A Cognitive Model of Adolescent Suicide and Risk-Taking

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Introduction

There are many different definitions of suicide, and it is important for us to define from the outset what we mean by suicide and attempted suicide. Durkheim (1951), in his important contribution to the taxonomy of suicide, "Le Suicide," defined suicide as follows:

All cases of death resulting directly or indirectly from a positive or negative act of the victim himself which he knows will produce this result, whereas an attempt is an act thus defined but falling short of the actual death. (p. 44)

It is this definition that we use in this book. In particular, we should note that when we talk about "attempted" suicide, we are talking about failed suicide. In other words, the young people in this book who make up the categories involving attempted suicide were drawn from hospital populations. Their suicidal act had resulted in damage to themselves to the extent that they required medical treatment, even though this damage fell short of actual death. Since it is not possible to use young people who have completed suicide in research of this type, those who have failed in the suicide attempt are the closest we can come to a group who have not survived the tragedy of suicide.

The definition proposed by Durkheim has proved useful for purposes of communication among workers in the field and for gathering statistics. It forms the basis of the national statistics available from most countries. However, it has its limitations. Although it alludes to intention by including "knowing the result of the act," it says nothing about the processes that bring a person to this point.

There have been other definitions of suicide that have alluded to process or to the way in which suicide may develop in a person. Shneidman (1985) provided a definition that regards suicide as an act undertaken by those suffering from a complex and painful condition to which suicide is a solution:

suicide is a conscious act of self-annihilation best understood as a multidimensional malaise in a needful individual who defines an issue for which suicide is perceived as the best solution. (p. 203)

This definition implies a link between suicide and problemsolving deficits. It is this link that we propose to investigate in this book. We contend that some adolescents who make a suicide attempt are doing so in a maladaptive effort to solve their problems. This is by no means an original idea and has been proposed by a number of other investigators. Many of them have followed up this view with significant work, which we mention in the body of this book (McLaughlin, Miller, & Warwick, 1996; Strosahl, Chiles, & Linehan, 1992).

The idea that problem solving is a component of adolescent suicide has many implications. If suicide is seen as a solution to complex personal problems, then the issue is opened up to involve the impact of modern youth culture on young people. We note that in the past two decades, music, television, and film have dealt with the issue of youth suicide, and some at least seem to have made suicide more

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acceptable as a solution to life's problems, particularly among adolescents. For instance, *Dead Poets Society*, an immensely popular film, has a young character commit suicide when he feels thwarted by his father's ambitions for him.

Why is suicide a particular problem of youth? How young are children when they perceive the finality of death? According to most of the research findings, children of about the age of 9 years understand death in a way familiar to most adults, although there is obviously great variation among children. Certainly, suicide seems rare before the age of 12 years. Quinnet (1987) suggests that younger suicide attempters are less capable of perceiving the finality of suicide and therefore more likely to see suicide as an immediate, short-term solution to their problems. With their lack of conception of finality, they think that if this fails to work, some other solutions can be tried in the future. Paradoxically, when suicide attempts are made by children, the acts are unusually violent in nature, with hanging and running into traffic figuring prominently and with a high likelihood of this being a fatal act (Kosky, 1982).

There is a change in suicide patterns after puberty. There is a rapid rise in the prevalence of suicide after a person reaches the age of 13 years. The prevalence rates peak around the age of 25 years. In this respect, suicide appears to be a developmental problem. The use of substances for poison increases as a method, although hanging and firearms are also prominent causes. There are so many things changing in adolescence, it is hard to know what might be contributing to the increasing prevalence rates for suicide. It seems unlikely that the biological processes of puberty have a specific association. The single study that looked at this issue showed that it was more likely that increasing suicide rates between the ages of 12 and 18 were due to psychosocial determinants rather than biological ones (Zubrick, Kosky, & Silburn, 1987).

Adolescent Development

Adolescence is a significant period in human biological and psychosocial development. In addition to the onset of puberty, adolescents struggle with the critical tasks that accompany the transition from childhood to adulthood. These include the establishment of an individual identity, the formulation of goals and future direction, and the move away from dependency on family and caregivers toward independence (Austrian, 2002). This transition and the factors that measure or affect its success have been a subject for intensive psychological theory and research. The most recent theory identifies three overlapping stages in the progression through adolescence: young, middle, and older adolescence (Austrian, 2002).

Puberty is perceived to be the most influential factor in young adolescence (ages 12–14). Young people are preoccupied with bodily appearance and the need to conform with an undefined code of normalcy. They adopt conformity and peer compliance as defenses against rejection and disapproval. Self-esteem is largely dependent on peer acceptance, and an emerging emotional distance from parents ensues.

In middle adolescence (14–16 years), peers remain influential in the development of interpersonal and social skills. Parental dependence fluctuates. Adolescent youth in this stage are also characterized by fluctuations in elation, irritability, moodiness, and depression that arises from biological changes or out of conflict between individual value systems and conformity to social mores. The search for identity and autonomy is further complicated by decisions regarding risk-taking and sexual behaviors. These decisions are usually foreshadowed by experimentation with alcohol and sometimes other substance use and the formation of tentatively intimate relationships. Growth in self-esteem usually stems from "successes" in these social aspects as well as from athletic or academic achievement.

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Older adolescence (16–19 years) is distinguished by the capacity for consideration of the consequences of decisions and behavior. The ability to make these decisions is bolstered by the increased confidence and independence associated with obtaining a driver's licence and reaching the legal drinking age (in some countries). Successful negotiation of these issues through positive decision making results in personal and vocational skills being crystallized into young people who can find a place in society that combines individuals' own value systems and their sexual and occupational self-identities. From this position, they approach adulthood and attempt to formulate a meaning of life.

