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# **SAVE:** A Suicide Prevention Program for Schools

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#### **Abstract**

Suicide is the second most frequent cause of death among young people aged 15 to 20 years. However, it is unfortunately a taboo topic in today's society (Federal Statistical Office, 2018). Suicide prevention among adolescents therefore is of high relevance. Schools, as an important learning and living environment for young people, offer a framework for suicide prevention initiatives such as gatekeeper trainings and psychoeducational programs. Persons involved in school life can act as gatekeepers, perceiving warning signals of suicidal behavior and encouraging students at risk of suicide to seek help (Hamann & Schweigert, 2013). The main focus of the project "SAVE" is health promotion and health maintenance through the promotion of self-regulation strategies. The aim is to efficiently involve the key players in school life – teachers and students – to achieve the greatest possible effect in terms of suicide prevention. Against this background, gatekeeper trainings and psychoeducational prevention programs are combined and a cooperation with regional care structures is established. This multi-perspective approach, based on an innovative combination of these three components, is intended to overcome weaknesses in previous preventive approaches. The program will be evaluated within the scope of an intervention study at two locations (Darmstadt and Heidelberg). The results will allow conclusions to be drawn about the further development of suicide prevention approaches and their implementation in schools. Training materials will be made available to the public at the end of the project.

### **Keywords**

Suicide in adolescents, suicide prevention in schools, self-regulation, gatekeeper training, psychoeducational prevention program

# SAVE: A Suicide Prevention Program for Schools

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### 1 Introduction

The development of young people is characterized by upheavals, changes, and crises. Coping with these shifts can be a great challenge. If they are not overcome, such crisis situations can have further consequences, including suicidal thoughts and suicide attempts among young people. This topic is still taboo in society, even though various researchers have highlighted the relevance of addressing this sensitive subject: Suicide among adolescents is a serious issue that is closely linked to social, medical, and health policy aspects. Triggering factors can include the pressure to succeed at school, bullying, and arguments with friends and family (Lohaus & Klein-Heßling, 2008). It is the second most frequent cause of death among adolescents aged 15 to 20 years (Federal Statistical Office, 2018), and studies from the US indicate that almost every tenth child has attempted or threatened to commit suicide (Centers for Disease Control and Prevention, 2016; Hawton, Rodham, & Evans, 2008). Only a very small percentage of adolescents (2.8%) report seeking medical treatment for suicide attempts throughout their life (Center for Disease Control and Prevention, 2016). In Germany, 205 adolescents between the ages of 15 and 20 years committed suicide in 2016 (Federal Statistical Office, 2018). The gender ratio for suicide attempts is approximately two boys for every one girl. While completed suicides are about two times more frequent among boys than among girls, females more frequently carry out suicide attempts in Western cultures (Albrecht, 2012; Holtkamp & Herpertz-Dahlmann, 2001).

In the "Heidelberger Schulstudie", 14% of 14- to 15-year-olds reported past thoughts of suicide (Brunner & Resch, 2008). This statistic underlines the high relevance of suicide prevention among adolescents. A possible cause for suicidal behavior among young people is the absence or failure of self-regulation strategies, emotion regulation strategies, or impulse control in dealing with crises. Young people often have a narrower spectrum of effective strategies for coping with stress and problems (Hamann & Schweigert, 2013). In some cases, suicidal behavior is also related to mental illness (e.g., depression, post-traumatic stress disorders, and personality disorders). About 20% of all children and adolescents aged between 3 and 17 years have mental health problems (cf. KIGGS study; Hölling, Schlack, Petermann, Ravens-Sieberer, & Mauz, 2014). The promotion of self-regulatory skills can help young people to overcome critical situations and suicidal tendencies more easily and is therefore directly related to suicide prevention.

## 2 Risk of Suicide in Adolescents and the Role of Self-regulation Skills

Suicidal behavior in children and adolescents is a serious and tragic issue. In a suicidal crisis, however, the persons focus is usually on the "path" away from one's own problems and not on the "way" to death (Deisenhammer, 2012). Verbal and non-verbal expressions of suicidal thoughts can serve as warnings of suicidal intentions. When one has acute suicidal tendencies, the perception of one's own world is so restricted that life is perceived as senseless and that no options for action to overcome the crisis seem to exist.

