"Psychological Processes and Repeat Suicidal Behavior: A Four-Year Prospective Study"

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Death investigation often relies heavily upon psychological autopsy to discern the likelihood of suicide vs. accident vs. homicide. The study of suicide informs the psychological autopsy's qualification to assess legal questions ranging from disputed wills, liability claims, potential criminal prosecution, and insurance claims, for example. Psychological autopsy has greatest relevance when focused on the probability that suicide happened at the point one died, rather than whether there existed a general risk of suicide in the life of the individual. Identifying the evidence to validate such death investigation is paramount.

Much of the research on suicide originates from clinical populations in the mental health arena. These studies benefit from the thoughtful consideration of conflicts and stressors that is native to the practice of psychology and psychiatry. Through research geared toward suicide prevention, the field has come to appreciate hopelessness as an entity more directly correlated with suicide than depression, for example.

In the forensic context, experience in death investigation often confronts cases in which suicide is obvious from findings at the death scene – yet, the deceased's history neither reflects hopelessness or depression, or even major mental illness. To live death investigation is to appreciate that when it comes to suicidology, there is more to be discovered to account for these perplexing scenarios.

Mental health research focuses primarily on living suicide attempters, who differ from medical examiner subjects of completed suicides in important respects. Attempters may have had secondary motivation, such as attention-seeking, emotional anchoring, and emotional manipulation, that depart from merely the desire to die. Medical examiner subjects generally were determined to die. The gap between the ambivalence of an attempter and the determination of a suicide completer impacts the applicability of suicidology research to death investigation, however helpful and necessary it often is.

The solution is not so obvious as studying completed suicides based upon records from the morgue. Unfortunately, medical examiners do not typically possess the historical data or psychiatric sophistication to inform studies on those who aimed to die. With that said, suicide research that draws from higher lethality efforts is particularly worth considering.

This point was only one of the reasons for appreciating a recent study by psychologist Rory O'Connor from the University of Glasgow, joined by colleagues from several participating

institutions. The research, published in the *Journal of Consulting and Clinical Psychology*, examined 61 patients admitted to a Scottish hospital (and seen by the liaison psychiatry service) following attempts established to involve suicidal motivation.

The authors examined records maintained by the National Health Service in Scotland to assess psychological processes and repeat suicidal behavior from the time of hospital admission through 48 months following. The overwhelming majority of patients presented with an overdose and the remainder presented with self-cutting or self-cutting and overdose combined. The 35 females and 26 males, overwhelmingly white, did not differ significantly in age by sex and had a mean age of 35.6 years. 41.4% of patients reported no previous suicide attempts, 25.7% reported one previous attempt, 10% reported two previous attempts, and 22.9% reported ≥3 previous attempts.

In addition to number of past suicide attempts, five baseline measures were investigated. **Depression** was measured using the Hospital Anxiety and Depression Scale (HADS), a "reliable and valid" seven-item scale that is used with equal success in psychiatric, primary care and general population applications. **Suicidal Ideation** was assessed using the Suicidal Ideation subscale of the Suicide Probability Scale (SPS), a measure of "an individual's self-reported attitudes that are related to suicide attempts." The subscale has been found in past studies to be a "reliable and valid" predictor of prospective suicide attempts. **Hopelessness** was measured using the Beck Hopelessness Scale, a 20-item measure previously shown to predict eventual suicide. **Defeat** was measured using the Defeat Scale, a 16-item self-report measure of "perceived failed struggle and loss of rank (e.g., 'I feel defeated by life'). In past studies, this scale "has been shown to predict suicidality over 12 months independent of baseline levels of depression." **Entrapment** was measured by the Entrapment Scale, a 16-item self-report measure that "taps internal entrapment (perceptions of entrapment by one's own thoughts and feelings) and external entrapment (perceptions of entrapment by external situations)." This scale "has been shown to distinguish between clinical patients with and without suicide attempt histories."

Entrapment "results when one's attempt to escape from high stress or defeating circumstances (which can be internal or external) is blocked." Entrapment is distinguished by the study authors from hopelessness by this "thwarted motivation to escape." O'Connor and colleagues posited that "it is this motivation to escape from the defeating circumstances that drives the search for solutions," which include "the likelihood of suicide being considered an escape strategy."

Results showed that out of the 61 study participants, 20 were readmitted to the hospital due to acts of self-harm within 48 months of their index self-harm episodes. 15 of these 20 persons were confirmed to have acted with suicidal intent; one single individual successfully completed suicide. The remaining 5 of these 20 persons were not confirmed to have been suicidal in their self-harm, due to either lack of sufficient data or personally expressed denial of suicidal intent.

Univariate logistic regression analyses revealed that defeat, entrapment, frequency of previous suicide attempts, suicidal ideation, depression, and hopelessness individually predicted suicidal behavior during the 48 months following the self-harm admission. Further hierarchical multivariate analysis showed that entrapment significantly increased probability of attempting suicide, with entrapment adding "incremental predictive validity over depression, hopelessness, suicide ideation, and the frequency of previous suicide attempts. In the final model, both entrapment and the frequency of previous suicide attempts predict the occurrence of a future suicide attempt." So robust is this relationship that the authors found, when holding all other variables at their mean, that one standard deviation increase in entrapment caused a .08 increased probability for suicide attempt.

The role of entrapment in the suicidal process is, according to these findings, undeniable and significant. Noted the authors, "The predictive utility of entrapment is consisted with a central tenet of the integrated motivational-volitional (IMV) model of suicidal behavior, which states that entrapment is a unique predictor of suicidal behavior." The authors also concluded that "Entrapment in particular should be included in clinical assessment…and should also be thought of as potentially part of the final common pathway to serious suicidal behavior."

Analysis: The significance of entrapment in suicidology is gaining momentum, and warrants greater and growing emphasis in the future. A solid understanding and appreciation for the role of entrapment in suicidal behavior may guide clinician to therapeutic aims that diminish suicide risk.

Furthermore, entrapment is of specific relevance to death investigation. Ensuring forensic inquiry includes scrutiny of different dimensions of one's person – sexuality, intimacy, livelihood, professional standing, sources of honor, health, and other intangible qualities is necessary to inform what may or may not render one to feel entrapped. Entrapment can happen to anyone, at any time, irrespective of emotional stability or psychiatric history. Entrapment may be the heart of the trigger for the closet homosexual whose private life is disseminated over the internet via concealed webcam; the famous person charged with child pornography distribution; the person in authority who knows too much; the decorated veteran exposed to have fraudulent medals of honor; the cornered criminal who refuses to be taken alive and who refuses to suffer an armed standoff.

An obvious suicide committed by a person with a history of forward thinking and no evidence for depression may well be instigated by entrapment; one sees no future, and so makes sure that there won't be. For those more equivocal deaths, evidence of feelings of entrapment may be the decisive evidence to resolve suicide as the mode of death. Research such as this O'Connor study are valuable expansions of our appreciation for what moves one to suicide. It will contribute to more diligent death investigation and more accurate findings. Entrapment, and research in this direction, frees death investigation from the presumption of illness to advances beyond.