Why People Die By Suicide

Thomas Joiner, Ph.D.
The Robert O. Lawton Distinguished Professor of Psychology
Department of Psychology
Florida State University
joiner@psy.fsu.edu
On February 1, 2003, the space shuttle Columbia disintegrated as it flew over the western United States...
... finally showering down over East Texas and Louisiana in thousands of pieces, killing all seven crew members.
The cause was a dense, dry, brownish-orange piece of foam weighing about 1.7 pounds, 19 inches long and 11 inches wide. The foam hit Columbia’s left wing traveling 545 mph, causing what investigators now know was a significant breach in the wing.
One of the members of the panel investigating the accident said “The excitement that only exists when there is danger was kind of gone – even though the danger was not gone.” Key NASA administrators decided against getting in-flight satellite images of the left wing, in part because their sense of danger about foam strikes has eroded over the years, due to repeated experience with them.
Relevance to Suicide

A key point of my theory is that when people get used to dangerous behavior – when they lose “the excitement that only exists when there is danger” in the words of the accident investigator – the groundwork for catastrophe is laid down. Just as NASA administrators became inured to a very real danger, to the point of no longer even worrying about foam strikes, so too, I will argue, do potentially suicidal people lose the danger signals and alarm bells that should accompany self-injury.
When self-injury and other dangerous experiences become “unthreatening and mundane” – when people work up to the act of death by suicide by getting used to its threat and danger – that is when we might lose them. That is when they have developed *the acquired ability to enact lethal self-injury*. 
A Good Theory

• Explains the heretofore unexplained....
Why….?

♦ ….. do female physicians and prostitutes have high rates of suicide?
♦ ….. do suicide rates decrease in times of national crisis and increase when a city’s sports team dashes expectations?
♦ ….. have societies across history and across culture sanctioned ritual suicide?
Tall Order for a Comprehensive Theory of Suicide

- Not only must the theory illuminate these and other questions, it must also be compatible with these facts:
Facts

♦ Suicide rates highest in older people
♦ ... and in men (except in China)
♦ ... and in Caucasian and Native American people in the U.S.
♦ Suicide is associated with impulsivity, yet very few die ‘on a whim.’
♦ Suicide is more associated with anorexia than with bulimia.
More Facts…

- Death by suicide is relatively rare – 100 per day die in U.S., compared to 1,900 per day from heart disease.
Sketch of the Theory

Those Who Desire Suicide

- Perceived Burdensomeness
- Thwarted Belongingness

Those Who Are Capable of Suicide

Serious Attempt or Death by Suicide
The Acquired Capability to Enact Lethal Self-Injury

♦ “It seems rather absurd to say that Cato slew himself through weakness. None but a strong man can surmount the most powerful instinct of nature” – Voltaire.

♦ Accrues with repeated and escalating experiences involving pain and provocation, such as
  – Past suicidal behavior, but not only that…
  – Repeated injuries (e.g., childhood physical abuse).
  – Repeated witnessing of pain, violence, or injury (cf. physicians).
  – Any repeated exposure to pain and provocation.
The Acquired Capability to Enact Lethal Self-Injury: Habituation

♦ Habituation: Response decrement due to repeated stimulation.
The Acquired Capability to Enact Lethal Self-Injury

♦ With repeated exposure, one habituates – the “taboo” and prohibited quality of suicidal behavior diminishes, and so may the fear and pain associated with self-harm.

♦ Relatedly, opponent-processes may be involved.
The Acquired Capability to Enact Lethal Self-Injury

- Briefly, opponent process theory (Solomon, 1980) predicts that, with repetition, the effects of a provocative stimulus diminish.... habituation in other words.

BUT....
The Acquired Capability to Enact Lethal Self-Injury

- Opponent process theory also predicts that, with repetition, the opposite effect, or opponent process, becomes amplified and strengthened.
- Example of skydiving.
The Acquired Capability to Enact Lethal Self-Injury

♦ The opponent process for suicidal people may be that they become more competent and fearless, and may even experience increasing reinforcement, with repeated practice at suicidal behavior.
The Documentary *The Bridge*

♦ Photographer saves someone who is pondering jumping from the Golden Gate Bridge.