In the psychiatric classifications of diseases (International Statistical Classification of Diseases and Related Health Problems 10 [ICD-10]), there are no clear diagnosis criteria for suicidal actions or symptoms indicating suicidal tendencies. Suicidal tendencies are a multi-dimensional phenomenon and cannot always be clearly attributed to a clinicalpsychiatric diagnosis (DGKJP, 2016). The presence of certain psychiatric diseases may be a major risk factor for suicidal tendencies, but this factor is not mandatory (DGKJP, 2016). Accordingly, suicidality can also occur in adolescents without mental disorders. However, children and adolescents suffering from a mental disorder have a suicide risk that is 3 to 12 times higher than that of adolescents without a corresponding diagnosis (Kasper et al., 2011). Groups at risk of suicidal tendencies include youths with low socioeconomic status (Schmidtke, Bille-Brahe, DeLeo, & Kerkhof, 1996) and low school performance (Fortune, Stewart, Yadav, & Hawton, 2007). Frequent parental conflicts or separation (Hawton, Saunders, & O'Connor, 2012), sexual abuse (Hawton et al., 2012), psychological disorders (Resch, Parzer, Brunner, & the BELLA study group, 2008), as well as drug and alcohol abuse are also risk factors for suicidal behavior in adolescents. Moreover, impulsivity and lack of affect regulation are further risk factors for suicidal behavior (DGKJP, 2016). Suicidal adolescents exhibit strong feelings of hopelessness and experience isolation more often than other adolescents do. They often lack social support from parents or peers, leaving them to struggle on their own with the feeling that their lives are meaningless. In adolescence, many teenagers experience difficulties in dealing with changes in their sense of self (Blasczyk-Schiep, 2004). Identity problems and self-esteem crises can occur; in this particular development phase, such issues can be explained primarily by the exaggeration of normal developmental processes. Slight depersonalization, which is a temporary phenomenon, occurs in 30-70% of young adults, and 50% experience suicidal thoughts in the course of adolescence (Remschmidt, 1992). However, a change in self-awareness does not necessarily increase the suicide risk of adolescents. The risk only grows if dysfunctional mental processes are related to other risk factors (e.g. conflicts, sexual abuse, drug and alcohol abuse, low selfregulation strategies).

Appropriate self-regulation processes can be protective factors in crises and stressful situations; they can prevent individuals from slipping into a negative world of thoughts and feelings. *Self-regulation* means the ability to process failures more easily and to

control cognitions, affect, and behaviors more significantly to generate new goals and learn effectively from one's mistakes (Zimmerman & Schunk, 2011). Zimmerman (2000) has emphasized the interaction of three components – the person, the situation, and the behavior – and has defined self-regulation as follows: "Self-regulation refers to self-generated thoughts, feelings, and actions that are planned and cyclically adapted to personal goals" (Zimmerman, 2000, p. 16). In the context of suicide prevention in young people, the aim is for programs to have a positive impact on the health of young people so that they can learn to control their impulses and become acquainted with their personal resources for dealing with crises.

Such a capacity for self-regulation means, first of all, an exact analysis of the situation that has occurred, instead of the rapid suppression of mistakes and discrepancies. Moreover, self-regulation covers the subsequent conscious control of thoughts and feelings. The empirical evidence regarding self-regulation processes in adolescents who were willing to end their lives and survived a suicide attempt shows that self-regulation skills are less efficient in these adolescents than in non-suicidal adolescents (Blasczyk-Schiep, 2004). Due to a lack of self-determination, they tend to carry out other peoples' goals rather than their own goals and often experience strong feelings of senselessness after the execution of such actions because they are unable to implement their own wishes. This lethargy with regard to self-determination results in particularly sensitive reactions to stress and less control of affect to decrease negative emotions (Blasczyk-Schiep, 2004).

Therefore, interventions addressing self-regulation can likely have a preventive effect in terms of protecting adolescents from destabilization. The role of confidant relationships, especially with teachers at schools, is also decisive during periods of destabilization. Teachers can be the primary contact and help young people to cope with crises through an appropriate response and support. If a teacher reacts appropriately by co-regulating or helping to regulate a student's expression of frustration, anger, fear, or discouragement, that response contributes to the student also opting for such a response. This intervention can support to the development of suitable self-regulatory abilities. However, not only teachers but also schools themselves are becoming increasingly important agents for suicide prevention. Against this background, schools should be taken into account in the development and implementation of suicide prevention programs.

