# Overview

<table>
<thead>
<tr>
<th><strong>Review</strong></th>
<th>Review the findings of a study of survivors of near lethal suicide attempts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Present</strong></td>
<td>Present preliminary 7-year follow up data</td>
</tr>
<tr>
<td><strong>Identify</strong></td>
<td>Identify developmental vulnerabilities and pathways to persistent suicidal thinking and behavior</td>
</tr>
</tbody>
</table>
Talking about suicide can be upsetting

Take a break if needed

Ask questions
Suicide in the USA

- Rate of suicide in USA decreased 5.6% in 2020
- COVID became the third leading cause of death, and suicide dropped from 10th to 11th cause of death.\(^3\)
- Rate of suicide in the USA increased >30% between 1999-2018\(^1\)
  - 44,834 people died by suicide in 2020\(^3\)
  - 1.38 million suicide attempts in 2019\(^2\)
  - Rate of suicide is 13.93/100,000
  - ~130 people die by suicide every day in USA
  - 50.39% of suicide deaths involve use of a firearm
  - White males account for ~69% of suicide deaths
  - Rural counties have the highest suicide rates and greatest increase in suicide over time


Suicide Rates Soaring in America, Especially in Rural Areas

TOPICS: Mental Health Ohio State University Suicide

By MISTI CRANE, OHIO STATE UNIVERSITY  SEPTEMBER 8, 2019

These maps show the increasing rates of suicide and the concentration of suicides in rural counties over time. Credit: Ohio State University

A VARIANT?
NO, I'M A WHOLE
SEPARATE EPIDEMIC!

GUN VIOLENCE
What we know and don’t know

• Suicide is a complex behavior with multifactorial causes
• There are proximal and distal factors involved (state-trait or diathesis-stress model)
• Stress is involved in creating the conditions for suicide, with acute stress or intolerable ongoing distress as a precipitant for suicidal behavior
• Cannot explain why extreme stress is associated with suicide behavior in some individuals but not all exposed individuals
Research Team, Consultants, and Funding

- **Principal Investigator:** Jane G. Tillman, PhD
- **Co-Investigators:** Jennifer Stevens, PhD; A. Jill Clemence, PhD; Katie Lewis, PhD
- **Consultants:** Herb Hendin, MD; John T. Maltsberger, MD; David Reiss, MD; Christopher Hopwood, PhD; Robyn Cree, PhD
- **Funding:**
  - International Psychoanalytic Association
  - Fund for Psychoanalytic Research, The American Psychoanalytic Association
Aims of the Study

• What is the role of psychiatric and trauma history, risk factors, and protective factors for suicide and how does this differ among complex psychiatric patients with and without a history of suicidal thinking and behavior?

• What can patients tell us about their state of mind immediately preceding a near-lethal suicide attempt?

• Can we hear a “deep story” about the process of suicide that improves our capacity to recognize the transition from chronic to acute risk?
Context for Research Project

- Austen Riggs Center
- ~45% of patients have made a suicide attempt prior to admission
- Patients are verbal, articulate, thoughtful
- Psychoanalytic clinicians and researchers
Mixed Methods Approach

- Quantitative Data
  - Demographic information
  - Questionnaires: Reasons for living, Resilience, Impulsivity, Psychic pain
  - Rating of Mood

- Qualitative Interviews
  - Semi-structured psychodynamic interviews
  - Interpretative Phenomenological Analysis

MIXED METHODS RESEARCH DESIGN FOR PRAGMATIC PSYCHOANALYTIC STUDIES

Calls for more rigorous psychoanalytic studies have increased over the past decade. The field has been divided by those who assert that psychoanalysis is properly a hermeneutic endeavor and those who see it as a science. A comparable debate is found in research methodology, where qualitative and quantitative methods have often been seen as occupying orthogonal positions. Recently, Mixed Methods Research (MMR) has emerged as a viable “third community” of research, pursuing a pragmatic approach to research endeavors through integrating qualitative and quantitative procedures in a single study design. Mixed Methods Research designs and the terminology associated with this emerging approach are explained, after which the methodology is explored as a potential integrative approach to a psychoanalytic human science. Both qualitative and quantitative research methods are reviewed, as well as how they may be used in Mixed Methods Research to study complex human phenomena.