♦ Here too, behavioral indicators of ambivalence.
Anecdotal Evidence: Cobain

♦ Cobain was temperamentally fearful – afraid of needles, afraid of heights, and, crucially, afraid of guns. Through repeated exposure, a person initially afraid of needles, heights, and guns later became a daily self-injecting drug user, someone who climbed and dangled from 30 foot scaling during concerts, and someone who enjoyed shooting guns.
Anecdotal Evidence: Cobain

- Regarding guns, Cobain initially felt that they were barbaric and wanted nothing to do with them; later he agreed to go with his friend to shoot guns but would not get out of the car; on later excursions, he got out of the car but would not touch the guns; and on still later trips, he agreed to let his friend show him how to aim and fire. He died by self-inflicted gunshot wound in 1994 at the age of 27.
Anecdotal Evidence: Fire Victim

♦ “I wonder why all the ways I’ve tried to kill myself haven’t worked. I mean, I tried hanging; I used to have a noose tied to my closet pole. I’d go in there and slip the thing over my head and let my weight go, but every time I started to lose consciousness, I’d just stand up. I tried to take pills; I took 20 Advil one afternoon, but that just made me sleepy. And all the times I tried to cut my wrist, I could never cut deep enough. That’s the thing, your body *tries to keep you alive no matter what you do* (italics added).”
Suicide in Anorexia Nervosa

- Mortality is extremely high in anorexic women (SMR = ~60).
- It is an under-appreciated fact that, should an anorexic patient die prematurely, the cause of death is more likely to be suicide than complications arising from compromised nutritional status.
Suicide in Anorexia Nervosa

- There are at least two possible accounts of the high association between AN and suicide. In one view, anorexic women die by suicide at high rates because they are unable to survive relatively low lethality attempts and/or they may be less likely to be rescued after an attempt due to their socially isolated status.
Suicide in Anorexia Nervosa

♦ In another view, informed by my theory of suicidal behavior, anorexic women die by suicide at high rates because their histories of self-starvation habituate them to pain and inure them to fear of death, and they therefore make high lethality attempts with high intent-to-die.
Suicide in Anorexia Nervosa

- We pitted these two accounts against each other, in a study of 239 women with AN, followed over ~15 years.
- 9 died by suicide, the leading cause of death among the sample.
- Of these 9, were they mostly highly lethal methods or not?
Suicide in Anorexia Nervosa

♦ The *least* lethal method: Ingestion of a powerful household cleaning product, along with benzodiazepines and alcohol (BAC = 0.16%). Cause of death was gastric hemorrhaging due to hydrochloric acid in the cleaner.

– Next behavior: Called 911.
– Preventable? Bitrix.
Blood alcohol concentrations in victims of sharp force injuries in the Stockholm area

1983-92

mg/dL

SUICIDES
HOMICIDES
Serious Attempt or Death by Suicide

Those Who Desire Suicide

Perceived Burdensomeness

Thwarted Belongingness

Those Who Are Capable of Suicide

Serious Attempt or Death by Suicide
Constituents of the Desire for Death

♦ Perceived Burdensomeness
♦ Thwarted Belongingness
Perceived Burdensomeness

♦ Essential calculation: “My death is worth more than my life to my loved ones/family/society.”
Perceived Burdensomeness: Anecdotal Evidence

Among the Yuit Eskimos of St. Lawrence Island, to become too sick, infirm, or old may threaten the group’s survival (i.e., burden the group); the explicit and socially sanctioned solution to this problem is ritual suicide. The ritual is graphic, often involving the family members’ participation in the shooting or hanging of the victim.
Perceived Burdensomeness: Anecdotal Evidence

- Burn victim mentioned earlier: "I felt my mind slip back into the same pattern of thinking I'd had when I was fourteen [when he attempted suicide]. I hate myself. I'm terrible. I'm not good at anything. There's no point in me hanging around here ruining other people's lives. I've got to get out of here. I've got to figure out a way to get out of my life."
Serious Attempt or Death by Suicide

Those Who Desire Suicide

Perceived Burdensomeness

Thwarted Belongingness

Those Who Are Capable of Suicide

Serious Attempt or Death by Suicide
Constituents of the Desire for Death

♦ Perceived Burdensomeness
♦ Thwarted Belongingness
Belonging as Protective

“... all the qualities of a man acquire dignity when he knows that the service of the collectivity that owns him needs him... No collectivity is like the military for nourishing such pride.” – William James
Thwarted Belongingness: Empirical Evidence

- Hoyer and Lund (1993) studied nearly a million women in Norway; over the course of a 15-year follow-up, over 1,000 died by suicide. They reported that women with six or more children had one-fifth the risk of death by suicide as compared to other women.

