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The School Professionals' Role in Identification of Youth at Risk of Suicide

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Abstract: The school professional is in a unique position to play a strategic role in the early identification and prevention of youth suicide. The current study assessed North Queensland teachers' knowledge on youth suicide. The sample comprised 201 secondary school teachers. A survey research design was used and data was collected using a self-administered questionnaire. Teachers scored, on average, 69% of the knowledge statements correct; however only 15% correctly recognized a high-risk situation. There was substantial variability in the accuracy of knowledge on youth suicide with some teachers maintaining high levels of knowledge, and others having very little accurate information. Findings highlight the need for youth suicide education for teachers in order to fulfil this 'gatekeeper' role in dealing with suicidal student

The great tragedy about youth suicide is that it takes place despite the suicidal youth giving out distress signals (Gould & Kramer, 2001). In response to the problem of youth suicide, many schools now acknowledge that suicide issues are often unavoidable and school professionals are increasingly accepting the role of 'gatekeeper' in dealing with suicidal students. In order to fulfil this gatekeeping role, however, teachers must possess accurate knowledge of the behavioural characteristics of suicidal intent and be capable of directing the student to appropriate services. Indeed, literature (e.g., Fish, 2000; Leane & Shute, 1998; Martin, Richardson, Bergen, Roeger, Allison, 2005; Nemeroff, Levitt, Faul, Wonpat-Borja, Bufferd, Setterberg & Jensen, 2008; Scoullar & Smith, 2002; Walter, Gouze & Lim, 2006) has emphasised the importance of the school professionals' ability to identify young people who are developing suicide risk behaviours. The current study, therefore, aims to shift the focus onto the gatekeeping role of the school professional and their ability to recognize and appropriately intervene with suicidal students.

Butler, Novy, Kagan and Gates (1994) estimate that seven to ten others are affected for every completed suicide. Indeed, Zinner (1990) points out that of 29,000+ suicide deaths, an estimated 200,000+ anguished individuals are left in their wake. Certainly, youth suicide has a long-term effect on society, and any reduction in youth suicide rates would also reduce the number of people affected. A study assessing the effectiveness of a school-based suicide education program for adolescents found that barriers to help-seeking were their inability to discuss concerns with adults, and a lack of closeness to adults in the school (Cigularov, Chen, Thurber & Stallones, 2008). Therefore, suicide prevention efforts which target the school professionals' ability to recognize suicidal behaviour in their students have the potential benefit of warding off the debilitating emotional and economic costs experienced by families, schools and society.

Suicide, by definition, "is not a disease, but a death that is caused by a self-inflicted, intentional action or behavior" (Silverman & Maris, 1995, p. 10). In 2006, a

total of 1799 suicide deaths were recorded nationally. Of the 1799 suicides, 1398 were males and 401 were females (Australian Bureau of Statistics, 2006). Suicide has been a growing phenomenon among Australia's youth, and a focus on reducing the rate of youth suicide is of particular importance.

An examination of the literature on youth suicide indicates that the school professional is in a unique position to play a strategic role in the early identification and prevention of youth suicide (Fish, 2000; Moor, Sharrock, Scott, McQueen, Wrate, Cowan & Blair, 2000; Nemeroff, Levitt, Faul, Wonpat-Borja, Bufferd, Setterberg & Jensen, 2008; Cimboric & Jobes, 1990). Indeed, important indicators of mood such as behaviour, interpersonal relationships, academic performance and the ability to cope, are all subject to continual observation in the school setting (Zenere & Lazarus, 1997). Moor et al. (2000) and Nemeroff et al. (2008) argue that early recognition of suspected high-risk students could greatly facilitate appropriate treatment and subsequent prevention of youth suicide. Obviously, a major factor of the teachers' role in assisting high-risk students depends on their ability to recognize and respond appropriately to verbal, behavioural and situational signs of suicidal intent in their students.

