

## **Relationship between Lithuanians' Attitudes Towards Life, Emotional States, and Suicidal Ideation**

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### **Abstract**

*Suicides continue to be the most devastating consequence of Lithuanians' inability to cope with life pressures, as various surveys indicate that for the last two decades Lithuania has been among the countries demonstrating the highest rates of suicides in the World. Lithuanians' cognitions towards life as well as suicidal ideation, which are the primary markers for future suicidal behavior have not been explored thoroughly. This paper presents some results of the survey (representative sample, n=1002) which was conducted in Lithuania in February – April 2014. Based on the findings of various authors referring to the importance of suicidal ideation on a continuum of suicidal behavior, the research aimed at exploring the link between certain attitudes towards life and suicidal ideation. Furthermore, it aimed at analyzing socio-demographic variables related to suicidal ideation. Finally, it targeted the link between suicidal ideation and emotional states. The present study showed that people, who are seriously considering suicide as a possible solution of their problems, are not satisfied with life; they feel miserably and cannot think about this life as meaningful, worthy living, purposeful, pleasant, fulfilled. Suicidal risk related cognition "I am considering seriously suicide as a possible solution of my problems" was found to be statistically significantly related to strong negative emotional states during the last week, such as pique, anger, anxiety, psychological pain, guilt, sadness, fear, stress, hopelessness, helplessness, meaninglessness, shame. It was also statistically significantly negatively related to positive states such as gratefulness, happiness, trust, hopefulness, and positive life perceptions. This might imply that in order to diminish the rates of suicides in Lithuania, there is a need to implement evidence based psycho-educational programs and interventions (to cope with negative emotions and life pressures, to increase psychological wellbeing).*

**Keywords:** attitudes, emotions, suicides

### **1. Introduction**

Even though suicide is a most important public health concern with over 100 individuals dying by suicide per day in the United States (McIntosh & Drapeau, 2012), in some countries these rates are several times higher. Longitudinal studies indicate that for the last two decades Lithuania has been among the countries demonstrating the highest rates of suicides in the World. According to the latest statistics (2012) from the World Health Organization, 61, 3 men and 10, 4 women per 100,000 inhabitants commit suicide in Lithuania annually. Some time ago it was possible to hypothesize that these findings might be scientifically explained by means of E. Durkheim's theory on impact of political changes and economic crisis on mental health of the society. However, Lithuanian economy has been growing fast during the last two decades, and political system has stabilized since Lithuania declared its independence in 1991, but Lithuanians' suicides and suicidal attempts' rates have remained almost the same. Even though Lithuania could follow the best evidence - based practices to overcome the suicides as the public health and social problem, Lithuanians' cognitions towards life and death as well as suicidal ideation, which is a primary marker for future suicidal behavior (Arria, O'Grady, Caldeira, Vincent, Wilcox, Wish, 2009), i.e. increases the risk for future suicide attempts and death by suicide (e.g., Brown, Beck, Steer, & Grisham, 2000) still have not been explored thoroughly.

Therefore, the suicides remain the most devastating consequence of Lithuanians' inability to cope with life pressures. Based on the findings of various authors referring to the importance of suicidal ideation on a continuum of suicidal behavior, we aimed at exploring the link between certain attitudes towards life and suicidal ideation.

Furthermore, we aimed at analyzing socio-demographic variables related to suicidal ideation. Moreover, we targeted the link between suicidal ideation and emotional states as psychological autopsy studies suggest, that about 90% of suicide completers had suffered severe depression and anxiety episodes (Cavanagh, Carson, Sharpe, Lawrie, 2003).

## 2. Aim

This study aimed to explore whether Lithuanians' different attitudes towards life and emotional states are associated with suicidal ideation.

