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On the Front Line:

The Role of Physical Educators in Preventing Student Suicide

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Educators play a vital role in identifying at-risk students and helping those students get the support and intervention they need. By merit of their close interaction with and observation of students, physical educators are well positioned to identify suicide warning signs and intervene to help save lives. Additionally, the role of physical educators in promoting suicide protective factors is equally noteworthy. Most physical educators receive little or no formal suicide prevention training in their teacher certification programs. Therefore, the purpose of this article is to provide general information and guidance for physical educators, specifically related to their role in suicide prevention. Naturally, an exhaustive approach to suicide prevention training is beyond the scope of this work; however, the premise of this article, which is written by a licensed professional counselor, a physical education teacher educator and a psychology of physical activity educator, is that physical educators can play a vital role in combatting child and adolescent suicide.

The Scope of the Problem

According to a Centers for Disease Control and Prevention (CDC) Vital Signs report published in 2018, suicide rates increased in nearly every state in the United States between 1999 and 2016. In that same time frame, half of U.S. states experienced a 30% or higher increase in suicide (Hedegaard et al., 2018). In 2013, 17% of high school students seriously considered suicide, 13.6% made a suicide plan, and 8% attempted suicide at least once (Kann et al., 2014). In both 2014 and 2017, suicide ranked as the second leading cause of death for people ages 10 to 24 years (Curtin & Heron, 2019; Heron, 2016). Suicide among adolescents remains a public health concern that requires systemic and deliberate intervention from all levels.

Suicide in Adolescents. Knowing that suicide is on the rise among adolescents, it is important to recognize the terminology, causes, warning signs and protective factors to help combat suicide loss.

Terminology and Messaging. There are multiple important terms related to suicide prevention, which are presented in Table 1. The National Strategy for Suicide Prevention (n.d.) defines suicide ideation as "self-reported thoughts of engaging in suicide-related behavior" (p. 6). People can experience varying degrees of suicidal ideation, from mild and occasional thoughts of suicide to pervasive rumination on suicide. The National Strategy for Suicide Prevention (n.d.) further defines *suicide attempts* as "potentially self-injurious behavior with a nonfatal outcome, for which there is evidence that the person intended to kill himself or herself; a suicide attempt may or may not result in injuries" (p. 7). Suicidologists do not use the term *unsuccessful suicide*, because this term can have negative connotations around success and failure. Finally, the National Strategy for Suicide Prevention (n.d.) defines *suicide* as "death from injury, poisoning, or suffocation where there is evidence that a self-inflicted act led to the person's death" (p. 7). Particularly for suicide completion, it is important to avoid the terms *successful* suicide and *committed* suicide. The latter can bear connotations similar to committing crimes and acts of violence, which can further stigmatize suicide distress and interfere with help-seeking.

The way we talk about suicide has significant implications in terms of both destigmatizing help-seeking and minimizing elevated risks to others immediately following a suicide crisis (i.e., suicide contagion). For this reason, Reporting on Suicide (n.d.) has created a list of safe messaging guidelines that indicate inappropriate and appropriate ways to publicly message about suicide. Generally, these guidelines advise against providing unnecessary detail regarding the person and their death or otherwise sensationalizing the suicide, emphasizing that treatment and coping work for most people who experience suicidal thoughts, providing information on suicide risk factors and warning signs rather than making assumptions about the cause of the suicide, and using language that is respectful to the survivors and accurately reflects suicide facts and data. When followed correctly, these guidelines can help reduce the incidence of suicide contagion, which Reporting on Suicide (n.d.) describes as "when one or more suicides are reported in a way that contributes to another suicide" (p. 1). Utilizing the safe messaging guidelines, physical educators can be mindful of the terminology they use when talking about suicide and can help advocate for safe messaging in their schools following the death of a student or other well-known individual to suicide.