American studies report that most teachers view identifying suicidal students as an important factor in their role as educators (King, Price, Telljohann & Wahl, 1999). However, an Australian study by Leane and Shute (1998) found that in Adelaide, teachers' gatekeeping potential was "compromised by a low level of knowledge about signs of suicide risk, which was found even among those who had taken courses in suicide or death and dying or who had personally known someone who suicided" (p.165).

This knowledge deficit was later underscored in Scoullar and Smith's (2002) research, which indicated that many teachers in Victoria do not understand the nature of suicidal behaviour. For example, 40 per cent of teachers in their study said that they would not take a suicide threat seriously. The probable consequence of this attitude may very well be the loss of a young person's life. Scoullar and Smith further reported that, in Victoria, the school professionals' level of training in dealing with suicidal youths was low. In fact, contrary to American findings, this study revealed that Victorian school professionals did not even regard themselves as being well placed to help a suicidal student (Scoullar & Smith, 2002).

Although school staffs are not mental health professionals, the teaching role provides this professional group with a unique opportunity to closely monitor student behaviour and thus prevent the suicide of a young person (King et al., 1999). Quite clearly, there appears to be a need for teachers to be better skilled in identifying the behavioural characteristics of suicidal intent. However, this role should be regarded as additional to, rather than a substitute for the role of a mental health professional (Guetzloe, 2000).

Malley, Kush and Bogo (1994) report that schools that employ a written policy on suicide are better organized in their approach to youth suicide than schools that do not possess such a policy. This environment is obviously more conducive to teacher education on suicide awareness. Accordingly, the school professional working within this environment will be more likely to possess accurate knowledge on indicators of suicidal intent (King, 2001). A school policy on suicide will be purposeless if teachers are unable to identify a suicidal student. Indeed, teachers need to know how to deal effectively with suicidal students and how to appropriately intervene to avoid the likelihood of a completed suicide (Popenhagen & Qualley, 1998). Teacher education on suicide awareness increases the potential to deal with

suicidal students confidently and appropriately (Davidson & Range, 1999; King & Smith, 2000; Wastell & Shaw, 1999). This is contrary to Leane and Shute (1998) who found that attending courses on suicide made no difference to teacher knowledge about signs of suicide. Nonetheless, King (2001) and Walter et al. (2006) contend that suicide education programs raise an awareness of the warning signs of suicide and increase teachers' confidence and willingness to get involved.

This study emphasises the importance of the school professionals' ability to identify young people who are developing suicide risk behaviours. The major aim of this study is to examine teachers' knowledge, attitudes and ability to recognize behaviours associated with suicidal intent. More specifically, the following hypotheses will be tested:

1. Teachers will be able to identify the correct level of risk in the low-risk and high-risk vignettes.
2. Teachers who have participated in a suicide education program will have had fewer students from their classes attempt or complete suicide.

Method

Design

A survey research design using a self-administered questionnaire was used to examine teachers' knowledge and attitudes. The time taken to complete the questionnaire was about 15 minutes. Eight out of ten secondary schools approached agreed to participate in the study. Teachers were invited to participate and were randomly assigned a questionnaire of either a high risk or a low risk situation in one of two orders (ie., there were four versions of the questionnaire).

The Questionnaire

The Adolescent Suicide Behaviour Questionnaire (ASBQ) by Scoullar and Smith (2002) which was developed specifically to measure knowledge on suicide was used. The ASBQ consists of 40 statement sentences relating to youth suicide. It examines knowledge about youth suicide across five content domains: risk factors, warning signs, precipitating factors, demographics and statistics, and prevention and treatment. Participants were required to (1) state how well informed they considered themselves to be along a five-point likert scale from 1 "very poorly informed" to 5 "very well informed"; and (2) indicate the extent to which they agreed or disagreed with these statements.