This paper proposes that the newly emerging science of Mixed Methods Research (MMR) offers a robust methodology for psychoanalytic research. MMR, also known as the “third community” of research in the social and behavioral sciences, seeks to capitalize on the strengths of quantitative and qualitative research traditions by combining these approaches into a complementary research design (Creswell 2009; Gelo, Braakmann, and Benetka 2008; Teddle and Tashakkori 2009). However, recent recommendations from psychoanalytic scholars (Hauser 2006; Luyten, Blatt,
Methods and Procedure

• Informed Consent
• Meeting #1
  • Demographic, Psychiatric and Trauma History and Suicide Attempt Questionnaire
  • Protective Factors
    • Connor Davidson Resilience Scale (CD-RISC)
    • Reasons for Living Inventory (RFL or RFLI)
  • Risk Factors
    • Barratt Impulsiveness Scale-11 (BIS-11)
    • Psychic Pain Scale (PPS)
• Meeting #2
  • Psychodynamic research interview
• Meeting #3
  • Repeat questionnaires from first meeting with reconstructed mind instructions
  • Mood rating scale
  • Suicide Attempt and Self Injury questionnaire (SASI)
Psychic Pain: Developing a new scale

- Psychache (Shneidman, 1993)
- Overwhelming negative affect
- Experienced as unbearable and unescapable (Meerwijk & Weiss, 2011)
- Leads to experience of psychological disintegration, affective flooding, loss of control (Maltsberger, 2004)
- Strongly associated with suicide related outcomes (Verrocchio et al., 2016)
Participants

298 patients admitted during study period (38 months)

50 met exclusion criteria

248 eligible participants

131 (53%) participated

119 questionnaires only

117 (47%) refused or did not respond

12 questionnaires + psychodynamic research interviews

1 excluded from analysis
Means, SD, and one-way ANOVA for between groups differences on risk and protective factors measures (n=131)

<table>
<thead>
<tr>
<th></th>
<th>Non-Attempters (n=61)</th>
<th>Attempters (n=54)</th>
<th>Near Lethal Attempters (n=16)</th>
<th>p</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resilience</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>p</td>
</tr>
<tr>
<td></td>
<td>53.14</td>
<td>18.67</td>
<td>48.08</td>
<td>19.01</td>
<td>.139</td>
</tr>
<tr>
<td>Reasons for Living</td>
<td>3.65</td>
<td>.95</td>
<td>2.82</td>
<td>.74</td>
<td>.000</td>
</tr>
<tr>
<td>Impulsivity</td>
<td>68.86</td>
<td>13.19</td>
<td>68.80</td>
<td>11.64</td>
<td>.371</td>
</tr>
<tr>
<td>Psychic Pain</td>
<td>55.26</td>
<td>15.40</td>
<td>65.72</td>
<td>16.07</td>
<td>.000</td>
</tr>
</tbody>
</table>
Pietrzak, Johnson, Goldstein, Malley, Southwick (2009). Psychological resilience and postdeployment social support protect against traumatic Stress and depressive symptoms in soldiers returning from OEF/OIF. *Journal of Depression and Anxiety.*
Summary

• Lowest reported scores on a measure of resilience in the published literature \(^1,2\)

• Fewer Reasons for Living (protective factor) and high Psychic Pain (risk factor) are associated with past suicide attempt status \(^1,2\)

• For those making a near lethal attempt, relationships that are perceived to be unavailable, empty, absent, or associated with betrayal are implicated in the decision to die


The persistent shadow of suicide ideation and attempts in a high-risk group of psychiatric patients: A focus for intervention

Jane G. Tillman, A. Jill Clemence, Robyn Cree, Katie C. Lewis, Jennifer L. Stevens, David Reiss

Austen Riggs Center, Stockbridge, MA
Veterans Health Care of the Ozarks, Fayetteville, AR
Yale School of Public Health, New Haven, CT
Yale University School of Medicine and Austen Riggs Center

Suicidality in High-Risk Psychiatric Patients: The Contribution of Protective Factors

Jane G. Tillman, A. Jill Clemence, Christopher J. Hopwood, Katie C. Lewis & Jennifer L. Stevens