Thwarted Belongingness: Empirical Evidence

♦ Twins die by suicide at lower rates than others despite having slightly higher rates of mental disorders.

Thwarted Belongingness: Empirical Evidence

- The camaraderie and sense of belongingness from being a fan of sports teams can be considerable, especially under conditions of success…
Thwarted Belongingness: Empirical Evidence

… as many who have lived in university towns can observe for themselves when the university wins a national championship, say, in football, say in 1993 or 1999.
Thwarted Belongingness: Empirical Evidence

- It is interesting to consider, then, whether teams’ success affects suicidality; from the present perspective, it might, in that increased belongingness should be associated with lower suicidality.
Thwarted Belongingness: Empirical Evidence

Several studies have documented this association.


Miracle on Ice, February 22, 1980
Number of Daily Suicides

February 22 (1972-1989)
Suicide Variation by Days of Week

Monday, Tuesday highest; Sunday, Saturday lowest

2005 Data
Monthly Variation in Suicide

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1992-96 Average Data

Spring Peak in Suicides

5-yr Mean Daily Number = 84.8
Serious Attempt or Death by Suicide

Those Who Desire Suicide

Perceived Burdensomeness

Thwarted Belongingness

Those Who Are Capable of Suicide

Serious Attempt or Death by Suicide
The model’s logic is that prevention of “acquired ability” OR of “burdensomeness” OR of “thwarted belongingness” will prevent serious suicidality.

Belongingness may be the most malleable and most powerful.
1-800-273-TALK
Suicidepreventionlifeline.org
Prevention/Treatment Implications

♦ CBT -> burdensomeness and low belonging.
General Risk Factors – a very long list

♦ genetics (one candidate gene is the serotonin transporter gene)
♦ prenatal stress (maternal influenza plays a possible role)
♦ childhood/family factors
♦ sexual orientation (especially among adolescents)
♦ whole class of negative life events
♦ loneliness
♦ hopelessness (Brown/Beck study)
General Risk Factors – a very long list (continued)

♦ previous suicidal experience (acquired ability)
♦ emotional pain (termed psycheache by Shneidman), especially about burdensomeness and loneliness
♦ impulsivity
♦ self-hatred (compare to burdensomeness)
♦ many Axis I and II diagnoses
Toward a Risk Assessment Framework

♦ A General Framework for Suicide Risk Assessment (Joiner, Walker, Rudd, & Jobes, 1999) will be presented

♦ Its Goal is to efficiently and objectively categorize with regard to suicide risk.

♦ Specific names of categories are less important than their consistency and their tie to clinical decision-making.

♦ I like these 4 categories: None, mild-moderate, severe, and extreme.
Toward a Risk Assessment Framework

- Two Most Important Areas: History of Previous Attempt/Fearlessness and Nature of Current Suicidal Symptoms

- Regarding History of Previous Attempts, our research shows that people who have a history of 0 or 1 previous attempt are just in a different risk category than people who have 2 or more attempts. Regardless of all the other things going on, this one variable tells you a lot about risk. The multiple attempters are virtually always in a higher risk category than their counterparts with 0 or even 1 previous attempt.
Toward a Risk Assessment Framework

♦ Two Most Important Areas: History of Previous Attempt/Fearlessness and Nature of Current Suicidal Symptoms

♦ Regarding nature of current suicidal symptoms, two concepts are important. The first is what we’ve termed Resolved Plans & Preparation (Developed Plan for Suicide, Sense of Courage & Competence to Commit Suicide, Opportunity, Intensity/Duration of Ideation).
Resolved Plans & Preparations

- This symptom cluster includes
  - Vivid, detailed, long-lasting ideas about suicide
  - A sense of competence about suicide
  - A sense of **fearlessness** about suicide.
  - Well-developed plans

Dangerous set of symptoms
Toward a Risk Assessment Framework

♦ The other concept is what we’ve termed Suicidal Desire (Desire for Death, Frequency of Ideas and so on).
♦ Both of these concepts represent serious things, but relatively speaking, the Resolved Plans & Preparation symptoms are more dangerous than the Suicidal Desire & Ideation factor.
Desire for Death

- This symptom cluster includes
  - Vague and fleeting ideas about suicide
  - Statements like “would be better off dead.”
  - No well-developed plans

Still worrisome set of symptoms, but RELATIVELY less dangerous.
Toward a Risk Assessment Framework

The idea of the Risk Assessment Framework is that Other Risk Factors (e.g., Substance Abuse, Marked Impulsivity, Personality Disorder, others discussed above) Are Interpreted In Light of Two Main Areas Assessment (again, two main areas are History of Previous Attempt/Fearlessness and Nature of Current Suicidal Symptoms). This relieves somewhat the “laundry list” problem.
The Framework

**NOTE:** “Other significant finding” means the list of suicide risk factors, things like severe recent negative life events, marked hopelessness, deteriorating health, loneliness, and so on.