Some modifications were made to the ASBQ for the purpose of the current study. They included adding a statement, which measured teacher attitude to prevention - "School teachers can reduce youth suicide completions by being able to identify students who are at risk of suicide". A statement referring to doctors was excluded as it was considered irrelevant to this study. Finally, the sentence "Young males are more likely to kill themselves than young females" was altered to "Young males are more likely to complete suicide than young females". The words "kill themselves" were changed to "complete suicide" as a result of feedback from pilot study participants who expressed ambiguity over the words "kill themselves".

The variables arising from this instrument were how well informed teachers considered themselves to be on youth suicide, their actual level of knowledge on youth suicide and their attitude toward their role in suicide prevention.

Respondents were then given one of two vignettes representing either a low-risk situation or a high-risk situation. The vignettes were based on a 16-year-old male student named Paul who was experiencing emotional problems in familial and social relationships. The content of the vignettes was developed to reflect several variables which research has found to be related to increased risk of suicide, namely, ability to recognize the behavioural characteristics of suicidal intent and their ability to appropriately deal with the situation.

The first vignette represented a situation at school in which a high risk of suicide existed. The accumulation of eight variables indicated a high risk in this vignette. They include the divorce of Paul's parents, a recent breakup with his girlfriend, a dramatic change in interests and mood, sleeping in class, indirect suicide comment ("nobody cares if I'm here or not") in class, death themes on his notebook and the sudden happiness after a prolonged period of depression. Paul had lived with his father since his parents divorced years ago and was generally a happy, well-liked, intelligent student until he broke up with his girlfriend a few weeks earlier. Since then he had lost interest in the sporting activities that he had previously enjoyed and was disinterested and, at one stage, aggressive in the classroom. When the teacher spoke with him he replied with an indirect suicide comment ("nobody cares if I'm here or not"). He had drawn death theme pictures (ie. Coffins, 'RIP') in his notebook. His sudden exhilaration the following day after weeks of this change in behaviour indicates that he had found a solution to his problems – death.

The second vignette represented a situation at school in which a low risk of suicide is present. Both vignettes portray an identical situation at school except that the low-risk vignette excludes three important variables, which differentiates it from the high-risk vignette. They include the relationship breakup with his girlfriend, the indirect suicide comment ("nobody cares if I'm here or not") and the pictures of death themes in his notebook. The variables left out of the low risk vignette are important in regard to level of risk. Without these additional variables, the sudden happiness in the low-risk vignette does not indicate as serious a threat as it does in the high-risk vignette.

Both vignettes were followed by four questions. The first question was an open-ended question asking participants what they felt was wrong with Paul. This question was designed to explore teachers' explanations for Paul's behaviour and to ascertain their level of understanding of Paul's behaviour. The second question asked respondents to rate whether they thought Paul was likely to commit suicide. The options were 4 "very likely", 3 "fairly likely", 2 "not likely", and 1 "uncertain". The third question was open-ended and designed to assess participants' awareness of the variables that indicate suicidal intent. Question four was created to measure the course of action teachers' would take to the situation. Response categories were provided and the options were "none", "ask student about suicide plans", "talk to parents", "talk to principal", "call crisis assessment team", and the last category was "uncertain". Respondents were asked to indicate what intervention was necessary and were directed to tick one or more of these categories to indicate what their course of action would be to either situation.

The final section sought demographic information including teachers' experience with suicidal students, years of professional experience, school suicide policy, training on suicide, level of education, and type of school.

Order Effects

According to Mitchell and Jolley (2007) the sequence or order in which participants receive a treatment may have an effect on the results. It was thought that the vignette might either provide clues to the answers of the knowledge statements or alternatively, the statements might provide clues to the level of risk in the vignettes (either high risk or low risk). Therefore, to minimise order effects, the questionnaire was organised in such a way that there were four versions. Each version was ordered in one of two ways. A high risk or low risk vignette was presented either before the statements (Order 1) or after the statements (Order 2).