To cite this article: Jane G. Tillman, A. Jill Clemence, Christopher J. Hopwood, Katie C. Lewis & Jennifer L. Stevens (2017) Suicidality in High-Risk Psychiatric Patients: The Contribution of Protective Factors, Psychiatry, 80:4, 357-373

To link to this article: https://doi.org/10.1080/00332747.2017.1296309
• IPA is a theoretically based qualitative approach to analyzing interview data at
  the level of the individual in order to understand how people make sense of a
defined life experience.
• Helps researchers gain an understanding of the psychological processes and
  themes linked to a specific situation.
• “moving from the particular to the shared, and from the descriptive to the
  interpretative” (p. 79).
Semi-Structured Dynamic Interview

- General thoughts and feelings at the time of the attempt
- Acute context for the attempt with attention to internal and external context (fantasies, dreams, stress)
- Interpersonal context
- Details of the method
- Rescue, damage, lethality information
- Survival
Sample Questions

1. Do you remember what you were thinking and feeling at the time you tried to kill yourself?
2. What was going on that day? Walk me through it, as you remember it.
3. Did you let anyone know that you were going to try to kill yourself or that you had been thinking about it?
4. Do you think that anyone close to you could have known that you were going to attempt suicide? Did you hope that someone might have known?
# Participants

## Demographic Characteristics (n = 11)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Overall</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>3 (27%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>8 (73%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age at time of interview (years), mean ± SD</td>
<td>29.0 ± 10.28</td>
<td>19</td>
<td>51</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>11 (100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education (years), mean ± SD</td>
<td>14.8 ± 4.29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single, divorced, or separated</td>
<td>8 (73%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Psychiatric, Suicide Ideation and Attempt History

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean ± SD</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>#Prior psychiatric hospitalizations</td>
<td>5.45 ± 6.17</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>Age of first psychiatric contact (years)</td>
<td>13.18 ± 7.21</td>
<td>6</td>
<td>33</td>
</tr>
<tr>
<td>Age of onset of suicidal ideation (years)</td>
<td>18.64 ± 12.75</td>
<td>7</td>
<td>50</td>
</tr>
<tr>
<td>Age of first suicide attempt (years)</td>
<td>24.09 ± 11.55</td>
<td>9</td>
<td>50</td>
</tr>
<tr>
<td>Total # lifetime suicide attempts</td>
<td>2.64 ±1.75</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>*DEPRESSED</td>
<td>5.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*HOPELESS</td>
<td>5.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*DESPERATE</td>
<td>5.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*EMPTY</td>
<td>5.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LONELY</td>
<td>4.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SELF-HATE</td>
<td>4.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HELPLESS</td>
<td>4.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*RESIGNED</td>
<td>4.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANXIOUS</td>
<td>4.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GUILTY</td>
<td>4.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NUMB</td>
<td>4.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MISUNDERS...</td>
<td>3.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEACEFUL</td>
<td>3.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABANDONED</td>
<td>3.17</td>
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</tr>
<tr>
<td>DISAPPOINT...</td>
<td>3.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNREAL</td>
<td>3.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OUT OF...</td>
<td>2.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FRANTIC</td>
<td>2.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONFUSED</td>
<td>2.58</td>
<td></td>
<td></td>
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<tr>
<td>HUMILIATED</td>
<td>2.58</td>
<td></td>
<td></td>
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<tr>
<td>ENRAGED</td>
<td>2.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EUPHORIC</td>
<td>1.58</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Thematic Units

- Developmental conflicts and crises
- Character traits and vulnerabilities
- Interpersonal and object relations
- Thinking and affect
- Fantasies of death
- Paradoxical nature of the suicide attempt
- Reactions to survival
• At the time of the interview 5/11 said they still actively thought about suicide as an option
• Alcohol use involved in 4/11 attempts
• Recently discharged from psychiatric hospital prior to attempt (7/11)
• Maternal death active issue in 3/11
• Maternal separation in 2/11
Changes in representability and states of mind associated with suicide process

- **Distress**
  - Representation

- **Deception**
  - Misrepresentation
  - (thinking, interpersonal, developmental conflicts,)

