Natalia Surmacz[1], MA, https://orcid.org/0000-0002-7743-6131
Aneta Tylec[2], PhD, https://orcid.org/0000-0001-5856-7809
Associate Professor Maria Ryś[1], PhD, https://orcid.org/0000-0003-4287-1261
Professor Katarzyna Kucharska[1], MD, PhD, https://orcid.org/0000-0002-6130-0520
[1] *Institute of Psychology*
Cardinal Stefan Wyszyński University
in Warsaw
[2] *Maria Curie Skłodowska University Branch Campous*
in Puławy

Assessment of selected suicide risk factors and the level of spiritual transcendence and religiosity

Ocena wybranych czynników ryzyka samobójstwa a poziom transcendencji duchowej i religijności[1]

https://doi.org/10.34766/fetr.v47i3.917

Abstract: Suicide is a global phenomenon and one of the leading causes of death worldwide. The analysis covers suicidal risk factors (depression, psychological pain, fascination with death) and protective factors (spirituality, religiosity) in the population of healthy people in the SARS-CoV-2 pandemic and the relationship between recent stressful events and suicide risk factors. In the period from October 2020 to March 2021, 260 people aged 18-63 were surveyed electronically, using the own questionnaire and Polish adaptations of research tools to assess: depression, mental pain, anxiety and fascination with death, spirituality and religiosity and the AUDIT screening test. 38.8% of the respondents achieved the result indicating the presence of symptoms of depression and the need for specialist consultation. Women achieved higher results compared to men ($Z = -2.424$; $p = 0.015$). In the measurement of religiosity and spiritual transcendence, the lowest score was noted on the following scales: religious commitment, religious crisis and fulfillment in prayer, while the highest score in the sense of attachment scale. Among the maximum results, the lowest was recorded in the measurement of transcendence and the highest in religious commitment. In the subscale of religious commitment, the respondents achieved the lowest average intensity, and slightly higher in the measurement of the religious crisis. However, the feeling of fulfillment in prayer and universality were the most intense. Statistical significance was demonstrated between depression and fascination with death ($\rho = 0.399$; $p < 0.001$) and depression and psychological pain ($\rho = 0.677$; $p < 0.001$). As the religious crisis intensified, the following also intensified: depression ($\rho = 0.290$; $p < 0.001$), psychological pain ($\rho = 0.279$; $p < 0.001$) and fascination with death ($\rho = 0.224$; $p < 0.001$). A positive correlation was found between the number of stressful events and depression ($\rho = 0.259$; $p < 0.001$) and psychological pain ($\rho = 0.295$; $p < 0.001$). Statistical significance was demonstrated in the analysis of the impact of recent stressors on suicide risk factors. Psychological pain is the strongest predictor of the "S" sample, and the religious crisis is associated with a greater severity of suicide risk factors. Depressiveness correlates with the intensity of mental pain and fascination with death in people with a high level of spiritual transcendence and religiosity. Increased depression and psychological pain are more common in women and in people experiencing recent stressful situations in life.

Keywords: psychological pain, fascination with death, religiosity, suicide, spiritual transcendence

[1] Polska wersja: https://stowarzyszeniefidesetratio.pl/Presentations0/2021-3-Surm.pdf

Abstrakt: Samobójstwo uznane jest za jedną z głównych przyczyn śmierci. Analizie poddano czynniki ryzyka suicydalnego (depresję, ból psychiczny, fascynację śmiercią) i czynniki protekcyjne (duchowość, religijność) w populacji osób zdrowych w warunkach pandemii SARS-CoV-2 oraz związek niedawnych wydarzeń stresogennych z czynnikami ryzyka samobójczego. Drogą elektroniczną, w okresie od X.2020 roku do III.2021 roku, przebadano 260 osób w wieku 18-63 lat, stosując ankietę własną oraz polskie adaptacje narzędzi badawczych do oceny: depresyjności, bólu psychicznego, lęku i fascynacji śmiercią, duchowości i religijności oraz testu przesiewowego AUDIT. 38.8% osób badanych osiągnęło wynik wskazujący na obecność objawów depresji i konieczność konsultacji specjalistycznej. Kobiet osiągnęły wyższe wyniki w porównaniu do mężczyzn (Z= -2.424; p=0.015). W pomiarze religijności oraz transcendencji duchowej najniższy wynik odnotowano w skalach: zaangażowania religijnego, kryzysu religijnego oraz spełnienia w modlitwie, natomiast w skali poczucia więzi wynik najwyższy. Wśród wyników maksymalnych, najniższy odnotowano w pomiarze transcendencji, a najwyższy w zaangażowaniu religijnym. W podskali zaangażowania religijnego badani osiągnęli najniższe średnie nasilenie, a nieco wyższe w pomiarze kryzysu religijnego. Natomiast najwyżej nasilone było poczucie spełnienia w modlitwie i uniwersalność. Wykazano istotność statystyczną między depresyjnością a fascynacją śmiercią (ρ=0.399; $p < 0.001$) i depresyjnością a bólem psychicznym (ρ=0.677; $p < 0.001$). Wraz z nasilaniem się kryzysu religijnego nasilały się również: depresyjność (ρ=0.290; $p < 0.001$), ból psychiczny (ρ=0,279; $p < 0.001$) oraz fascynacja śmiercią (ρ=0.224; $p < 0.001$). Wykazano dodatnią korelację pomiędzy liczbą zdarzeń stresogennych a depresyjnością (ρ=0.259; $p < 0.001$) i bólem psychicznym (ρ=0.295; $p < 0.001$). Wykazano istotności statystyczne w analizie wpływu niedawnych zdarzeń stresogennych na czynniki ryzyka samobójstwa. Ból psychiczny jest najsilniejszym predyktorem próby „S", a kryzys religijny wiąże się z większym nasileniem czynników ryzyka samobójstwa. Depresyjność koreluje z nasileniem bólu psychicznego i fascynacji śmiercią u osób o wysokim poziomie transcendencji duchowej i religijności. Nasilona depresyjność i ból psychiczny częściej występują u kobiet i u osób doświadczających niedawnych, życiowych sytuacji stresogennych.
Słowa kluczowe: ból psychiczny, fascynacja śmiercią, religijność, samobójstwo, transcendencja duchowa