### 3 Suicide Prevention in Schools

The school, as a central learning and living environment for young people, plays an important role in suicide prevention, as the mental health issues of young people can be noticed at an early stage in this setting. In addition, school themselves cannot be completely relieved of responsibility, considering that compulsory grades, disciplinary measures, school suspension, and (cyber-)bullying can favor the development of suicidal

intentions (Bründel, 2004). Nonetheless, the causes of suicide and attempted suicide are often manifold and must always be seen in the overall context of an unfavorable development (Bründel, 2015b). However, schools are not merely sites for the early recognition of warning signals: people involved in school life, such as teachers and peers, can also act as confidants and encourage students at risk to seek help. In addition, they can act as gatekeepers. *Gatekeepers* can be defined as those people who have personal contact with many others in the community and who are able to identify suicide-prone persons and refer them to appropriate care structures (Reis & Cornell, 2008). Thus, teachers can perceive warning signals for students' suicidal behavior (Hamman & Schweigert, 2013).

Moreover, schools provide a suitable framework for suicide prevention programs and preventive measures with regard to the health-promoting processes of young people, as many young people can be addressed at schools. Such measures and programs can inform students about health and illness in general – and about suicidal tendencies in particular – and teach them concrete strategies to better cope with critical situations. Moreover, it is important to address and to increase students' willingness to seek and accept help. Eliminating the taboo on discussing suicide and raising awareness of individual resources and coping strategies are decisive elements in this respect. Schools can carry out such programs to prevent the negative developments that often begin during puberty (Ploeg, Ciliska, Brunton, MacDonnell, & O'Brian, 1999). This statement is also supported by the fact that preventive measures, including suicide prevention programs, are more promising in adolescence than in adulthood since opportunities for change are greater in this age group.

As teachers serving as gatekeepers in school settings are the main contact persons for students, they should be adequately prepared and supported with regard to such sensitive issues such as suicidal behavior in young people. This assumption is reinforced by the growing need for counseling on mental health and suicide in schools: As part of a research project on parental counseling at grammar schools in the greater Heidelberg area, guideline-based interviews with school principals were conducted on counseling occasions and contents. The school principals emphasized the increasing need for counseling for parents and students on mental and psychosomatic illnesses. They pointed to a lack of information and a high need for further training in this area, as the school is the first point of contact for many families with particular needs of support (Hartenstein & Hertel, 2017). According to the school principals, most schools do not have a standardized procedure for dealing with students with mental health problems or the risk of suicide. This not only points to a need for preventive counseling by teachers at schools, but also highlights that counseling can be used as a resource.

Furthermore, the results on counseling situations in everyday school life indicate that teachers in Germany tend to be more reserved with parental counseling appointments at school. They do not feel well prepared for such events (Hertel, 2009; Wild, 2003) and

offer counseling sessions less frequently than teachers in other countries do (Borgonovi & Montt, 2012). One possible reason is that hardly any counseling skills are taught in teacher training in Germany (Wild, 2003). Even though such skills can be gained through comparatively short training programs (Hertel, 2009; Hertel, Larcher, Helmker, Djakovic, & Kerwer, 2014; Gartmeier et al., 2015). Thus far, the focus has been on counseling in learning situations. The need for further training for teachers on topics such as mental health and suicidal behavior in adolescence can be partially met through gatekeeper trainings. These and other suicide prevention approaches are discussed in the following section.

## 4 Initiatives for Suicide Prevention in Schools

Approaches to suicide prevention in schools can be divided into four categories: (1) psychoeducational prevention programs, (2) screening procedures, (3) gatekeeper programs, and (4) postventive interventions (Bründel, 2015b). Most existing programs can be classified as psychoeducational prevention (Bründel, 2015b), but only a few have already been evaluated, pointing out the great need for effectiveness studies in this area (Bründel, 2015a). Psychoeducational prevention programs aim at building up knowledge among students and are generally designed for whole classes (group-based prevention). The results have illustrated that after the implementation of a corresponding program, students had significantly more background knowledge on the subject of suicide (e.g., risk factors, signs of crisis). In addition, they showed more appropriate attitudes toward suicide, and reported to commit suicide attempts less frequently. However, their willingness to seek help in a (suicidal) crisis did not increase (Aseltine & DeMartino, 2004; Aseltine, James, Schilling, & Glanovsky, 2007; Klimes-Dougan, Klingbeil, & Mueller, 2013).