Causes of Suicide. Understanding the causes of suicide in adolescents is the subject of extensive inquiry. Researchers tend to separate these analyses into three broad categories: risk factors, predictive factors and contributing or precipitating factors. *Risk factors* are those aspects of a person's lifetime experience that make them statistically more likely to complete suicide at some point, whereas *predictive factors* help us understand the unique aspects that tend to move a person from suicidal ideation (i.e., cognitive preoccupation with suicide) to planning and/or attempting suicide. Finally, *contributing or precipitating factors* are tertiary factors that tend to increase suicide risk in those who are already in distress. The sections below describe two of the three identified categories in greater detail — risk factors and contributing or precipitating factors. Because the purpose of this article is to address physical educators' role in suicide prevention, this article does not address the concept of predictive factors, because predictive factors are most applicable to mental health professionals and those who conduct suicide risk assessments. Table 2 provides an overview of common suicide risk factors and precipitating factors.

Risk Factors. Various factors may elevate suicide risk for adolescents. Research on suicide risk factors is extensive and sometimes contradictory. However, a number of risk factors tend to permeate the literature. These include, not in ranked order, having a parent who has attempted suicide (Brent et al., 2015), family rejection of the adolescent's gender identity (Klein & Golub, 2016), presence of depression or persistent depressive disorder (i.e., dysthymia; Karch et al., 2013), severe anxiety (Rodriguez & Kendall, 2014), illicit drug use (Lowry et al., 2014), disordered eating or disordered weight control behaviors (Lowry et al., 2014), recent suicide attempts by friends (Abrutyn & Mueller, 2014), and previous nonfatal suicide attempt (Lowry et al., 2014). It is important to note that risk factors do not equate to a causal relationship. In other words, an adolescent may have a number of risk factors for suicide but never experience suicidal ideation or attempt suicide. Physical educators may use knowledge of risk factors to better identify students who may be at higher risk for suicide and remain observant for signs of heightened distress in their students.

Contributing or Precipitating Factors. Several tertiary intra- and interpersonal factors can increase suicide risk among those who are already in distress (see Table 2). The Hedegaard et al. (2018) found that relationship problems are the most common contributing factor to suicide, followed by a recent or impending crisis, substance misuse and a physical health problem. These results support Karch et al. (2013), who found that relationship problems (e.g., parents, friends), recent crises, mental health problems, intimate partner issues and school problems (e.g., academic issues and bullying) commonly precipitated suicide among adolescents. Puckett et al. (2017) examined suicide risk in LGB youth and found that adolescents who lost friendships or were psychologically maltreated by their parents or caregivers after coming out experienced a significantly elevated risk of suicide. Physical educators can use their understanding of suicide to monitor student behavior for signs of distress and, when appropriate, make referrals to appropriate mental health professionals.

Suicide Warning Signs. Suicide warning signs are things one might observe in another person's behavior or physical presentation that may suggest that the person is in heightened emotional distress. The warning signs presented by Rudd et al. (2006) are frequently observed in people who are contemplating suicide. However, it is important to note that people may experience emotional distress in

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Table 1.
Suicide Terminology

Term	Definition
Suicidal ideation	"self-reported thoughts of engaging in suicide-related behavior" (National Strategy for Suicide Prevention, n.d., p. 6)
Suicide attempt	"potentially self-injurious behavior with a nonfatal outcome, for which there is evidence that the person intended to kill himself or herself; a suicide attempt may or may not result in injuries" (National Strategy for Suicide Prevention, n.d., p. 7)
Suicide or suicide completion	"death from injury, poisoning, or suffocation where there is evidence that a self-inflicted act led to the person's death" (National Strategy for Suicide Prevention, n.d., p. 7)
Suicide contagion	"when one or more suicides are reported in a way that contributes to another suicide" (Reporting on Suicide, n.d., p. 1)

Table 2.
Common Suicide Risk Factors and Contributing or Precipitating Factors

Risk Factors	Contributing or Precipitating Factors
Having a parent who has attempted suicide (Brent et al., 2015)	Relationship problems (Hedegaard et al., 2018; Karch et al., 2013)
Family rejection of the adolescent's gender identity (Klein & Golub, 2016),	Recent or impending crisis (Hedegaard et al., 2018; Karch et al., 2013))
Presence of depression or persistent depressive disorder (i.e., dysthymia; Karch et al., 2013),	Substance misuse (Hedegaard et al., 2018)
Severe anxiety (Rodriguez & Kendall, 2014),	Physical health problem (Hedegaard et al., 2018)
Illicit drug use (Lowry et al., 2014),	Mental health problems (Karch et al., 2013)
Disordered eating or disordered weight control behaviors (Lowry et al., 2014),	Intimate partner issues (Karch et al., 2013)
Recent suicide attempts by friends (Abrutyn & Mueller, 2014),	School problems, such as academic issues and bullying (Karch et al., 2013)
Previous nonfatal suicide attempt (Lowry et al., 2014).	For LGB youth, losing friendships or being psychologically maltreated by their parents or caregivers after coming out (Puckett et al., 2017)

