"I wish I could have helped him in some way or put the family on notice": An exploration of teachers' perceived strengths and deficits in overall knowledge of suicide

Janaina Minelli de Oliveira^{a*}, Paloma Vicens Calderón^b and Pablo Buenestado Caballero^c

^aPedagogy Department, Universitat Rovira I Virgili, Tarragona, Spain; ^bDepartment of Psychology, Universitat Rovira I Virgili, Tarragona, Spain; ^cEscola d'Enginyeria de Barcelona Est, Universitat Politècnica de Catalunya, Barcelona, Spain;

*Corresponding author: janaina.oliveira@urv.cat

Campus Sescelades, Carretera de Valls, S/N, 43007 Tarragona, Spain.

Biographical notes

Janaina Minelli de Oliveira

Janaina Minelli de Oliveira holds a PhD in Applied Linguistics. She is an associate professor Serra Húnter at Universitat Rovira i Virgili, at the Departament de Pedagogia of Facultat de Ciències de l'Educació i Psicologia. She is a member of Educational Research Methodology with Social Impact (MEDIS, 2017 SGR 1674). Her research interests include social semiotics, educational communication, educational technology and suicide prevention. Address for correspondence: Carretera de Valls, s/n, Campus Sescelades, 43007, Tarragona, Spain. Email: janaina.oliveira@urv.cat

Paloma Vicens Calderón

Doctor in Psychology, Degree in Psychology, Degree in Philosophy. She is a member of the non-profit association Intro-Ment, for in-depth mediation techniques, and the association Assisted Therapy with Animals "4 POTES", with which he actively collaborates in the design of intervention programs. She is also a member of the Foundation "El sueño de la campana", an international NGO that works in Nicaragua and in which she participates actively through the URV's Nicaragua Cooperation Practice. Nowadays, she is studiyng Somatic psychotherapy in order to deepen body techniques from a Humanist perspective.

Pablo Buenestado Caballero

Pablo Buenestado Caballero holds a PhD in Physical Science. He is an assistant professor at Universitat Politècnica de Catalunya, at the Departament of Mathematics. He is a researcher in applied mathematics and climate change.

"I wish I could have helped him in some way or put the family on notice": An exploration of teachers' perceived strengths and deficits in overall knowledge of suicide

This article examined teachers' capacity to identify suicide myths and explored their perceived strengths and deficits in overall knowledge of suicide. One hundred twenty-nine teachers from 41 schools in Spain participated. Teachers showed moderately low suicide myth identification, holding misconceptions related to suicide verbalizations. They felt poorly informed, but acknowledged their strategic role and wanted relevant information. Training initiatives should address communicative abilities, apart from information on suicide risk factors and protective factors associated with youth, warning signs of imminent risk of suicide and basic guidelines for first intervention in students' suicide ideation, plan, or attempt.

Keywords: Suicide, prevention, schools, Spain.

Introduction

Suicide is the leading cause of preventable death in Spain, having accounted for 3,539 deaths in 2018 (Instituto Nacional de Estadística [INE], 2019). The death rate by age 15 to 19 years old stands at 2.59 per 100,000 persons in Spain (Eurostat, n.d.). These figures however do not include deaths from events of undetermined intent (some of which should be considered as suicides) and attempted suicides that do not result in death. The magnitude of the pain caused by suicide should not be underestimated. For every suicide death, there are an estimated 25 additional nonfatal suicide attempts, and a conservative estimate of six suicide survivors, including family members, friends, professional counselors, and other care providers (Velaz-de-Medrano et al., 2012). If we consider people who live with suicidal thoughts and additionally consider limitations of national and international statistics to record many cases of suicide that are not declared

as such, it will become clear that official suicide rates are the tip of the iceberg, urging attention to a complex problem.

The Mental Health Strategy of the Spanish National Health System 2009-2013 included suicide prevention as one of its objectives (Sanidad, 2011). Due to complex political circumstances, the country has not been able to renew its Mental Health Strategy yet, although it is expected to be announced in 2020. For the time being, Spain does not have a national plan or strategy for suicide prevention.

Spain has a very poor implementation of suicide prevention programs compared with other European countries (Sáiz et al., 2004). There have, however, been local initiatives, such as in Catalonia (Hegerl & Schäfer, 2007; Tejedor et al., 2011), Galicia (Del Valle, 2011), and Asturias (Jimenez-Trevino et al., 2011; Wasserman et al., 2010). An epidemiological study on suicidality developed in the south region of Spain identified a relatively high prevalence, affecting more than 1 in 25 persons (Huertas, 2020). The Spanish Society of Psychiatry and the Spanish Society of Biological Psychiatry expressed interest in the development of a series of recommendations for the prevention and management of suicidal behavior (Ayuso-Mateos et al., 2012).