Screening procedures assessing suicide risk are another possible approach to suicide prevention in schools. Such screenings are carried out with the aid of questionnaires and tests. These methods have proven helpful (Gould, Brunstein, & Batejan, 2009), although there are several objections to using them: Screening the whole student body can lead to a high number of false positive results. These screenings usually have low thresholds for determining the relevance of a clinical investigation, which goes hand in hand with greater security in case of a potential suicidal risk. However, these high rates of false positive results might lead to dissatisfaction among students and their parents. In addition, the need for regular repetition of these screening procedures must be discussed. But even if additional screening entails higher costs, the risk of suicide is not stable and should be carefully re-examined (Bründel, 2015b).

In addition to these pupil-oriented approaches, individual-centered gatekeeper programs are an important component of suicide prevention in schools (Gould et al., 2009). They help teachers and other actors in school life to deal more confidently with students at risk of suicide. The best-known gatekeeper program – Questions, Persuade,

and Refer (QPR) – was developed by Quinnett (2012) and has been evaluated several times (e.g., Reis & Cornell, 2008). Teachers are trained on how to address endangered students, how to persuade them to accept help, and how to refer them to appropriate institutions.

The results show that after training, teachers had more knowledge about risk factors, were more proactive in addressing young people, and recognized endangered students earlier (e.g., Isaac et al., 2009; Gould et al., 2009). Although gatekeeper programs have been integrated into various prevention initiatives (e.g., "Worth Living," Plöderl & Fartacek, & Fartacek, 2010; the Saving and Empowering Young Lives in Europe [SEYLE] study, Wasserman, Carli, Hoven, Wasserman, & Sarchiapone, 2012), no published results on pure gatekeeper training courses are available for German-speaking countries. In particular, the SEYLE study pointed out that gatekeeper training should also impart knowledge about students' mental health, precisely because it is an important component for teachers to adequately exercise the role of a gatekeeper (Wasserman et al., 2012).

The fourth type of prevention approach is postventive interventions, which begins after a successful suicide. These interventions form the framework and schedule for the entire mourning work of teachers and students. In addition to supporting fellow students and teachers in mourning and coping with emerging emotions, such approaches also impart knowledge about risk factors and warning signals for preventive purposes. Other potentially endangered students should be identified to motivate them to seek professional help (Bründel, 2015b).

In summary, both group-based and individual-centered approaches are effective in certain respects, but each has specific weaknesses. However, a very important aspect is the continued reluctance of students to seek help. The SAVE project aims to overcome this weakness by drawing on multiple perspectives through the innovative combination of a gatekeeper training, a psychoeducational intervention for students, and the involvement of regional care structures. Combining group-centered approaches and individual approaches is expected to compensate for the weaknesses of the individual elements. In particular, supporting teachers in taking on the role of gatekeepers and building networks with regional care structures should substantially increase the effects of this psychoeducational intervention for students. In the following, the project and the particular elements are presented in more detail.

## 5 SAVE: A Suicide Prevention Program for Teachers and Students

The project "SAVE: Suicide Prevention in Schools" is a co-operation of the University of Heidelberg and the Darmstadt Children's Hospital Princess Margaret. Two approaches are represented: At the Heidelberg project location, an educational-psychological approach centered on self-regulation was chosen. A clinical-therapeutic approach is represented at the Darmstadt project site. The general aim of the SAVE project is to

sustainably improve suicide prevention in schools through a combination of individual-centered and group-based prevention measures and integration into regional care structures. Two training programs have been designed for this purpose: a gatekeeper training for teachers and a psychoeducational intervention for students with a focus on promoting self-regulation skills. The interventions presented in this article were developed as part of the educational-psychological approach at the Heidelberg project site. To test the effectiveness of the two planned programs, a scientific study at two locations (Darmstadt and Heidelberg) is planned; that study is described below.

## 6 Methodology: Research Questions and Design

As only few effectiveness studies on suicide prevention programs in schools exist, the interventions carried out within the scope of the SAVE project are being scientifically monitored. The effectiveness of the preventive approaches will be tested via a randomized intervention study. The three main questions and sub-goals of the project can be concretized as follows:

(1) Can teachers be sensitized to signs of suicidal tendencies through training and acquire counseling skills enabling them to safely and competently make initial contact with students at risk of suicide? (Individual-centered approach, teachers as gatekeepers).