Participants

The target group for this study was volunteer secondary school professionals who were randomly assigned to the four conditions. The convenience sample comprised of 201 secondary school teachers from both Private (N=63, 31%) and Government (N=138, 69%) schools. Participants' ages ranged between 20 and 60 years old, with a mean age of 40.5 years ($SD = 10.01$), and had been teaching for an average of 16.22 years (range from 1 to 45 years, $SD = 9.64$). The participant gender mix reflected the gender balance of the region's secondary school teachers with 79 (39.3%) being male and 121 (60.2%) female. The majority of the teachers (N=148, 73.6%) reported that they had not participated in any training on suicide prevention. Almost half of the teachers had completed a postgraduate degree (N=93, 46.3%) while the level of education for 107 (53.2%) participants was an undergraduate degree. Alarming, the number of teachers who had had a student from within their class attempt or complete suicide was 80 (40%). Almost half the teachers stated that the school in which they taught did not have a policy on suicide (N=87, 43.3%) with many who were uncertain (N=77, 39.3%) and 34 (16.9%) stating that their school did have a policy on suicide.

Procedure

Once university ethics committee permission was obtained for the study, and clearance was also obtained from both the private and government sectors, the purpose and nature of the study was explained to the principals of each school. After the principals had granted approval to access teaching staff, approximately 50 questionnaires were delivered at each of the schools for distribution amongst teaching staff. Of the 400 questionnaires distributed, 204 questionnaires were returned, a response rate of 50.25%.

Participants were assured of the confidentiality and anonymity of all responses, and that participation was voluntary. Information about the project was supplied to all teachers and those who wished to participate were instructed to sign the informed consent form. The ethical concerns of the study were dealt with by providing two support people for participants to contact should they become distressed after completing the questionnaire. These support people were given a copy of the questionnaire to assist with any counseling, should it occur.

Results

Perceived level of knowledge on youth suicide ranged from 1 “very poorly informed” to 5 “very well informed”. Many teachers (N= 76, 38 %) reported that they felt they were “very well informed to moderately informed”, and a smaller number (N= 30, 15%) rated themselves as “well informed”. Sixty-eight (34%) teachers reported that they were “poorly to very poorly informed on youth suicide. Of the remainder of the sample, 27 (13%) failed to indicate how well informed they considered themselves to be.

In terms of level of knowledge on youth suicide, as a whole, North Queensland secondary school teachers possessed a moderate level of knowledge scoring 69 percent of the ASBQ items correct. There was however, a large variance between secondary school professionals in their level of knowledge with scores ranging from as little as two correct to as many as 38 correct.

There were strengths and deficits found in teachers’ level of knowledge across the five content domains of the ASBQ. The teachers in the study performed better on items in demographics and statistics (71%) and in the prevention and treatment (79%) areas of the ASBQ. More importantly, deficits were found in the other areas of the ASBQ. These areas include risk factors (51%), precipitating factors (56%) and warning signs (69%).

Items	Correct Teacher Responses	
	N	%
WARNING SIGNS		
Although giving away prized possessions is a warning sign for suicide, it is not a significant one.	87	43.3
Adolescents who talk about suicide won’t commit suicide. H	154	76.6
Sudden and extreme changes in eating or sleeping habits, losing or gaining weight, can warn of imminent suicide.	100	49.8
Adolescents who are contemplating suicide usually tell their parents rather than their friends. H	174	86.6
An improvement in the mood of a young person who has threatened suicide means that the danger is over. H	165	82.1
Most young people who commit suicide have given warning of their intent.	98	48.8
Not all suicide threats or statements should be considered warning signs of high suicide risk. H	101	50.2
PRECIPITATING FACTORS		
A young person can be prompted to commit suicide by hearing about somebody else who has suicided.	126	62.7
Parental conflict is a common precipitant for a suicide attempt.	94	46.8
A significant personal loss (e.g., the death of a close friend) can trigger a young person to attempt suicide.	142	70.6
Relationship break-ups are common in adolescence and therefore will not prompt a suicide. H	146	72.6
PREVENTION & TREATMENT		
Suicidal adolescents clearly want to die H	157	78.1
Secondary school teachers are in a good position to detect the risk factors for suicide in their students.	102	50.7