Over the last decade (2009-2018) teenage suicides in Spain has shown an upward trend (INE, 2019). In 2018 alone, for which the latest data is available in the country, 77 teenagers took their own lives. To our knowledge, however, there have not been initiatives addressing the role of educational institutions in suicide prevention in Spain. A pioneering study concluded that suicidal ideation is present in the Spanish adolescent population and is associated with poorer subjective emotional well-being and greater emotional and behavioral problems (Fonseca-Pedro et al., 2017). The authors warn that these results have clear implications, both at the health and educational level, and that

there is a need to improve the promotion of emotional well-being and the prevention of psychological and psychiatric problems in this sector of the population. The design of a national plan for suicide prevention that addresses the role of educational institutions in suicide prevention is therefore paramount.

The most important increase in risk of suicide ideation, plan, or intent occurs in the second decade of life (Gabilondo et al., 2007). There is therefore a very compelling case for making suicide prevention an issue in schools (Arora et al., 2017; Davidson, 1999; Lee et al., 2019; Prakasha & Mohan, 2020; Shaffer, 1991; Westefeld et al., 2007; WHO, 2000). Teachers and other school personnel may be the first individuals to become aware of student suicide risk (Capuzzi, 1994). School interventions designed to reduce suicidal behaviors should be a universal goal (Page et al., 2013). School is a familiar setting for adolescents, which makes it an appropriate place for discussions about suicide and efforts to increase the protective factors and attachment bonds that play significant roles in decreasing suicidal ideation and self-harm (Nakhid-Chatoor, 2020).

Schools represent a structure in which adolescents develop their academic skills, and prosocial behaviors and tendencies, and are exposed to various factors that may enhance or impair their psychological development (Yockey et al., 2019). Bowden et al. (2019) found that school-based interventions that draw on existing structural support offered by school communities may be an option for targeting suicide prevention.

Introducing depression education programs into high schools has been described as an alternative approach to addressing the public health crisis of adolescent suicide (Kann et al., 2006; King, 2001; Swartz et al., 2007; Tompkins et al., 2009). Online practice communities (Penn et al., 2005) that support suicide prevention initiatives have also proven useful. The literature has also described effective gatekeeper training programs

among secondary school personnel (Tompkins et al., 2009) and positive outcomes of school-based suicide prevention programs (King et al., 2011). In fact, every front-line staff member should know how to intervene using suicide prevention strategies and crisis management, which are potentially lifesaving responses (Johnson & Parsons, 2012).

Teachers are in a unique position to identify at-risk youth and refer them for help. The promulgation of the myth that school-based suicide prevention programs are harmful because talking about suicide with students will promote suicidal behavior is irresponsible and hinders prevention efforts (Kalafat, 2003). Myths and resistances impair proper understanding of suicidal people (Pompili, 2010). School professionals must possess accurate information in attempting to reduce adolescent suicide (King, 1999; Popenhagen & Qualley, 1998). In the United States of America, for example, suicide prevention efforts in high schools are usually led by school counselors, mental health professionals, or social workers, who implement collaborative suicide prevention strategies (SAMHSA, 2012). Up to 75% of US high schools require that some type of suicide prevention curriculum be taught in their school (Kann et al., 2001). In Spain, however, this is still a field to be explored.

Although a role for teachers in the prevention of youth suicide has been suggested, no prior study in Spain, to our knowledge, has assessed knowledge in education professionals. Barrero (2006) considered that for teachers to contribute to suicide prevention, it is essential for them to know: (1) the myths around this issue, (2) at-risk groups and their characteristics, (3) risky situations, (4) protective factors of suicide, and (5) how to offer psychological first aid in an emergency. This article aimed to examine teachers' capacity to identify common misconceptions about suicide and explore their

perceived strengths and deficits in suicide overall knowledge, to inform school gatekeeper training initiatives.

Methods

Participants

Participants included 129 teachers (98 women, 31 men), working in 41 different Catalan schools. Table 1 presents participants' demographic information.

[Table 1 near here]

Procedure

Two hundred thirty-nine schools in Catalonia, Spain, were contacted to participate in an online survey through school's e-mails. In this contact we requested that the email receiver forward the self-administered online questionnaire to schoolteachers. In this same email, participants were informed of our research objetives, of the voluntary nature of the study, and the confidentiality and anonymity of their answers.

Instrument

We used a self-administered online questionnaire with four categories addressing teachers' capacity to identify misconceptions about suicide and explore their perceived strengths and deficits in suicide overall knowledge. A 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree) was used. Participants were asked:

i) to rate 10 suicide myths (Barrero, 2006) acknowledged as misconceptions by the suicidology community (Schurtz et al., 2010).