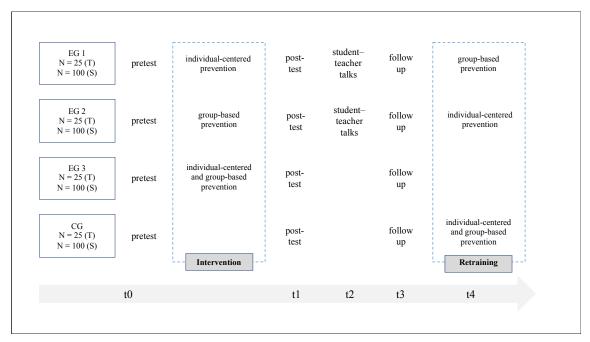
Teachers are trained as gatekeepers within the framework of training courses. After the training, they feel more confident in their advisory skills and in identifying suicidal tendencies and mental health issues among students. They have a professional understanding of their role, develop favorable attitudes towards their role as gatekeepers in preventing suicide among students, and work closely with the regional care structures in crisis situations. From this safety-focused point of view, they initiate counseling interviews with students, during which they evaluate the suicide risk. Students who have taken part in the conversations rate the counseling interviews positively.

- (2) Can students be sensitized to signs of suicidal tendencies and acquire strategies for action within the framework of a teaching unit that supports them to deal competently with their own personal stress and crisis situations or with those of fellow students? (Group-based approach, sensitization of students in the classroom by project staff). Students are sensitized to signs of suicidal tendencies and acquire action skills for dealing with stress and crisis situations. After the program, they feel more confident in recognizing signs of suicidal behavior in themselves and others and have self-regulation strategies that they can use to deal with critical situations. They are more willing to seek help in the event of a crisis. In addition, the relevance of gender, socio-economic background, and type of school attended are examined.
- (3) Do students and teachers perceive the networking with medical care structures helpful and valuable, and what opportunities, challenges, and obstacles arise?

In both trainings, networking with regional care structures takes place. We assume that teachers and students perceive these structures as helpful and supportive. In critical situations, they seek help and turn to the contact persons of the network. In the study, they will also be asked to indicate which opportunities, challenges, and obstacles have arisen. Cooperation between schools and both regional care structures and medical facilities might differ. Some schools might have a close collaboration, whereas others might have rather loose contact. We hypothesize that the intensity of cooperation with regional care structures is an important aspect when it comes to referring students to appropriate institutions and promoting the acceptance of help. Implications for the further dissemination of the approach in everyday school life can be derived from the results of our study.

To pursue these research questions, we have chosen a two-factor experimental design with the factors *individual-centered prevention* (yes/no) and *group-based prevention* (yes/no) (see Figure 1). In addition, a waiting control group will be included. This design results in four study conditions: individual-centered prevention (experimental group [EG] 1), group-based prevention (EG 2), individual-centered prevention and group-based prevention (EG 3, a combination), and one waiting control group (CG). After the follow-up survey, the experimental groups receiving only one intervention component (EG 1 or EG 2) and the waiting control group (CG) will receive follow-up training. The data collection will be multi-methodical and based on multiple perspectives. Data on teachers (T) and students (S) will be collected with questionnaires at three measurement points (t0, t1, and t3). The respective interventions will be carried out between measurement points t0 and t1.

Figure 1: Study design of the project. EG = experimental group, CG = control group, N = sample size, T = teachers, S = students, t = measurement time point.



The sample will be recruited via the regional networks of both project locations in Darmstadt and Heidelberg. A total of 20 schools in the greater Heidelberg and Darmstadt areas will be recruited for the study. From each school – regardless of the school type – at least 5 teachers and one or two school classes (approximately 30 students) should participate in the study, for a total of 100 teachers and 400 students. The schools will be randomly assigned to one of the four study conditions. Since this project focuses on a primary prevention program, suicide screening of the participating students will be carried out as part of the questionnaire survey before the intervention. This step is necessary to exclude acutely suicide-prone students from the program before it starts and to refer them directly to the regional care structures. If individual adolescents exhibit signs of possible suicidal tendencies before or during the intervention, their parents will be informed immediately and contact with regional clinical care structures will be established.