If you promise to keep a young person's suicide plans confidential you should usually keep that promise. H	175	87.1
Discussing suicide with a suicidal adolescent may cause that person to end their life. H	114	56.7
School teachers can reduce adolescent suicide completions by being able to identify students who are at risk of suicide.	140	69.7

DEMOGRAPHICS & STATISTICS

Suicide is more common among adolescents of low socioeconomic status than among adolescents of high socioeconomic status. H	155	77.1
Young males are more likely to complete suicide than young females.	151	75.1
Across all age groups, there are more deaths caused by suicide in Australia than by traffic accidents.	58	28.9
Young males in rural areas are one of the highest risk groups for suicide.	139	69.2
Young males are more likely to attempt suicide than young females. H	33	16.4
Suicide is one of the principal causes of death of young people in Australia.	145	72.1
Adolescent suicide in Australia has not substantially increased in the last 20 years. H	137	68.2

RISK FACTORS

Familial and Social Environment

Adolescents who attempt suicide are more likely to come from families with a history of drug or alcohol abuse than are non-suicidal adolescents.	36	17.9
Lack of social support significantly increases the risk of an adolescent committing suicide.	177	88.1
Depression is more common in the history of parents whose children commit suicide than in the histories of parents of non-suicidal children.	54	26.9
Adolescents who attempt suicide have commonly lost or been separated from a family member.	39	19.4
Adolescents with a family history of suicidal behaviour are more at risk for suicide than other adolescents.	92	45.8
Family breakdown and conflict is common among adolescents who attempt or complete suicide.	126	62.7
Gay and lesbian adolescents are at higher risk of attempting suicide than are heterosexual adolescents.	77	38.3
Adolescents who attempt suicide are no more likely than others to have been physically and/or sexually abused. H	84	41.8

Psychiatric Disorder

The majority of adolescents who commit suicide have a psychiatric disorder.	23	11.4
Most suicidal people are out of contact with reality. H	105	52.2
Alcohol or drug abuse is a principal risk factor for adolescent suicide.	100	49.8
A young person who is very depressed is no more likely to commit suicide than any other young person. H	115	57.

Cognitive Factors

Suicidal and non-suicidal adolescents do not differ in their problem-solving abilities. H	119	59.2
Only suicidal adolescents think about committing suicide. H	173	86.1
The more hopeless adolescents feel, the more likely they are to suicide.	174	86.6

Prior Attempt

The more life threatening (lethal) a suicide attempt has been, the higher the risk that an individual will subsequently complete suicide.	90	44.8
Young people who complete suicide have not commonly made a previous attempt. H	94	46.8

Table 1: Percentages of Teachers Correct and Incorrect Responses to ASBQ Items within each Content Domain

Note: Items with **H** indicate a false statement. All other statements can be read as true.

In terms of correct and incorrect individual statements (divided into five content domains in Table 1), the vast majority of school teachers (89%) were unaware of the high prevalence of a psychiatric disorder in youths who commit suicide. There was also a notable deficit in teachers' knowledge of family and social environmental risk factors affecting suicide in youths. Teachers were unaware that risk factors such as a family history of drug or alcohol abuse (82%) and depression in parents (73%) increase the risk of suicide in youths. However, the majority of teachers (88%) did recognize that a lack of social support was a risk factor for suicide. Most school teachers also realized that youths considering suicide did not tell their parents (87%) and that an improvement in mood did not indicate the danger of suicide was over (82%). A high percentage of school teachers (84%) did not know that young females were more likely to attempt suicide than young males, yet many (75%) were aware that males are more likely to complete a suicide than young females. Teachers were generally uninformed that a loss or separation of a family member is common in youths who commit suicide (81%).