## 3. Method

### 3.1. Samples and Procedure

This study used a test design utilizing a heterogeneous random sample of 1002 persons representing Lithuanian population. All the participants were personally asked to participate in the study and were personally interviewed at their home in February – April 2014. This research is funded by the European Social Fund under the Global Grant measure (No. VP1-3.1-ŠMM-07-K-03-032). The interview of one person on average took up to 60 minutes. The sample was selected in a multiscaled probabilistic way so that every citizen of Lithuania might have an equal probability to be interviewed. The data were collected in 20 cities and 29 villages of Lithuania.

The subjects of the study were 469 men (46,8 percent) and 533 (53,2 percent) women. Additional demographics of the sample included a mean age of 49.29 years (Minimum – 18 years old, Maximum – 90 years old, Std. Deviation – 16,206). The majority of the participants were married (48,9 percent), some respondents lived with a partner (9,7 percent), some indicated they are separated (12,2 percent), some were widows (13,8 percent) or lived alone (12 percent). The mean height of the respondents was 170,93 cm (Minimum – 142 cm, Maximum – 205 cm, Std. Deviation – 8,99), and the mean weight was 77,37 kg. (Minimum – 42 cm, Maximum – 270 cm, Std. Deviation – 16,699); the mean BMI of Lithuanians in this research was 26.33. The majority of respondents have a higher education (51,4 percent), but some have just primary (2,7 percent) or secondary (6,5 percent) education. The income of the interviewed Lithuanians per family is distributed as follows (not including taxes): the income of the majority of the sample (44,7 percent) is just 500 dollars or less per month, some (37,4 percent) get 501-1000 dollars per month, some (13,3 percent) get 1001-2000 dollars per month, and just a minority (2,2 percent) get more than 2000 dollars per month, with some of them (0,1 percent) reaching up to 6500 dollars per month.

### 3.2. Measures

The measures used in this study included:

- 1) *Positive, Negative and Suicidal risk related states scale*. To assess specific states of Lithuanian population, we have created a 22-item modified version of the PANAS (Watson, Clark, Tellegen, 1988; Watson et al., 1994). Representative sample of 1002 subjects rated themselves using Past Week instructions. All responses were anchored on a 6-point Likert scale, ranging from “never” to “always”. *Positive, Negative and Suicidal risk related states scale's* subscales demonstrated acceptable reliability in this study: *Positive states* subscale's (9 items: joy, gratefulness, trust, confidence, hopefulness, happiness, peacefulness). Cronbach's alpha for this sample was = .94, *Negative states* subscale's (8 items: pique, anger, anxiety, psychological pain, guilt, sadness, fear, stress). Cronbach's alpha for this sample was = .90, *Suicidal risk related states* subscale's (5 items: unwillingness to live, hopelessness, helplessness, meaninglessness, shame). Cronbach's alpha for this sample was = .89 (n=1002).
- 2) *Life Perceptions scale*. To assess Lithuanians' attitudes towards life, i.e. specific cognitions related to subjective wellbeing, we have created a 8 – item questionnaire based on the works of positive psychology scholars (Diener, 1994; Diener, 2000, Diener, 2003; Diener, Wirtz, Tov, Kim-Prieto, Choi, Oishi, & Biswas-Diener, 2010; Diener, Oishi, & Lucas, 2003; Diener, Seligman, 2002; Diener, Emmons, Larsen, & Griffin, 1985; Fredrickson, 2001; Frisch, 2006; Parducci, 1995; Ryan&Deci, 2000; Ryff, 1996; Seligman, 2002; Tov & Diener, 2009; Sirgy, 2009; Sirgy et al., 2012; Warburton, 1996; Veenhoven, 2003). It involves questions, rated on a Likert-type scale including 6 – point response options ranging from “totally disagree” to “totally agree”. Some sample items for Life Perceptions scale included the following: “I have clear goals in life”, “Life is pleasant”, “Life is meaningful”, “Life is worthy living”, “I am satisfied with life”. Life Perceptions scale demonstrated acceptable reliability in this study: Cronbach's alpha for this sample was = .87 (n=1002).