- **Dissociation**
  - Unrepresentable
  - (break up of the self, unrepresentable psychic pain)
• 10/11 participants in psychotherapy at the time of the near lethal attempt
• 9/10 said they did not tell (and did not consider telling) their therapist they were considering acting on suicidal ideas.
• 1 called her therapist after taking an overdose but lied about having taken an overdose. Her therapist called the police anyway.
• Some were very focused on the satisfaction they got from being able to deceive parents, spouses, treatment professionals. Some reported elaborate conscious plans to deceive others as a type of triumph over authority figures
• For others the deception seemed less interpersonally driven and more a function of desperation and determination to escape psychic pain/distress
Dissociation: Unrepresentability

- Difficulty describing/reconstructing the state of mind immediately preceding the suicide attempt
- Paradoxical experience of attempt as both planned and impulsive. Rehearsed and spontaneous. Known and unknown.
- For some: Ineffable quality of that moment that has to do with an absorption in an experience of beauty, a sense of a “perfect moment,” “everything just came together and it was a good time,” “I had the perfect day with my family, beautiful, and that’s how I wanted it to end”
- Dissociation: relinquishing object ties, cessation of psychic pain, automatism. Does dissociation also facilitate “fixed attention?”
Psychic pain as a proto-affect for negative affective states

Psychic Pain

- Dysphoria/Depression
- Anxiety
- Anger/Rage
- Resignation
- Self-hate
- Dissociation/Numbness
- Impulsiveness
- Aggression toward others/self

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Developmental Models of Suicide

- Childhood temperament and coping
- Trait impulsiveness
- Childhood and Adolescent suicidal ideation or attempts
- Childhood psychiatric treatment
- Rumination
- Affective instability
- Resilience
- Neurobiological development
Suicide attempts associated with Adverse Childhood Experience

• Adverse Childhood Experience (ACEs) increases the likelihood of a lifetime suicide attempt 3-5 times that of people without ACE’s

• Relationship between ACE’s and suicide attempts was mediated by a history of alcoholism, depressed affect, and illicit drug use

• In our sample, a history of childhood abuse (sexual, physical, emotional) was associated with an increasing number of lifetime suicide attempts but was not associated with suicide severity

Proposed developmental pathway to suicide

- Low resilience in the face of adversity
- Toxic stress
- Character pathology: maladaptive conscious and unconscious reactive aggression
- Impaired object relations and interpersonal dynamics
- Attachment style

Problems in thinking and affect tolerance

- Vulnerability to overwhelming psychic pain
- High dissociative capacity: depersonalization and derealization
- Focused attention
- Fantasies about death as a solution and as both final and reversible

Developmental psychopathology

- Acute developmental crises
- Interpersonal loss or betrayal
- Grandiosity: often preconscious
- Unable to identify reasons for living

Suicide Attempt
Follow Up Study
Meanwhile, back at the ranch....
Time 1 participants (n=131)

Declined consent for follow-up (n=8)

Time 2
Deceased (n=11)

Time 2
Contacted for participation (n=71)

Time 2
Unable to contact (n=41)

Time 2
Agreed to participate (n=56)

Time 2
Actual participation (n=46)
Table 1. Sample Characteristics

<table>
<thead>
<tr>
<th>Demographics</th>
<th>N</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants at T1</td>
<td>131</td>
<td></td>
</tr>
<tr>
<td>Participants at T2</td>
<td>46 (35.1%)</td>
<td>7.3 ± 1.03</td>
</tr>
<tr>
<td>Years of Follow-up</td>
<td>46</td>
<td>7.3 ± 1.03</td>
</tr>
<tr>
<td>Age (years, M, SD)</td>
<td>46</td>
<td>40.76 ± 12.09</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>12 (26.1%)</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>34 (73.9%)</td>
<td></td>
</tr>
<tr>
<td>Sexual Orientation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lesbian, Gay, Bisexual</td>
<td>14 (30.4%)</td>
<td></td>
</tr>
<tr>
<td>Not Sure</td>
<td>3 (6.5%)</td>
<td></td>
</tr>
<tr>
<td>Heterosexual</td>
<td>29 (63%)</td>
<td></td>
</tr>
<tr>
<td>Description of Suicide History</td>
<td></td>
<td></td>
</tr>
<tr>
<td>History of suicide attempt(s) prior to T1</td>
<td>23 (50%)</td>
<td></td>
</tr>
<tr>
<td>History of suicide ideation prior to T1</td>
<td>16 (34.8%)</td>
<td></td>
</tr>
<tr>
<td>No history of suicide attempts or ideation prior to T1</td>
<td>7 (15.2%)</td>
<td></td>
</tr>
<tr>
<td>Suicide death after T1</td>
<td>10 (7.6%)</td>
<td></td>
</tr>
<tr>
<td>Suicide attempts without death after discharge</td>
<td>7 (15.2%)</td>
<td></td>
</tr>
</tbody>
</table>