- ii) to express how knowledgeable they felt on suicide risk factors, mortality rates in Spain, protective factors, warning signs of imminent suicide risk, strategies to minimize risk factors, and protocols of action in a potential suicidal crisis.
- iii) to indicate their level of agreement about teachers potentially having an important role in suicide prevention if they receive specific training and their willingness to receive information on suicide prevention.
- iv) to indicate how often they felt having had information on suicide would have been helpful in their professional and personal lives. In this part of the questionnaire, there was also an open-ended noncompulsory question that invited teachers to report any situations related to suicide in their professional or personal lives, help identify relevant contexts for suicide training.

Results

Following a scoring method used by previous researchers (Scouller & Smith, 2002), to examine teachers' capacity to identify common misconceptions about suicide (category 1), values 1 and 2 (strongly disagree and disagree) were collapsed and added to yield an overall affirmative capacity. Values 4 and 5 (agree and strongly agree) were also collapsed and added to yield an overall incapacity to identify suicide misconceptions. Response 3 was categorized as undecided (Cronbach's $\alpha = 0.9$). This method was used only in this category of the questionnaire. Table 2 presents a summary of the results.

The overall mean of responses in which teachers showed capacity to identify misconceptions about suicide was 5.22 (standard deviation [SD] = 1.93), the mean of

responses in which participants cannot identify misconceptions was 2.43 (SD = 1.67), and the mean of undecided responses was 2.35 (SD = 1.68). A one-way ANOVA found no significant differences regarding gender, age, or the educational level taught for all ten suicide misconceptions. We have, however, identified significant differences in some items in the questionnaire, which will be discussed latter on.

Results for participants' perception of how knowledgeable they feel on different aspects of suicide are shown in Table 3.

[Table 3 near here]

Participants globally perceived themselves as poorly informed about suicide M = 1.99 (SD = 0.28). We found significant differences between male and female participants' responses to items 2, 4, and 5 (see Table 2). In these items, male participants reported perceiving themselves as more knowledgeable than female participants, as shown in Table 4. Participants who had received some kind of teacher training in psychological or emotional intervention had a higher mean of suicide misconception identification (5.51; SD = 1.96) than participants who had not (5.06; SD = 1.91). Interestingly, participants who reported having received some kind of teacher training in psychological or emotional intervention that specifically mentioned suicide actually had a lower mean of correct responses (M = 4.13, SD = 1.36) than the overall mean (M = 5.22; SD = 1.93).

[Table 4 near here]

Regarding openness to playing a professional role in suicide prevention, most participants thought that educators can play an important role in suicide prevention if

they were trained to do so (M = 4.04, SD = 0.92) and most teachers would like to receive information on suicide prevention, risk factors, protection factors, and protocol guidelines (M = 4.1, SD = 1.11). We asked participants how often they felt it would have been useful to know about suicidal behavior in their teaching careers. The mean answer was M = 2.11 (SD = 1.16). We also asked participants how often they felt it would have been useful to know about suicidal behavior on a personal level, to help their own family members, their friends, or themselves. This question received a mean response of M = 2.34 (SD = 1.42).

Twenty-seven (20.93%) participants answered the noncompulsory open-ended final question, which invited teachers to report any situations in which information on suicide would have been helpful for them. Their answers were coded according to whether the experiences reported related to their professional or personal lives, and whether they were related to suicide verbalizations, intent, or actual suicides. Together with such results, we present a few extracts of their answers, which were given in Spanish and in Catalan, both official languages in Catalonia. These extracts are followed by a translation into English.

In their professional context:

• Two participants reported having had students who expressed suicidal ideas.

These teachers had a higher mean of correct identification of suicide misconceptions (6.5; SD = 0.5) than the overall average (5.22; SD = 1.93).

"Un alumno con depresión manifestó el deseo de desaparecer porque no le importaría a nadie."

"A student with depression expressed the desire to disappear because nobody would care."

"Vaig tenir un alumne que sovint deia que es volia morir."

"I had a student who often said he wanted to die."

• Two participants mentioned having been knowledgeable of suicide intent among their students. These teachers also had a higher mean of correct identification of suicide misconceptions (6; SD = 1) than the overall average (5.22; SD = 1.93).

"Viví la experiencia de una alumna que intentó tirarse de su propia terraza en casa, la madre pudo evitarlo. Estaba muy deprimida y en ocasiones verbalizaba ideas suicidas."

"I have lived the experience of a student who tried to throw herself from own terrace at home, her mother could avoid it. She was very depressed and occasionally verbalized suicidal ideas."