3) *Suicidal ideation questionnaire.* To assess suicidal ideations, i.e. personal predispositions, attitudes towards suicide, we have created a 2 – item questionnaire self- rated on a Likert-type scale including 6 – point response options ranging from “totally disagree” to “totally agree” (“I have been thinking about the suicide as a possible solution”, “A person has right to commit suicide if he/she wants to”). Suicidal ideation questionnaire demonstrated acceptable reliability in this study: Cronbach’s alpha for this sample was = .70 (n=1002).

#### 4. Results

Table 1 displays frequencies of cognition “I am considering seriously suicide as a possible solution of my problems” of Lithuanian population’s representative sample (n=1002). Almost 57 percent of respondents answered that they “totally disagree” with the statement, while more than 9 percent agree with the statement, and it means they might be at suicidal risk.

**Table 1: Frequencies of Lithuanian Population Representative Sample’s cognition “I Am Considering Seriously Suicide as a Possible Solution of My Problems” (N=1002)**

“I am considering seriously suicide as a possible solution of my problems”	N	%
Totally disagree	570	56,9%
Disagree	282	28,1%
Somewhat disagree	50	5,0%
Somewhat agree	49	4,9%
Agree	27	2,7%
Totally agree	15	1,5%
Not answered	9	,9%
Total	1002	100,0%

Table 2 displays frequencies of cognition “I am considering seriously suicide as a possible solution of my problems” of Lithuanian population’s representative sample (n=1002) in relation to gender, age, living area, marital status, and children. The results show that cognition “I am considering seriously suicide as a possible solution of my problems” was more expressed in women than in men. To compare with other age groups, it was 50-59 years age group. Cognition “I am considering seriously suicide as a possible solution of my problems” was most expressed in cities (from 5000 to 80000 citizens), it was mostly typical for Lithuanians who are divorced and have no children.

**Table 2: Frequencies of Suicidal Risk Related Cognition “I Am Considering Seriously Suicide as a Possible Solution of My Problems” of Lithuanian Population’s Representative Sample (N=1002) In Relation to Gender, Age, Living Area, Marital Status, and Children**

		Totally disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Totally agree	Not answered	Total
<b>Sex</b>	Male	N 259	147	20	24	10	4	5	469
		% 55,2%	31,3%	4,3%	5,1%	2,1%	,9%	1,1%	100,0%
	Female	N 311	135	30	25	17	11	4	533
		% 58,3%	25,3%	5,6%	4,7%	3,2%	2,1%	,8%	100,0%
<b>Age</b>	Up to 29 yrs.	N 99	33	5	7	3	1		148
		% 66,9%	22,3%	3,4%	4,7%	2,0%	,7%		100,0%
	30-39 yrs.	N 93	30	6	8	4	3	1	145
		% 64,1%	20,7%	4,1%	5,5%	2,8%	2,1%	,7%	100,0%
	40-49 yrs.	N 103	61	6	8	10	5	2	195
		% 52,8%	31,3%	3,1%	4,1%	5,1%	2,6%	1,0%	100,0%
	50-59 yrs.	N 116	71	18	13	7	5	2	232
		% 50,0%	30,6%	7,8%	5,6%	3,0%	2,2%	,9%	100,0%
	60-69 yrs.	N 82	47	11	9	1	1	2	153
		% 53,6%	30,7%	7,2%	5,9%	,7%	,7%	1,3%	100,0%
<b>Living area</b>	70 and more yrs.	N 77	40	4	4	2		2	129
		% 59,7%	31,0%	3,1%	3,1%	1,6%		1,6%	100,0%
	Countryside, rural area (less than 3000 citizens)	N 176	86	9	16	9	9	3	308
		% 57,1%	27,9%	2,9%	5,2%	2,9%	2,9%	1,0%	100,0%
	Village (from 3000 to 5000 citizens)	N 11	6	2		1	1		21
		% 52,4%	28,6%	9,5%		4,8%	4,8%		100,0%
	City (from 5000 to 80000 citizens)	N 91	82	27	18	4	1	3	226
		% 40,3%	36,3%	11,9%	8,0%	1,8%	,4%	1,3%	100,0%
	Kaunas, Klaipėda, Šiauliai, Panevėžys	N 170	77	8	10	9	2	2	278
		% 61,2%	27,7%	2,9%	3,6%	3,2%	,7%	,7%	100,0%
<b>Marital status</b>	Vilnius(capital, >400000 citizens)	N 122	31	4	5	4	2	1	169
		% 72,2%	18,3%	2,4%	3,0%	2,4%	1,2%	,6%	100,0%
	Married	N 300	135	16	15	14	8	2	490
		% 61,2%	27,6%	3,3%	3,1%	2,9%	1,6%	,4%	100,0%
	Lives with a partner	N 52	31	5	4	4	1		97
		% 53,6%	32,0%	5,2%	4,1%	4,1%	1,0%		100,0%
	Divorced	N 58	36	10	10	4	3	1	122
		% 47,5%	29,5%	8,2%	8,2%	3,3%	2,5%	,8%	100,0%
	Widowed	N 74	36	9	11	3	1	4	138
		% 53,6%	26,1%	6,5%	8,0%	2,2%	,7%	2,9%	100,0%
<b>Children</b>	Lives alone	N 65	35	8	7	2	2	1	120
		% 54,2%	29,2%	6,7%	5,8%	1,7%	1,7%	,8%	100,0%
	Other	N 16	7	2	2			1	28
		% 57,1%	25,0%	7,1%	7,1%			3,6%	100,0%
	No children	N 402	212	43	36	17	11	9	730
		% 55,1%	29,0%	5,9%	4,9%	2,3%	1,5%	1,2%	100,0%
	1 child	N 100	49	7	8	2	2		168
		% 59,5%	29,2%	4,2%	4,8%	1,2%	1,2%		100,0%
	2 children	N 44	18		5	7	2		76
		% 57,9%	23,7%		6,6%	9,2%	2,6%		100,0%
3 and more children	N 24	3			1			28	
	% 85,7%	10,7%			3,6%			100,0%	