many nonsuicidal ways. Additionally, unabated emotional distress can intensify and manifest as high-risk behaviors. As such, when any of these warning signs are present, it is necessary to intervene and offer support, regardless of whether the person is contemplating suicide. Physical educators in local K–12 schools, when more aware of suicide warning signs, are likely in a position to quickly recognize concerns and help seek the proper care for the at-risk individual(s).

Rudd and colleagues (2006) discussed two types of warning signs: those that demonstrate the need for immediate intervention — an emergency — and those that demonstrate the need for timely intervention. For the former, Rudd et al. advised that emergency services or a trained mental health professional should be contacted immediately if a person is "threatening to hurt or kill themselves," "looking for ways to kill themselves (i.e., seeking access to pills, weapons, or other means," or "talking or writing about death, dying, or suicide" (Rudd et al., 2006, p. 259). This is not the time for health educators to offer counsel, advice or other preventive measures; this is the time to employ the immediate assistance of a trained mental health or medical professional. For the latter, Rudd et al. advised that a mental health professional should be contacted to provide support when warning signs (see Table 3) are present. Individual warning signs could indicate various types of psychological distress, including suicide distress. However, when seen as clusters in an individual, these warning signs tend to be highly indicative of suicide distress and should be taken seriously.


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Protective Factors. Protective factors are generally conceptualized as factors that help insulate against or reduce the risk of suicide in individuals (CDC, 2021). Protective factors can help mitigate risk factors. It is well established that a strong and supportive relationship with one's parents can help reduce the risk of suicide among adolescents (Conner et al., 2016). This is also true for adolescents who have the support of a trusted adult within their community (Pisani et al., 2013) or healthy social connections with peers who do not promote or attempt suicide (Whitlock et al., 2014). Physical educators can serve as positive role models in this way but also help identify meaningful relationships for students, as a direct result of content taught/learned in the program. Moreover, fostering students' feelings of connectedness with their schools can significantly insulate students against suicide (Marraccini & Brier, 2017). Physical educators can also implement

Table 3.
Suicide Warning Signs

1. "hopelessness"
2. "rage, anger, seeking revenge"
3. "acting reckless or engaging in risky activities, seemingly without thinking"
4. "feeling trapped — like there's no way out"
5. "increasing alcohol or drug use"
6. "withdrawing from friends, family, or society"
7. "anxiety, agitation, unable to sleep, or sleeping all the time"
8. "dramatic changes in mood"
9. "no reason for living; no sense of purpose in life"

From Rudd et al. (2006*, p. 259).*

physical activity programming that helps students develop social relationships and promote positive experiences among students. Although it is not possible to entirely insulate students against suicide, bolstering protective factors is one strategy that can prove effective in reducing suicide risk in adolescents.

Suicide Prevention Programming in Schools. Suicide prevention programming is multifaceted, requiring a community approach in which individuals from a variety of roles can be trained in awareness training, gatekeeper training and related school-based programming (World Health Organization, 2014). Due to their experience working with adolescents in health, physical education and physical activity settings beyond the traditional classroom and possibly their content knowledge in health education curriculum, it is likely that physical educators can be especially helpful in one or more of these roles.

Awareness Training. Awareness training emphasizes the need for a whole-community approach to suicide awareness and prevention (Underwood, 2015). Every community member has a role in raising awareness. Students with positive peer relationships and connections to adult school leaders exhibit stronger salience to suicide awareness campaigns when compared to students with fewer schoolwide connections (Pickering et al., 2018). Strategies that train students as peer leaders to spread suicide awareness are more effective than stand-alone adult-driven presentations, posters or video awareness campaigns (Pickering et al., 2018). Awareness strategies can include methods to change upstream risk and protective factors or the factors that increase the likelihood a student will become suicidal, in addition to statistics and treatment options (Wyman, 2014). Awareness training can emphasize positive coping skills, problem solving, social connectedness and help-seeking rather than a code of silence toward suicide risks, signs and help-seeking (Stone et al., 2017).

