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# Suicide ideation in higher education students: influence of social support

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#### **KEYWORDS**

Suicidal ideation; Higher education students; Social support

#### **Abstract**

*Objectives:* To determine the prevalence of students' suicidal ideation and to assess its connection with social support.

Methods: Quantitative, descriptive and exploratory study on a sample of 1074 students from a higher education institution in Portugal. The data was collected through an online platform that included a questionnaire regarding the sociodemographic and academic profile of the students, the Social/Familiar Support Satisfaction Scale1 and the Suicidal Ideation Questionnaire2.

Results: Students' ages varies between 17 and 49 ( $\overline{X}$  = 23,9 years old  $\pm$  6,107 sd), with the great majority (64.7%) being females. Results show that the presence/severity of suicidal thoughts is low ( $\overline{X}$  = 13.84;  $\pm$  20.29 SD) on a scale from 0 to 180 and cut-off point > 41 for values that suggest potential suicide risk, identifying 84 students at risk (7.8%). We verified significant connections between suicidal ideation and some dimensions of social support: social activities (r = -0.305; P = .000), intimacy (r = -0.272; P = .000) and overall social support (r = -0.168; P = .002).

Conclusions: Suicidal ideation severity is higher on students who are far from home and living alone; students with weak social/familiar support networks (less involvement on social activities and intimate relationships). These results allow us to conclude that a frail social support network positively associates with ideation and suicidal risk.

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#### Introduction

Suicide constitutes a major public health issue. It is among the ten main causes of death on the world's population and also represents the third cause of death on young people aged between 15 and 35 years old.<sup>1</sup>

Recent scientific evidences show that young people's suicidal behaviours (suicidal ideation and suicide attempts) are complex phenomena that seem to be rising, composing an important highlight of attention for social policies.<sup>2</sup>

Attending to higher education often brings some psychological problems, induced by being removed from a social network that was previously established. Students who leave their home might feel less socially and psychologically supported by those they consider close to them, which can have serious negative implications on their well-being and adaptation process. Rewarding contact with family, friends, and colleagues strengthens the strategies to cope with the problems that appear on this stage of life.<sup>3</sup>

Higher education teachers are faced with worrying numbers of students that manifest homesickness, missing their friends and family, contributing to depressive symptoms with prominent suicidal ideation. Most times, these suicidal ideation-related situations are only identified on extremely severe cases, resorting to psychyatric hospitalization of students or more dramatic scenarios such as suicide.<sup>4</sup>

The suicidal downward spiral starts with ideation, which functions as an indicator of vulnerability and might lead to a suicide attempt or suicide. Suicidal ideation specifically involves thoughts about ending one's own life, from a range of general thoughts about death to more specific and elaborate ways to commit suicide. <sup>5</sup> Suicidal ideation presents itself as one of the main predictors of suicidal risk, being used in many researches to estimate the presence of a suicidal process.

Several authors<sup>6-8</sup> have studied the influence of social support or social support networks on mental health and its role as moderator or suicidal behaviour predictor.

Social support perception and linkages established between an individual and the social system might help in the adaptation to stress situations. Students with proper social support networks find it easier to develop coping strategies towards hostile situations. On the other hand, absent or weak social/family support often is often assumed as a higher suicide behaviour risk factor. 9-11

Although there are some studies on suicidal ideation prevalence in higher education students, the results vary depending on the methodology and the time lapse targeted for the study (last week, last month, last year or throughout life). Considering this, the objectives of this study are to determine the prevalence of suicidal ideation in higher education students (in the last month) and to assess its relation with social support.

#### **Methods**

We developed a quantitative, transversal, descriptive and correlational study, on a sample of students enrolled on the various Schools of the Polytechnic Institute of Viseu. The data collection was made through an online platform available from October 2012 to May 2013. Instruments: It was used a

questionnaire regarding the sociodemographic and academic profile of the students, and measurement instruments validated and calibrated for the Portuguese population, such as the Social/Familiar Support Satisfaction Scale¹² (SSSS) and the Suicide Ideation Questionnaire (SIQ).⁵ The SIQ has a maximum value of 180, corresponding to maximum severity of suicidal thoughts occurred during the last month. According to the authors, values ≥ 41 are already suggestive of the presence of psychopathology and potential suicide risk. Participants: From a universal population of 5864 students, 1074 questionnaires were received and validated. The sample is intentional, non probabilistic, composed by all the students who answered the survey (1074) distributed through the 1st, 2nd, 3rd and 4th years of the several courses of the Polytechnic Institute of Viseu.