An interesting finding was that 51 percent of school teachers were either undecided or disagreed with the statement that most young people who commit suicide have given a warning of their intent. Yet, 70 percent of secondary school teachers recognized the important role that they might play in youth suicide prevention by being able to identify students at risk. Fortunately, many teachers (71%) were clear that they would not maintain student confidentiality of suicidal intent, and the majority (86%) realized that not only suicidal youths thought about suicide.

For teachers given the high-risk vignette, the most common explanation given for Paul's behaviour was depression. For those given the low-risk vignette they explained Paul as being depressed, and also mentioned to a lesser extent drugs and relationship problems.

In terms of the ability to recognize a high-risk situation, 58% recognized that some risk was present, however only 15% of those teachers correctly assessed Paul's level of risk as high. Twenty-seven percent of teachers were uncertain of the level of risk and 15% stated that Paul was "not likely" to be at risk of suicide in the high-risk vignette.

In regard to the low risk situation, 11% of teachers from the low risk group stated that Paul was "very likely" to be at risk of suicide, 32% stated that he was "fairly likely" to be at risk, 40% indicated that they were "uncertain" and 17% stated that Paul was "not likely" to be at risk of suicide.

When asked what aspects of the situation indicate a risk of suicide, 50% of participants in the low risk group mentioned one variable, 24% mentioned two, 6% mentioned three, 5% mentioned four, 16% were uncertain. In regard to the high-risk group, 34% mentioned one variable, 33% mentioned two, 20% mentioned three, 8%

mentioned four, 2% mentioned five, and only 1% mentioned six variables indicating risk. No participants mentioned all variables in either the high-risk vignette or the low-risk vignette.

Respondents were able to nominate more than one of the options provided as a course of action to deal with the situations in either vignette. There was not a large contrast between the high and low risk groups in regard to the nominated course of action they would take in either situation.

Intervention	High	Risk	Low	Risk
	N	%	N	%
None	4	4.1	5	4.9
Ask Paul if he plans to commit suicide	23	23.5	17	16.5
Talk to the parents	51	52.0	46	44.7
Talk to the Principal	50	51.0	48	46.6
Call Crisis Assessment Team	35	35.7	24	23.3
Uncertain	14	14.3	21	20.4

Table 2: Options for Nominating Course of Action for Low and High Risk

The order in which the vignettes were presented to participants was thought to influence responses to the question asking participants to assess Paul’s risk of suicide. Chi-squared analyses revealed no significant connection between an order effect and how participants responded to the question referring to risk of suicide $\chi^2(3, N = 200) = 3.76, p > .05$. Participants were not affected by the order in which they received the vignettes.

To determine whether there was a relationship between the number of students who attempted or completed suicide and participation in a suicide education program, a chi-square test for independence was performed. Teachers who had received training on suicide had fewer students from within their class attempt or commit suicide $\chi^2(1, N = 198) = 4.168, p < .05$.

Discussion

In order to address the continuing problem of youth suicide, the gatekeeping potential of the school professional was examined. Results of the present study indicate that the majority of secondary school teachers recognize their own value in the youth suicide prevention process. This is contrary to Scoullar and Smith (2002) who found that participants did not even regard themselves as being well placed to help a suicidal student. These teachers scored slightly better than Scoullar and Smith’s Victorian sample, which averaged 59 percent of the ASBQ items correct. However, the present study revealed considerable individual variability in the accuracy of beliefs about youth suicide. Scoullar and Smith found a similar pattern in their sample of Victorian teachers with some demonstrating excellent knowledge levels whilst others had little accurate information. In the present study, knowledge is found lacking particularly in the areas of risk factors, precipitating factors, and to a lesser degree, warning signs. This is of particular concern as it suggests that suicidal students may largely go unnoticed and therefore, are not likely to receive much needed assistance. The apparent deficit in knowledge of specific areas has important implications in the future development of teacher training programs.