Three participants declared having experienced having a suicidal student in their schools. These participants had a significantly higher mean of correct identification of suicide misconceptions (7; SD = 1.63) than the overall average M = 5.22 (SD = 1.93).

"Hace muchísimos años, un alumno que tuve en la primaria, un chico de etnia gitana, brillante estudiante se suicidó al cumplir 15 años. Me llamó varias veces por teléfono y detecté su tristeza pero nunca imaginé el grado de desesperación que sentía, me hubiera gustado poder ayudarle de alguna manera o poner a la familia sobre aviso." "Many years ago, a pupil I had in elementary school, a boy from the Gypsy community, a brilliant student, committed suicide when he turned 15. He called me several times

over the phone and I detected his sadness but never imagined how desperate he felt. I wish I could have helped him in some way or put the family on notice."

"En uno de los colegios donde he trabajado se suicidó una alumna."

"In one of the schools where I have worked, a student committed suicide."

In their personal lives:

• Five participants reported having had family members or close friends who expressed suicidal ideas. These teachers had a slightly higher mean of correct identification of suicide misconceptions (5.6; SD = 2.06) than the overall average (5.22; SD = 1.93).

"Tengo una amiga con problemas de depresión que ha insinuado varias veces la intención de suicidarse."

"I have a friend with depression issues who has hinted several times about her intention to commit suicide."

• Five participants mentioned suicide intent among their family members or friends. These teachers had a lower mean of correct identification of suicide misconceptions (4.8; SD = 1.33) than the overall average (5.22; SD = 1.93).

"Una buena amiga intentó suicidarse y creo que saber más cosas nos hubiera ayudado a todos a entender y ayudar."

"A good friend tried to commit suicide and I think knowing more would have helped us all to understand and help."

• Nine participants had a family member or close friend who ended their own lives. These teachers had the same mean of correct identification of suicide misconceptions (5.22; SD = 1.55) as the overall average (5.22; SD = 1.93).

"He viscut dos casos de suicidi en el meu entorn proper, tots dos ben diferents i m'han sorprès que haguessin arribat en aquest final."

"I have experienced two suicide cases in my immediate surroundings, both of which are very different and I was surprised that they had reached this end."

• One participant acknowledged having considered suicide sometime in the past.

This teacher had a significantly higher mean of correct identification of suicide misconceptions (7) than the overall average (5.22; SD = 1.93).

"Yo mismo tuve una depresión fuerte hace años y durante un momento pensé que sería una solución."

"I had a strong depression myself years ago and for a moment I thought it would be a solution."

Discussion

Results showed that participants perceived themselves as poorly informed regarding suicide and showed a moderately low mean of correct identification of suicide misconceptions. Some misconceptions were more generally held than others. Particularly, most teachers in this study could not identify popular misconceptions related to verbalizations of suicide. Only 20.93% and 24.80% of the participants could identify misconceptions 1 (People who talk about wanting to die by suicide do not try to kill themselves) and 10 (People who want to suicide do not talk about it), respectively. Less than half of participants could identify misconception 2 (People who try to suicide do not want to die; they just want to call attention). Holding such misconceptions may lead to inhibition or underestimation of implicit and explicit demands for help by people with suicidal ideas or plans. This may obstruct identification of cases in which suicidal ideation is real and

preventive action possible. Such an analysis is reinforced by the open-ended responses that expressed feelings of doubtfulness, uneasiness, and helplessness. An additional incapacity to sympathize with suicidal peoples' feelings or identify warning symptoms of suicidal behavior reduces the possibility of establishing a frank dialogue in a supportive atmosphere. Participants' answers to items 1 and 10 in Table 2 may be particularly interpreted as indicative of poor communicative abilities relevant for suicide prevention.

Only 17.82% of all participants identified item 5 in Table 2 as a misconception. This seems to indicate that most participants had a stereotyped view of people with suicide ideation. Although depressed people may have suicide ideas, suicide may be caused by alcohol, drugs, or other mental health problems, which may not be easy to detect. Teachers' limited capacity in terms of risk factors and warning signs of imminent suicide is confirmed in their answers to items 1 and 3 and in the open-ended responses, wherein participants expressed feelings of surprise after the suicide of an acquaintance or a student, reporting not having been aware the person was going through problems.

Even though these results showed participants had only a moderately low capacity for suicide myth identification and perceived themselves as poorly informed regarding suicide, there are good prospects for preventive efforts among teachers, since the majority did not believe the following myths: myth 3, identified as a misconception by 68.21% of participants; myth 4, identified as a misconception by 79.84% of participants; myth 6, considered false by 58.91% of participants; myth 7, identified as a misconception by 82.17% of participants; myth 8, considered incorrect by 62.01% of all respondents; and myth 9, identified as a misconception by 63.56% of participants. Besides, teachers expressed openness to taking professional responsibility for suicide prevention. Most participants believed teachers can play a significant role in suicide pre-

vention if they receive appropriate training, and would like to obtain information in this area.