Gatekeeper Training. The community-based suicide prevention method, gatekeeper training, is a systematic way of training individuals who have consistent contact with students to (a) identify those who are at risk for suicide, (b) understand the warning signs of suicide, and (c) learn the skills necessary to refer students to support or treatment (Office of the Surgeon General [US], & National Action Alliance for Suicide Prevention [US], 2012). Training generally divides school gatekeepers into two groups, the designated group and the emergent group (Ramsay et al., 1990). *Designated leaders* are those who are professionally trained in helping fields (i.e., psychology, medicine, counseling, etc.). *Emergent leaders* are individuals who are not suicide prevention professionals but have been identified as trusted adults by those with suicide intent (i.e., coaches, teachers, security guards, parents, etc.). The Suicide Prevention Resource Center (2013) has compiled a list of gatekeeper training programs, all of which aim to increase knowledge about suicide, improve attitudes about suicide prevention, reduce intervention reluctance, and foster self-efficacy to help students in need. One of the more common gatekeeper training programs is the Question, Persuade, Refer program (Quinnett, 2015). A review of school-based gatekeeper trainings effectively improved attitudes and knowledge about suicide, self-efficacy and skills to intervene, and likelihood to intervene (Mo et al., 2018).

Related School-Based Programming. In addition to training school personnel on suicide prevention, schools can take targeted measures to address issues that underlie or contribute to suicide in adolescents. The CDC (2018) stated that, in an effort to reduce the loss of life due to suicide, schools can teach students skills they can use to navigate social–relational and school problems. Likewise, Karch et al. (2013) recommend that schools implement prevention strategies addressing relationship-building and problem-solving skills and that schools work to increase adolescents' access to treatment. Further, bullying prevention programming could help address the elevated risk of suicide among adolescents who experience bullying (Karch et al., 2013). This is particularly important because research indicates that both perpetrators (King et al., 2013) and recipients (Barzilay et al., 2017; Messias et al., 2014) of bullying behavior are at an elevated risk for suicide. Related, schools may address appropriate use of social media to reduce cyberbullying and thereby minimize risk of elevated psychological distress caused by cyberbullying (Sampasa-Kanyinga & Hamilton, 2015).

Targeting problematic behavior is important, but it is equally important to facilitate students' development of prosocial behavior. To this end, schools can work to bolster students' connection to the school through facilitating supportive adult–adolescent relationships, student engagement in school operations, faculty–student collaborations and peer mentoring (Marraccini & Brier, 2017). Working to enhance healthy social connections between peers to promote peer support (Whitlock et al., 2014) can provide an additional barrier against suicide. And, given the relationship between low emotion regulation and suicide risk (Pisani et al., 2013), schools may implement programming to improve emotion identification and regulation in adolescents. Ideally, some or many of these strategies can begin within physical education classes, as the concepts described above help foster personal and social responsibility (Standard 4, SHAPE America – Society of Health and Physical Educators, 2015).

Physical Education–Based Suicide Prevention. Health and wellness education are crucial in the promotion of protective factors of suicide ideation and prevention of suicide behavior. Meeting physical activity guidelines of 150 min of moderate-intensity aerobic activity and 2 days of muscle and bone strengthening activities per week is a significant protective factor against suicidal ideation (Vancampfort et al., 2018). Regular physical activity is also negatively associated with suicidal ideation in adolescents. Such a relationship is understandable because regular physical activity behavior protects against and reduces adolescent anxiety and depression (Biddle et al., 2019). Physical activity behavior has a significant effect on externalizing

and internalizing problems, self-concept and academic achievement in students (Spruit et al., 2016).