Within the teacher survey, the dependent variables are knowledge of signs of suicide, attitudes toward suicide, understanding of roles, counselling competence, and gatekeeper skills. The student survey covers knowledge of signs of suicide, attitudes toward suicide, strategies for action, and key constructs such as stress factors, self-regulation strategies, coping strategies, and impulse control. At the third measurement point, experiences with the prevention measures; satisfaction with the training, effectiveness of thee prevention measures, as well as opportunities, obstacles, and challenges regarding program implementation will also be assessed.

## 7 Preventive Approaches of SAVE

The main focus of the project "SAVE" is health promotion and health maintenance through the promotion of self-regulation strategies. The aim is to efficiently involve the key actors in school life – teachers and students – to achieve the greatest possible effect in terms of suicide prevention.

Within the scope of the gatekeeper training, the program content will be conveyed on both a theoretical and a practical level. The goals are to train teachers to recognize warning signs of suicidal tendencies in students, to convince students to seek help, and to refer them to suitable resources as needed. In addition, teachers will practice with practical scenarios so that they can learn how to directly address at-risk students in schools and to stabilize them in consultations. A further aim is to reduce restraints regarding addressing at-risk students and offering them help. The aim of the psychoeducational intervention is to help students acquire self-regulation strategies so they can react competently in demanding situations. The psychoeducational intervention is aimed primarily at young people in grades 8–10, aged between 13 and 16 years. Since, as described above, there are gender-specific differences with regard to suicide attempts and the number of deaths, group-based and individual-centered preventive approaches should carefully address these disparities. The basic structure of

the instructions, tasks, questionnaires, and instruments of the preventive programs comprising the SAVE project are covered in the following four modules: "S – Become sensitive," "A – Become active," "V – Venture and implement change," and "E – Encourage."

The combination of the three prevention approaches - (1) the gatekeeper training, (2) the psychoeducational intervention, and (3) the involvement of regional care structures - is a unique approach of the project SAVE. This innovative multi-perspective initiative is intended to promote synergies, which will increase the effectiveness of the programs. The training programs focus on the main issues described in Figure 2.

Figure 2: Main issues addressed by the gatekeeper training for teachers and the psychoeducational intervention for students.

Gatekeeper Training for Teachers	Modules	Psychoeducational Intervention for Students
to warning signs, triggers, causes, and risk factors of suicidality among adolescents; removal of taboos, destigmatisation; knowledge about explanatory models.	S Become sensitive	to warning signs and risk factors of suicidality and crisis among adolescents (lighter version); removal of taboos, destignatisation.
and perceive changes in students. Actively approach students in critical situations with communication and counselling competences.	A Become active	and learn about health-promoting effects of self- regulation. Get to know coping strategies to deal with stressful and critical situations.
, activate resources, expand students perspective, show options for action, strengthen emotional regulatory skills	V Venture and implement change	by strengthening self-regulatory skills (control of thoughts, feelings, and actions) with interactive tasks.
students to seek for (professional) help. Find confidence by building a gatekeeper network and knowing about the regional care structures.	Encourage	help-seeking behaviour for themselves and others. Get to know the regional care structures, fill out an individual emergency card.

Both training programs contain strategies that have been used effectively in clinical work with children and adults at risk of developing suicidal tendencies (Teismann & Dorrmann, 2015; von Auer & Bohus, 2017). In the following, the two prevention programs are presented, with the contents outlined in more detail.

### 7.2 Gatekeeper Training for Teachers (Individual-centered Approach)

The SAVE gatekeeper training focuses on imparting gatekeeping skills in teachers. These gatekeeper skills include the ability to recognize at-risk students at an early stage, to evaluate risk factors for suicidal tendencies, to establish supportive relationships with these students, and to address potential suicidal thoughts directly. In addition, skills that teachers can use to persuade these students to seek help and to refer them to appropriate care structures are also included. Such actions require conversation skills, coping skills, and personal resources. Based on the four modules of the project, teachers are first taught warning signals, risk factors, and causes of suicide among adolescents; important information on suicidal behavior in students and myths and

misunderstandings are clarified (module S). The legal issues for teachers dealing with suicidal students are addressed. Another key component of this module is the tackeling of taboos and stigma around suicidality. In the following module (A), the teachers receive important information on mental health, resilience, and resources and learn to recognize warning signs in everyday school situations. In module V, participants acquire useful discussion strategies and counseling skills that will help them address students in confidential conversations and to persuade them to seek help. This goal is accomplished by combining theoretical discussions with roleplaying activities. A further focus is on strengthening teachers' emotional regulation as regards dealing with confidential conversations with students in crisis situations. The last module (E) focuses on the creation of a gatekeeper network and the involvement of regional care structures.