Given the focus of the study, correlation analysis of study variables was determined to be the appropriate statistical technique.

Therefore, we have also analyzed relationships between suicidal risk related cognition and other study variables. Table 3 displays means, standard deviations and correlations for Lithuanians’ cognition “I am considering seriously suicide as a possible solution of my problems” and negative emotional states during the last week.

**Table 3: Means, Standard Deviations, and Correlations of Lithuanians’ Suicidal Risk Related of Cognition “I am Considering Seriously Suicide as a Possible Solution of My Problems” and Negative Emotional States during the Last Week (N=1002)**

	M	SD	1	2	3	4	5	6	7	8	9
“I am considering seriously suicide as a possible solution of my problems”	1,78	1,300	1								
Pique	2,65	1,647	,239**	1							
Anger	2,75	1,570	,204**	,643**	1						
Anxiety	3,03	1,565	,204**	,551**	,576**	1					
Psychological pain	2,47	1,587	,280**	,660**	,545**	,623**	1				
Guilt	2,16	1,442	,293**	,529**	,463**	,529**	,611**	1			
Sadness	2,97	1,558	,225**	,569**	,537**	,633**	,650**	,545**	1		
Fear	2,40	1,563	,260**	,525**	,472**	,615**	,631**	,597**	,613**	1	
Stress	3,05	1,695	,189**	,476**	,505**	,513**	,496**	,396**	,461**	,477**	1

\*\* - Correlation is significant at 0,01 level (2-tailed).

The results demonstrated statistically significant strong relationship between cognition “I am considering seriously suicide as a possible solution of my problems” and negative emotional states: pique ( $r=.239, p<0,01$ ), anger ( $r=.204, p<0,01$ ), anxiety ( $r=.204, p<0,01$ ), psychological pain ( $r=.280, p<0,01$ ), guilt ( $r=.293, p<0,01$ ), sadness ( $r=.225, p<0,01$ ), fear ( $r=.260, p<0,01$ ), stress ( $r=.189, p<0,01$ ). As it could be observed in Table 3, experiences of various negative emotional states were correlated as well. Interestingly, the highest correlations could be observed between psychological pain during the last week, and the lately experienced pique ( $r=.660, p<0,01$ ), guilt ( $r=.611, p<0,01$ ), sadness ( $r=.650, p<0,01$ ), fear ( $r=.631, p<0,01$ ), anxiety ( $r=.623, p<0,01$ ).