It is worth mentioning that male participants perceived themselves as more knowledgeable than female participants regarding suicide behavior and prevention, although no significant gender differences were found in the respondents' capacity for identifying suicide myths or misconceptions. Our data suggest that teacher training initiatives should take gender differences into account. Male teachers should particularly be supported in questioning their (mis)conceptions on suicide and guided in acknowledging the need to reach out for help in situations of mental and emotional distress.

Conceptions of masculinity held by male teachers in Spain may possibly play an important role here.

It is also relevant to consider that, in our study, participants who reported having received some kind of teacher training in psychological or emotional intervention that specifically mentioned suicide actually had a lower mean of correct responses than the overall mean. These findings confirm that addressing suicide properly is a complex matter, which will require a specifically school-based approach. It is important not to present suicide as an understandable response to common adolescent problems, to avoid normalizing or even romanticizing suicide, which could have negative consequences such as suicidal ideation facilitation (Schurtz et al., 2010).

Conclusions

This is the first study to our knowledge to investigate the capacity of teachers to identify commonly held misconceptions about suicide and to explore the strengths and deficits in their overall suicide knowledge in Spain. We found that participants had only a mod-

erately low capacity for suicide myth identification. Teachers held some misconceptions related to suicide, which have been previously found in studies performed in Australia (Kylie & David, 2002) and in Korea (Lee et al., 2010), particularly those related to suicide verbalizations. We also found that teachers in the present study perceived themselves as poorly informed regarding suicide, but acknowledged their strategic role in suicide prevention and would like to receive information in this area. These findings are consistent with those of Ross et al. (2017), who found that teachers identified a need for suicide prevention training and reported that suicide prevention education and training was not current practice.

Talking about suicide is a very difficult task. If teenagers feel they might be criticized for sharing their desire to die, it is likely that many will face great emotional barriers in looking for help. Providing a supportive atmosphere, which will make students who have suicidal ideation or plans comfortable enough to reach out for help requires more than good will. It poses challenges for preventive strategies that health and education policy makers must urgently face collaboratively in Spain. Changing Spanish schools into settings that provide a frank supportive atmosphere for suicide prevention requires the collaborative work of health professionals, social workers, pedagogues, and school staff.

Practical implications of the results presented here are that psychoeducational services or training initiatives in suicide prevention should particularly address communicative abilities relevant for suicide prevention, apart from information on suicide risk factors and protective factors associated with youth. Our data suggests such psychoeducational services or training initiatives should also take gender differences into account.

A limitation of the present research is that the participant population of this study was restricted to schools in Catalonia. There is a need to investigate the questions posed here among teachers in other areas of Spain. It is also relevant to develop qualitative studies that may appropriately analyze questions such as why participants who report having received some kind of teacher training in psychological or emotional intervention that specifically mentioned suicide actually have a more limited capacity to identify suicide misconceptions; or why men feel more knowledgeable than women about suicide, even though their capacity to identify suicide misconception was not significantly different. As future lines of research, we see the need to expand this study beyond Catalonia and to carry out qualitative studies that illuminate the questions identified here.

References

- Ayuso-Mateos, J. L., Baca-García, E., Bobes, J., Giner, J., Giner, L., Pérez, V., Sáiz, P. A., Saiz Ruiz, J., & Grupo RECOMS. (2012). [Recommendations for the prevention and management of suicidal behaviour]. *Revista De Psiquiatria Y Salud Mental*, *5*(1), 8–23. https://doi.org/10.1016/j.rpsm.2012.01.001
- Arora, P. G., Collins, T., Dart, E., Hernández, S., Fetterman, H., & Doll, B. (2019). Multi-ti-tiered systems of support for school-based mental health: A systematic review of depression interventions. *School Mental Health*, 11(2), 240–264.
- Barrero, S. A. (2006). Los mitos sobre el suicidio. La importancia de conocerlos. In P.
 B. S. A. Pérez & D. Mosquera (Eds.), *El suicidio: Prevención y manejo* (pp. 231–240). Madrid: Ediciones Pléyades.

- Bowden, M., McCoy, A., & Reavley, N. (2019). Suicidality and suicide prevention in culturally and linguistically diverse (CALD) communities: A systematic review.