Introduction

"S" suicide is a significant global public health problem. Suicide is the third cause of death among people aged 15-19 years (WHO, 2019). Annually, approximately 800,000 people (one person every 40 seconds) take their own lives. In 2016, 52.1% of people who died before the age of 45 committed suicide. Suicide data is difficult to estimate due to the lack of central registration. In 2016, the Suicide and Depression Prevention Working Group of the Public Health Council of the Ministry of Health began work on a National Registry of Suicide and Suicide Attempts, which would help to accurately collect information from police and medical services (Gmitrowicz, 2020). The worldwide increase in the number of suicide attempts ("S") is alarming. In 2016, the suicide rate was 10.5globally; in Europe – 12.9 while in Poland – 13.4 (3.4 for women and 23.9 for men). The rate is highest in high-income countries, although 79% of suicides are recorded in low- and middle-income countries. The suicide rate among men is 1.8 -3 times higher compared to women (historical, cultural, and religious influences) (Grzywa, A. Kucmin, & T. Kucmin, 2009). Women are more likely to make "S" attempts (Miranda-Mendizabal et al., 2019), but men are more likely to do so when stress is low (Wasserman et al., 2020) and make more successful "S" attempts (Pawlak et al., 2018).

Suicide is of interest to many scientific disciplines, including sociology, psychology, psychiatry, philosophy or theology (Raniszewska-Wyrwa, 2010), resulting in a multitude of definitions of the term (Holyst, 2018). Durkheim provided the first definition of suicide (2006, p 51), which says that "suicide is any death resulting directly or indirectly from a positive or negative action of the victim who knew that it would produce such a result". According to the World Health Organization (2019), "suicide is an act deliberately initiated and prepared by a person with full knowledge and anticipation of its outcome." Awareness, intention, and purposefulness are indispensable components of suicide. According to some scholars, suicide is a revenge response through which the victim the burden of guilt and remorse on society (Malczewska-Błaszczyk, 2017, p. 24). Revenge is the most common motive for suicide attempt by 14–18-year-olds (Makara-Studzińska, 2013). A common feature of most definitions is awareness at the time of the act. Individuals with heightened "S" tendencies often consume alcohol just prior to committing suicide, which may deprive them of full awareness.

Risk factors for attempting “S” include: male sex, old age, social isolation, lack of support, highly stressful life situations, substance abuse, chronic somatic and mental illnesses, too few protective factors (Młodożeniec, 2008; Grzywa et al., 2009) along with psychological pain or fascination with death.

Psychological pain is one of the most important risk factors for suicide. The concept of psychological pain as injury, anguish, or pain overpowering the mind was popularized by Shneidman (1998). Psychological pain is the pain of excessively felt shame, guilt, fear, anxiety, loneliness, apprehension, fear of aging or agonising death (Shneidman, 1996). Pent-up life needs under severe stress can release psychological pain and lead to perceptual narrowing known as presuicidal syndrome (Ringel, 1987).

Death fascination has been described as an interest in the topic of death and dying, thoughts about one's own death, and as a (declared) readiness to engage in suicidal behaviour (Żemojtel-Piotrowska, Piotrowski, 2009). The fascination with death may stem from cognitive curiosity (Lee et al., 2013) and may have different consequences among individuals who exhibit suicidal behaviour. The fascination occurs when a person is placed in a difficult life situation that is perceived as unsolvable. Suicidal fantasies include imagining that one does not exist; contemplating a suicidal act; and thinking of a specific way to take one's own life (Malczewska-Błaszczyk, 2017).

Spiritual transcendence and religiosity appear to be protective factors against suicidal behaviour. Spirituality is an inseparable part of human life and behaviour (Kapala, 2017), and the topic of spirituality is increasingly being addressed by researchers in various scientific fields (Różycka & Skrzypińska, 2011). Psychology deals with both the way of understanding and experiencing spirituality (Trzebinska, 2008), ideas about the existence of some higher power along with its influence on human life (Różycka & Skrzypińska, 2011).

Spirituality was initially associated with religious life, but nowadays it is perceived more broadly: an inner, spontaneous, informal and universal experience; freedom of individual expression and a search for the ultimate meaning and purpose of life (Skrzypińska, 2012, p. 82). Spirituality is the construction of the meaning of life, happiness and the search for the ultimate things, using one's own cognitive, emotional and behavioural resources, accompanied by the experience of happiness at the moment of feeling unity with the world. Spirituality is perceived in many dimensions. It is an experience of oneness with the cosmos, an activity aimed at overcoming the limits of one's own existence (Socha, 2014, p. 13); a search for holiness (Hill et al., 2000); the presence of a relationship with a higher power that affects the way an individual functions (Zinnbauer & Pargament, 2005, p. 23) or a person's relationship with God, revealed through beliefs, feelings and human behaviour (Golan, 2006). The literature also portrays spirituality as existential well-being, enjoyment of life, peace, and well-being (Koenig, 2009); a personal or group search for holiness, developed in a traditional, sacred context (Zinnbauer & Pargament, 2005, p. 35). Spiritual transcendence is a personality trait; a source of intrinsic motivation; the ability to transcend an immediate sense of time and place and to see life from a broader, more objective perspective (Piedmont, 1999, p. 988). Spiritual transcendence has three components: a sense of social connection (a sense of being part of humanity), universality (a belief in the unifying nature of life), and fulfilment in prayer (Piedmont, Werdel, & Fernando, 2009). Spiritual transcendence is a broader concept than religiosity. Religiosity is comprised of specific practices, worldview, and openness to spiritual reality (Van Praag, 2021).

2. Materials and methods

The project is novel in that it analyses for the first time (to the authors' current knowledge) the variable of spiritual transcendence in a population of healthy adults in conjunction with a number of rarely studied variables such as psychological pain and fascination with death.

The aim of this study was an in-depth analysis, supported by evidence in the research literature, of suicidal risk factors such as depression, psychological pain, fascination with death, and selected protective factors such as spirituality and religiosity in a healthy population during the pandemic. This study also aimed at examining the relationship between suicide risk factors and protective factors against engaging in suicidal behaviour. The study also dealt with testing the correlation between recent stressful events and suicide risk factors.

