style interaction in solutions staged ballets of the nineteenth, twentieth centuries. *Astra Salvensis* 2018; 6(12): 689-694.
- [76] Nagima S, Rakhmetova RU, Musulmankulova AA, Abenova KA, Akmaral K. Socio-economic sustainable development of the regions of Kazakhstan: Research of demographic potential. *Journal of Environmental Management and Tourism* 2019; 10(5): 1124-1134.
- [77] Atabekova AA, Gorbatenko RG, Shoustikova TV, Valero-Garcés C. Cross-cultural mediation with refugees in emergency settings: ICT use by language service providers. *Journal of Social Studies Education Research* 2018; 9(3): 351-369.
- [78] Miethlich B, Oldenburg AG. Social inclusion drives business sales: A literature review on the case of the employment of persons with disabilities. In: *Proceedings of the 33rd International Business Information Management Association Conference, IBIMA 2019: Education Excellence and Innovation Management through Vision 2020* (pp. 6253-6267). 10-11 April, Granada, Spain 2019. <https://doi.org/10.33543/16002.62536267>
- [79] Portnova T. Giants against Gods (regarding the plastic nature of sculpture and theater by the example of the exhibition and installation of the Pergamon Altar in the Pushkin state museum of fine arts). *European Research Studies Journal* 2015; 18(4): 189-196. <https://doi.org/10.35808/ersj/491>
- [80] Rakhmetova RU, Abenova KA. The main demographic trends of rural and urban population of Kazakhstan. *World Applied Sciences Journal* 2013; 27(13A): 273-277.
- [81] Baimyshev ES, Abzaliev KB, Karibekov TS. Prevention of postoperative eventration. *Vestnik Khirurgii Imeni I.I. Grekova* 1988; 141(7): 119-120.

- [82] Atabekova A. Constructivism in practice: Web-based task-focused teaching language for specific purposes. Proceedings of the IADIS International Conference WWW/Internet 2009, ICWI 2009; 2: 57-61.
- [83] Gavrilov AO, Seidinov SM, Iusupov AA. Structural and clinical characteristics of elderly and senile patients' treatment in regional surgical hospital. *Khirurgiia* 2011; 6: 56-59.
- [84] Bagdasarov VV, Bagdasarova EA, Chernookov AI, Ramishvili VS, Ataian AA, Larkov SA. Tactics by the acute intestinal ischemia. *Khirurgiia* 2015; 6: 44-50.
- [85] Miethlich B, Kvitka S, Ermakova M, Bozhko L, Dvoryankin O, Shemshurina S, Kalyakina I. Correlation of educational level, labor potential and digital economy development in Slovakian, Ukrainian and Russian experience. *TEM Journal* 2020; 9(4): 1597-1605.
<https://doi.org/10.18421/TEM94-35>
- [86] Portnova TV. Self-determination of personality of creative beginning in choreographic context. *Space and Culture, India* 2019; 7(2): 143-158.
<https://doi.org/10.20896/saci.v7i2.452>
- [87] Shmelev IM, Petrovsky VA. Formalizing the use of training methods in developing a career path. *Journal of Community Psychology* 2021; 1: 1-10.
- [88] Rakhmetova R, Zhakenova K, Issabekov N, Andekina R, Tazabekova A. The development potential of the cities in the Republic of Kazakhstan. *Theoretical and Empirical Researches in Urban Management* 2018; 13(4): 56-72.
- [89] Portnova TV. Choreography sketches as a representational system of dance recording: From M. Petipa to M. Fokine. *Indian Journal of Science and Technology* 2016; 9(29): 88740.
<https://doi.org/10.17485/ijst/2016/v9i29/88740>
- [90] Rakhmetova R, Zhakenova K, Abenova K, Ryskulova M, Andekina R. Classification and assessment of cities in Kazakhstan in terms of their development potential. *Espacios* 2017; 38(62): 32.
- [91] Miethlich B, Oldenburg AG. Employment of persons with disabilities as competitive advantage: An analysis of the competitive implications. In: Proceedings of the 33rd International Business Information Management Association Conference, IBIMA 2019: Education Excellence and Innovation Management through Vision 2020 (pp. 7146-7158). 10-11 April, Granada, Spain 2019.
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