 International Journal of Mental Health, 40(6), 624–640.

 doi:10.1080/00207411.2019.1694204
- Capuzzi, D. (1994). Suicide prevention in the schools: Guidelines for middle and high school settings. Alexandria, VA: American Counseling Association.
- Davidson, M. W. (1999). Are teachers of children and young adolescents responsive to suicide prevention training modules? Yes. *Death Studies*, *23*(1), 61–71. doi:10.1080/074811899201190
- Del Valle, E. F. (2011). Programa de Intervención Intensiva (PII). In J. Bobes, J. Giner, J. Saiz (Eds.), Suicidio y psiquiatría Recomendaciones preventivas y de manejo del comportamiento suicida (p. 183). Madrid: Triacastela.
- Eurostat. (n.d.). *Suicide death rate by age group*. https://ec.europa.eu/eurostat/data-browser/view/tps00202/default/table?lang=en
- Fonseca-Pedrero, E., Inchausti, F., Pérez-Gutiérrez, L., Aritio Solana, R., Ortuño-Sierra, J., Sánchez-García, M. a Á., Lucas-Molina, B., Domínguez, C., Foncea, D., Espinosa, V., Gorría, A., Urbiola-Merina, E., Fernández, M., Merina Díaz, C., Gutiérrez, C., Aures, M., Campos, M. S., Domínguez-Garrido, E., & Pérez de Albéniz Iturriaga, A. (2018). Ideación suicida en una muestra representativa de adolescentes españoles. *Revista de Psiquiatría y Salud Mental*, *11*(2), 76–85. http://dx.doi.org/10.1016/j.rpsm.2017.07.004
- Gabilondo, A., Alonso, J., Pinto-Meza, A., Vilagut, G., Fernandez, A., Serrano-Blanco, A., Almansa, J., Codony, M., & Haro, J. M. (2007). Prevalencia y factores de

- riesgo de las ideas, planes e intentos de suicidio en la población general española. Resultados del estudio ESEMeD. *Medicina Clínica*, *129*(13), 494-500.
- Hegerl, U., & Schäfer, R. (2007). [From the Nuremberg Alliance Against Depression to a European network (EAAD)—extending community-based awareness-campaigns on national and European level.] *Psychiatrische Praxis*, *34*(Suppl. 3), 261–265. http://dx.doi.org/10.1055/s-2007-986172
- Huertas, P., Moreno-Küstner, B., Gutiérrezc, B., Cervilla, J. A. (2020). Prevalence and correlates of suicidality in Andalusia (Spain): Results of the epidemiological study PISMA-ep. *Journal of Affective Disorders*, *266*, 503–511. http://dx.-doi.org/1016/j.jad.2020.01.115
- Instituto Nacional de Estadística (INE). (2019, December 19). *Defunciones según la causa de muerte*. https://www.ine.es/prensa/edcm 2018.pdf
- Johnson, L. A., & Parsons, M. E. (2012). Adolescent suicide prevention in a school setting: Use of a gatekeeper program. NASN School Nurse, 27(6), 312–317.
 doi:10.1177/1942602X12454459
- Kalafat, J. (2003). School approaches to youth suicide prevention. *American Behavioral Scientist*, 46(9), 1211–1223. doi:10.1177/0002764202250665
- Kann, L., Brener, N. D., & Allensworth, D. (2001). Health education: School health policies and programs study 2000. *Journal of School Health*, 71(7), 266–278.
- Kann, L., Telljohann, S. K., & Wooley, S. F. (2007). Health education: Results from the school health policies and programs study 2006. *Journal of School Health*, 77(8), 408–434.
- King, K. A. (1999). Fifteen prevalent myths concerning adolescent suicide. *The Journal of School Health*, 69(4), 159–161.

- King, K. A. (2001). Developing a comprehensive school suicide prevention program. *The Journal of School Health*, 71(4), 132–137.
- King, K. A., Strunk, C. M., & Sorter, M. T. (2011). Preliminary effectiveness of surviving the teens: Suicide prevention and depression awareness program on adolescents' suicidality and self-efficacy in performing help-seeking behaviors. *The Journal of School Health*, 81(9), 581–590. doi:10.1111/j.1746-1561.2011.00630.x.
- Kylie, M., & David, I. (2002). Prevention of youth suicide: How well informed are the potential gatekeepers of adolescents in distress. *Suicide and Life-Threatening Behavior*, 32(1), 67–79.
- Jimenez-Trevino, L., Sáiz, P. A., Corcoran, P., Garcia-Portilla, M. P., Buron, P., Garrido, M., Diaz-Mesa, E., Al-Halabi, S., & Bobes, J. (2011). The incidence of hospital-treated attempted suicide in Oviedo, Spain. *Crisis*, 33(1), 46–53. https://doi.org/10.1027/0227-5910/a000094
- Lee, S. Y., Hong, J. S., & Espelage, D. L. (2010). An ecological understanding of youth suicide in South Korea. *School Psychology International*, *31*(5), 531–546. https://doi.org/10.1177/0143034310382724
- Lee, K., Lee, D., & Hong, H. J. (2019). Text mining analysis of teachers' reports on student suicide in South Korea. *European Child & Adolescent Psychiatry*, 29(4),453–465. https://doi.org/10.1007/s00787-019-01361-1
- Nakhid-Chatoor, M. (2020). Schools and suicide The importance of the attachment bond. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, 41(1), 1–6. https://doi.org/10.1027/0227-5910/a000640