The survey was disseminated via social media and conducted electronically. Data were collected from October 2020 to March 2021. The study included individuals aged 18-65,

of Polish origin, with an intellectual level within normal limits, with at least basic education. Exclusion criteria included the presence of serious somatic diseases and diagnosed mental disorders (based on data from a questionnaire filled in by the subject), neurodevelopmental disorders, neurological dysfunctions, addiction to psychoactive substances in the last 12 months, based on ICD-10 criteria and Alcohol Use Disorder Identification Test (AUDIT). The study was approved by the Ethics and Bioethics Committee of Cardinal Stefan Wyszyński University in Warsaw (KEiB - 21/2020).

Respondents were asked to fill in a questionnaire (15 questions) including sociodemographic data: sex, age, race, religious affiliation, education, occupational status, marital status, place of residence and questions about having children, the presence of mental illness or chronic somatic diseases, and stressful/traumatic events in the last three months. The following Polish adaptations of the following research tools were used to measure the variables:

1. The Centre for Epidemiologic Studies Depression Rating Scale – Revised (CESD-R) (Koziara, 2016).

2. The Scale of Psychache, which assesses the experience of psychological pain, difficulty in coping with it and its impact on general functioning. The scale consists of 13 items (choosing one of five answers). The higher the score, the more severe the psychological pain (Chodkiewicz & Miniszewska, 2016).

3. The Death Anxiety and Fascination Scale, which consists of two subscales: the scale of fear of death (9 items; measurement of general fear of death, mainly in relation to oneself) and the scale of fascination with death (14 items; cognitive fascination with death and dying, the possibility and declared willingness to take one's own life). Rating on a 4-point scale (from 1 - "strongly disagree" to 4 - "strongly agree") (Piotrowski et al., 2021).

4. The Assessment of Spirituality and Religious Sentiments (ASPIRES), which consists of two subscales: scale of religious sentiments (5-7-graded scale of 12 questions assessing religious commitment i.e. frequency of religious practices, religious beliefs, experiences related to God, and a religious crisis i.e. experiences related to conflict with God, religious group, and faith dogmas) and the Spiritual Transcendence scale (5-graded scale of 23 questions regarding fulfilment in prayer, universality, and sense of social connection) (Piotrowski et al, 2021).

5. Alcohol Use Disorder Identification Test (10 questions) to assess the presence of an alcohol problem (exclusion criteria).

The results collected in the study were statistically analysed using IBM SPSS Statistics v. 25. The analysis involved statistical description techniques, Shapiro-Wilk normality of distribution test, Spearman correlation method and Mann-Whitney U test. The non-parametric methods of analysis were chosen due to differences in empirical distributions and unequal sizes of the assessed groups. The statistical significance was defined as $p < 0.05$.

3. The results

A total of 294 subjects participated in the study. After the final verification (inclusion and exclusion criteria), 260 subjects aged 18-63, an equinumerous group of men and women, were included in the study. 99.2% of the subjects (n = 258) were Caucasian, while one subject each in each group was either Black or Hispanic (0.8%). The mean age of the study group was 33.33 (SD=10.24). 240 individuals (92.3%) reported adherence to the Catholic religion, 11 individuals (4.2%) reported atheism and agnosticism; 4 individuals (1.5%) indicated adherence to another Christian religion; 3 individuals (1.2%) to another religious tradition, and 1 individual each (0.8%) to Protestantism and Mormonism.

In the surveyed population, 173 persons (66.5%) had a university or college, 82 persons (31.5%) had secondary, and 5 persons (2%) had primary level of education. 157 persons (60.4%) were economically active, while out of 81 (31%) students, 41 were economically active and 40 were not working; the remaining 22 persons (8.6%) were economically inactive (living on pensions).

As far as the place of residence: 82 people (31.5%) lived in villages, while the remaining lived in bigger – 77 (29.6%), medium – 59 (22.7%) and small – 42 (16.2%) towns.

195 people (75%) lived with their family, 50 people (19.2%) lived with a roommate, and 15 people (5.8%) lived alone. 122 persons (46.9%) were married, 100 persons (38.4%) were single, 27 persons (10.4%) lived in an informal relationship, 7 persons (2.7%) were divorced, and 2 persons (1.6%) each were widowed or separated. 110 people (42.3%) had offspring.

Among the stressful situations that have occurred in the last three months, 27 respondents (10.4%) pointed to difficult work situation, 22 (8.5%) – illness of a close person, 17 (6.5%) – own illness, 15 (5.8%) – financial problems, 12 (4.6%) – relationship breakdown, 8 (3.1%) – death of a loved one, 5 (1.9%) – conflicts, while 4 (1.5%) – COVID-19 pandemic; work or university stress, life threatening factors and difficulties of loved ones – 3 people (1.2%) each; an ongoing court case – 2 people (0.8%) while childbirth and wedding - 1 person (0.4%) each.

The analysis of the severity of depression, psychological pain and fascination with death in the study group (Table 1) showed in the CESD-R scale that 101 people (38.8%) achieved a score indicating the presence of depressive symptoms and the need for specialist consultation. Women achieved higher scores compared to men ($Z = -2.424$; $p = 0.015$). There were no statistically significant differences in the intensity of the fascination with death between the group of women and men ($Z = -0.955$; $p = 0.340$). The distribution of scores for all indicators (depression, psychological pain, and anxiety and fascination with death) differed significantly from a normal distribution.

Table 1. Analysis of the intensity of suicide risk factors in the study group

Risk factors for suicide	Test group	min.	max.	mean	SD	skewness	kurtosis	Shapiro-Wilk test
depression rating scale	all	0	76	15,75	14.87	1.38	0.142	<0.001
	women	0	76	18,01	16.02	1.267	1.451	<0.001
	men	0	64	13.49	13.3	1.462	2.115	<0.001
psychological pain scale	all	13	58	22.68	7.79	1.439	3.426	<0.001
	women	13	58	23.80	7.72	1.214	2.913	<0.001
	men	13	58	21.57	7.74	1.773	4.748	<0.001
scale of fear and fascination with death	all	14	50	22.31	6.73	1.195	1.518	<0.001
	women	14	50	22.08	6.97	1.32	1.83	<0.001
	men	14	48	22.54	6.50	1.07	1.28	0.001

In the measure of religiosity and spiritual transcendence (Table 2), the lowest score was recorded in the scales of religious commitment, religious crisis and fulfilment in prayer, while the highest score was recorded in the scale of sense of social connection. Among the maximum scores, the lowest was recorded in the measure of transcendence, and the highest in religious commitment. The respondents achieved the lowest mean intensity in the subscale of religious involvement, and slightly higher in the measure of a religious crisis. In contrast, feeling fulfilled in prayer and the sense of universality were the highest intensities. The distributions for all subscales of spirituality and religiosity assessment differed significantly from the normal distribution.