The participating teachers will complete four 4-hour training units. The methods used in the training are based on a resource-oriented approach. By linking the modules mentioned above, the approach will generate synergistic effects, enabling the participating teachers to improve their knowledge and transfer it to practical contexts.

## 7.3 Psychoeducational Intervention for Students (Group-based Approach)

The psychoeducational intervention for students focuses on the development and expansion of self-regulation skills and coping strategies. The intervention is divided into six teaching units of 45 minutes each. These will be implemented in the school during regular school operations. The program focuses on an indirect primary prevention approach, and overall, the intervention focusses on the health-promoting effects of self-regulation (module S). It also addresses background knowledge about suicidal behavior in adolescents. The starting point is stress factors for young people, that are collected in a first round of group-discussion and expanded with empirical results on stress factors. In the process, students gain knowledge about the importance of their own self-regulation strategies and resources. They practice controlling emotions, thoughts, and actions in a situation-appropriate way (module A). The training provides a broad theoretical basis as well as practical skills to better cope with difficult situations. By practicing self-regulation strategies (control of thoughts, feelings, and actions), students will further develop their impulse control (module V).

In addition, students can also act as gatekeepers and recognize warning signals of suicidal crises in others and themselves. Students' willingness to approach teachers and confidants and to accept professional help are addressed. Moreover, students will establish a personal support network which can network be activated in case of a crisis (module E). The method underlying the program is based on a resource-oriented approach. Within the scope of the program, students should become aware of their options in crisis situations to be able to expand and improve their strategies in such situations.

## 8 Conclusion

The development of young people is characterized by upheavals, changes, and crises; such major challenges are not always easy to overcome. Crisis situations can lead to suicidal tendencies in adolescents. While suicide is still a taboo subject, it is the second most frequent cause of death among adolescents between the ages of 15 and 20 years (Federal Statistical Office, 2018). Schools, as a key learning and living environment for young people, provide a framework for suicide prevention programs. This highlights the need for further training for teachers in this field. Furthermore, the self-regulation ability of students should be promoted since self-regulation can help one to cope with crises and represent a protective factor guarding against suicidal behavior.

Two possible preventive approaches in the school context are gatekeeper trainings (individual-centered prevention) and psychoeducational programs (group-based prevention). The SAVE project presented in this article aims to address youth suicide and to make a sustainable contribution to the prevention of suicide in schools via these two approaches. The starting point involves imparting gatekeeper skills in teachers and promoting self-regulation among young people. One aim is to train teachers to become gatekeepers so that they can recognize at-risk students and have confidential, trusting conversations with them. Teachers will also receive training on emotional regulation skills so that they can effectively assume the role of gatekeeper and deal with such difficult conversations.

Within the framework of the SAVE project, this study will illustrate whether the combination of individual-centered measures, group-based measures, and close links between schools and clinical networks can improve suicide prevention to a greater extent than the approaches described in the empirical literature. The aim is to examine whether the multi-perspective approach is accepted and effective. The gatekeeper training for teachers and the psychoeducational program for students is implemented and evaluated at both locations (Darmstadt and Heidelberg). Both programs are expected to be effective, but the combination of all three components (programs and integration into regional care structures) is expected to have the greatest impact. It is expected that after the implementation of both programs, participating students and teachers will have more knowledge about warning signals, risk factors, and suicidal tendencies in adolescents.

Furthermore, an increase in students' self-regulatory abilities is anticipated. As an important outcome, students are expected to be more willing to seek help. Teachers are expected to increase their communication competence and gatekeeper skills, as well as their ability to regulate their emotions. They will likely also feel integrated into a regional gatekeeper network and thus feel more secure. Based on the results, the implications regarding the further use of the approach in everyday school life can be derived. In particular, the prevention elements, which have proven effective in scientific evaluations and which are widely accepted by the participating schools, teachers, and

students, will be made available to the public at the end of the project: A manual will be produced and train-the-trainer courses will be conducted to facilitate the transfer into everyday school life according to the projects theme: Be balanced – be save!

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