- Page, R. M., Saumweber, J., Hall, P. C., Crookston, B. T., & West, J. H. (2013). Multi-country, cross-national comparison of youth suicide ideation: Findings from global school-based health surveys. *School Psychology International*, 34(5), 540–555. doi:10.1177/0143034312469152
- Penn, D. L., Simpson, L., Edie, G., Leggett, S., Wood, L., Hawgood, J., Krysinska, K., Yellowlees, P., & De Leo, D. (2005). Development of ACROSSnet: an online support system for rural and remote community suicide prevention workers in Queensland, Australia. *Health Informatics Journal*, 11(4), 275–293. doi:10.1177/1460458205058755
- Popenhagen, M. P., & Qualley, R. M. (1998). Adolescent suicide: Detection, intervention, and prevention. *Professional School Counseling*, 1(4), 30–36.
- Pompili, M. (2010). Exploring the phenomenology of suicide. *Suicide and Life Threatening Behavior, 40*(3), 234–244.
- Prakasha, A., & Mohan, A. K. (2020). Suicidal behaviour: A knowledge assessment of adolescents. *Studies in Indian Place Names*, 40(70).
- Ross, V., Kõlves, K., & De Leo, D. (2017). Teachers' perspectives on preventing suicide in children and adolescents in schools: A qualitative study. *Archives of Suicide Research*, *21*(3), 519–530. doi:10.1080/13811118.2016.1227005
- Sáiz, P. A., García-Portilla, M. P., Bousoño, M., Bobes, J. (2004). Programas para grupos de alto riesgo. In J. Bobes, P. A. Sáiz, M. P. García-Portilla, M. T. Bascarán, M. Bousoño (Eds.), Comportamientos suicidas Prevención y tratamiento (pp. 382–403). Barcelona: Ars Médica.
- SAMHSA Substance Abuse and Mental Health Services Administration. (2012). *Preventing Suicide: A Toolkit for High Schools*. HHS Publication No.

- SMA-12-4669. Rockville, MD: Center for Mental Health Services, Substance
 Abuse and Mental Health Services Administration. https://store.samhsa.gov/system/files/sma12-4669
- Sanidad. (2011). Estrategia en Salud Mental del Sistema Nacional de Salud 2009–2013. https://www.mscbs.gob.es/organizacion/sns/planCalidadSNS/docs/saludmental/SaludMental2009-2013.pdf
- Schurtz, D. R., Cerel, J., & Rodgers, P. (2010). Myths and facts about suicide from individuals involved in suicide prevention. *Suicide and Life-Threatening Behavior*, 40(4), 346–352. doi:10.1521/suli.2010.40.4.346
- Scouller, K. M., & Smith, D. I. (2002). Prevention of youth suicide: How well informed are the potential gatekeepers of adolescents in distress? *Suicide & Life-Threatening Behavior*, 32(1), 67–79.
- Shaffer, D., Garland, A., Vieland, V., Underwood, M., & Busner, C. (1991). The impact of curriculum-based suicide prevention programs for teenagers. *Journal of the American Academy of Child and Adolescent Psychiatry*, 30(4), 588–596.
- Swartz, K. L., Kastelic, E. A., Hess, S. G., Cox, T. S., Gonzales, L. C., Mink, S. P., & DePaulo, J. R. (2007). The effectiveness of a school-based adolescent depression education program. *Health Education & Behavior*, *37*(1), 11–22. doi:10.1177/1090198107303313
- Tejedor, C., Díaz, A., Faus, G., Pérez, V., Solà, I. (2011). Resultados del programa de prevención de la conducta suicida Districto de la Dreta de l'Eixample de Barcelona. *Actas Españolas de Psiquiatría*, 39(5), 280–287.
- Tompkins, T. L., Witt, J., & Abraibesh, N. (2009). Does a gatekeeper suicide prevention program work in a school setting? Evaluating training outcome and moderators