Despite entrenched opinion about the vicissitudes of adolescence, most people do not experience turmoil or psychological disturbances during the developmental processes of adolescence (Offer, Schonert-Reichl, & Boxer, 1996). Most young people enter adulthood confident in their new identity (Austrian, 2002). However, Erikson raised a point of caution. He highlighted the possibility of the development of a "negative identity," in which young people struggle with an inability to bring these developmental issues together and instead experience a sense of chronic role diffusion; they seem to choose to be "nobody," "someone bad," or even "dead" (Austrian, 2002).

Adolescents and Suicide

Attention has been focused on the problem of suicide in adolescents on a worldwide basis. Overall, most countries are reporting a rise in the rates of suicide among young people aged 15–25 years. The highest increases have been reported in the developed Western nations, although this may be an artifact produced by more thorough health-recording methods available in those countries. Nevertheless,

the rises can be clearly seen in the statistics provided by UNICEF (1993) and presented here in Figure 1.

Despite the alarming growth patterns illustrated here, the literature devoted specifically to adolescent suicide is relatively limited to epidemiology and there are still many unknown causes. For example, the role of hopelessness as a factor in adolescent suicide and attempted suicide is still unclear. The relative weight to be attached to adverse family factors, social pressures such as school pressures, thwarted ambition, experience of loss, experience of abuse, and the many other factors that have been implied as contributing to youth suicide is still unclear.

The increase in youth suicide is dominated by young male suicides. Some of these young men can only be described as model citizens. Connell (1972) pointed out that many of the young schoolchildren who attempted suicide were successful, well behaved, and highly regarded young people. However, some also come from the population that comes into contact with the criminal justice system and are likely to be aggressive, to engage in serious risk-taking behavior, and to present difficult management problems. Suicidal young people may not be catered to by available health services.

For both of these groups, the spotting of suicidal tendencies presents difficulties. For the former well-regarded group, it is often difficult for parents, friends, teachers, and others to accept that such adolescents have any problems. For them, their difficulties may be overlooked and they may do nothing to draw attention to their personal struggles. For the aggressive risk-taking youth, their personal problems may be buried underneath acting-out aggressive behaviors. In these cases, it is difficult to reach the world of turmoil that they are experiencing.

The upshot of the problem of identifying presuicidal youth is apparent in a study conducted in Norway. Of 99 boys and 30 girls who committed suicide, only 24% had ever accessed treatment for





emotional or behavioral problems (Groholt et al., 1997). There are many examples like this from other parts of the world. This has led to the proposition that although suicide risk increases with age for adolescent males, treatment decreases (Piacentini et al., 1995).

The failure of adolescents to access services or for those services to pick up on the suicidal feelings present in some adolescents gives the development of prevention programs a sense of urgency. There is a dearth of controlled studies on treatment modalities for suicidal young people (Rudd, 2000). Risk-taking behaviors can be positively correlated with suicidal behaviors (Woods et al., 1997). We explore the nature of this link in this book.

That some such link between suicide and risk-taking should exist is not surprising, for risk-taking behaviors fall comfortably within the definitions of both Durkheim and Schneidman that we quoted earlier. Self-harm can occur through risk-taking such as driving while intoxicated, driving at high speed, binge drinking, and substance abuse as well as engaging in risky sexual and eating behaviors. At least one way of seeing these risk-taking behaviors is that they are forms of self-murder.

Although the absence of a manifest intention to cause immediate death is often relied on to exclude risk-taking behaviors from the spectrum of suicidal acts, both sets of behaviors have a central factor in common: Each is deliberately calculated to involve the risk of death and each may in fact have a fatal outcome. In this sense they conform to the definition of Durkheim. Serious forms of risktaking behavior may differ from suicidal behavior only because the intention to cause death is not made explicit. The usual failure to clearly indicate intention tends to confound coronial inquiries, which may lead to misclassification of cause of death, for instance, of fatal motor vehicle accidents (Kosky, 1982).

As to the processes involved, there are evident similarities between the psychological and social factors considered as markers in

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suicide and serious risk-taking. When one of us attended the children's court, it was very apparent that in a large number of the cases observed, the background factors of dysfunctional families, parental psychopathology, abuse, significant negative life events, and suicidal behavior were present in the stories that the young people brought to court. They were strikingly like the 18 children who were among the first suicidal young people to be systematically described in the scientific literature. These children were reported to be disturbed, depressed, and aggressive (Bender & Schilder, 1937).

The question we address in this book is this: Given the links between suicidal and risk-taking young people, do they have cognitive deficits, and, if so, are they the same ones or are they different?

An area long fraught with difficulty is the prediction of suicidal behavior. A distinguished authority (Litman, 1996) has said that, despite the current wealth of literature and research effort devoted to the topic,

we can pick out individuals and groups who are more vulnerable to suicide than other individuals and groups, but we cannot predict which individual will commit suicide or when. (p. 3)

One aim of this book is to look at possible similarities and differences in the populations encompassed by suicide and risk-taking behaviors and to draw that information together as a model of suicidal and risk-taking behavior. This model would show how adolescents progress to these extreme behaviors. These pathways will show those variables that are significant mediators between early indications of risk and the later adverse behaviors. If it is possible to produce such a model and to justify it through empirical data, then it will provide opportunities to predict the potential for adverse behavioral outcomes, thereby increasing the opportunities for early interventions to prevent these outcomes.