Implications for Physical Educators. In addition to efforts to increase student levels of physical activity, a sound approach to appropriate physical education can be instrumental for reducing suicide attempts among adolescents. In a recently published guidance document, Benes and Alperin (2019) identified the essential components of health education. These components, based upon the Whole School, Whole Community, Whole Child (CDC, n.d.) model, provide a guiding framework with the following 10 components: (a) health education; (b) physical education and physical activity; (c) nutrition environment and services; (d) health services; (e) counseling, psychological and social services; (f) social and emotional climate; (g) physical environment; (h) employee wellness; (i) family engagement; and (j) community involvement. One might see how suicide prevention strategies can be easily infused in physical education with one or more of the essential components. In addition to directly addressing suicide, physical educators can work with students to enhance their protective factors, notably positive social connections, and thereby reduce overall suicide risk. In the following section, the authors present conceptual and theoretical support for developing social connections, conceptualized by Adler (1956) as *social interest*, through physical education in the pursuit of enhancing students' social–emotional wellness.

Supporting Social Interest. Adler (1956) described humans as necessarily socially embedded, such that "all the questions of life" pertain to "three major problems — the problems of communal life, of work, and of love" (p. 131). *Social interest* can be understood as "spontaneous social effort" that is necessary to meet the "high degree of cooperation and social culture which man needs for his very existence" (Adler, 1956, p. 134). Social interest involves feelings of belongingness to a social system. Adler described social interest as "an innate potentiality which has to be consciously developed" (Adler, 1956, p. 134). He further stated that the "purpose of education is to evoke" social interest (Adler, 1956, p. 134). He proposed that empathy and cooperation and the subsequent focus on others are major pathways toward the development of social interest (Adler, 1956).

Reinforcing Social Interest and Belonging. Cooperative activities are at the heart of many physical education programs. Cooperative activities often include light forms of physical activity (Anderson & Glover, 2017). It is particularly important, however, for the physical education setting to be one in which students feel support from and belonging with their peers and not competition with each other. People inherently seek belonging, and in the absence of healthy and supportive social groups, adolescents may turn to maladaptive groups to acquire a sense of belonging. Therefore, educators who aid students in their attempts to belong to a healthy and supportive peer group may simultaneously be insulating those students from joining a peer group that contributes to problematic behaviors. Belonging and the subsequent joining of peer groups is of central importance and should be a primary consideration when developing physical education lessons.

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To support social interest and belonging (Adler, 1956), physical educators may utilize teaching techniques that require high levels of peer engagement and interaction. This might involve intentionally pairing or grouping students to increase interaction across common social lines. When doing so, and if possible, these groups should be small (e.g., dyads or triads) to minimize the likelihood of group-based ostracism. Further, to reduce apprehension, students can be given a specific and achievable task that requires high levels of collaboration. Various learning models for increased interaction among students in a quality physical education programs are available (Lund & Tannehill, 2015; Metzler, 2017).

A key responsibility for physical educators is the process of consistently reinforcing prosocial behavior when it is observed. For instance, if the educator witnesses one student doing something kind of helpful for another student, the educator may respond with an affirming statement, such as, "That was very thoughtful of you to help her" or "You're a considerate person." These small affirmations of prosocial behavior can reinforce not only the behavior in the student to whom the statement was directed but also for those who observed the interaction. Additionally, physical educators may integrate lessons and activities that promote intellectual understanding and the experience of empathy while instilling the importance of reinforcement, feedback, student self-perceptions, behavior management and prosocial behaviors (Blankenship, 2017).

Using Techniques That Require Social Solidarity. To further enhance students' sense of social interest and belonging, health educators may use activities that require social solidarity — a sense of interdependence. These could include team building and team cooperative exercises. Trust is a prerequisite for the productive use of team and cooperative exercises, so health educators may scaffold these to allow for the successive development of trust and interdependence. Health educators can involve students in developing shared classroom norms to ensure that every student understands the expectations for social interaction. Students could also cooperate to set process- and outcome-oriented goals for the semester/year to instill teamwork and collaborative goal-directed activities.

Intervention Skills. In addition to supporting social interests within the physical education environment, there are also a variety of skills that must be included in school-based prevention training, awareness training, gatekeeper training and intervention training (Stone et al., 2017). Such programming trains school personnel to effectively identify the warning signs of suicide, learn to talk with students in distress, and understand how to make necessary referrals (Mo et al., 2018).