Furthermore, we analyzed relationship between cognition “I am considering seriously suicide as a possible solution of my problems”, and other suicidal–risk related states such as hopelessness, helplessness, meaningfulness. Table 4 displays means, standard deviations and correlations for study variables: Lithuanians’ cognition “I am considering seriously suicide as a possible solution of my problems” and other suicidal –risk related states during the last week.

**Table 4: Means, Standard Deviations, and Correlations of Lithuanians’ Suicidal Risk Related Cognition “I am Considering Seriously Suicide as a Possible Solution of My Problems” and Suicidal Risk Related States during the Last Week (N=1002)**

	M	SD	1	2	3	4	5
“I am considering seriously suicide as a possible solution of my problems”	1,78	1,300	1				
Hopelessness	2,02	1,493	,367**	1			
Helplessness	2,25	1,553	,315**	,753**	1		
Meaninglessness	2,11	1,484	,361**	,754**	,794**	1	
Shame	1,95	1,479	,216**	,472**	,419**	,442**	1

\*\* - Correlation is significant at 0,01 level (2-tailed).

The results demonstrated statistically significant strong relationship between cognition “I am considering seriously suicide as a possible solution of my problems” and suicidal – risk related emotional states: hopelessness ( $r=.367, p<0,01$ ), helplessness ( $r=.315, p<0,01$ ), meaningfulness ( $r=.361, p<0,01$ ), shame ( $r=.216, p<0,01$ ). As it could be observed in Table 3, experiences of various negative emotional states were correlated as well.

Interestingly, the strongest correlation could be observed between meaningfulness and helplessness ( $r=.794, p<0,01$ ).

As this study is based on theoretical framework of positive psychology, we have also analyzed relationship between Lithuanians' cognition "I am considering seriously suicide as a possible solution of my problems" and positive states such as compassion, gratefulness, hopefulness. Many countries in the world are considering legislation on suicide with help, and there is an opinion that a person who chooses death can reflect on his situation constructively, and he is still capable to experience positive emotions. Even though positive experiences such as a satisfied life are among the central concerns of positive psychology (McCullough & Snyder, 2000; Seligman, 2002), it remains unclear whether people who express "considering suicide as a possible solution of their problems", still can experience positive emotions and states, for example, gratitude, compassion, or happiness. Table 5 displays means, standard deviations and correlations for Lithuanians' cognition "I am considering seriously suicide as a possible solution of my problems" and positive states during the last week.

**Table 5: Means, Standard Deviations, and Correlations of Lithuanians' Suicidal Risk Related Cognition "I am Considering Seriously Suicide as A Possible Solution of My Problems" and Positive States during the Last Week (N=1002)**

	M	SD	1	2	3	4	5	6	7	8	9
"I am considering seriously suicide as a possible solution of my problems"	1,78	1,300	1,000								
Joy	4,00	1,527	-,146**	1,000							
Gratefulness	3,94	1,536	-,063*	,709**	1,000						
Enthusiasm	3,58	1,635	-,063*	,662**	,664**	1,000					
Trust	3,74	1,605	-,112**	,607**	,631**	,770**	1,000				
Confidence	3,91	1,524	-,162**	,634**	,603**	,705**	,746**	1,000			
Compassion	3,84	1,621	-,046	,425**	,534**	,500**	,551**	,561**	1,000		
Hopefulness	3,89	1,555	-,171**	,625**	,593**	,735**	,696**	,737**	,549**	1,000	
Happiness	3,93	1,548	-,156**	,696**	,626**	,668**	,658**	,700**	,505**	,747**	1,000

\*\* - Correlation is significant at 0,01 level (2-tailed). \* - Correlation is significant at 0,05 level (2-tailed).