Table No. 2 Analysis of the results of the scale for the study of spirituality and religiosity in the study group.

Subscales of the scale for the study of spirituality and religiosity	min.	max.	mean	SD	skewness	kurtosis	Shapiro-Wilk test
religious commitment	1,0	6,13	1,05	1,23	-0,468	-0,573	<0,001
religious crisis	1,0	5,00	1,88	0,75	0,875	1,028	<0,001
transcendence	1,39	4,57	3,50	0,61	-0,566	-0,201	<0,001
fulfilment in prayer	1,0	5,00	3,67	1,00	-0,901	0,142	<0,001
universality	1,14	5,00	3,63	0,74	-0,576	0,040	<0,001
sense of social connection	1,67	4,67	3,39	0,68	-0,208	-0,540	0,001

Correlation analysis between risk factors and suicide predictors (Table 3) showed statistical significance: the weakest between depression and fascination with death (ρ=0.399; p < 0.001) and the strongest between depression and psychological pain (ρ=0.677; p < 0.001). The greater the psychological pain the more frequent the occurrence of depressive symptoms and vice versa. Individuals with more psychological pain showed more interest in death, while individuals less fascinated by death experienced less psychological pain. Moreover, depressive symptoms (ρ=0.290; p < 0.001), psychological pain (ρ=0.279; p < 0.001), and fascination with death (ρ =0.224; p < 0.001) also increased with increasing a religious crisis. There was no correlation between the other indicators of spiritual transcendence and religiosity and suicidal risk factors.

Table No. 3 Correlation analysis between risk factors and suicide prevention in the study group

Factors for attempting S:		depression	fascination with death	psychological pain
risks	depression	-	0,399***	0,677***
	fascination with death	0,399***	-	0,435***
	psychological pain	0,677***	0,435***	-
prevention	religious commitment	-0,107	0,047	-0,049
	religious crisis	0,290***	0,224***	0,279***
	spiritual transcendence	-0,059	-0,064	-0,011
	fulfilment in prayer	-0,065	-0,046	-0,025
	universality	-0,12	-0,085	-0,093
	sense of social connection	0,071	0,003	0,09

***p < 0.001

Analysis of the relationship between recent stressful events, i.e., those that have occurred in the last three months, and suicide risk factors (Table 4) showed a positive correlation between the number of stressful events and depression (ρ=0.259; p < 0.001) and psychological pain (ρ=0.295; p < 0.001).

Table No. 4 Correlation analysis between the number of stressful events and suicide risk factors in the study group

Number of stressful events	correlation coefficient	depression	fascination with death	psychological pain
	ρ	0.259	0.023	0.295
	p	<0.001	0.708	<0.001
	N	260	260	260

Analysis of the effects of recent stressful events on risk factors for suicidal activity (Table 5) revealed statistical significance for relationship breakdown vs. depression and psychological pain severity; own illness vs. psychological pain severity; financial problems vs. all analysed suicide risk factors; occupational difficulties and experiencing conflicts vs. depression and psychological pain severity; situation related to the SARS-CoV-2 coronavirus pandemic (own illness, illness in family; employment at high risk of contagion) vs. fascination with death.

Table 5a. Analysis of the impact of selected stressful situations on risk factors of suicidal activity in the study group

Stressful situations			depressiveness mean score / SD	fascination with death mean score / SD	psychological pain mean score / SD
pandemic Covid-19	No (n = 256)		15.74 / 14.94	22.40 / 6.74	22.70 / 7.84
	yes (n = 4)		16.25 / 11.09	16.25 / 1.26	21.50 / 3.0
	Mann- U test Whitney	Z	-0.443	-2.252	-0.013
		p	0.658	0.024	0.989
life-threatening factors	no (n = 257)		15.65 / 14.81	22.24 / 6.67	22.62 / 7.81
	yes (n = 3)		24.33 / 21.78	28.33 / 11.02	28.00 / 4.36
	Mann- U test Whitney	Z	-0.634	-1.133	-1.624
		p	0.526	0.257	0.104
stress related with work/university	no (n = 257)		15.67 / 14.81	22.32 / 6.75	22.66 / 7.76
	yes (n = 3)		22.67 / 22.01	21.67 / 5.13	25.00 / 12.29
	Mann–Whitney U test	Z	-0.587	-0.066	-0.155
		p	0.557	0.948	0.877
conflicts	no (n = 255)		15.39 / 14.59	22.21 / 6.65	22.53 / 7.69
	yes (n = 5)		34.20 / 18.97	27.40 / 9.53	30.80 / 9.68
	Mann–Whitney U test	Z	-2.101	-1.320	-2.039
		p	0.036	0.187	0.041
life difficulties of loved ones	no (n = 257)		15.65 / 14.91	22.32 / 6.76	22.67 / 7.83
	yes (n = 3)		24.33 / 6.35	21.00 / 3.46	23.67 / 4.04
	Mann–Whitney U test	Z	-1.619	-0.031	-0.630
		p	0.105	0.975	0.528
ongoing court case	no (n = 258)		15.79 / 14.92	22.35 / 6.47	22.67 / 7.81
	yes (n = 2)		10.00 / 2.83	17.50 / 2.12	24.00 / 8.48
	Mann–Whitney U test	Z	-0.255	-1.116	-0.407
		p	0.799	0.265	0.684