Identifying Signs of Suicide. To effectively intervene, individuals must understand the warning signs of suicide. Schools should follow best practices regarding dissemination of information about suicide, warning signs and help-seeking (Rudd et al., 2006). Programs such as Signs of Suicide, Lifelines, Question, Persuade, Refer, At-Risk for Middle School Educators, Be A Link!, Connect Youth Leaders, Just Talk About It, and LifeSavers Training effectively educate teachers to identify warning signs of suicide (Suicide Prevention Resource Center, 2013). Specific curriculum trains individuals to identify the signs of suicide virtually or in a classroom format via videos, informational manuals, group discussions and dramatized role-playing (Schilling et al., 2016). Research indicates that teachers who receive gatekeeper training are better equipped to identify signs of suicide and are more likely to speak directly with students (Condron et al., 2015).

Talking With Students in Distress. Adults should take any conversation about suicide seriously, regardless of the student's age. It is important to create an atmosphere of caring, unconditional positive regard, active listening and urgency in a way that facilitates dialogue and help-seeking when speaking with distressed students (American Foundation for Suicide Prevention, 2018). Contrary to popular belief, talking to students about suicide will not actually increase their risk or likelihood of engaging in suicidal behavior. Adults should be direct and persistent, trying to build a connection and reinforce that they care. They should try not to act judgmental, angry, shocked or disappointed or otherwise minimize the issue (Gryglewicz et al., 2014). School personnel should also be direct in asking whether the distressed student has thought about suicide and has a plan for suicide and remove suicide means if necessary and when it is safe for the educator to do so. Though many conversations can be confidential, students should be informed that any indication of threat to self or others or any signs of emotional or physical abuse will lead to the necessary referrals and reports. Whether following a recent school suicide or as an act of prevention, trained adults can provide accurate information about suicide, help students emotionally express themselves in a responsible way, and promote help-seeking (American Foundation for Suicide Prevention, 2018). The Applied Suicide Intervention Skills Training (Ramsay et al., 1999) is one example of a program that trains adults to work with students in distress and make referrals when necessary.

Making Referrals. It is crucial that school staff learn the necessary skills to confidently refer students who are in distress. Research has found that school staff who receive longer training incorporating role-playing situations were better able to identify signs of suicide and refer more students than those who received shorter, less experiential training (Condron et al., 2015). It is also important for every staff member to know their school's protocol for referrals, including criteria for a referral and how to best get in contact with the school mental health professional. Staff should remain with the student, escort the student to the school's mental health contact, and provide all relevant information regarding the student to the mental health contact (Suicide Prevention Resource Center, 2019). Staff should be mindful of the community-based, 24-h referral services that are available to students. When in doubt, staff should refer students to the school mental health professional and never attempt to diagnose or treat or believe that students will seek help on their own. Schools are responsible for every step of the referral and intervention process, so documentation should be maintained by relevant school staff for legal purposes (National Association of School Psychologists, 2015).

Conclusions

The purpose of this article was to provide general information and guidance for physical educators specifically related to their role in suicide prevention. It is the duty of school personnel to recognize their vital role to help prevent suicide, to promote healthy behaviors and positive relationships, and to appropriately talk about suicide and suicide attempts. Implications for physical educators therefore include the importance of having knowledge of the risk factors, understanding the underlying concepts of suicidal behaviors, and awareness of their responsibility to help educate others. Physical educators can do this by providing meaningful teacher- and student-based modeling and mentoring opportunities in physical education, particularly those that support students' social interest and belonging. This may include using teaching techniques that require high levels of peer interaction and cooperation, matching students for activities to increase interaction across social lines, reducing opportunities for competition, reinforcing prosocial behavior, using team building exercises, and creating a safe classroom where students can feel able to be less than perfect and practice new social skills. Moreover, using their knowledge of the suicide warning signs and contributing or precipitating factors, physical educators can remain alert to signs of suicide distress in their students, openly talk with students to identify suicide distress, and make appropriate referrals to school-based mental health providers. It is not the responsibility of physical educators to know every nuance of suicide prevention and/or training technique, but as individuals who spend significant time with students, they can play an essential, positive role in students' overall health and well-being.

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