#### Results

## Sociodemographic and academic profile of the students

Age of the students varies between 17 and 49 years old, with a mean ( $\overline{X}=23.93$  years old  $\pm$  6,10 SD). This mean is slightly higher on male students ( $\overline{X}=25.49\pm6.83$  SD) compared to females ( $\overline{X}=23.08\pm5.49$  SD) with significant differences (t = 5.892; P=.000). The sample is mostly feminine (64.7%), single (86.1%), of rural provenance (55.7%) and its cohabitation during classes is evenly distributed between those who live with family (47.2%) and those who live with friends (41.7%).

The majority (88.2%) attends to the intended course and qualifies their academic performance between average and good. About 4 out of 10 students admit to have failed once and almost every student mentions good relationships with teachers (95,6%), colleagues (96,8%) and non-teaching staff (94,9%).

#### Social/family support

We verified that, in general, students present reasonable values in almost all the dimensions of social support. However, males reveal a better social support when compared to females, with significant differences on intimacy and overall social support (Table 1).

#### Suicidal ideation

The severity of suicidal thoughts in the sample is low  $(\overline{X} = 13.84 \pm 20.29 \text{ SD})$  given the variation between 0 (zero) and 180. Female students present higher values  $(\overline{X} = 14.75 \pm 20.55 \text{ SD})$  compared to males  $(\overline{X} = 12.18 \pm 19.73 \text{ SD})$  with statistical significance between the groups (t = -1.982; P = .048). Considering the cut-off point (> 41) established by the authors, we found 84 students (7,8%) with severe suicidal ideation levels and potential suicide risk (Table 2).

#### Social support vs suicidal ideation

The significance of the social support effect over suicidal ideation was assessed by a multiple linear regression, with estimated parameters through the method of maximum likelihood. The social support dimensions that manifested as

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Table 1 Students' perception towards social support							
SSSS dimensions (Ribeiro, 1999)	Min	Max	Mean	SD	CV		
Friendship satisfaction	5	25	12.38	3.08	9.51		
Intimacy	4	20	11.07	2.30	5.31		
Family satisfaction	3	15	6.78	2.74	7.52		
Social activities	3	15	9.25	2.99	8.97		
Overall social support	15	71	39.47	5.91	34		

Mean differences between social support and gender							
	Masc		Fem		t	Р	
	Mean	SD	Mean	SD			
Friendship satisfaction	12.59	3.02	12.26	3.11	1.666	.096	
Intimacy	11.60	2.30	10.78	2.26	5.649	0.000	
Family satisfaction	6.69	2.58	6.83	2.83	-0.836	.403	
Social activities	9.46	2.80	9.13	3.09	1.805	.071	
Overall social support	40.34	5.79	39.00	5.92	3.571	.000	

Table 2 Students' perception towards suicidal ideation						
SIQ	Min	Max	Mean	SD	CV	
	0.0	179.0	13.84	20.29	411.8	
Mean difference between SIQ dimensions and gender						
	Mean	S	D	t	Р	
Male Female	12.18 14.75	19. 20.		-1.982	.048	

predictors of suicidal ideation were intimacy ( $\beta$  =-0.27; p=0.000), social activities ( $\beta$  =-0.31; p=0.000) and overall social support ( $\beta$  =-0.17; p = 0.002) (Fig. 1). Altogether they explain 15% of variability.

#### Discussion

Severe suicidal ideation prevalence on the sample being studied is (7,8%), results slightly inferior to those found in other samples of higher education students, <sup>13-16</sup> where suicidal ideation prevalence values oscillate between 10 and 11%.

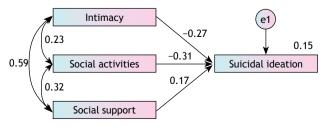


Figure 1 Relation between suicidal ideation and social support.

Although the students of the sample display reasonable social support and low severity of suicidal ideation, severe suicidal ideation was higher on those with less involvement in social activities and intimate relationships. These results allow us to conclude that a frail social support network positively associates with ideation and suicidal risk.

#### Conclusions

Being often alone and dislocated from home, students might experience a significant break on their social support network. Prevention assumes a fundamental role regarding suicidal behaviours. Although detection and minimization of risk factors play an important part, we believe (based on the results) that it is equally important the strengthening of protective factors, such as a proper social/family support.

#### What we know about the theme

- Recent scientific evidences state suicide as a complex phenomenon with multifactorial etiology (biologic, psychologic, socio-cultural factors).
- Students' suicidal behaviours seem to be rising significantly, representing a high vulnerability group.
- Social support can work as a moderator of suicide risk.

#### What we get out the study

- This study provides relevant information about the moderator or predictive role of social/family support on suicidal behaviours in young students.
- The obtained data can be used for signalling and guidance of students at risk, but also to establish interventional strategies that promote mental health and prevent suicidal behaviours on academic environments.

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#### Conflicts of interest

The authors declare that there are no conflicts of interest.

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