Table 5b. Analysis of the impact of selected stressful situations on risk factors of suicidal activity in the study group

occupational problems	no (n = 233)		14.83 / 14.25	22.18 / 6.71	22.27 / 7.54
	yes (n = 27)		23.67 / 17.82	23.44 / 6.91	26.26 / 9.07
	Mann–Whitney U test	Z	-2.906	-1.036	-2.358
		p	0.004	0.300	0.018
financial problems	no (n = 245)		14.76 / 14.22	22.06 / 6.63)	22.36 / 7.82
	yes (n = 15)		32.00 / 16.29	26.33 / 7.37	28.00 / 4.99
	Mann–Whitney U test	Z	-4.047	-2.418	-3.536
		p	< 0.001	0.016	< 0.001
death of a close person	no (n = 252)		15.72 / 14.66	22.35 / 6.74	22.72 / 7.87
	yes (n = 8)		16.63 / 21.69	20.88 / 6.71	21.38 / 5.13
	Mann–Whitney U test	Z	-0.535	-0.706	-0.158
		p	0.592	0.480	0.875
illness of a close person	no (n = 238)		15.83 / 15.16	22.30 / 6.65	22.55 / 7.97
	yes (n = 22)		14.86 / 11.45	22.41 / 6.65	24.18 / 5.5
	Mann–Whitney U test	Z	-0.417	-0.352	-1.8
		p	0.677	0.725	0.072
own illness	no (n = 243)		15.42 / 14.66	22.22 / 6.64	22.51 / 7.78
	yes (n = 17)		20.47 / 17.33	23.59 / 8.01	25.24 / 6.29
	Mann–Whitney U test	Z	-1.247	-0.525	-2.041
		p	0.212	0.600	0.041
relationship breakdown	no (n = 248)		15.06 / 14.1	22.24 / 6.57	22.38 / 7.46
	yes (n = 12)		30.00 / 22.55	23.67 / 9.79	29.08 / 11.52
	Mann–Whitney U test	Z	-2.317	-0.252	-2.372
		p	0.020	0.801	0.018

4. Discussion of the results

Suicidal behaviour is influenced by many individual, social (Jarema, 2018), and cultural factors (Wassermen et al., 2020), but the ability to take one's own life is also essential (Holyst, 2018). Although a suicidal act triggers a specific stimulus, it is important to consider the causes of suicide holistically. All risk factors for suicide are related to each other. In the research literature, many authors indicate a correlation between suicidal activity and depressive disorder, reduced appetite, disruption of the sleep-wake rhythm, feelings of fatigue, decreased libido, and in the course of severe depression, low levels of low-density

lipoprotein and total cholesterol. In addition, patients with "S" intentions compared to those without them suffer from illnesses longer and have more psychotic symptoms (Ma et al., 2019). Other factors that increase suicide risk include feelings of hopelessness, worthlessness, "S" thoughts, and greater awareness of illness. The rate of suicidal behaviour in severe depression is: for "S" thoughts – 53.1%; "S" tendencies – 17.5% and for "S" attempts – 23.7% (Dong et al., 2018; Dong et al., 2019). Individuals with major depression make up 15% of successful "S" attempts (Grzywa et al., 2009). Analysis of risk factors for completed and attempted suicide among individuals with unipolar and bipolar affective disorder indicates that "S" behaviours occur most frequently during an episode of a major depression or during a mixed episode (20-40 times more often than in the euthymic state). Moreover, the risk of "S" behaviour is increased by simultaneous use of psychoactive substances, type B personality disorder (antisocial, borderline, histrionic or narcissistic), sense of hopelessness, tendency to aggressive behaviour, difficult childhood experiences and stressful life events. Disease factors predispose but do not trigger suicidal activity (Isometsä, 2014).

In our study, the distribution of measurement of suicide risk factors significantly deviated from the normal, which is favourable information from a psychological point of view. 61.2% of the subjects did not show significant depression, but more than 1/3 of the participants may be affected by depression, which is a significant problem during the SARS-CoV-2 pandemic. The higher prevalence of depression in the female population is consistent with the results of work by other authors (Ferrari et al., 2013; Salk, Hyde, & Abramson, 2017). In addition, our results indicated a co-occurrence of depressivity with more severe psychological pain and a moderately higher fascination with death. Tripp et al. (2020) also indicated a stronger relationship between depression and psychological pain compared to the correlation between depressivity and lack of a sense of belonging (Tripp et al., 2020). Other researchers have shown a correlation between depression and psychological pain and feelings of hopelessness (Troister & Holdena, 2010).

In our project, women were characterized by more severe psychological pain compared to men although the overall result in both groups indicates at most a medium severity of this factor. Psychological pain was more frequently indicated in the study population than depression. This may indicate that psychological pain is the strongest predictor of suicidal behaviour, which was also confirmed by Reist (2017). The connection between high levels of psychological pain with the severity of "S" thoughts and acts indicated higher levels of psychological pain in subjects with past and current "S" attempts compared to subjects without attempted suicide (Ducasse et al., 2018). Additionally, significantly higher psychological pain severity was also observed in depressed patients compared to controls (Reist et al., 2017; Berardelli et al., 2020). Shelef (2015) in a group of soldiers of the Israel Defence Forces showed that individuals with a low capacity for

emotional regulation of psychological pain manifested a higher intensity of psychological pain and had more "S" thoughts.

The literature does not report studies on the construct of fascination with death in the context of "S" behaviour, although it is undoubtedly a suicide risk factor. In our study, the surveyed subjects, regardless of sex, were characterized by its low intensity. It can be assumed that there was a low risk of suicidal intent among the subjects, which is significant in the context of the whole study. The study also revealed that the participants were characterized by a high level of spirituality and religiosity, and at the same time they had a low level of religious crisis. The results indicate that the subjects felt fulfilment in prayer, joy in communing with transcendent reality, believed in the unity of all life, had a sense of connection with others, and were engaged in religious life and did not feel any conflict with God, the truths of faith or the religious group to which they belonged. Religiosity may serve an important function in stress coping strategies (Pargament, 1997) and, along with spiritual transcendence, is protects against suicidal behaviour. Most studies on spirituality and religiosity confirm a negative association with suicidal activity. Our study did not confirm the protective function of spirituality and religiosity, despite their high levels among respondents. Both religious commitment and spiritual transcendence, fulfilment in prayer, universality and sense of social connection were not significantly connected with depression, psychological pain or fascination with death. Similar results were obtained by Lawrence et al. (2016). They showed that among patients with major depression, those who declared a religious affiliation were more likely to attempt "S" (Lawrence et al., 2016). Perhaps among healthy individuals there are stronger protective factors against suicide such as social support and sense of coherence. Hence, there is a need for further exploration of the research area.