- of effectiveness. *Suicide & Life Threatening Behavior*, 39(6), 671–681. doi:10.1521/suli.2009.39.6.671.
- Velaz-de-Medrano UC, Blanco-Blanco Á, Manzano-Soto N. (2012). Coverage of Guidance and Form-teaching Needs in Compulsory Education: Study in Nine Autonomous Communities. *Revista de Educación*. 138-173.
- Wasserman, D., Carli, V., Wasserman, C., Apter, A., Balazs, J., Bobes, J., Bracale, R.,
 Brunner, R., Bursztein-Lipsicas, C., Corcoran, P., Cosman, D., Durkee, T.,
 Feldman, D., Gadoros, J., Guillemin, F., Haring, C., Kahn, J.-P., Kaess, M., Keeley, H., ... Hoven, C. W. (2010). Saving and empowering young lives in Europe (SEYLE): a randomized controlled trial. *BMC Public Health.* 10, 192. https://doi.org/10.1186/1471-2458-10-192
- Westefeld, J. S., Jenks Kettmann, J. D., Lovmo, C., & Hey, C. (2007). High school suicide: Knowledge and opinions of teachers. *Journal of Loss and Trauma*, 12(1), 33–44.
- World Health Organization. (2000). Preventing suicide: A resource for teachers and other school staff. https://www.who.int/mental_health/media/en/62.pdf
- Yockey, R. A., King, K. A., & Vidourek, R. A. (2019). School factors and anxiety disorder among Hispanic youth: Results from the 2016 US national survey on children's health. *School Psychology International*, 40(4), 403–415.

Table 1. Participants' demographic characteristics

Participants' demographic characteristics		
	n	%
Gender		
Male	31	24.03
Female	98	75.97
Age		
25 years old or younger	10	7.8
26-35 years old	33	25.6
36-45 years old	36	27.9
46-55 years old	43	33.3
56 years old or older	7	5.4
Education levels taught		
Early education	11	8.52
Primary education	45	34.88
Secondary Education	52	40.31
High school	21	16.27
Received some kind of teacher training in psychological or emotional intervention		
Yes	52	40.31
No	77	59,68
Received some kind of teacher training in psychological or emotional intervention specifically mentioning suicide		
Yes	8	6.20
No	121	93.80

Table 2. Participants' identification of suicide myths or misconceptions

Misconception		Participants could identify the statement as a misconception			
		Yes	No	Undecided	
		n (%)	n (%)	n (%)	
1.	People who talk about wanting to die by suicide do not try to kill themselves.	27 (20.93)	54 (41.86)	48 (37.20)	
2.	People who attempt suicide do not want to die; they just want to get attention.	55 (42.63)	36 (27.90)	38 (29.45)	
3.	Once a person has made a suicide attempt, that person will die by suicide sooner or later.	88 (68.21)	11 (8.52)	30 (23.25)	
4.	Suicide is hereditary.	103 (79.84)	8 (6.20)	18 (13.95)	
5.	People who attempt to commit suicide are always depressed.	23 (17.82)	80 (62.01)	26 (20.15)	
6.	Suicide cannot be prevented because it is impulsive.	76 (58.91)	20 (15.50)	33 (25.58)	
7.	Discussing suicide may cause someone to consider it or make things worse.	106 (82.17)	8 (6.20)	15 (11.62)	
8.	Nobody can help someone who is truly suicidal.	80 (62.01)	23 (17.82)	25 (19.37)	
9.	Only psychiatrists and psychologists can prevent suicide.	82 (63.56)	18 (13.95)	29 (22.48)	
10.	People who want to suicide do not talk about it.	32 (24.80)	56 (43.41)	41 (31.78)	

Item	M	SD
1. I know the suicide risk factors associated with youth.	2.41	1.04
2. I know the suicide protective factors in youth.	2.33	1.34
3. I can recognize the warning signs of imminent risk of suicide.	1.73	0.86
4. I know strategies to minimize risk factors of suicide in youth.	1.88	0.90
5. I know basic guidelines for first intervention in case of detection of suicide ideation or attempt among students.	1.81	0.90
6. I am aware that suicide is the leading external cause of death in Spain, surpassing traffic fatalities.	1.76	0.89

Table 3. Participants' perceived knowledge of suicide

Table 4. Gender differences regarding participants' perceived knowledge of suicide

	Female Participants		Male Participants			
	M	SD	M	SD	F	p
2. I know the suicide protective factors in youth.	1.61	0.75	2.10	1.08	7.8	0.006
4. I know strategies to minimize risk factors of suicide in youth.	1.68	0.84	2.23	0.99	8.91	0.003
5. I know basic guidelines for first intervention in case of detection of suicide ideation or attempt among students.	1.64	0.85	2.13	0.92	7.37	0.008