1 10 of T1 participants (N=131) died by suicide; 1 participant died of other causes
2 Suicide attempts reported by T2 participants (N=46)
Admissions to a psychiatric hospital since being discharged from ARC

- None: 31 participants
- 1 subsequent admission: 5 participants
- 2-4 subsequent admissions: 4 participants
- 5 or more admissions: 4 participants
Comparison of T1 measures for those alive and those with suicide outcomes

<table>
<thead>
<tr>
<th>Variable at T1</th>
<th>N</th>
<th>Known alive at T2</th>
<th>Known suicide death by T2</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>RFL</td>
<td>89</td>
<td>3.14 ± 0.88</td>
<td>3.14 ± 0.81</td>
<td>0.939</td>
</tr>
<tr>
<td>CDRISC</td>
<td>91</td>
<td>48.87 ± 18.5</td>
<td>46.3 ± 21.33</td>
<td>0.743</td>
</tr>
<tr>
<td>PPS-12</td>
<td>89</td>
<td>35.82 ± 11.16</td>
<td>36.7 ± 9.12</td>
<td>0.776</td>
</tr>
<tr>
<td>BIS-11</td>
<td>90</td>
<td>67.91 ± 12/96</td>
<td>76.54 ± 9.68</td>
<td>0.022</td>
</tr>
</tbody>
</table>

Results calculated using a Wilcoxon-Mann-Whitney Test
## Change Scores $T_1$ to $T_2$ on RFLI, CDRISC, PPS-12

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean, sd</th>
<th>Mean, sd</th>
<th>p†</th>
</tr>
</thead>
<tbody>
<tr>
<td>RFLI</td>
<td>44</td>
<td>3.1 ± 0.77</td>
<td>3.73 ± 0.95</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>CDRISC</td>
<td>45</td>
<td>48.27 ± 18.26</td>
<td>62.64 ± 15.63</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>PPS-12</td>
<td>42</td>
<td>36.38 ± 11.9</td>
<td>28.38 ± 11.67</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

† P-value calculated using two-sided Wilcoxon Sign Rank Test
Suicide Attempt Status at Follow-Up
Clinical Take Home Message

- There are multiple pathways to the moment of suicide with highly idiosyncratic meanings and complex shifts in representability.
- Understanding nomothetic warning signs and risk factors is necessary but NOT SUFFICIENT for understanding the pathway to suicide for the individual.
- Need to develop techniques for assessing those at risk for suicide with attention to shifts in representability and dissociative states
- What we are learning about secrecy, deception, and alliance (or misalliance) is very important. Sometimes deception is primarily interpersonal and sometimes primarily intrapsychic, and most often a complex interaction.
- Multiple levels of mental functioning and meaning
• Suicide is often planned AND impulsive
  • Fantasies, plans, thoughts of suicide may have been present both consciously and unconsciously for days, weeks and even years prior to the attempt
  • Suicidal action may also emerge very suddenly and without clear warning
• Developmental psychopathology sets the stage
  • Stress-Diathesis model has developmental origins
• No one mood state or factor that accounts for suicidal impulse or action
• Pathway to suicide may be more than a decade in the making
• Deception and secrecy, particularly of therapists, parents, or others is frequent
• Psychoanalytic theory has focused on the “anger turned inward” theory of suicide. Our data suggest that this is not necessarily the case. Attending to psychic pain is essential
• Role of perceived betrayal
• In this cohort of complex psychiatric patients the 7 year mortality rate of ~8.0% suggests that this is a group who may need ongoing psychiatric care for long periods of time
Why did this take so long? (2009-2021)

• Two marriages
• One divorce
• Four babies born
• One dissertation completed
• One ordination to the priesthood
• Five Medical Director/CEO’s
• Several patient suicide deaths
• Numerous job changes and re-locations