Surprisingly, only the factor indicative of a religious crisis, co-occurred with higher levels of suicide risk factors. That is, experiencing a crisis of faith raises suicide risk by co-occurring with slightly higher levels of depression, psychological pain, and fascination with death. Rodziński, Rutkowski, and Ostachowska (2017) believe that rejection of cultural and religious norms and recent values and goals along with the lack of perceived support (religious crisis), may cause the suicidal process to deepen (from the moment of first “S” thought to the realization of suicide). A higher risk of" S" is associated with a developmental crisis (Makara-Studzińska, 2013). According to Pargament's (1998) theory of religiosity, negative coping with stress is connected with anxiety and depressive symptoms (Francis et al., 2019). A positive correlation between negative religious ways (having an insecure relationship with God, sinister worldview, religious struggle in search of meaning in life) and more intense "S" thoughts was also found in advanced cancer (Trevino et al., 2014). There are many studies on religiosity and suicidal behaviour, but most works are limited to analyses of specific groups (patients with mental disorders, veterans or adolescents).

Nevertheless, research indicates that religious and existential well-being negatively correlate with "S" thoughts (Ibrahim et al., 2019). Furthermore, religious involvement along with family support may counteract the emergence of "S" thoughts among adolescents. Most studies on spirituality and religiosity confirm a negative association with suicidal behaviour (Wu, Wang, & Jia, 2015; Tae & Chae, 2021), implying that they may be preventive factors of suicidal activity.

An additional value of the manuscript is the analysis of the relationship between stressful life events and suicide risk factors. Clearly, one's life situation is important for engaging in "S" activity. Individuals scoring higher on depression and psychological pain scores also experienced more recent (within the past three months) stressful situations. Thus, the severity of symptoms of depression and psychological pain may be related to the occurrence of difficult life events. A review of studies confirmed that negative life situations are related to "S" thoughts and behaviours (Liu & Miller, 2014). In the study group, increased rates of depression and psychological pain were co-occurring with events such as relationship breakdown, career difficulties, conflict, and financial problems, and greater psychological pain was also associated with experiencing one's own illness. Fascination with death was higher among those experiencing financial problems and the effects of the COVID-19 pandemic. In the study, experiences such as life threatening, stress at work or university, ongoing court cases, life difficulties of loved ones or their death or illness can undoubtedly be a source of stress, but did not translate into an increased risk of suicide in the sample group. Due to the small sample size, the results should be interpreted with caution.

Considering the novelty of the project, it is reasonable to set directions for future research. First of all, it would be worth checking the level of identification with religion, the motivations for participation in religious and spiritual life, and the image of God among the respondents. It seems that other protective factors, such as a sense of belonging or social support, should also be addressed in the future.

Conclusions

1) Of the analysed risk factors for suicidal activity (depression, psychological pain, and fascination with death), psychological pain is the strongest predictor of the "S" sample.
2) Religious crisis is associated with higher levels of suicide risk factors.
3) Depressiveness correlates with increased psychological pain and fascination with death in individuals with high levels of spiritual transcendence and religiosity.

4) Increased symptoms of depression and psychological pain are more common in people who have recently experienced stressful situations and in the female population.

Bibliography:

Berardelli, I., Sarubbi, S., Spagnoli, A., Fina, C., Rogante, E., Erbuto, D., Innamorati, M., Lester, D., Pompili, M. (2020). Projective Technique Testing Approach to the Understanding of Psychological Pain in Suicidal and Non-Suicidal Psychiatric Inpatients, *International Journal of Environmental Research and Public Health*, *17* (1), 284, 1–7, https://doi.org/10.3390/ijerph17010284.

Chodkiewicz, J., Miniszewska, J. (2016). Męska depresja – koncepcja, metody pomiaru i związki z zachowaniami samobójczymi, *Psychiatria i Psychologia Kliniczna*, *16* (1), 33–37.

Chodkiewicz, J., Miniszewska, J. (2016). Męska depresja – koncepcja, metody pomiaru i związki z zachowaniami samobójczymi, *Psychiatria i Psychologia Kliniczna*, *16*(1), 33–37**,** https://doi.org**/**10.15557/PiPK.2016.0006**.**

Dong, M., Wang, S.B., Xu, D.D., Ungvari, G.S., Ng, C.H., Chow, I.H.I., Xiang, Y.T. (2018). Prevalence of suicidal behaviors in patients with major depressive disorder in China: A comprehensive meta-analysis, *Journal of Affective Disorders*, *225*, 32–39, https://doi.org/10.1016/j.jad.2017.07.043.

Dong, M., Zeng, L.N., Lu, L., Li, X. H., Ungvari, G.S., Ng, C.H., Chow, I.H.I., Zhang, L., Zhou, Y., Xiang, Y. T. (2019). Prevalence of suicide attempt in individuals with major depressive disorder: a meta-analysis of observational surveys, *Psychological Medicine*, *49* (10), 1691–1704, https://doi.org/10.1017/S0033291718002301.

Ducasse, D., Holden, R.R., Boyer, L., Artéro, S., Calati, R., Guillaume, S., Courtet, P., Olié, E. (2018). Psychological Pain in Suicidality: A Meta-Analysis, *Journal of Clinical Psychiatry*, *79* (3), https://doi.org/10.4088/JCP.16r10732.

Durkheim, É. (2006). *Samobójstwo. Studium z socjologii*. Warszawa: Oficyna Naukowa.

Ferrari, A.J., Somerville, A.J., Baxter, A.J., Norman, R., Patten, S.B., Vos, T., Whiteford, H.A. (2013). Global variation in the prevalence and incidence of major depressive disorder: a systematic review of the epidemiological literaturę, *Psychological Medicine*, *43* (3), 471–481, https://doi.org/10.1017/S0033291712001511.

Francis, B., Gill, J.S.,Han, N.Y.,Petrus, C.F., Azhar, F.L., Sabki, Z.A., Said, M.A., Hui, K.O., Guan, N.C., Sulaiman, A.H. (2019). Religious Coping, Religiosity, Depression and Anxiety among Medical Studenrs in a Multi-Religious Setting, *International Journal of Environmental Research and Public Health*, *16* (2), 259, 1–13, https://doi.org/10.3390/ijerph16020259.