“Moderate Risk” refers to risk categories, such as None, Mild-Moderate, Severe, and Extreme. A multiple attempter with one other significant finding would be in the mild-moderate category; a multiple attempter with two other significant findings would be in the severe category; a multiple attempter with three or more other significant findings would be in the extreme category.
The Framework

Multiple Attempter/Fearless?
Yes  No

Any Other Significant Finding = AT LEAST Moderate Risk

Elevated on Resolved Plans & Preparation?
Yes  No

Any Other Significant Finding = AT LEAST Moderate Risk

Elevated on Suicidal Desire & Ideation
Yes  No

Two or More Other Significant Findings = AT LEAST Moderate Risk

Low Risk
The Framework

♦ Miscellaneous considerations can be used for people who are on the “edges” of categories (social support; religiosity).

♦ Framework has to be used together with common sense.

♦ The framework appears to be general across populations, with minor amendments as needed.
Barriers to Risk Assessment

- Prodromality
- Unaware/Latent Risk
- Deceit/Demand Characteristics
Distillation of Risk Factors

♦ Talking about/planning suicide (*safety planning*)
♦ Agitation (*benzos*)
♦ Insomnia (*sleep hygiene*)
♦ Nightmares (*rescripting*)
♦ Marked social withdrawal (*list of 300*).
  – Motivational Interviewing
Distillation of Risk Factors

- Two others to consider (but less strongly):
  - Humiliation
  - Anger (marked increase)
Distillation of Risk Factors

♦ What’s not listed?
  – Sluggishness
    • Hopelessness
    • Depression
More on Risk Categories

If risk category is **Mild-Moderate**: possible actions include more frequent sessions, referral for adjunctive treatments (e.g., antidepressant medicines), phone monitoring, incorporation of family members, “coping card/safety plan” (discussed in a moment), means restriction, provision of crisis hotline numbers, reminder of emergency contact numbers. Documentation in progress notes of risk category and attendant actions is necessary.
More on Risk Categories

♦ If risk category is **Severe**: actions are similar to those for Mild-Moderate, but “stepped” up (e.g., do most or all of these), and voluntary hospitalization is discussed. Again, documentation in progress notes of risk category and attendant actions is necessary.

♦ If risk category is **Extreme**: Hospitalization is enacted.

♦ Documentation: Just do it every time.
More on Risk Categories

♦ The whole point of risk categories is to facilitate clinical decision-making.
♦ If risk category is None: no action necessary, except determination to monitor risk in case it does increase (regular progress note to this effect is good practice).
More on Risk Categories

- The coping card/safety plan simply involves the development of a straightforward crisis plan that can be written down on the back of a business card, a 3 x 5 index card, or a sheet of paper. An example would be “When I’m upset and thinking of suicide, I’ll take the following steps:
More on Risk Categories

The coping card/safety plan (cont).: 1) use what I’ve learned in therapy to try to identify what is upsetting me; 2) write down and review some reasonable, non-suicidal responses to what is bothering me; 3) try to do things that, in the past, have made me feel better (e.g., talking to __, music, exercise, etc.); 4) if the suicidal thoughts continue and get specific, or I find myself preparing for suicide, I’ll call the emergency call person at (phone number; xxx-xxxx) or 1-800-273-TALK; 5) if I feel that I cannot control my suicidal behavior, I’ll go to the emergency room or call 911.”
– Means restriction.
No Suicide Contracts

♦ What about no suicide contracts? Agreement to follow “coping card” may be better, because it tells people what to do instead of what not to do.

♦ In one study, 41% of clinicians using contracts had patients die by suicide or severely attempt while on contract (Kroll, 2000, *Am. J. Psychiat*.).
VIP mnemonic

♦ V is for voluntary hospitalization – mention it.
♦ I is for intensify treatment – more frequent, additional treatments, etc.
♦ P is for phone check-ins.
Thank You!

joiner@psy.fsu.edu