With regards to the first hypothesis only a very small proportion of teachers were able to accurately identify students at a low or high level of risk. This inability

to recognize a high-risk student is of particular concern, as it is well known that teachers have regular contact with students who are “at risk” of suicide (Leane & Shute, 1998; Nemeroff, Levitt, Faul, Wonpat-Borja, Bufferd, Setterberg & Jensen, 2008). It is critical that teachers recognize the seriousness of a high-risk situation, which necessitates immediate action. If teachers are unsuspecting of an impending crisis, then young lives may be lost. This inability to recognize level of risk may be due to the particularly low level of knowledge found in specific content domains of the ASBQ, namely, risk factors, precipitating factors and warning signs. Obviously, this is likely to compromise the preventative potential this position holds. Other factors that influence teachers' inability to identify a student at high risk of committing suicide may be lack of confidence (see Walter, Gouze & Lim, 2006) and fear of overreacting. It is important that these factors are further explored.

What is particularly alarming is that nearly half of the teachers in the study have had a student from within their class attempt or complete suicide. The majority of the sample has not had any training on youth suicide and only a small number of teachers are aware of a policy on suicide within their school. While some researchers (e.g., Cigularov, Chen, Thurber & Stallones, 2008; Malley, Kush & Bogo, 1994; Popenhagen & Qualley, 1998) have highlighted the need for training and a school policy in order to more confidently and appropriately deal with suicidal youth, major changes are required in order for this to occur within this sample of secondary school teachers.

Both Scoullar and Smith (2002) and Leane and Shute (1998) argue that teachers may be unable to fulfill their gatekeeping role due to a lack of knowledge about youth suicide. In the present study this claim is substantiated. However, Scoullar and Smith and Leane and Shute simply investigated teachers' level of knowledge on youth suicide. The present study not only measured level of knowledge but also teachers' ability to identify a suicidal student. Indeed, a unique aspect of the present study was the addition of vignettes to the questionnaire. This provided the means to investigate teachers' ability to detect a suicidal student. A further aspect of the present study was the exploration of the course of actions that teachers would use to deal with the situations described in the vignettes. Thus, the present study makes a substantial contribution to the exploration of teachers' ability to discriminate between a suicidal and a non-suicidal student.

Walter et al. (2006) found that teacher education and experience predicted teacher self-efficacy in relation to identifying a student who may be suicidal. Not surprisingly, teachers who have had experience with a suicidal student and have received training on youth suicide have fewer students from within their classroom attempt or commit suicide. What is not known is whether they received training prior to or following the suicide attempt. Further exploration is needed into this issue.

Some limitations of the current study however, need to be recognized. The issue of sample representativeness and whether intended behaviour actually predicts behaviour is one such limitation. It is likely that a selection bias exists as the characteristics and behaviour of the teachers who volunteered for the study may be very different from the teachers that chose not to volunteer. Volunteers may be more knowledgeable than teachers who chose not to participate. Thus the study's findings may be an over-estimation rather than an under-estimation of teachers' level of knowledge.

With regards to the course of action teachers would take, teachers' intended behaviour may differ dramatically from their actual behaviour when confronted with

a potentially unstable situation. Thus, generalizations of present results to other populations are inappropriate.

Based on the findings of the present study, these recommendations are offered:

- 1) Development of education programs to improve teacher knowledge and recognition of suicidal behaviour. King, Price, Telljohann and Wahl, (1999) suggest the use of role-playing and observations of suicidal students to better prepare teachers.
- 2) Educate teachers on youth suicide at the beginning of their career, which will better equip inexperienced teachers.
- 3) Add a suicide education module to university curricula for both primary and secondary school teachers that include information and training on assessing risk of suicide and information on appropriate referral of suicidal students.
- 4) Provide regular in-service training on youth suicide to all teaching staff. Periodic training every two years will further ensure that these professionals remain aware of the behavioural characteristics of suicidal intent as well as the appropriate steps to take with a suicidal student.
- 5) All schools should ensure that they have a policy on suicide and that their teachers are aware of it in order for any intervention to be successful.

The development of education programs to improve teacher recognition of suicidal behaviour could dramatically decrease one of the leading causes of death for young people.

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