Gmitrowicz, A. (2020). *Dlaczego i jak monitorowane są zachowania samobójcze?* II Kongres Suicydologiczny, Łódź.

Golan, Z. (2006). Pojęcie religijności, (w:) S. Głaz (red.), *Podstawowe zagadnienia psychologii religii,* 71–79, Kraków: Wydawnictwo WAM.

Grzywa, A., Kucmin, A., Kucmin, T. (2009). Samobójstwa – epidemiologia, czynniki, motywy i zapobieganie. Część I, *Polski Merkuriusz Lekarski*, *27* (161), 432–436.

Hill, P. C., Pargament, K.I., Hood, R.W., Jr., McCullough, M.E., Swyers, J.P., Larson, D.B., Zinnbauer, B.J. (2000). Conceptualizing religion and spirituality: Points of commonality, points of departure, *Journal for the Theory of Social Behaviour*, *30* (1), 51–77, https://doi.org/10.1111/1468-5914.00119.

Hołyst, B. (2018). *Zapobieganie samobójstwom*. *Imperatyw ogólnoświatowy*, Warszawa: Instytut Psychiatrii i Neurologii.

Ibrahim, N., Che Din, N., Ahmad, M., Amit, N., Ghazali, S.E., Wahab, S., Abdul Kadir, N.B., Halim, F. W., Mohd Radzi Tarmizi, A. Halim, M. R. T. (2019). The role of social suport and spirituals wellbeing in predicting suicidal ideation among marginalized adolescents in Malaysia, *BMC Public Health*, *19* (4), 553, 1–8, https://pdf.manuscriptpro.com/search/Author-Suzaily-Wahab/1/0552aba9.

Isometsä, E. (2014). Suicidal behaviour in mood disorders – who, when, and why? *The Canadian Journal of Psychiatry*, *59* (3), 120–130, https://doi.org/10.1177/070674371405900303.

Jarema, M. (2018). Czy można ocenić ryzyko samobójstwa? *Psychiatria Polska*, *52* (1), 7–19, https://doi.org/10.12740/PP/74161.

Kapała, M. (2017). Duchowość jako niedoceniany aspekt psyche. Propozycja nowego ujęcia duchowości w psychologii – kategoria wrażliwości duchowej, *Annales Universitatis Mariae Curie-Skłodowska Sectio Paedagogia-Psychologia*, *30* (1), 7–37 https://journals.umcs.pl/j/article/view/3478.

Koenig, H.G. (2009). Research on Religion, Spirituality, and MentalHealth: A Review, *The Canadian Journal of Psychiatry*, *54* (5), 283–291, https://doi.org/10.1177/070674370905400502.

Koziara, K. (2016). Ocena depresyjności w populacji. Psychometryczna ocena polskiej wersji skali CESD-R, *Psychiatria Polska*, *50* (6), 1109–1117, https://doi.org/10.12740/PP/61614.

Lawrence, R.E., Brent, D., Mann, J.J., Burke, A.K., Grunebaum, M.F., Galfalvy, H.C., Oquendo, M.A. (2016). Religion as a riskfactor for suicide attempt and suicide ideation among depressed patients, *Journal of Nervous and MentalDisease*, *204* (11), 845–850, https://doi.org/10.1097/NMD.0000000000000484.

Lee, S.A., Piotrowski, J., Różycka, J., Żemojtel-Piotrowska, M. (2013). Associations Between Death Fascination, Death Anxiety and Religion among Polish College Students, *Polish Psychological Bulletin*, *44* (4), 439–448, https://doi.org/10.2478/ppb-2013-0047.

Liu, R.T., Miller, I. (2014). Life events and suicidal ideation and behawior: a systematic review, *Clinical Psychology Review*, *34* (3), 181–192, https://doi.org/10.1016/j.cpr.2014.01.006.

Ma, Y.J., Wang, D.F., Yuan, M., Zhang, X.J., Long, J., Chen, S. B., Wu, Q.X., Wang, X.Y., Patel, M., Verrico, C.D., Liu, T.Q., Zhang, X. Y. (2019). The prevalence, metabolic disturbances and clinical correlates of recent suicide attempts in Chinese inpatients with major depressive disorder, *BMC Psychiatry*, *19* (1), 144, 1–7 https://doi.org/10.1186/s12888-019-2131-6.

Makara-Studzińska, M. (2013). Przyczyny prób samobójczych u młodzieży w wieku 14– 18 lat, *Psychiatria Polska, 10* (2), 76–83, https://journals.viamedica.pl/psychiatria/article/view/35886.

Malczewska-Błaszczyk, A. (2017). *Samobójstwa – Polska i świat. Wybrane aspekty zagadnienia*. Rzeszów: Pro Carpathia.

Miranda-Mendizabal, A., Castellvi, P., Pares-Badell, O., Alayo, I., Almenara, J., Alonso, I., Blasco, M.J., Cebria, A., Gabilondo, A., Gili, M., Lagares, C., Piqueras, J.A., Rodriguez-Jimenez, T., Rodriguez-Marin, J., Roca, M., Soto-Sanz, V., Vilagut, G., Alonso, J. (2019). Gender differences in suicidal behavior in adolescents and Young adults: systematic review and meta-analysis of longitudinal studies, *International Journal of Public Health*, *64*, 265–283, https://doi.org/10.1007/s00038-018-1196-1.

Młodożeniec, A. (2008). *Uwarunkowania kliniczne obecności i nasilenia myśli i tendencji samobójczych u chorych leczonych z powodu schizofrenii paranoidalnej. Rozprawa doktorska*, Warszawa: Instytut Psychiatrii i Neurologii.

Pargament, K.I. (1997). *The psychology of religion and coping: Theory, research, practice*, New York: Guilford Press.

Pawlak, J., Miechowicz, I., Dmitrzak-Węglarz, M., Szczepankiewicz, A., Zaremba, D., Kapelski, P., Rajewska-Rager, A., Czerski, P., Skibińska, M., Hauser, J. (2018). Czy czynniki związane z ryzykiem samobójstwa są specyficzne dla płci? *Psychiatria Polska, 52* (1), 21–32, https://doi.org/10.12740/PP/78974.

Piedmont, R.L. (1999). Does spirituality represent the sixth factor of personality? Spiritual transcendence and the five-factor model, *Journal of Personality*, *67* (6), 985– 1013, https://doi.org/10.1111/1467-6494.00080.