The results demonstrated statistically significant negative relationship between cognition "I am considering seriously suicide as a possible solution of my problems" and positive emotional states: joy ( $r=-.146$ ,  $p<0,01$ ), gratefulness ( $r=-.063$ ,  $p<0,05$ ), enthusiasm ( $r=-.063$ ,  $p<0,05$ ), trust ( $r=-.112$ ,  $p<0,01$ ), confidence ( $r=-.162$ ,  $p<0,01$ ), hopefulness ( $r=-.171$ ,  $p<0,01$ ), happiness ( $r=-.156$ ,  $p<0,01$ ).

As it could be observed in Table 5, the last week experiences of various positive states were correlated as well. Interestingly, the highest correlations could be observed between gratefulness and joy ( $r=.70$ ,  $p<0,01$ ), trust and enthusiasm ( $r=.77$ ,  $p<0,01$ ).

Furthermore, we analyzed the link between cognition "I am considering seriously suicide as a possible solution of my problems" and perceptions of life. Table 6 displays means, standard deviations and correlations for study variables: Lithuanians' cognition "I am considering seriously suicide as a possible solution of my problems" and life perceptions.

**Table 6: Means, Standard Deviations, and Correlations of Lithuanians' Suicidal Risk Related Cognition "I am Considering Seriously Suicide as a Possible Solution of My Problems" and Life Perceptions (N=1002)**

	M	SD	1	2	3	4	5	6	7	8	9
"I am considering seriously suicide as a possible solution of my problems"	1,78	1,300	1,000								
I have clear goals in life	4,21	1,214	-,168**	1,000							
My life is fulfilled	4,14	1,178	-,205**	,530**	1,000						
Life is worthy living	4,77	1,204	-,275**	,370**	,452**	1,000					
Life is pleasant	4,08	1,123	-,208**	,426**	,604**	,596**	1,000				
Life is meaningful	4,38	1,253	-,256**	,478**	,561**	,662**	,660**	1,000			
Any experience, even painful, is meaningful	3,59	1,424	-,068*	,195**	,278**	,307**	,325**	,400**	1,000		
I am satisfied with my life	4,08	1,154	-,240**	,438**	,604**	,563**	,833**	,632**	,309**	1,000	
I will be happy with my life after 10 years	3,94	1,417	-,182**	,390**	,481**	,505**	,576**	,591**	,332**	,568**	1,000

\*\* - Correlation is significant at 0,01 level (2-tailed).

As it could be observed in Table 6, cognition "I am considering seriously suicide as a possible solution of my problems" was statistically significantly negatively related to positive statements about life. We have found negative correlations between cognition "I am considering seriously suicide as a possible solution of my problems" and positive life perceptions: "I have clear goals in life" ( $r = -.168$ ,  $p < 0,01$ ), "My life is fulfilled" ( $r = -.205$ ,  $p < 0,01$ ), "Life is worthy living" ( $r = -.275$ ,  $p < 0,01$ ), "Life is pleasant" ( $r = -.208$ ,  $p < 0,01$ ), "Life is meaningful" ( $r = -.256$ ,  $p < 0,01$ ), "Any experience, even painful, is meaningful" ( $r = -.068$ ,  $p < 0,05$ ), "I am satisfied with my life" ( $r = -.240$ ,  $p < 0,01$ ), "I will be happy with my life in 10 years" ( $r = -.182$ ,  $p < 0,01$ ).

As it could be observed in Table 5, various positive life perceptions were strongly correlated, and the correlations were statistically significant. Interestingly, the strongest correlation could be observed between statement "Life is pleasant", and statement "I am satisfied with my life" ( $r = .833$ ,  $p < 0,01$ ).

In order to determine the relationship between negative emotional states (strong unwillingness to live during the last week, strong emotional pain at present) and cognition "I am considering seriously suicide as a possible solution of my problems" (dependent variable was cognition "I am considering seriously suicide as a possible solution of my problems"), we used linear regression analysis procedure (Enter model). The results of regression analysis are presented in Table 7.