Piedmont, R.L., Werdel, M.B., Fernando, M. (2009). The utility of the assessment of spirituality and religious sentiments (aspires) scale with Christians and Buddhists in Sri Lanka, *Research in the Social Scientific Study of Religion*, *20*, 131-143.

Piotrowski, J., Żemojtel-Piotrowska, M., Piedmont, R.L., Baran, T. (2021). The Assessment of Spirituality and ReligiousSentiments (ASPIRES) scale: Examining a spirituals transcendence nomological net in Polish context, *Psychology of Religion and Spirituality*, *13* (1), 36–45, https://doi.org/10.1037/rel0000273.

Van Praag, H.M. (2021). The role of religion in suicide prevention, (in:) D. Wasserman, *Oxford Textbook of Suicidology and Suicide Prevention,* 9–15, Oxford: Oxford University Press, https://doi.org/10.1093/med/9780198570059.001.0001.

Raniszewska-Wyrwa, A. (2010). Problem samobójstw w perspektywie psychiatrycznej i psychologicznej, *Acta Universitatis Lodziensis. Folia Psychologica*, *14*, 45-62, http://hdl.handle.net/11089/4650.

Reist, C., Mee, S., Fujimoto, K., Rajani, V., Bunney, W.E., Bunney, B.G. (2017). Assessment of psychological pain in suicidal veterans, *PLOS ONE*, *12* (5), e0177974, 1–11, https://doi.org/10.1371/journal.pone.0177974.

Ringel, E. (1987). *Gdy życie traci sens. Rozważania o samobójstwie*, Szczecin: Glob.

Rodziński, P., Rutkowski, K., Ostachowska, A. (2017). Progresja myśli samobójczych do zachowań samobójczych w świetle wybranych modeli suicydologicznych, *Psychiatria Polska*, *51* (3), 515–530, https://doi.org/10.12740/PP/63984.

Różycka, J., Skrzypińska, K. (2011). Perspektywa noetyczna w psychologicznym funkcjonowaniu człowieka, *Roczniki Psychologiczne*, *14* (2), 101-120, https://www.kul.pl/files/1024/Roczniki_Psychologiczne/2011/2/RocznikiPsychologiczne_14_2011_nr2_B5_s101-121.pdf.

Salk, R.H., Hyde, J.S., Abramson, L.Y. (2017). GenderDifferences in Depression in Representative National Samples: Meta-Analyses of Diagnoses and Symptoms, *Psychological Bulletin*, *143* (8), 783–822, https://doi.org/10.1037/bul0000102.

Shelef, L., Fruchter, E., Hassidim, A., Zalsman, G. (2015). Emotional regulation of mental pain as moderator of suicidal ideation in military settings, *European Psychiatry,* 30 (6), 765–769, https://doi.org/10.1016/j.eurpsy.2014.12.004.

Shneidman, E.S. (1996). *The suicidal mind*, New York: Oxford University Press.

Shneidman, E.S. (1998). *Perspectives on suicidology. Further reflections on suicide and psychache,* (in:) E.S. Schneidman, S. Edwin (eds.), *Suicide and Life-Threatening Behavior*, New York: American Association Suicidology.

Skrzypińska, K. (2012). Granice duchowości – perspektywa pierwsza, *Roczniki Psychologiczne*, *15* (1), 75–96, https://ojs.tnkul.pl/index.php/rpsych.

Socha, P.M. (2014). Przemiana duchowa jako kluczowe pojęcie psychologii rozwoju człowieka, *Psychologia Rozwojowa*, *19* (3), 9–22, https://www.ejournals.eu/Psychologia-Rozwojowa/Tom-19-2014/Numer-3-2014/art/3620/.

Tae, H., Chae, J.H. (2021). Factors related to suicide attempts: the roles of childhood abuse and spirituality, *Frontiers in Psychiatry*, *12,* 565358, 1–12, https://doi.org/10.3389/fpsyt.2021.565358.

Trevino, K.M., Balboni, M., Zollfrank, A., Balboni, T., Prigerson, H.G. (2014). Negativereligiouscoping as a correlate of suicidalideation in patients with advancedcancer, *Psycho-Oncology*, *23* (8), 936–945, https://doi.org/10.1002/pon.3505.

Tripp, D. A., Mihajlovic, V., Fretz, K., Fervaha, G., Izard, J., Corby, R., Siemens, D.R. (2020). Quality of life, depression, and psychosocialmechanisms of suiciderisk in prostatę cancer, *Canadian Urological Association Journal*, *14*(10), E487–E492, https://doi.org/10.5489/cuaj.6310.

Troister, T., Holden, R.R. (2010). Comparing psychache, depression and hopelessness in their associations with suicidality: A test of Shneidman'stheory of suicide, *Personality and Individual Differences*, *49* (7), 689–693, https://doi.org/10.1016/j.paid.2010.06.006.

Trzebińska, E. (2008). *Psychologia pozytywna*. Warszawa: Wydawnictwa Akademickie i Profesjonalne.

Wassermen, D., *Thanh*, H.T.T., Minh, D.P.T., Goldstein, M., Nordenskiold, A., Wasserman, C. (2020). Suicidal process, suicidal communication and psychosocial situation of young suicide attempters in a rural Vietnamese community, *World Psychiatry*, *7*, 47–53, https://doi.org/10.1002/j.2051-5545.2008.tb00152.x.

World Health Organization (2019). *Suicide in the world: Global Health Estimates*, World Health Organization.

Wu, A., Wang, J.Y., Jia, C.X. (2015). Religion and Completed Suicide: a Meta-Analysis, *PLOS ONE,* 10 (6), e0131715, https://doi.org/10.1371/journal.pone.0131715.

Zinnbauer, B.J., Pargament, K.I. (2005). Religiousness and spirituality. W: R. F. Paloutzian, C. L. Park, *Handbook of the psychology of religion and spirituality,* 21–42, New York: Guilford Press.

Żemojtel-Piotrowska, M., Piotrowski, J. (2009). Skala lęku i fascynacji śmiercią, *Polskie Forum Psychologiczne*, *14* (1), 90–109, bwmeta1.element.psjd-655b80b7-faaf-4ddc-8271-b2a29e6fa03c.