**Table 7. Linear Regression Analysis (n=1002)****Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	,529 <sup>a</sup>	,280	,279	1,104	,280	194,536	2	999	,000

a. *Predictors:* (Constant), strong unwillingness to live during the last week, strong emotional pain at present.

b. *Dependent Variable:* “I am considering seriously suicide as a possible solution of my problems”.

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	474,422	2	237,211	194,536	,000 <sup>a</sup>
	Residual	1218,148	999	1,219		
	Total	1692,571	1001			

a. *Predictors:* (Constant), strong unwillingness to live during the last week, strong emotional pain at present.

b. *Dependent Variable:* “I am considering seriously suicide as a possible solution of my problems”.

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	,508	,076		6,641	,000			
	Strong emotional pain at present	,268	,027	,289	10,113	,000	,412	,305	,271
	Strong unwillingness to live during the last week	,360	,029	,355	12,394	,000	,455	,365	,333

*Dependent Variable:* “I am considering seriously suicide as a possible solution of my problems”

The analysis demonstrates that the regression is statistically significant ( $p = 0,00$ ), and coefficient of Pearson shows strong relationship of variables ( $R = 0,529$ ). Coefficient of regression analysis explains that in linear regression model the relationship found between dependent and independent variables is strong enough ( $R^2 = 0,28$ ). As it can be observed in Table 7, the linear regression analysis implies that emotional states of strong unwillingness to live during the last week, strong emotional pain at present leads to cognition “I am considering seriously suicide as a possible solution of my problems” ( $p = 0,00$ ) in Lithuanian population. This implies that the rates of cognition “I am considering seriously suicide as a possible solution of my problems” heightens in regard to the rates of lately experienced strong unwillingness to live ( $t = 12,39$ ;  $p = 0,00$ ) and strong emotional pain at present ( $t = 10,11$ ;  $p = 0,00$ ).

To sum up, cognition “I am considering seriously suicide as a possible solution of my problems” is statistically significantly related to negative emotional states, and statistically significantly negatively related to positive states and positive life perceptions in the representative sample of Lithuanian population.



## 5. Conclusions

This study confirmed that considering seriously suicide as a possible solution of problems is related to negative emotional states and cognitions, and this Lithuanian research complements the previous studies done in various countries (Andres, Collings, Qin, 2010; Brown, Beck, Steer, & Grisham, 2000; Arria et al., 2009; Brown et al., 2000; Khan, Leventhal et al., 2002; Sareen, Cox, Afifi, de Graaf, Asmundson, et al., 2005; Have, de Graaf, van Dorsselaer, Verdurmen et al., 2009; Crump, Sundquist, Sundquist, Winkleby, 2013; Ishtiak-Ahmed, Perski, Mittendorfer-Rutz, 2013). Psychological pain, defined as the introspective experience of negative emotions in suicide actors, has been confirmed to manifest a suicidal mindset (Cavanagh, Carson, Sharpe, Lawrie, 2003). Moreover, growing evidence has suggested that suicide can be conceptualized as motivated by the desire to escape from unbearable psychological pain (Durkheim, Spaulding, & Simpson, 2010).

To sum up, the present study revealed various relations between Lithuanians' attitudes towards life, emotional states, and suicidal ideation:

- 1) The results demonstrated that cognition "I am considering seriously suicide as a possible solution of my problems" was more expressed in Lithuanian women than in men. To compare with other age groups, it was higher in 50-59 year's age group. Unwillingness to live was most expressed in cities (from 5000 to 80000 citizens), it was mostly typical for people living alone and having no children.
- 2) The results demonstrated statistically significant strong relationship between cognition "I am considering seriously suicide as a possible solution of my problems" and negative emotional states: pique ( $r=.239$ ,  $p<0,01$ ), anger ( $r=.204$ ,  $p<0,01$ ), anxiety ( $r=.204$ ,  $p<0,01$ ), psychological pain ( $r=.280$ ,  $p<0,01$ ), guilt ( $r=.293$ ,  $p<0,01$ ), sadness ( $r=.225$ ,  $p<0,01$ ), fear ( $r=.260$ ,  $p<0,01$ ), stress ( $r=.189$ ,  $p<0,01$ ).
- 3) The results demonstrated statistically significant strong relationship cognition "I am considering seriously suicide as a possible solution of my problems" and suicidal – risk related emotional states: hopelessness ( $r=.367$ ,  $p<0,01$ ), helplessness ( $r=.315$ ,  $p<0,01$ ), meaninglessness ( $r=.361$ ,  $p<0,01$ ), shame ( $r=.216$ ,  $p<0,01$ ).
- 4) The results demonstrated statistically significant negative relationship between cognition "I am considering seriously suicide as a possible solution of my problems" and positive emotional states: joy ( $r=-.146$ ,  $p<0,01$ ), gratefulness ( $r=-.063$ ,  $p<0,05$ ), enthusiasm ( $r=-.063$ ,  $p<0,05$ ), trust ( $r=-.112$ ,  $p<0,01$ ), confidence ( $r=-.162$ ,  $p<0,01$ ), hopefulness ( $r=-.171$ ,  $p<0,01$ ), happiness ( $r=-.156$ ,  $p<0,01$ ).
- 5) The results demonstrated statistically significant negative correlations between cognition "I am considering seriously suicide as a possible solution of my problems" and positive life perceptions: "I have clear goals in life" ( $r=-.168$ ,  $p<0,01$ ), "My life is fulfilled" ( $r=-.205$ ,  $p<0,01$ ), "Life is worthy living" ( $r=-.275$ ,  $p<0,01$ ), "Life is pleasant" ( $r=-.208$ ,  $p<0,01$ ), "Life is meaningful" ( $r=-.256$ ,  $p<0,01$ ), "Any experience, even painful, is meaningful" ( $r=-.068$ ,  $p<0,05$ ), "I am satisfied with my life" ( $r=-.240$ ,  $p<0,01$ ), "I will be happy with my life in 10 years" ( $r=-.182$ ,  $p<0,01$ ).
- 6) The rates of cognition "I am considering seriously suicide as a possible solution of my problems" heightens in regard to the rates of lately experienced strong unwillingness to live ( $t = 12.39$ ;  $p = 0,00$ ) and strong emotional pain at present ( $t = 10.11$ ;  $p = 0,00$ ).

The present study showed that people, who are considering seriously suicide as a possible solution of their problems, are not satisfied with life, they feel miserably and cannot think about this life as meaningful, worthy living, purposeful, pleasant, fulfilled. Research shows that high life satisfaction correlates with the absence of psychological problems such as depression, and hopelessness is one of the most prominent cognitive factors associated with depression (Abramson, Alloy, 1998; Abramson, Metalsky, & Alloy, 1989; Romens, Abramson, & Alloy, 2009; Hawton, Casanas, Haw, Saunders, 2013) and suicidality (Harris, Barraclough, 1997; Gili-Planas, Roca-Bennasar, Ferrer-Perez, Bernardo-Arroyo, 2001; Christensen, Batterham, Soubelet, & Mackinnon, 2013). Therefore, regarding the suicides with help, there is no evidence for the opinion that a person, who is considering suicide as a possible solution of problems, is still capable to experience positive emotions and perceive the life constructively.

To sum up, suicidal risk related cognition "I am considering seriously suicide as a possible solution of my problems" is statistically significantly related to negative emotional states, and statistically significantly negatively related to positive states and positive life perceptions in the representative sample of Lithuanian population. This implies that in order to diminish the rates of suicides in Lithuania, there is a need to implement evidence based psycho-educational programs and interventions (to cope with negative emotions and life pressures, to increase psychological wellbeing).

Nonetheless, supplementary research is needed to explore further the different factors contributing to suicidal ideation which is a sign of diminished psychological wellbeing, as it could have added value to practical applications in Lithuania.

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